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Notations :

- 1.Options shown in green color and with ✓ icon are correct.
- 2.Options shown in red color and with ✗ icon are incorrect.

Question Paper Name :	PGTMF10JULS1
Subject Name :	PGT-Maths (Female)
Creation Date :	2021-07-10 13:14:12
Duration :	180
Total Marks :	300
Display Marks:	Yes
Calculator :	None
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter :	No
Auto Save on Console? (SA type of questions will be always auto saved) :	No

Mental Ability

Group Number :	1
Group Id :	976755400
Group Maximum Duration :	0
Group Minimum Duration :	0

Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

Mental Ability

Section Id :	976755728
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755858
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 97675511939 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

From the given responses, find the missing term in the series.

A1Z , C3Y , E7X , G15W , ?

Options :

1.  I31V
2.  A29G
3.  O31V
4.  B29U

Question Number : 1 Question Id : 97675511939 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

दिए गए विकल्पों में से, श्रेणी में लुप्त पद को ज्ञात करें।

A1Z , C3Y , E7X , G15W , ?

Options :

1. ✓ I31V
2. ✗ A29G
3. ✗ O31V
4. ✗ B29U

Question Number : 2 Question Id : 97675511940 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

From the given responses, find the missing letter cluster in the series.

ZXVU, VTRQ, ?, NLJI, JHFE

Options :

1. ✓ RPNM
2. ✗ KLMN
3. ✗ KLMO
4. ✗ RSNP

Question Number : 2 Question Id : 97675511940 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

दिए गए विकल्पों में से, श्रेणी में लुप्त अक्षर समूह को ज्ञात करें।

ZXVU, VTRQ, ?, NLJI, JHFE

Options :

1. ✓ RPNM
2. ✗ KLMN
3. ✗ KLMO

4. ✖ RSNP

Question Number : 3 Question Id : 97675511941 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Choose the option that is to unrelated (or odd one out amongst) the given set of words.

Options :

1. ✖ Curd
2. ✖ Butter
3. ✖ Paneer
4. ✔ Oil

Question Number : 3 Question Id : 97675511941 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

दिए गये शब्दों के समूह से उस विकल्प को चुनें जो शब्द समूह से (या इनमें से एक विषम) असंबंधित है?

Options :

1. ✖ दही
2. ✖ मक्खन
3. ✖ पनीर
4. ✔ तेल

Question Number : 4 Question Id : 97675511942 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the option in which the words share the same relationship as that shared by the given pair of words.

Hospital : Treatment

Options :

1. ✖ College : Job
2. ✔ Office : Work
3. ✖ Court : lawyer

4. ✖ Soil : Bricks

Question Number : 4 Question Id : 97675511942 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

उस विकल्प का चयन करे, जिसमें शब्दों का आपस में वही संबंध है, जो संबंध नीचे दिए गए शब्द-युग्म के शब्दों के बीच है।

अस्पताल : इलाज

Options :

1. ✖ महाविद्यालय : रोजगार
2. ✔ कार्यालय : कार्य
3. ✖ न्यायालय : वकील
4. ✖ मिट्टी : ईंटें

Question Number : 5 Question Id : 97675511943 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

In the following question, select the related letter cluster from the given alternatives.

EDKX : MLSF :: ACZO : ?

Options :

1. ✖ IKVG
2. ✖ JKHV
3. ✖ JKIV
4. ✔ IKHW

Question Number : 5 Question Id : 97675511943 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित प्रश्न में, दिए गए विकल्पों में से संबंधित अक्षर समूह का चयन करें।

EDKX : MLSF :: ACZO : ?

Options :

1. ✖ IKVG
2. ✖ JKHV
3. ✖ JKIV
4. ✔ IKHW

Question Number : 6 Question Id : 97675511944 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

In a certain code language, 'MAPED' is coded as '64' and 'RECK' is coded as '41'. How will 'NOSE' be coded as in that language?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 63
2. 51
3. 82
4. 57

Question Number : 6 Question Id : 97675511944 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

किसी निश्चित कूट भाषा में, 'MAPED' को '64' लिखा जाता है और 'RECK' को '41' लिखा जाता है। उस भाषा में 'NOSE' को कैसे लिखा जाएगा?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 63
2. 51
3. 82
4. 57

Question Number : 7 Question Id : 97675511945 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Priti scored more than Rahul. Yamuna scored as much as Divya. Lokita scored less than Manju. Rahul scored more than Yamuna. Manju scored less than Divya. Who scored the lowest?

Options :

1. ✖ Rahul
2. ✖ Yamuna
3. ✖ Manju
4. ✔ Lokita

Question Number : 7 Question Id : 97675511945 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

प्रीति ने राहुल से अधिक अंक प्राप्त किए। यमुना ने दिव्या जितने अंक प्राप्त किए। लोकिता ने मंजू से कम अंक प्राप्त किए। राहुल ने यमुना से अधिक अंक प्राप्त किए। मंजू ने दिव्या से कम अंक प्राप्त किए। सबसे कम अंक किसने प्राप्त किये?

Options :

1. ✖ राहुल
2. ✖ यमुना
3. ✖ मंजू
4. ✔ लोकिता

Question Number : 8 Question Id : 97675511946 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Pointing to the photograph, Mamta said that the woman in this photo is the wife of the son of my father's wife's only daughter. How is the Mamta related to that woman?

Options :

1. ✖ Sister
2. ✖ Mother
3. ✔ Mother-in-law
4. ✖ Aunt

Question Number : 8 Question Id : 97675511946 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

फोटो की ओर इशारा करते हुए ममता ने कहा कि इस फोटो में जो महिला है वह मेरे पिता की पत्नी की इकलौती बेटी के बेटे की पत्नी है। ममता, उस महिला से कैसे संबंधित है?

Options :

1. ✖ बहन
2. ✖ माता
3. ✔ सास
4. ✖ आंटी

Question Number : 9 Question Id : 97675511947 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

In the question below, there are two statements followed by four conclusions given in options. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusion logically follow(s) from the given statements.

Statements:

Some crystals are diamonds.

All emeralds are crystals.

Options :

1. ✖ Some emeralds are diamonds
2. ✔ Some crystals are emeralds
3. ✖ All diamonds are emeralds
4. ✖ All crystals are emeralds

Question Number : 9 Question Id : 97675511947 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

नीचे दिए गए प्रश्न में, दो कथन के बाद विकल्पों में चार निष्कर्ष दिए गए हैं। आपको दिए गए कथनों को सत्य मानना है, भले ही वे सर्वज्ञात तथ्यों से भिन्न प्रतीत होते हों। सभी निष्कर्षों को पढ़िए फिर तय कीजिए कि दिए गए निष्कर्षों में से कौन सा तर्कसंगत रूप से अनुसरण करता है, चाहे सर्वज्ञात तथ्य कुछ भी हों।

कथन:

कुछ क्रिस्टल, हीरे हैं।

सभी पत्रे, क्रिस्टल हैं।

Options :

1. ✖ कुछ पत्रे, हीरे हैं।
2. ✔ कुछ क्रिस्टल, पत्रे हैं
3. ✖ सभी हीरे, पत्रे हैं
4. ✖ सभी क्रिस्टल, पत्रे हैं

Question Number : 10 Question Id : 97675511948 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

In the question below are given two statements followed by two conclusion. You have to take the two given statements to be true even if they seem to be at variance with the commonly known facts and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.

Statements:

All cars are tyres.

Some clutches are tyres.

Conclusions:

I. Some cars are clutches.

II. Some clutches are cars.

Options :

1. ✖ If only conclusion I follows
2. ✖ If only conclusion II follows
3. ✖ If either conclusion I or II follows
4. ✔ If neither conclusion I nor II follows

Question Number : 10 Question Id : 97675511948 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

नीचे दिए गए प्रश्न में दो कथन और उसके बाद दो निष्कर्ष दिए गए हैं। आपको दिए गए कथनों को सत्य मानना है भले ही वे सर्वज्ञात तथ्यों से भिन्न प्रतीत होते

हों। सभी निष्कर्षों को पढ़िए फिर तय कीजिए कि दिए गए निष्कर्षों में से कौन - सा निष्कर्ष दिए गए कथनों का तर्कसंगत रूप से अनुसरण करता है, चाहे सर्वज्ञात तथ्य कुछ भी हों।

कथन:

सभी कारें, टायर्स हैं।

कुछ क्लच, टायर्स हैं।

निष्कर्ष:

I. कुछ कारें, क्लच हैं।

II. कुछ क्लच, कारें हैं।

Options :

1. ✖ यदि केवल निष्कर्ष I अनुसरण करता है
2. ✖ यदि केवल निष्कर्ष II अनुसरण करता है
3. ✖ यदि या तो निष्कर्ष I या II अनुसरण करता है
4. ✔ यदि न तो निष्कर्ष I और न ही II अनुसरण करता है

Question Number : 11 Question Id : 97675511949 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

In the question given, relations between different elements are shown in the statements. These statements are followed by two conclusions. Find out which of the given conclusions follow(s) the given statements and select the correct alternative from the given choices.

Statement:

$L \geq M = N < O, P < Q \geq R = S \geq L$

Conclusion:

I. $Q > M$

II. $N = Q$

Options :

1. ✔ None is true
2. ✖ Only II is true
3. ✖ Only I is true
4. ✖ Either I or II is true

Question Number : 11 Question Id : 97675511949 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

दिए गए प्रश्न में, कथन में विभिन्न अवयवों के बीच संबंध को दर्शाया गया है। कथन के बाद दो निष्कर्ष दिए गए हैं। दिए गए कथन के आधार पर निष्कर्षों का अध्ययन कीजिये और उचित उत्तर को चुनिए।

कथन:

$$L \geq M = N < O, P < Q \geq R = S \geq L$$

निष्कर्ष:

I. $Q > M$

II. $N = Q$

Options :

1.  कोई भी सत्य नहीं है
2.  केवल II सत्य है
3.  केवल I सत्य है
4.  या तो I या II सत्य है

Question Number : 12 Question Id : 97675511950 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which two signs should be interchanged to make the given equation correct?

$$20 + 5 \times 3 \div 3 - 1 = 14$$

Options :

1.  $\times$ and $-$
2.  $\div$ and $\times$
3.  $\div$ and $+$
4.  $\times$ and $+$

Question Number : 12 Question Id : 97675511950 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित समीकरण को सही करने के लिए किन दो चिन्हों को एक-दूसरे के स्थान पर रखना होगा?

$$20 + 5 \times 3 \div 3 - 1 = 14$$

Options :

1. ✖ × और –
2. ✖ ÷ और ×
3. ✔ ÷ और +
4. ✖ × और +

Question Number : 13 Question Id : 97675511951 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Find the missing number in the series given below.

3, 8, 22, 63, ?

Options :

1. ✔ 185
2. ✖ 295
3. ✖ 310
4. ✖ 285

Question Number : 13 Question Id : 97675511951 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

नीचे दी गयी श्रेणी में लुप्त संख्या ज्ञात करें।

3, 8, 22, 63, ?

Options :

1. ✔ 185
2. ✖ 295
3. ✖ 310
4. ✖ 285

Question Number : 14 Question Id : 97675511952 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

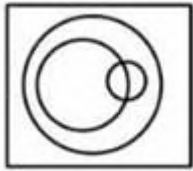
Correct Marks : 1 Wrong Marks : 0.25

Identify the diagram that best represents the relationship among the given classes.

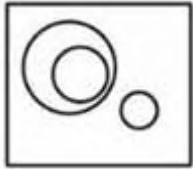
Book, Page, Pen

Options :

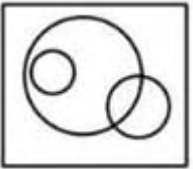
1. ✖



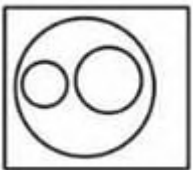
2. ✔



3. ✖



4. ✖



Question Number : 14 Question Id : 97675511952 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

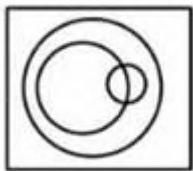
Correct Marks : 1 Wrong Marks : 0.25

उस आरेख को पहचानें जो दिए गए वर्गों के बीच संबंधों को सबसे अच्छे तौर से दर्शाता है।

पुस्तक, पृष्ठ, कलम

Options :

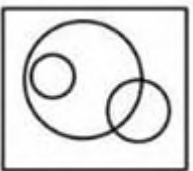
1. ✖



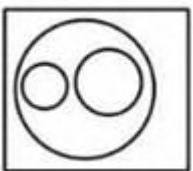
2. ✔



3. ✖



4. ✖



Question Number : 15 Question Id : 97675511953 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Identify the diagram that best represents the relationship among the given classes.

Pandemic, Coronavirus, Diabetes

Options :



Question Number : 15 Question Id : 97675511953 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

उस आरेख का चयन करें जो दिए गये वर्गों में उचित संबंध को दर्शाता है।

महामारी, कोरोनावायरस, मधुमेह

Options :



2. ✖



3. ✖



4. ✔



Question Number : 16 Question Id : 97675511954 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Rahul starts walking in the south direction and walks a distance of 7 meters. Now he took a left turn and walk 6m. Again he takes a left turn and walks 15m and reached a point P. In which direction is Rahul from the initial point?

Options :

- 1. ✖ South-East
- 2. ✔ North-East
- 3. ✖ North-West
- 4. ✖ South-West

Question Number : 16 Question Id : 97675511954 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

राहुल दक्षिण दिशा में चलना शुरू करता है और 7 मीटर की दूरी तय करता है। फिर उसने एक बायाँ मोड़ लिया और 6 मीटर चला। वह फिर से बाएं मुड़ता है और 15 मीटर चलता है और एक बिंदु P पर पहुंचता है। राहुल प्रारंभिक बिंदु से किस दिशा में है?

Options :

- 1. ✖ दक्षिण-पूर्व
- 2. ✔ उत्तर-पूर्व

3. ✖ उत्तर-पश्चिम
4. ✖ दक्षिण-पश्चिम

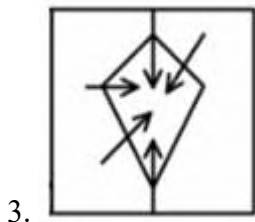
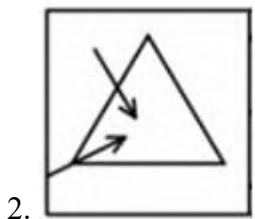
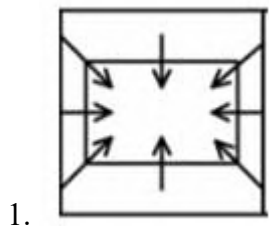
Question Number : 17 Question Id : 97675511955 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

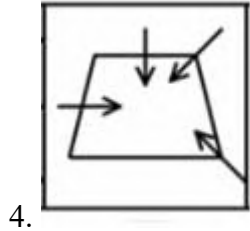
Correct Marks : 1 Wrong Marks : 0.25

Four figures are given in the following question. All figures have something in common except one. Find the odd figure out.

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :





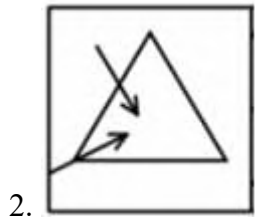
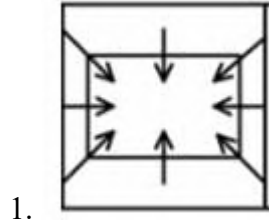
Question Number : 17 Question Id : 97675511955 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

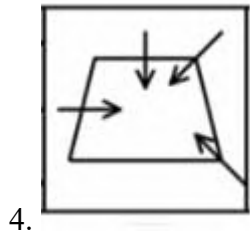
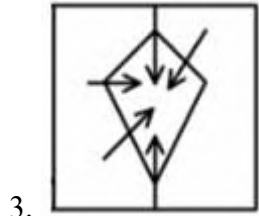
Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित प्रश्न में चार आकृति दी गयी है। एक को छोड़कर सभी आकृति में कुछ समान है। विषम आकृति ज्ञात कीजिए।

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :





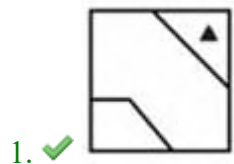
Question Number : 18 Question Id : 97675511956 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which answer figure will complete the pattern in the question figure?



Options :



2. ✖



3. ✖



4. ✖



Question Number : 18 Question Id : 97675511956 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

कौन-सी उत्तर आकृति, प्रश्न आकृति के प्रतिरूप को पूरा करेगी?



Options :

1. ✔

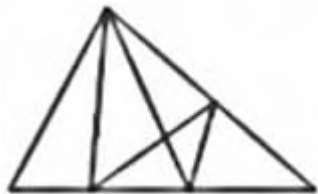




Question Number : 19 Question Id : 97675511957 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

How many triangles are there in the given figure?



Options :

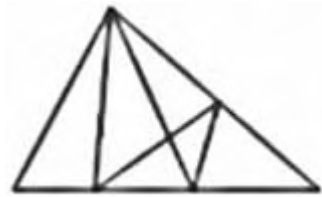
- 1. ✖ 13
- 2. ✖ 14
- 3. ✔ 15
- 4. ✖ 16

Question Number : 19 Question Id : 97675511957 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

दी गई आकृति में कितने त्रिभुज हैं?



Options :

1. ✖ 13

2. ✖ 14

3. ✔ 15

4. ✖ 16

Question Number : 20 Question Id : 97675511958 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Find the mirror image of the following figure.

Question figure:



Options :



1. ✖

2. ✖



3. ✔



4. ✖



Question Number : 20 Question Id : 97675511958 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

दी गयी आकृति का दर्पण प्रतिबिम्ब ज्ञात कीजिए।

प्रश्न आकृति:



Options :

1. ✖



2. ✖



3. ✔



4. ✖



General Awareness

Group Number :	2
Group Id :	976755401
Group Maximum Duration :	0
Group Minimum Duration :	0
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

General Awareness

Section Id :	976755729
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755859
Question Shuffling Allowed :	Yes

Question Number : 21 Question Id : 97675511959 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following individuals composed the National Song "Vande Mataram"?

Options :

1. ✖ Rabindranath Tagore
2. ✔ Bankimchandra Chatterjee
3. ✖ Dr. Rajendra Prasad
4. ✖ Lata Mangeshkar

Question Number : 21 Question Id : 97675511959 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से किस व्यक्ति ने राष्ट्रीय गीत "वंदे मातरम" की रचना की?

Options :

1. ✖ रविंद्रनाथ टैगोर
2. ✔ बंकिमचंद्र चटर्जी
3. ✖ डॉ राजेंद्र प्रसाद

4. ✖ लता मंगेशकर

Question Number : 22 Question Id : 97675511960 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Who among the following laid the foundation of Golden Temple?

Options :

1. ✖ Guru Arjan Sahib
2. ✖ Guru Amardas Sahib
3. ✖ Guru Ramdas Sahib
4. ✔ Hazrat Mian Mir ji

Question Number : 22 Question Id : 97675511960 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से किसने स्वर्ण मंदिर की नींव रखी थी?

Options :

1. ✖ गुरु अर्जन साहिब
2. ✖ गुरु अमरदास साहिब
3. ✖ गुरु रामदास साहिब
4. ✔ हज़रत मियां मीर जी

Question Number : 23 Question Id : 97675511961 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The Gateway of India was built to commemorate the visit of which of the following Kings?

Options :

1. ✖ King William IV
2. ✖ King Edward VII
3. ✔ King George V
4. ✖ King George I

Question Number : 23 Question Id : 97675511961 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

गेटवे ऑफ इंडिया का निर्माण निम्नलिखित में से किस राजा की यात्रा की स्मृति में किया गया था?

Options :

1. ✖ किंग विलियम IV
2. ✖ किंग एडवर्ड VII
3. ✔ किंग जॉर्ज V
4. ✖ किंग जॉर्ज I

Question Number : 24 Question Id : 97675511962 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Who is the Ex-Officio Chairperson of the NITI Aayog?

Options :

1. ✖ Vice President
2. ✖ Home Minister
3. ✔ Prime Minister
4. ✖ President

Question Number : 24 Question Id : 97675511962 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

नीति आयोग के पदेन अध्यक्ष कौन हैं?

Options :

1. ✖ उपराष्ट्रपति
2. ✖ गृहमंत्री
3. ✔ प्रधान मंत्री
4. ✖ राष्ट्रपति

Question Number : 25 Question Id : 97675511963 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

In which of the following years was the Indian Policy Resolution adopted by the Parliament?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 1950
2. 1991
3. 1947
4. 1956

Question Number : 25 Question Id : 97675511963 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

संसद द्वारा भारतीय नीति प्रस्ताव (Indian Policy Resolution) निम्नलिखित में से किस वर्ष में अपनाया गया था?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 1950
2. 1991
3. 1947
4. 1956

Question Number : 26 Question Id : 97675511964 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following refractive defects of vision is also known as Far-sightedness?

Options :

1. ✖ Myopia

2. ✓ Hypermetropia
3. ✗ Presbyopia
4. ✗ Cataract

Question Number : 26 Question Id : 97675511964 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से किस दृष्टि दोष को दूरदृष्टि दोष के नाम से भी जाना जाता है?

Options :

1. ✗ मायोपिया
2. ✓ हाइपरमेट्रोपिया
3. ✗ प्रेसबायोपिया
4. ✗ कैटेरेक्ट

Question Number : 27 Question Id : 97675511965 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

What is the Scientific Name of National Bird of India?

Options :

1. ✓ Pavo Cristatus
2. ✗ Panthera Tigris
3. ✗ Peacock
4. ✗ Peak Cokoo

Question Number : 27 Question Id : 97675511965 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

भारत के राष्ट्रीय पक्षी का वैज्ञानिक नाम क्या है?

Options :

1. ✓ पावो क्रिस्टेटस
2. ✗ पेंथेरा टाइग्रिस

3. ✖ मोर
4. ✖ पीक कोकू

Question Number : 28 Question Id : 97675511966 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is the largest District in India as per area?

Options :

1. ✔ Kuchchh
2. ✖ Mahe
3. ✖ Mumbai
4. ✖ Bangalore

Question Number : 28 Question Id : 97675511966 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

क्षेत्रफल के अनुसार निम्नलिखित में से कौनसा जिला भारत का सबसे बड़ा जिला है?

Options :

1. ✔ कच्छ
2. ✖ माहे
3. ✖ मुंबई
4. ✖ बैंगलोर

Question Number : 29 Question Id : 97675511967 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The water holding capacity is the highest in which of the following soils?

Options :

1. ✖ Silt Soil
2. ✖ Chalk Soil
3. ✔ Clayey Soil

4. ✖ Peat Soil

Question Number : 29 Question Id : 97675511967 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से किस मिट्टी में जल धारण क्षमता सबसे अधिक है?

Options :

1. ✖ गाद मिट्टी
2. ✖ चाक मिट्टी
3. ✔ दुमटी मिट्टी
4. ✖ पीट मिट्टी

Question Number : 30 Question Id : 97675511968 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Where was the first initiative of Mahatma Gandhi as a nationalist in India?

Options :

1. ✖ Kheda
2. ✖ Ahmedabad
3. ✔ Champaran
4. ✖ Porbandar

Question Number : 30 Question Id : 97675511968 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

भारत में एक राष्ट्रवादी के रूप में महात्मा गांधी की पहली पहल कहाँ से थी?

Options :

1. ✖ खेड़ा
2. ✖ अहमदाबाद
3. ✔ चंपारण
4. ✖ पोरबंदर

Question Number : 31 Question Id : 97675511969 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Who was the judge who presided over Mahatma Gandhi's hearing during the Non-Cooperation Movement in the year 1922?

Options :

1.  Justice CN Broomfield
2.  Justice Henry Davison
3.  Justice William McDonell
4.  Justice James Dewar

Question Number : 31 Question Id : 97675511969 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

वर्ष 1922 में असहयोग आंदोलन के दौरान महात्मा गांधी की सुनवाई की अध्यक्षता करने वाले न्यायाधीश कौन थे?

Options :

1.  जस्टिस सी.एन. ब्रूमफील्ड
2.  जस्टिस हेनरी डेविसन
3.  जस्टिस विलियम मैकडोनेल
4.  जस्टिस जेम्स देवर

Question Number : 32 Question Id : 97675511970 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following mahajanapadas was Vaishali the capital of?

Options :

1.  Magadha
2.  Vajji
3.  Avanti
4.  Panchala

Question Number : 32 Question Id : 97675511970 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से किस महाजनपद की राजधानी वैशाली थी?

Options :

1. ✖ मगध
2. ✔ वज्जि
3. ✖ अवन्ती
4. ✖ पांचाल

Question Number : 33 Question Id : 97675511971 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following commission was appointed by the Central Government on Union-State relations in 1983?

Options :

1. ✖ Dutt Commission
2. ✔ Sarkaria Commission
3. ✖ Setalvad Commission
4. ✖ Kalelkar Commission

Question Number : 33 Question Id : 97675511971 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन सा आयोग 1983 में केंद्र-राज्य संबंधों पर केंद्र सरकार द्वारा नियुक्त किया गया था?

Options :

1. ✖ दत्त आयोग
2. ✔ सरकारिया आयोग
3. ✖ सीतलवाद आयोग
4. ✖ कालेलकर आयोग

Question Number : 34 Question Id : 97675511972 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Who can initiate the process for the removal of the Vice-President of India?

Options :

1. ✖ House of People
2. ✔ Council of States
3. ✖ Council of Ministers
4. ✖ President

Question Number : 34 Question Id : 97675511972 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

भारत के उपराष्ट्रपति को हटाने की प्रक्रिया कौन शुरू कर सकता है?

Options :

1. ✖ लोक सभा
2. ✔ राज्य-सभा
3. ✖ मन्त्रि-परिषद्
4. ✖ राष्ट्रपति

Question Number : 35 Question Id : 97675511973 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following individuals is the author of the book "Anandamath"?

Options :

1. ✖ Rabindranath Tagore
2. ✖ Munshi Premchand
3. ✔ Bankimchandra Chatterji
4. ✖ Dr. Rajendra Prasad

Question Number : 35 Question Id : 97675511973 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित व्यक्तियों में से कौन "आनंदमठ" पुस्तक के लेखक हैं?

Options :

1. ✖ रवींद्रनाथ टैगोर
2. ✖ मुंशी प्रेमचंद
3. ✔ बंकिमचंद्र चटर्जी
4. ✖ डॉ राजेंद्र प्रसाद

Question Number : 36 Question Id : 97675511974 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Who is the first ever Indian recipient of a Nobel Prize?

Options :

1. ✖ CV Raman
2. ✖ Amartya Sen
3. ✖ Mother Teresa
4. ✔ Rabindranath Tagore

Question Number : 36 Question Id : 97675511974 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

नोबेल पुरस्कार पाने वाले पहले भारतीय कौन हैं?

Options :

1. ✖ सी वी रमन
2. ✖ अमर्त्य सेन
3. ✖ मदर टेरेसा
4. ✔ रवींद्रनाथ टैगोर

Question Number : 37 Question Id : 97675511975 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which team had won the first Cricket World Cup in the year 1975?

Options :

1. ✖ Australia
2. ✔ West Indies
3. ✖ India
4. ✖ Pakistan

Question Number : 37 Question Id : 97675511975 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

1975 में पहला क्रिकेट विश्व कप किस टीम ने जीता था?

Options :

1. ✖ ऑस्ट्रेलिया
2. ✔ वेस्ट इंडीज
3. ✖ भारत
4. ✖ पाकिस्तान

Question Number : 38 Question Id : 97675511976 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following Tennis player won the ATP Rome 2021 (Paris Open)?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. Rafael Nadal
2. Roger Federar
3. Novak Djokovic
4. Andy Murray

Question Number : 38 Question Id : 97675511976 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से किस टेनिस खिलाड़ी ने एटीपी रोम 2021 (पेरिस ओपन) जीता?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. राफेल नडाल
2. रोजर फ़ेडरर
3. नोवाक जोकोविच
4. एंडी मरे

Question Number : 39 Question Id : 97675511977 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following organizations developed the COVID-19 vaccine Covishield?

Options :

1. ✖ Moderna
2. ✖ Indian Medical Association
3. ✔ Serum Institute of India
4. ✖ Bharat Biotech

Question Number : 39 Question Id : 97675511977 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से किस संगठन ने COVID-19 वैक्सीन कोविशील्ड विकसित कि है?

Options :

1. ✖ मोडरना
2. ✖ इंडियन मेडिकल एसोसिएशन
3. ✔ सीरम इंस्टीट्यूट ऑफ इंडिया
4. ✖ भारत बायोटेक

Question Number : 40 Question Id : 97675511978 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Recently Mount Nyiragongo volcano has erupted. In which of the following countries is it situated?

Options :

1. ✓ Democratic Republic of Congo
2. ✗ Morocco
3. ✗ Nigeria
4. ✗ Madagascar

Question Number : 40 Question Id : 97675511978 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

हाल ही में माउंट न्यारागोंगो ज्वालामुखी फटा है। यह निम्नलिखित में से किस देश में स्थित है?

Options :

1. ✓ कांगो लोकतांत्रिक गणराज्य
2. ✗ मोरक्को
3. ✗ नाइजीरिया
4. ✗ मेडागास्कर

Arithmetic Ability

Group Number :	3
Group Id :	976755402
Group Maximum Duration :	0
Group Minimum Duration :	0
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

Arithmetic Ability

Section Id :	976755730
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755860
Question Shuffling Allowed :	Yes

Question Number : 41 Question Id : 97675511979 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

What will come in the place of question mark (?) in the given expression?

$$(420 \div 12 \times 35 + 45^2 - 15^2) = ?^2$$

Options :

1. ✖ 25
2. ✖ 35
3. ✖ 45
4. ✔ 55

Question Number : 41 Question Id : 97675511979 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

दिये गए व्यंजक में प्रश्न चिह्न (?) के स्थान पर क्या आएगा?

$$(420 \div 12 \times 35 + 45^2 - 15^2) = ?^2$$

Options :

1. ✖ 25
2. ✖ 35
3. ✖ 45
4. ✔ 55

Question Number : 42 Question Id : 97675511980 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

What value will come in place of question mark (?) in the following question?

$$\sqrt[3]{8000} + \sqrt[3]{27} - \sqrt[3]{343} = ?$$

Options :

1. ✖ 23
2. ✔ 16
3. ✖ 9
4. ✖ 24

Question Number : 42 Question Id : 97675511980 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित प्रश्न में प्रश्नवाचक चिह्न (?) के स्थान पर क्या मान आएगा?

$$\sqrt[3]{8000} + \sqrt[3]{27} - \sqrt[3]{343} = ?$$

Options :

1. ✖ 23
2. ✔ 16
3. ✖ 9
4. ✖ 24

Question Number : 43 Question Id : 97675511981 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $3^{(p+q)} = 243$ and $5^{(q-p)} = 5$, then find the value of $(p \times q)$?

Options :

- 1. ✓ 6
- 2. ✗ 3
- 3. ✗ 12
- 4. ✗ 4

Question Number : 43 Question Id : 97675511981 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $3^{(p+q)} = 243$ और $5^{(q-p)} = 5$ है, तो $(p \times q)$ मान ज्ञात करें ?

Options :

- 1. ✓ 6
- 2. ✗ 3
- 3. ✗ 12
- 4. ✗ 4

Question Number : 44 Question Id : 97675511982 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

LCM of two numbers is 3 times their HCF. The sum of the LCM and the HCF is 44. If one number is 11, then the other number is:

Options :

- 1. ✗ 22
- 2. ✗ 44
- 3. ✓ 33
- 4. ✗ 20

Question Number : 44 Question Id : 97675511982 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

दो संख्याओं का लघुत्तम समापवर्त्य उनके महत्तम समापवर्तक का 3 गुना है। लघुत्तम समापवर्त्य और महत्तम समापवर्तक का योग 44 है। यदि एक संख्या 11 है,

तो दूसरी संख्या है:

Options :

1. ✖ 22
2. ✖ 44
3. ✔ 33
4. ✖ 20

Question Number : 45 Question Id : 97675511983 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Find the largest fraction of the following fractions.

Options :

1. ✔ $\frac{895}{428}$

2. ✖ $\frac{23}{12}$

3. ✖ $\frac{88}{46}$

4. ✖ $\frac{313}{150}$

Question Number : 45 Question Id : 97675511983 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित भिन्नों में से सबसे बड़ी भिन्न ज्ञात कीजिए।

Options :

1. ✔ $\frac{895}{428}$

$$2. \quad \begin{array}{r} 23 \\ \times 12 \\ \hline \end{array}$$

$$3. \quad \begin{array}{r} 88 \\ \times 46 \\ \hline \end{array}$$

$$4. \quad \begin{array}{r} 313 \\ \times 150 \\ \hline \end{array}$$

Question Number : 46 Question Id : 97675511984 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Average of 45 numbers is 33. If average of first 15 numbers is 28 and average of last 25 numbers is 35, then what is the average of remaining five numbers?

Options :

- 1. ✖ 35
- 2. ✖ 37
- 3. ✖ 39
- 4. ✔ 38

Question Number : 46 Question Id : 97675511984 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

45 संख्याओं का औसत 33 है। यदि पहले 15 संख्याओं का औसत 28 है और अंतिम 25 संख्याओं का औसत 35 है, तो शेष पांच संख्याओं का औसत कितना होगा ?

Options :

- 1. ✖ 35
- 2. ✖ 37
- 3. ✖ 39
- 4. ✔ 38

Question Number : 47 Question Id : 97675511985 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

200 students took the examination in a school, and 13 percent of the students got distinction. The number of boys who got distinction is 2 more than the number of girls who got distinction. If 20 percent of the girls got distinction, find the total number of boys in the school ?

Options :

- 1. ✖ 120
- 2. ✖ 220
- 3. ✔ 140
- 4. ✖ 180

Question Number : 47 Question Id : 97675511985 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

200 छात्रों ने एक स्कूल में परीक्षा दी, और 13 प्रतिशत छात्रों को विशेष योग्यता मिली। ऐसे लड़कों की संख्या जिन्हें विशेष योग्यता मिली है, विशेष योग्यता पाने वाली लड़कियों की संख्या की तुलना में 2 अधिक है। यदि 20 प्रतिशत लड़कियों को विशेष योग्यता मिली है, तो स्कूल में लड़कों की कुल संख्या कितनी होगी?

Options :

- 1. ✖ 120
- 2. ✖ 220
- 3. ✔ 140
- 4. ✖ 180

Question Number : 48 Question Id : 97675511986 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The price of a shirt is decreased by 25 percent and hence the sale is increased by 20 percent. What will be the effect on the total revenue of the shop?

Options :

- 1. ✖ 5 percent increase
- 2. ✔ 10 percent decrease
- 3. ✖ No effect
- 4. ✖ 10 percent increase

Question Number : 48 Question Id : 97675511986 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

एक शर्ट की कीमत में 25 प्रतिशत की कमी होती है और इसलिए बिक्री में 20 प्रतिशत की वृद्धि हो जाती है। दुकान के कुल राजस्व पर क्या प्रभाव पड़ेगा?

Options :

1. ✖ 5 प्रतिशत की वृद्धि
2. ✔ 10 प्रतिशत की कमी
3. ✖ कोई प्रभाव नहीं
4. ✖ 10 प्रतिशत की वृद्धि

Question Number : 49 Question Id : 97675511987 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Prakash bought 2 items at the same price. He sold one item at 20 percent profit and another item at 15 percent profit. What is the overall percentage profit he made?

Options :

1. ✖ 2.5 percent
2. ✔ 17.5 percent
3. ✖ 16.5 percent
4. ✖ 22.5 percent

Question Number : 49 Question Id : 97675511987 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

प्रकाश ने समान मूल्य पर दो वस्तु खरीदी। उसने एक वस्तु को 20 प्रतिशत लाभ पर और दूसरी वस्तु को 15 प्रतिशत लाभ पर बेचा। उसने कुल कितना प्रतिशत लाभ अर्जित किया?

Options :

1. ✖ 2.5 प्रतिशत
2. ✔ 17.5 प्रतिशत
3. ✖ 16.5 प्रतिशत
4. ✖ 22.5 प्रतिशत

Question Number : 50 Question Id : 97675511988 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

A, B and C are three partners in a business who shared profit in the ratio of 2:5:3. If they had invested for 8 months, 6 months and 9 months respectively, what is the ratio of their investments?

Options :

- 1. ✖ 6:10:9
- 2. ✔ 3:10:4
- 3. ✖ 4:5:9
- 4. ✖ 3:5:4

Question Number : 50 Question Id : 97675511988 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

A, B और C एक व्यवसाय में तीन साझेदार हैं जिन्होंने 2:5:3 के अनुपात में लाभ को साझा किया। यदि उन्होंने क्रमशः 8 महीने, 6 महीने और 9 महीने के लिए निवेश किया था, तो उनके निवेश का अनुपात क्या है?

Options :

- 1. ✖ 6:10:9
- 2. ✔ 3:10:4
- 3. ✖ 4:5:9
- 4. ✖ 3:5:4

Question Number : 51 Question Id : 97675511989 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

An alloy contains tin, copper and zinc in the ratio of 4:6:5. Find the quantity of copper to be added to 120 kg of this alloy to form a new alloy in which the ratio of the above elements in the same order is 4:4:5?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 16 kg
2. 20 kg
3. 10 kg
4. 8 kg

Question Number : 51 Question Id : 97675511989 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

एक मिश्र धातु में टिन, तांबा और जस्ता 4:6:5 के अनुपात में है। 120 किग्रा के इस मिश्र धातु में तांबा की मिलाये जाने वाली मात्रा कितनी होगी जिससे बनने वाली नयी मिश्र धातु में उपरोक्त तत्वों का अनुपात क्रमशः 4:4:5 हो।

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 16 किग्रा
2. 20 किग्रा
3. 10 किग्रा
4. 8 किग्रा

Question Number : 52 Question Id : 97675511990 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

A sum of Rs. 3600 is divided into two principals. One principal is invested at 8 percent p.a. for 2 years and the other is invested at 9 percent p.a. for 3 years. If the total simple interest obtained is Rs. 741, then find the larger principal.

Options :

1. ✖ Rs. 1800
2. ✖ Rs. 1500
3. ✔ Rs. 2100
4. ✖ Rs. 2400

Question Number : 52 Question Id : 97675511990 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

3600 रुपये को दो मूलधनों में विभाजित किया गया। एक मूलधन को 8 प्रतिशत सालाना ब्याज की दर से दो वर्ष के लिए निवेश किया गया और दूसरे को 9 प्रतिशत सालाना ब्याज की दर से तीन वर्ष के लिए निवेश किया गया। यदि प्राप्त कुल साधारण ब्याज 741 रुपये, है तो बड़ा मूलधन ज्ञात कीजिए।

Options :

1. ✖ 1800 रुपये
2. ✖ 1500 रुपये
3. ✔ 2100 रुपये
4. ✖ 2400 रुपये

Question Number : 53 Question Id : 97675511991 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The ratio of speed of boat in upstream to speed of boat in downstream is 2: 3. The time taken by boat to cover 45 km in downstream is t hours, then in t hours how many kilometers will be travelled by boat in upstream?

Options :

1. ✖ 15 km
2. ✔ 30 km
3. ✖ 40 km
4. ✖ 50 km

Question Number : 53 Question Id : 97675511991 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

धारा के विपरीत दिशा में नाव की गति और धारा की दिशा में नाव की गति का अनुपात 2: 3 है। धारा की दिशा में 45 किमी की दूरी तय करने में नाव द्वारा लिया गया समय t घंटे हैं, तो धारा के विपरीत दिशा में नाव t घंटे में कितने किमी की दूरी तय करेगी?

Options :

1. ✖ 15 किमी
2. ✔ 30 किमी
3. ✖ 40 किमी
4. ✖ 50 किमी

Question Number : 54 Question Id : 97675511992 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If Arvind reaches his college in 2 hours by his bike at an average speed of 30 km/hr, then what should be his average speed by his car to reach the college half an hour earlier?

Options :

1. ✓ 40 km/hr
2. ✗ 36 km/hr
3. ✗ 45 km/hr
4. ✗ 35 km/h

Question Number : 54 Question Id : 97675511992 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि अरविंद 30 किमी/घंटा की औसत गति से अपनी बाइक से 2 घंटे में कॉलेज पहुँचता है, तो वह अपनी कार की किस औसत गति से कॉलेज आधे घंटे पहले पहुँच सकता है?

Options :

1. ✓ 40 किमी/घंटा
2. ✗ 36 किमी/घंटा
3. ✗ 45 किमी/घंटा
4. ✗ 35 किमी/घंटा

Question Number : 55 Question Id : 97675511993 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Roli takes 3 hours to type 24 pages. Neelam takes 9 hours to type 45 pages. In how many hours they will type 351 pages together?

Options :

1. ✗ 15 hours
2. ✗ 18 hours
3. ✓ 27 hours
4. ✗ 21 hours

Question Number : 55 Question Id : 97675511993 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

रोली 24 पेज टाइप करने में 3 घंटे का समय लेती है। नीलम 45 पेज टाइप करने में 9 घंटे का समय लेती है। वे कितने घंटों में एक साथ मिलकर 351 पेज टाइप कर लेगी?

Options :

1. ✖ 15 घंटे
2. ✖ 18 घंटे
3. ✔ 27 घंटे
4. ✖ 21 घंटे

Question Number : 56 Question Id : 97675511994 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Two cubes whose edge is 8 cm are joined together to form a single cuboid. What is the volume of the new cuboid so formed?

Options :

1. ✖ 1850 cm³
2. ✔ 1024 cm³
3. ✖ 2150 cm³
4. ✖ 1950 cm³

Question Number : 56 Question Id : 97675511994 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

दो घन जिनके किनारे 8 सेमी है, को जोड़कर एक घनाभ बनाया जाता है। नवनिर्मित घनाभ का कुल आयतन कितना होगा?

Options :

1. ✖ 1850 सेमी³

2. ✓ 1024 सेमी³

3. ✗ 2150 सेमी³

4. ✗ 1950 सेमी³

Question Number : 57 Question Id : 97675511995 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If the one of the diagonal of a kite is 16 cm and its area is 96 cm^2 , what is the length of the other diagonal of the kite?

Options :

1. ✗ 14 cm

2. ✗ 16 cm

3. ✓ 12 cm

4. ✗ 18 cm

Question Number : 57 Question Id : 97675511995 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि एक पतंग का एक विकर्ण 16 वर्ग से.मी. है और इसका क्षेत्रफल 96 वर्ग सेमी है, तो पतंग के दूसरे विकर्ण की लंबाई कितनी है?

Options :

1. ✗ 14 सेमी

2. ✗ 16 सेमी

3. ✓ 12 सेमी

4. ✗ 18 सेमी

Question Number : 58 Question Id : 97675511996 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Study the following table carefully to answer the given question.

Number of employees in different departments of five organisations

Organisation → Department ↓	A	B	C	D	E
HR	145	80	120	180	160
Finance	120	75	100	220	140
Marketing	150	90	115	200	190
IT	225	110	160	280	220
Administration	180	120	130	110	130

What is the ratio between the number of employees from Finance and Marketing departments together of organization B and these two departments together of organisation D respectively?

Options :

1. ✖ 11:18
2. ✖ 9:11
3. ✔ 11:28
4. ✖ 18:11

Question Number : 58 Question Id : 97675511996 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

दिए गए प्रश्न का उत्तर देने के लिए निम्न तालिका का ध्यानपूर्वक अध्ययन कीजिए।

पांच संगठनों के विभिन्न विभागों में कर्मचारियों की संख्या

संगठन → विभाग ↓	A	B	C	D	E
एचआर	145	80	120	180	160
वित्त	120	75	100	220	140
विपणन	150	90	115	200	190
आईटी	225	110	160	280	220
प्रशासन	180	120	130	110	130

संगठन B के वित्त और विपणन विभागों को मिलाकर कर्मचारियों की कुल संख्या और संगठन D के इन दोनों विभागों को मिलाकर कर्मचारियों की कुल संख्या के बीच का अनुपात क्या है?

Options :

1. ✖ 11:18
2. ✖ 9:11
3. ✔ 11:28
4. ✖ 18:11

Question Number : 59 Question Id : 97675511997 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Study the following table carefully to answer the given question.

Number of employees in different departments of five organisations

Organisation → Department ↓	A	B	C	D	E
HR	145	80	120	180	160
Finance	120	75	100	220	140
Marketing	150	90	115	200	190
IT	225	110	160	280	220
Administration	180	120	130	110	130

Number of employees in IT department of organization C is what per cent of the total number of employees in organization C in all the departments together?

Options :

1. ✖ 16.5
2. ✔ 25.6
3. ✖ 22.4
4. ✖ 27.4

Question Number : 59 Question Id : 97675511997 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

दिए गए प्रश्न का उत्तर देने के लिए निम्न तालिका का ध्यानपूर्वक अध्ययन कीजिए।

पांच संगठनों के विभिन्न विभागों में कर्मचारियों की संख्या

संगठन → विभाग ↓	A	B	C	D	E
एचआर	145	80	120	180	160
वित्त	120	75	100	220	140
विपणन	150	90	115	200	190
आईटी	225	110	160	280	220
प्रशासन	180	120	130	110	130

संगठन C के IT विभाग में कर्मचारियों की संख्या, संगठन C में सभी विभागों में मिलाकर कर्मचारियों की कुल संख्या का कितना प्रतिशत है?

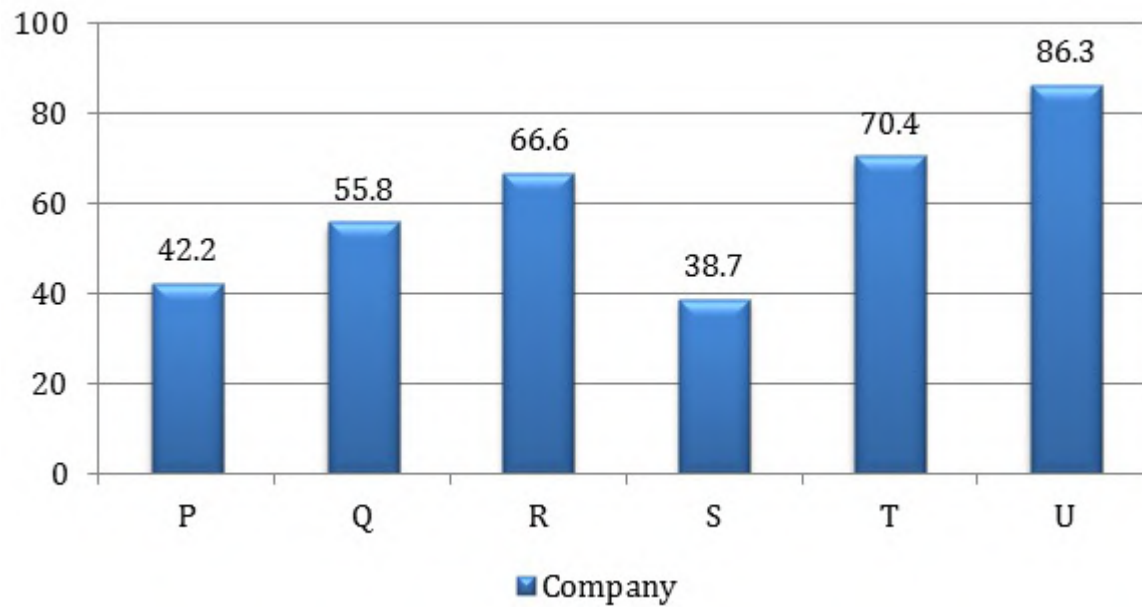
Options :

1. ✖ 16.5
2. ✔ 25.6
3. ✖ 22.4
4. ✖ 27.4

Question Number : 60 Question Id : 97675511998 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The following bar graph shows the sales (in Rs. crore) of six companies in 2012-13.



What approximate percentage of the total sales of the given six companies together was the sale of company T?

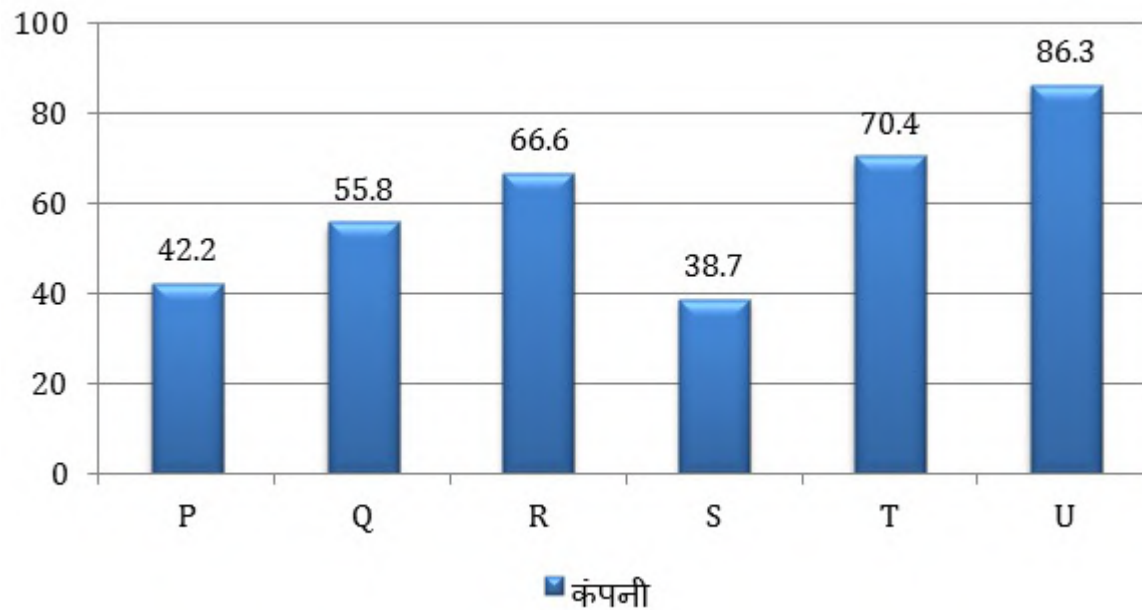
Options :

1. ✓ 19.55 percent
2. ✗ 22.3 percent
3. ✗ 17.4 percent
4. ✗ 15 percent

Question Number : 60 Question Id : 97675511998 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित बार ग्राफ 2012-13 में छह कंपनियों की बिक्री (करोड़ रुपये में) को दर्शाता है।



कंपनी T की बिक्री, दी गई छह कंपनियों को मिलाकर कुल बिक्री का लगभग कितना प्रतिशत था?

Options :

1. ✓ 19.55 प्रतिशत
2. ✗ 22.3 प्रतिशत
3. ✗ 17.4 प्रतिशत
4. ✗ 15 प्रतिशत

General English

Group Number :	4
Group Id :	976755403
Group Maximum Duration :	0
Group Minimum Duration :	0
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	20

Is this Group for Examiner? :

No

General English

Section Id :	976755731
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	16
Number of Questions to be attempted :	16
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755861
Question Shuffling Allowed :	Yes

Question Number : 61 Question Id : 97675511999 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

In the following question, four sentences are given out of which three sentences are grammatically incorrect while one is correct. Find out which sentence is grammatically correct and select the appropriate option.

Options :

- ✘ All Central Acts and subordinate legislations passed by the Centre, include rules, regulations, and circulars, should be made available on this portal.
- ✘ The data uploaded on the portal should available in machine readable PDF formats.
- ✔ Navigation on this portal should be such that the complete law-making chain, right from the parent act to the subordinate legislations, is clearly visible.
- ✘ The portal should allow uploaded of state government Acts, regulations and subordinate legislations as well.

Question Number : 61 Question Id : 97675511999 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

In the following question, four sentences are given out of which three sentences are grammatically incorrect while one is correct. Find out which

sentence is grammatically correct and select the appropriate option.

Options :

1. ✖ All Central Acts and subordinate legislations passed by the Centre, include rules, regulations, and circulars, should be made available on this portal.
2. ✖ The data uploaded on the portal should available in machine readable PDF formats.
3. ✔ Navigation on this portal should be such that the complete law-making chain, right from the parent act to the subordinate legislations, is clearly visible.
4. ✖ The portal should allow uploaded of state government Acts, regulations and subordinate legislations as well.

Question Number : 62 Question Id : 97675512000 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Identify the segment in the sentence which contains the grammatical error from the given options.

If he had wrote the examination faster and answered one more question he would have scored better.

Options :

1. ✔ If he had wrote the examination faster
2. ✖ and answered one more question
3. ✖ he would have scored better
4. ✖ No error

Question Number : 62 Question Id : 97675512000 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Identify the segment in the sentence which contains the grammatical error from the given options.

If he had wrote the examination faster and answered one more question he would have scored better.

Options :

1. ✔ If he had wrote the examination faster
2. ✖ and answered one more question
3. ✖ he would have scored better
4. ✖ No error

Question Number : 63 Question Id : 97675512001 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

The medals from the two events will be counted for "ranking of competing nations" at the Birmingham Games, the CGF said on Monday.

Options :

1. ✖ will count
2. ✖ be counted
3. ✖ will be count
4. ✔ No substitution required

Question Number : 63 Question Id : 97675512001 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

The medals from the two events will be counted for "ranking of competing nations" at the Birmingham Games, the CGF said on Monday.

Options :

1. ✖ will count
2. ✖ be counted
3. ✖ will be count
4. ✔ No substitution required

Question Number : 64 Question Id : 97675512002 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

Since 1970, trends in agricultural production, fish harvest, bio-energy production and harvest of materials have increased, in response to populational growth, rising demand and technology development.

Options :

1. ✓ population growth, rising demand and technological development.
2. ✗ populated growth, rising demand and technological development.
3. ✗ population growing, rising demand and technological development.
4. ✗ No substitution required.

Question Number : 64 Question Id : 97675512002 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

Since 1970, trends in agricultural production, fish harvest, bio-energy production and harvest of materials have increased, in response to population growth, rising demand and technology development.

Options :

1. ✓ population growth, rising demand and technological development.
2. ✗ populated growth, rising demand and technological development.
3. ✗ population growing, rising demand and technological development.
4. ✗ No substitution required.

Question Number : 65 Question Id : 97675512003 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate option to fill in the blank.

She slipped _____ damp grass, breaking a leg, cracking a bone in the other and hurting her shoulder.

Options :

1. ✗ at
2. ✓ on
3. ✗ by
4. ✗ to

Question Number : 65 Question Id : 97675512003 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate option to fill in the blank.

She slipped _____ damp grass, breaking a leg, cracking a bone in the other and hurting her shoulder.

Options :

1. ✖ at
2. ✔ on
3. ✖ by
4. ✖ to

Question Number : 66 Question Id : 97675512004 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate option to fill in the blank.

We all are well aware that to _____ hygiene, we have to keep ourselves and our surroundings clean.

Options :

1. ✖ renew
2. ✖ nurture
3. ✔ maintain
4. ✖ conserve

Question Number : 66 Question Id : 97675512004 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate option to fill in the blank.

We all are well aware that to _____ hygiene, we have to keep ourselves and our surroundings clean.

Options :

1. ✖ renew
2. ✖ nurture
3. ✔ maintain

4. ✖ conserve

Question Number : 67 Question Id : 97675512005 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Rearrange the following sentences in their correct order to form a meaningful paragraph.

P. There are so many reasons to include veggies into your diet.

Q. Low in calories, nutrient-dense, versatile and tasty.

R. When we use the term healthy, vegetable is the first word that comes to our mind.

S. Filling your plate with healthy and nutritious food items is an effective way to lose weight.

Options :

1. ✔ SRQP

2. ✖ RQPS

3. ✖ QPSR

4. ✖ PSRQ

Question Number : 67 Question Id : 97675512005 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Rearrange the following sentences in their correct order to form a meaningful paragraph.

P. There are so many reasons to include veggies into your diet.

Q. Low in calories, nutrient-dense, versatile and tasty.

R. When we use the term healthy, vegetable is the first word that comes to our mind.

S. Filling your plate with healthy and nutritious food items is an effective way to lose weight.

Options :

1. ✔ SRQP

2. ✖ RQPS

3. ✖ QPSR

4. ✖ PSRQ

Question Number : 68 Question Id : 97675512006 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Rearrange the following sentences in their correct order to form a meaningful paragraph.

P: The government of Maharashtra has come up with guidelines for organising of Ganesh Festival.

Q: If organisers need to have more than 20 people, then they need to take permission from the local District Collector.

R: At any given time, no more than 20 people will be allowed to gather in the sanctum within the pandal where the Ganesh idol is kept for worshipping.

S: The District Collector will then verify the size of the pandal and will give permission if satisfied that social distancing will be maintained with 20 plus people.

Options :

1. ✓ PRQS

2. ✗ QPSR

3. ✗ RQPS

4. ✗ SRPQ

Question Number : 68 Question Id : 97675512006 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Rearrange the following sentences in their correct order to form a meaningful paragraph.

P: The government of Maharashtra has come up with guidelines for organising of Ganesh Festival.

Q: If organisers need to have more than 20 people, then they need to take permission from the local District Collector.

R: At any given time, no more than 20 people will be allowed to gather in the sanctum within the pandal where the Ganesh idol is kept for worshipping.

S: The District Collector will then verify the size of the pandal and will give permission if satisfied that social distancing will be maintained with 20 plus people.

Options :

1. ✓ PRQS

2. ✗ QPSR

3. ✗ RQPS

4. ✗ SRPQ

Question Number : 69 Question Id : 97675512007 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate synonym of the given word.

AMBIVALENCE

Options :

1. ✖ Intensity
2. ✖ Violence
3. ✔ Puzzle
4. ✖ Despair

Question Number : 69 Question Id : 97675512007 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate synonym of the given word.

AMBIVALENCE

Options :

1. ✖ Intensity
2. ✖ Violence
3. ✔ Puzzle
4. ✖ Despair

Question Number : 70 Question Id : 97675512008 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate antonym of the given word.

Ostentatious

Options :

1. ✔ Modest
2. ✖ Innocence
3. ✖ Flamboyance
4. ✖ Purity

Question Number : 70 Question Id : 97675512008 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate antonym of the given word.

Ostentatious

Options :

1. ✓ Modest
2. ✗ Innocence
3. ✗ Flamboyance
4. ✗ Purity

Question Number : 71 Question Id : 97675512009 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the correctly spelt word

Options :

1. ✗ Forrunner
2. ✗ Foerrunner
3. ✓ Forerunner
4. ✗ Forarunner

Question Number : 71 Question Id : 97675512009 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the correctly spelt word

Options :

1. ✗ Forrunner
2. ✗ Foerrunner
3. ✓ Forerunner
4. ✗ Forarunner

Question Number : 72 Question Id : 97675512010 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the wrongly spelt word.

Options :

1. ✓ Gaurmet
2. ✗ Grateful
3. ✗ Guarantee
4. ✗ Grandeur

Question Number : 72 Question Id : 97675512010 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the wrongly spelt word.

Options :

1. ✓ Gaurmet
2. ✗ Grateful
3. ✗ Guarantee
4. ✗ Grandeur

Question Number : 73 Question Id : 97675512011 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate meaning of the given idiom/ phrase.

To burn your finger

Options :

1. ✓ To experience unpleasant consequences
2. ✗ Excellent health
3. ✗ In good condition espec. Getting a lot of money
4. ✗ Things always get worse before they get better

Question Number : 73 Question Id : 97675512011 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate meaning of the given idiom/ phrase.

To burn your finger

Options :

1. ✓ To experience unpleasant consequences
2. ✗ Excellent health
3. ✗ In good condition esp. Getting a lot of money
4. ✗ Things always get worse before they get better

Question Number : 74 Question Id : 97675512012 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate meaning of the given idiom/ phrase.

To face the music

Options :

1. ✗ To be greeted rudely
2. ✗ To be offered warm hospitality
3. ✗ To enjoy a music programme
4. ✓ To bear the consequences

Question Number : 74 Question Id : 97675512012 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the most appropriate meaning of the given idiom/ phrase.

To face the music

Options :

1. ✗ To be greeted rudely
2. ✗ To be offered warm hospitality

3. ✖ To enjoy a music programme

4. ✔ To bear the consequences

Question Number : 75 Question Id : 97675512013 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the word which means the same as the group of words given.

Transmission that combines media of communication:

Options :

1. ✖ Multiple

2. ✔ Multimedia

3. ✖ Multitasking

4. ✖ Multimillionaire

Question Number : 75 Question Id : 97675512013 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Select the word which means the same as the group of words given.

Transmission that combines media of communication:

Options :

1. ✖ Multiple

2. ✔ Multimedia

3. ✖ Multitasking

4. ✖ Multimillionaire

Sub-Section Number :

2

Sub-Section Id :

976755862

Question Shuffling Allowed :

Yes

Question Id : 97675512014 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (76 to 80)

Read the following passage and answer the questions below.

The tribunes of Rome, Marullus and Flavius, break up a gathering of citizens who want to celebrate Julius Caesar's triumphant return from war. The victory is marked by public games in which Caesar's protégé, Mark Antony, takes part. On his way to the arena, Caesar is stopped by a stranger who warns him that he should 'Beware the Ides [15th] of March.'

Fellow senators, Caius Cassius and Marcus Brutus, are suspicious of Caesar's reactions to the power he holds in the Republic. They fear he will accept offers to become Emperor. He has been gaining a lot of power recently and people treat him like a god. Cassius, a successful general himself, is jealous of Caesar. Brutus has a more balanced view of the political position. The conspirator Casca enters and tells Brutus of a ceremony held by the plebeians. They offered Caesar a crown three times, and he refused it every time. But the conspirators are still wary of his aspirations.

Cassius, Casca, and their allies plant false documents to manipulate Brutus to join their cause to remove Caesar. After doing so, they visit Brutus at night in his home to persuade him of their views. There they plan Caesar's death. Brutus is troubled but refuses to confide in his devoted wife, Portia. On 15 March, Caesar's wife, Calpurnia, urges him not to go to the Senate. She has had visionary dreams and fears the portents of the overnight storms.

Caesar is nevertheless persuaded by flattery to go to the Capitol. At the Capitol, he is stabbed by each conspirator in turn. As Brutus gives the final blow, Caesar utters the famous phrase: Et tu, Brute?

Sub questions

Question Number : 76 Question Id : 97675512015 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Whom does this line “He has been gaining a lot of power recently and people treat him like a god” refer to according to the given passage:

Options :

1. ✖ Caius Cassius
2. ✖ Marcus Brutus
3. ✔ Julius Caesar
4. ✖ Calpurnia

Question Number : 77 Question Id : 97675512016 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Why did Caesar's wife, Calpurnia, urge him not to go to the Senate?

Options :

1. ✔ because she had a visionary dream of something bad to happen

2. ✖ because she was told to do so by the two senators Brutus and Cassius
3. ✖ because an stranger told her to be killed by some senators
4. ✖ because she was not much concerned about Caesar's prestige

Question Number : 78 Question Id : 97675512017 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

According to the given passage, Portia has been portrayed as-

Options :

1. ✖ Cassius' daughter
2. ✖ Casca's mother
3. ✖ Calpurnia's sister
4. ✔ Brutus' wife

Question Number : 79 Question Id : 97675512018 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Why did the conspirators plant false documents?

Options :

1. ✖ to manipulate Caesar to join their cause to remove Brutus
2. ✔ to manipulate Brutus to join their cause to remove Caesar
3. ✖ to manipulate Portia to join their cause to remove Brutus
4. ✖ to manipulate Cassius to join their cause to remove Brutus

Question Number : 80 Question Id : 97675512019 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following statements is incorrect according to the given passage?

Options :

1. ✖ Caesar is nevertheless persuaded by flattery to go to the Capitol.
2. ✖ Caesar utters the famous phrase: Et tu, Brute?
3. ✖ They offered Caesar a crown three times, and he refused it every time.

4. ✓ At the Capitol, Cassius is stabbed by each conspirator in turn.

Question Id : 97675512014 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (76 to 80)

Read the following passage and answer the questions below.

The tribunes of Rome, Marullus and Flavius, break up a gathering of citizens who want to celebrate Julius Caesar's triumphant return from war. The victory is marked by public games in which Caesar's protégé, Mark Antony, takes part. On his way to the arena, Caesar is stopped by a stranger who warns him that he should 'Beware the Ides [15th] of March.'

Fellow senators, Caius Cassius and Marcus Brutus, are suspicious of Caesar's reactions to the power he holds in the Republic. They fear he will accept offers to become Emperor. He has been gaining a lot of power recently and people treat him like a god. Cassius, a successful general himself, is jealous of Caesar. Brutus has a more balanced view of the political position. The conspirator Casca enters and tells Brutus of a ceremony held by the plebeians. They offered Caesar a crown three times, and he refused it every time. But the conspirators are still wary of his aspirations.

Cassius, Casca, and their allies plant false documents to manipulate Brutus to join their cause to remove Caesar. After doing so, they visit Brutus at night in his home to persuade him of their views. There they plan Caesar's death. Brutus is troubled but refuses to confide in his devoted wife, Portia. On 15 March, Caesar's wife, Calpurnia, urges him not to go to the Senate. She has had visionary dreams and fears the portents of the overnight storms.

Caesar is nevertheless persuaded by flattery to go to the Capitol. At the Capitol, he is stabbed by each conspirator in turn. As Brutus gives the final blow, Caesar utters the famous phrase: Et tu, Brute?

Sub questions

Question Number : 76 Question Id : 97675512015 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Whom does this line “He has been gaining a lot of power recently and people treat him like a god” refer to according to the given passage:

Options :

1. ✗ Caius Cassius
2. ✗ Marcus Brutus
3. ✓ Julius Caesar
4. ✗ Calpurnia

Question Number : 77 Question Id : 97675512016 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Why did Caesar's wife, Calpurnia, urge him not to go to the Senate?

Options :

1. ☒ because she had a visionary dream of something bad to happen
2. ☐ because she was told to do so by the two senators Brutus and Cassius
3. ☐ because an stranger told her to be killed by some senators
4. ☐ because she was not much concerned about Caesar's prestige

Question Number : 78 Question Id : 97675512017 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

According to the given passage, Portia has been portrayed as-

Options :

1. ☐ Cassius' daughter
2. ☐ Casca's mother
3. ☐ Calpurnia's sister
4. ☒ Brutus' wife

Question Number : 79 Question Id : 97675512018 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Why did the conspirators plant false documents?

Options :

1. ☐ to manipulate Caesar to join their cause to remove Brutus
2. ☒ to manipulate Brutus to join their cause to remove Caesar
3. ☐ to manipulate Portia to join their cause to remove Brutus
4. ☐ to manipulate Cassius to join their cause to remove Brutus

Question Number : 80 Question Id : 97675512019 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following statements is incorrect according to the given passage?

Options :

1. ✖ Caesar is nevertheless persuaded by flattery to go to the Capitol.
2. ✖ Caesar utters the famous phrase: Et tu, Brute?
3. ✖ They offered Caesar a crown three times, and he refused it every time.
4. ✔ At the Capitol, Cassius is stabbed by each conspirator in turn.

General Hindi

Group Number :	5
Group Id :	976755404
Group Maximum Duration :	0
Group Minimum Duration :	0
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

General Hindi

Section Id :	976755732
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	16
Number of Questions to be attempted :	16
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755863
Question Shuffling Allowed :	Yes

Question Number : 81 Question Id : 97675512020 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा शब्द तत्पुरुष समास का उदाहरण नहीं है?

Options :

1. ✖ जन्मांध
2. ✖ गिरहकट
3. ✔ महात्मा
4. ✖ सत्याग्रह

Question Number : 81 Question Id : 97675512020 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा शब्द तत्पुरुष समास का उदाहरण नहीं है?

Options :

1. ✖ जन्मांध
2. ✖ गिरहकट
3. ✔ महात्मा
4. ✖ सत्याग्रह

Question Number : 82 Question Id : 97675512021 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से तत्सम शब्द का चयन कीजिए-

Options :

1. ✖ पंद्रह
2. ✖ पछतावा
3. ✖ पड़ोस
4. ✔ प्रतिच्छाया

Question Number : 82 Question Id : 97675512021 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से तत्सम शब्द का चयन कीजिए-

Options :

1. ✖ पंद्रह
2. ✖ पछतावा
3. ✖ पड़ोस
4. ✔ प्रतिच्छाया

Question Number : 83 Question Id : 97675512022 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से "आराधना" शब्द का विशेषण कौन-सा है?

Options :

1. ✖ राधना
2. ✔ आराध्य
3. ✖ आलोचित
4. ✖ अर्धना

Question Number : 83 Question Id : 97675512022 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से "आराधना" शब्द का विशेषण कौन-सा है?

Options :

1. ✖ राधना
2. ✔ आराध्य
3. ✖ आलोचित
4. ✖ अर्धना

Question Number : 84 Question Id : 97675512023 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से उत्तमपुरुष वाचक सर्वनाम का चयन कीजिए-

Options :

1. ✓ हम
2. ✗ तुम
3. ✗ वे
4. ✗ आप

Question Number : 84 Question Id : 97675512023 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से उत्तमपुरुष वाचक सर्वनाम का चयन कीजिए-

Options :

1. ✓ हम
2. ✗ तुम
3. ✗ वे
4. ✗ आप

Question Number : 85 Question Id : 97675512024 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा शब्द "निष्ठा" का पर्यायवाची नहीं है?

Options :

1. ✗ श्रद्धा
2. ✗ आस्था
3. ✗ विश्वास
4. ✓ संदेह

Question Number : 85 Question Id : 97675512024 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा शब्द "निष्ठा" का पर्यायवाची नहीं है?

Options :

1. ✖ श्रद्धा
2. ✖ आस्था
3. ✖ विश्वास
4. ✔ संदेह

Question Number : 86 Question Id : 97675512025 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से अशुद्ध वर्तनी वाले शब्द का चयन कीजिए-

Options :

1. ✔ फुटवॉल
2. ✖ परित्याग
3. ✖ अत्यावश्यक
4. ✖ संकल्पित

Question Number : 86 Question Id : 97675512025 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से अशुद्ध वर्तनी वाले शब्द का चयन कीजिए-

Options :

1. ✔ फुटवॉल
2. ✖ परित्याग
3. ✖ अत्यावश्यक
4. ✖ संकल्पित

Question Number : 87 Question Id : 97675512026 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से "अवाक्" का विलोम शब्द कौन-सा है?

Options :

1. ✖ जावक
2. ✖ विष
3. ✔ सवाक्
4. ✖ उत्थान

Question Number : 87 Question Id : 97675512026 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से "अवाक्" का विलोम शब्द कौन-सा है?

Options :

1. ✖ जावक
2. ✖ विष
3. ✔ सवाक्
4. ✖ उत्थान

Question Number : 88 Question Id : 97675512027 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

दिए गए वाक्यांश के लिए एक शब्द का चयन कीजिए-

जिसको एक स्थान से दूसरे स्थान पर न ले जाया जा सके-

Options :

1. ✖ स्थानापन्न
2. ✔ स्थावर
3. ✖ जंगम
4. ✖ गमनशील

Question Number : 88 Question Id : 97675512027 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

दिए गए वाक्यांश के लिए एक शब्द का चयन कीजिए-

जिसको एक स्थान से दूसरे स्थान पर न ले जाया जा सके-

Options :

1. ✖ स्थानापन्न
2. ✔ स्थावर
3. ✖ जंगम
4. ✖ गमनशील

Question Number : 89 Question Id : 97675512028 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से दिया गया वाक्य किस काल का उदाहरण है?

खिलाड़ी मैच खेल रहे थे।

Options :

1. ✔ अपूर्ण भूतकाल
2. ✖ आसन्न भूतकाल
3. ✖ हेतुहेतुमद् भूतकाल
4. ✖ संभाव्य वर्तमानकाल

Question Number : 89 Question Id : 97675512028 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से दिया गया वाक्य किस काल का उदाहरण है?

खिलाड़ी मैच खेल रहे थे।

Options :

1. ✔ अपूर्ण भूतकाल
2. ✖ आसन्न भूतकाल
3. ✖ हेतुहेतुमद् भूतकाल

4. ✖ संभाव्य वर्तमानकाल

Question Number : 90 Question Id : 97675512029 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा शब्द सदैव बहुवचन में प्रयुक्त होता है?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. आशा
2. प्रजा
3. निराशा
4. अहिंसा

Question Number : 90 Question Id : 97675512029 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा शब्द सदैव बहुवचन में प्रयुक्त होता है?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. आशा
2. प्रजा
3. निराशा
4. अहिंसा

Question Number : 91 Question Id : 97675512030 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा वाक्य विस्मयादिबोधक वाक्य है?

Options :

1. ✖ आप जीवन में उन्नति करें।
2. ✖ सुमित अब जा चुका होगा।
3. ✖ हम यह कार्य नहीं करेंगे।
4. ✔ ओह! कितनी ठंडी रात है।

Question Number : 91 Question Id : 97675512030 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा वाक्य विस्मयादिबोधक वाक्य है?

Options :

1. ✖ आप जीवन में उन्नति करें।
2. ✖ सुमित अब जा चुका होगा।
3. ✖ हम यह कार्य नहीं करेंगे।
4. ✔ ओह! कितनी ठंडी रात है।

Question Number : 92 Question Id : 97675512031 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से अशुद्ध वर्तनी वाले वाक्य का चयन कीजिए-

Options :

1. ✖ स्वास्थ्य के लिए स्वच्छ जल आवश्यक है।
2. ✔ हिन्दी का व्यवहारिक ज्ञान अपेक्षित है।
3. ✖ दलाईलामा आध्यात्मिक धर्म-गुरू हैं।
4. ✖ आपकी कक्षा में कितने छात्र हैं।

Question Number : 92 Question Id : 97675512031 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से अशुद्ध वर्तनी वाले वाक्य का चयन कीजिए-

Options :

1. ✖ स्वास्थ्य के लिए स्वच्छ जल आवश्यक है।
2. ✔ हिन्दी का व्यवहारिक ज्ञान अपेक्षित है।
3. ✖ दलाईलामा आध्यात्मिक धर्म-गुरू हैं।
4. ✖ आपकी कक्षा में कितने छात्र हैं।

Question Number : 93 Question Id : 97675512032 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से मुहावरा "अंडे का शहजादा" का क्या अर्थ है?

Options :

1. ✔ अनुभवहीन व्यक्ति।
2. ✖ कठारे परिश्रम करने वाला।
3. ✖ लालची मनुष्य।
4. ✖ बहुत अनुभवी होना।

Question Number : 93 Question Id : 97675512032 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से मुहावरा "अंडे का शहजादा" का क्या अर्थ है?

Options :

1. ✔ अनुभवहीन व्यक्ति।
2. ✖ कठारे परिश्रम करने वाला।
3. ✖ लालची मनुष्य।
4. ✖ बहुत अनुभवी होना।

Question Number : 94 Question Id : 97675512033 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से लोकोक्ति "अपना रख पराया चख" का क्या अर्थ है?

Options :

1. ✖ लालच छोड़ कर थोड़े में ही संतुष्ट होना।
2. ✔ अपनी वस्तु की रक्षा, दूसरे की वस्तु का उपभोग।
3. ✖ हस्तगत चीज का विशेष मूल्य नहीं होता।
4. ✖ जिसे सफलता मिले, उसी का यश फैले।

Question Number : 94 Question Id : 97675512033 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से लोकोक्ति "अपना रख पराया चख" का क्या अर्थ है?

Options :

1. ✖ लालच छोड़ कर थोड़े में ही संतुष्ट होना।
2. ✔ अपनी वस्तु की रक्षा, दूसरे की वस्तु का उपभोग।
3. ✖ हस्तगत चीज का विशेष मूल्य नहीं होता।
4. ✖ जिसे सफलता मिले, उसी का यश फैले।

Question Number : 95 Question Id : 97675512034 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

नीचे दिए गए वाक्य में निम्न में से किस चिन्ह का प्रयोग नहीं किया गया है?

जो क्रियाएँ संज्ञा या विशेषण बनती हैं, उन्हें "नामधातु क्रिया" कहते हैं।

Options :

1. ✖ अल्पविराम चिन्ह
2. ✖ पूर्णविराम चिन्ह
3. ✔ योजक चिन्ह
4. ✖ उद्धरण चिन्ह

Question Number : 95 Question Id : 97675512034 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

नीचे दिए गए वाक्य में निम्न में से किस चिन्ह का प्रयोग नहीं किया गया है?

जो क्रियाएँ संज्ञा या विशेषण बनती हैं, उन्हें "नामधातु क्रिया" कहते हैं।

Options :

1. ✖ अल्पविराम चिन्ह
2. ✖ पूर्णविराम चिन्ह
3. ✔ योजक चिन्ह
4. ✖ उद्धरण चिन्ह

Sub-Section Number :

2

Sub-Section Id :

976755864

Question Shuffling Allowed :

Yes

Question Id : 97675512035 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (96 to 100)

निम्नलिखित गद्यांश का ध्यानपूर्वक अध्ययन कर प्रश्नों के उत्तर दीजिए-

संसार में दो अचूक शक्तियाँ हैं- वाणी और कर्म। कुछ लोग वचन से संसार को राह दिखाते हैं और कुछ लोग कर्म से। शब्द और आचार दोनों ही महान शक्तियाँ हैं। शब्द की महिमा अपार है। विश्व में साहित्य, कला, विज्ञान, शास्त्र सब शब्द-शक्ति के प्रतीक प्रमाण हैं। पर कोरे शब्द व्यर्थ होते हैं, जिनका आचरण न हो।

कर्म के बिना वचन, व्यवहार के बिना सिद्धांत की कोई सार्थकता नहीं है।

निस्सन्देह शब्द शक्ति महान है, पर चिरस्थायी और सनातनी शक्ति तो व्यवहार है। महात्मा गाँधी ने इन दोनों की कठिन और अद्भुत साधना की थी। महात्मा जी का सम्पूर्ण जीवन उन्हीं दोनों से युक्त था। वे वाणी और व्यवहार में एक थे। जो कहते थे वही करते थे। यही उनकी महानता का रहस्य है। कस्तूरबा ने शब्द की अपेक्षा कृति की उपासना की थी, क्योंकि कृति का उत्तम व चिरस्थायी प्रभाव होता है। 'बा' ने कोरी शाब्दिक, शास्त्रीय, सैद्धांतिक शब्दावली नहीं सीखी थी। वे तो कर्म की उपासिका थीं। उनका विश्वास शब्दों की अपेक्षा कर्मों में था। वे जो कहा करती थीं उसे पूरा करती थीं। वे रचनात्मक कर्मों को प्रधानता देती थीं। इसी के बल पर उन्होंने अपने जीवन में सार्थकता और सफलता प्राप्त की थी।

Sub questions

Question Number : 96 Question Id : 97675512036 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से उपर्युक्त गद्यांश का उचित शीर्षक कौन-सा है?

Options :

1. ✖ निस्सन्देह: चिरस्थायी एवं सनातनी शक्ति

2. ✖ शब्द का महत्व
3. ✖ निष्ठामूर्ति गाँधी
4. ✔ वाणी और कर्म

Question Number : 97 Question Id : 97675512037 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

उपर्युक्त गद्यांश के अनुसार, गाँधीजी की महानता का रहस्य क्या है?

Options :

1. ✖ सदैव गरीबों की सहायता करते थे।
2. ✖ जो कहते थे वह, कभी नहीं करते थे।
3. ✔ जो कहते थे वही करते थे।
4. ✖ जो दूसरे व्यक्ति कहते थे, वही करते थे।

Question Number : 98 Question Id : 97675512038 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से “चिरस्थायी” से क्या अभिप्राय है?

Options :

1. ✔ देर तक रहनेवाला या टिकाऊ।
2. ✖ अति शीघ्र नष्ट होने वाला।
3. ✖ जो कठोर परिश्रम न करता हो।
4. ✖ जिसका दिमाग स्थिर न हो।

Question Number : 99 Question Id : 97675512039 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

उपर्युक्त गद्यांश के संदर्भ में, प्रायः सज्जन व्यक्ति संसार को _____ राह दिखाते हैं।

Options :

1. ✖ केवल गरीबों की मदद करने की भावना से।
2. ✔ अपने कर्म एवं वाणी से।
3. ✖ अपनी बुद्धिक्षमता से।

4. ✖ अपनी कार्यक्षमता से।

Question Number : 100 Question Id : 97675512040 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा शब्द “सार्थकता” का पर्यायवाची नहीं है?

Options :

1. ✖ उपयोगिता
2. ✖ सफलता
3. ✖ उद्देश्यपूर्ति
4. ✔ निरर्थक

Question Id : 97675512035 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (96 to 100)

निम्नलिखित गद्यांश का ध्यानपूर्वक अध्ययन कर प्रश्नों के उत्तर दीजिए-

संसार में दो अचूक शक्तियाँ हैं- वाणी और कर्म। कुछ लोग वचन से संसार को राह दिखाते हैं और कुछ लोग कर्म से। शब्द और आचार दोनों ही महान शक्तियाँ हैं। शब्द की महिमा अपार है। विश्व में साहित्य, कला, विज्ञान, शास्त्र सब शब्द-शक्ति के प्रतीक प्रमाण हैं। पर कोरे शब्द व्यर्थ होते हैं, जिनका आचरण न हो। कर्म के बिना वचन, व्यवहार के बिना सिद्धांत की कोई सार्थकता नहीं है। निस्सन्देह शब्द शक्ति महान है, पर चिरस्थायी और सनातनी शक्ति तो व्यवहार है। महात्मा गाँधी ने इन दोनों की कठिन और अद्भुत साधना की थी। महात्मा जी का सम्पूर्ण जीवन उन्हीं दोनों से युक्त था। वे वाणी और व्यवहार में एक थे। जो कहते थे वही करते थे। यही उनकी महानता का रहस्य है। कस्तूरबा ने शब्द की अपेक्षा कृति की उपासना की थी, क्योंकि कृति का उत्तम व चिरस्थायी प्रभाव होता है। ‘बा’ ने कोरी शाब्दिक, शास्त्रीय, सैद्धांतिक शब्दावली नहीं सीखी थी। वे तो कर्म की उपासिका थीं। उनका विश्वास शब्दों की अपेक्षा कर्मों में था। वे जो कहा करती थीं उसे पूरा करती थीं। वे रचनात्मक कर्मों को प्रधानता देती थीं। इसी के बल पर उन्होंने अपने जीवन में सार्थकता और सफलता प्राप्त की थी।

Sub questions

Question Number : 96 Question Id : 97675512036 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से उपर्युक्त गद्यांश का उचित शीर्षक कौन-सा है?

Options :

1. ✖ निस्सन्देह: चिरस्थायी एवं सनातनी शक्ति

2. ✖ शब्द का महत्व
3. ✖ निष्ठामूर्ति गाँधी
4. ✔ वाणी और कर्म

Question Number : 97 Question Id : 97675512037 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

उपर्युक्त गद्यांश के अनुसार, गाँधीजी की महानता का रहस्य क्या है?

Options :

1. ✖ सदैव गरीबों की सहायता करते थे।
2. ✖ जो कहते थे वह, कभी नहीं करते थे।
3. ✔ जो कहते थे वही करते थे।
4. ✖ जो दूसरे व्यक्ति कहते थे, वही करते थे।

Question Number : 98 Question Id : 97675512038 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से “चिरस्थायी” से क्या अभिप्राय है?

Options :

1. ✔ देर तक रहनेवाला या टिकाऊ।
2. ✖ अति शीघ्र नष्ट होने वाला।
3. ✖ जो कठोर परिश्रम न करता हो।
4. ✖ जिसका दिमाग स्थिर न हो।

Question Number : 99 Question Id : 97675512039 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

उपर्युक्त गद्यांश के संदर्भ में, प्रायः सज्जन व्यक्ति संसार को _____ राह दिखाते हैं।

Options :

1. ✖ केवल गरीबों की मदद करने की भावना से।
2. ✔ अपने कर्म एवं वाणी से।
3. ✖ अपनी बुद्धिक्षमता से।

4. ✖ अपनी कार्यक्षमता से।

Question Number : 100 Question Id : 97675512040 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा शब्द “सार्थकता” का पर्यायवाची नहीं है?

Options :

1. ✖ उपयोगिता
2. ✖ सफलता
3. ✖ उद्देश्यपूर्ति
4. ✔ निरर्थक

Discipline1

Group Number :	6
Group Id :	976755405
Group Maximum Duration :	0
Group Minimum Duration :	0
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

Discipline1

Section Id :	976755733
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20
Number of Questions to be attempted :	20

Section Marks : 20
Enable Mark as Answered Mark for Review and Clear Response : Yes
Sub-Section Number : 1
Sub-Section Id : 976755865
Question Shuffling Allowed : Yes

Question Number : 101 Question Id : 97675512041 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

A Relation in R is defined as $R = \{(a, b) : a \leq b^2\}$ is _____.

Options :

1. ✖ Reflexive
2. ✖ Transitive
3. ✖ Symmetric
4. ✔ Not an Equivalence Relation

Question Number : 101 Question Id : 97675512041 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$R = \{(a, b) : a \leq b^2\}$ द्वारा परिभाषित संबंध R एक _____ है-

Options :

1. ✖ स्वतुल्य
2. ✖ संक्रामक
3. ✖ सममित
4. ✔ तुल्य संबंध नहीं

Question Number : 102 Question Id : 97675512042 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $S = \{a, b, c, d\}$ and $p = \{(a, a), (b, b), (c, c), (d, d), (a, b), (b, a), (b, c), (c, b)\}$, then p is-

Options :

1. ✖ Reflexive and transitive

2. ✖ Symmetric and transitive
3. ✔ Reflexive and symmetric
4. ✖ Equivalence

Question Number : 102 Question Id : 97675512042 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $S = \{a, b, c, d\}$ और $p = \{(a, a), (b, b), (c, c), (d, d), (a, b), (b, a), (b, c), (c, b)\}$, तो p है –

Options :

1. ✖ स्वतुल्य और संक्रामक
2. ✖ सममित और संक्रामक
3. ✔ स्वतुल्य और सममित
4. ✖ तुल्यता संबंध

Question Number : 103 Question Id : 97675512043 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let $f : \mathbb{R} \rightarrow \mathbb{R}$ be defined as $f(x) = 8x$. Choose the correct answer:

Options :

1. ✔ f is one-one onto
2. ✖ f is many-one onto
3. ✖ f is one-one but not onto
4. ✖ f is neither one-one nor onto

Question Number : 103 Question Id : 97675512043 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिये की $f(x) = 8x$ द्वारा परिभाषित फलन $f : \mathbb{R} \rightarrow \mathbb{R}$ है। सही उत्तर चुनिए-

Options :

1. ✔ f एकैकी आच्छादक है
2. ✖ f बहुएक आच्छादक है

3. ✖ f एकैकी है परन्तु आच्छादक नहीं
4. ✖ f न तो एकैकी है और ना ही आच्छादक

Question Number : 104 Question Id : 97675512044 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $f : A \rightarrow B$ and $g : B \rightarrow C$ are one-one, then $\text{gof} : A \rightarrow C$ is-

Options :

1. ✖ One-one and onto both
2. ✔ One-one
3. ✖ Onto
4. ✖ Neither One-One, nor onto

Question Number : 104 Question Id : 97675512044 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $f : A \rightarrow B$ और $g : B \rightarrow C$ एकैकी है, तो $\text{gof} : A \rightarrow C$ है-

Options :

1. ✖ एकैकी और आच्छादक दोनों
2. ✔ एकैकी
3. ✖ आच्छादक
4. ✖ ना ही एकैकी और ना ही आच्छादक

Question Number : 105 Question Id : 97675512045 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The greatest integer function $f: \mathbb{R} \rightarrow \mathbb{R}$ given by $f(x) = [x]$, (where $[x]$ denotes the greatest integer), is _____.

Options :

1. ✖ One-One, onto
2. ✖ One-One, but not onto
3. ✔ Neither One-One nor onto

4. ✖ Onto, but not One-One

Question Number : 105 Question Id : 97675512045 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$f(x) = [x]$ द्वारा प्रदत्त महत्तम पूर्णांक फलन $f : \mathbb{R} \rightarrow \mathbb{R}$, (जहाँ $[x]$ महत्तम पूर्णांक को निरूपित करता है), _____ है

Options :

1. ✖ एकैकी, आच्छादक
2. ✖ एकैकी परन्तु आच्छादक नहीं
3. ✔ ना तो एकैकी और ना ही आच्छादक
4. ✖ आच्छादक, पर एकैकी नहीं

Question Number : 106 Question Id : 97675512046 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $f : \mathbb{R} \rightarrow \mathbb{R}$ defined by $f(x) = x^2 - 3x + 2$, then $f(f(x)) =$

Options :

1. ✖ $x^4 + 6x^3 + 10x^2 + 3x$
2. ✔ $x^4 - 6x^3 + 10x^2 - 3x$
3. ✖ $x^4 - 6x^3 - 13x^2 + 3x$
4. ✖ $x^4 + 6x^3 - 13x^2 + 3x$

Question Number : 106 Question Id : 97675512046 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $f : \mathbb{R} \rightarrow \mathbb{R}$ $f(x) = x^2 - 3x + 2$, द्वारा परिभाषित है तो $f(f(x)) =$

Options :

1. ✖ $x^4 + 6x^3 + 10x^2 + 3x$
2. ✔ $x^4 - 6x^3 + 10x^2 - 3x$
3. ✖ $x^4 - 6x^3 - 13x^2 + 3x$
4. ✖ $x^4 + 6x^3 - 13x^2 + 3x$

Question Number : 107 Question Id : 97675512047 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If a binary operation $*$ on $\mathbb{N}$ is defined as $a * b = a^3 + b^3$, then –

Options :

1. ✖ $*$ is both associated and commutative
2. ✔ $*$ is commutative but not associative
3. ✖ $*$ is associative but not commutative
4. ✖ $*$ is neither commutative nor associative

Question Number : 107 Question Id : 97675512047 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $a * b = a^3 + b^3$ प्रकार से परिभाषित, $\mathbb{N}$ में एक द्विआधारी संक्रिया $*$ हो, तो -

Options :

1. ✖ * साहचर्य तथा क्रमविनिमेय दोनों है
2. ✔ * क्रमविनिमेय है किन्तु साहचर्य नहीं है
3. ✖ * साहचर्य है किन्तु क्रमविनिमेय नहीं है
4. ✖ * न तो क्रमविनिमेय है और न साहचर्य है

Question Number : 108 Question Id : 97675512048 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $f: \mathbb{R} \rightarrow \mathbb{R}$ and $g: \mathbb{R} \rightarrow \mathbb{R}$ are given by $f(x) = \cos x$, and $g(x) = 3x^2$, then -

Options :

1. ✖ $g \circ f = f \circ g$
2. ✔ $g \circ f \neq f \circ g$
3. ✖ $g \circ f$ and $f \circ g$ both do not exist
4. ✖ Can't be determined

Question Number : 108 Question Id : 97675512048 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

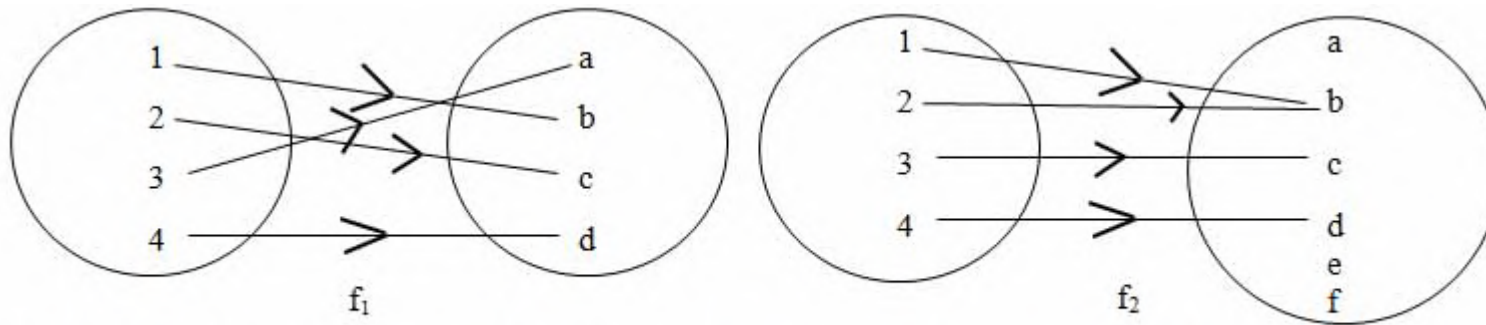
यदि $f: \mathbb{R} \rightarrow \mathbb{R}$ और $g: \mathbb{R} \rightarrow \mathbb{R}$ और $f(x) = \cos x$, और $g(x) = 3x^2$ द्वारा दिया जाता है, तो -

Options :

1. ✖ $g \circ f = f \circ g$
2. ✔ $g \circ f \neq f \circ g$
3. ✖ $g \circ f$ और $f \circ g$ दोनों मौजूद नहीं हैं
4. ✖ तय नहीं किया जा सकता

Question Number : 109 Question Id : 97675512049 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25



Which of the following is correct if the above image represents the functions f_1 and f_2 ?

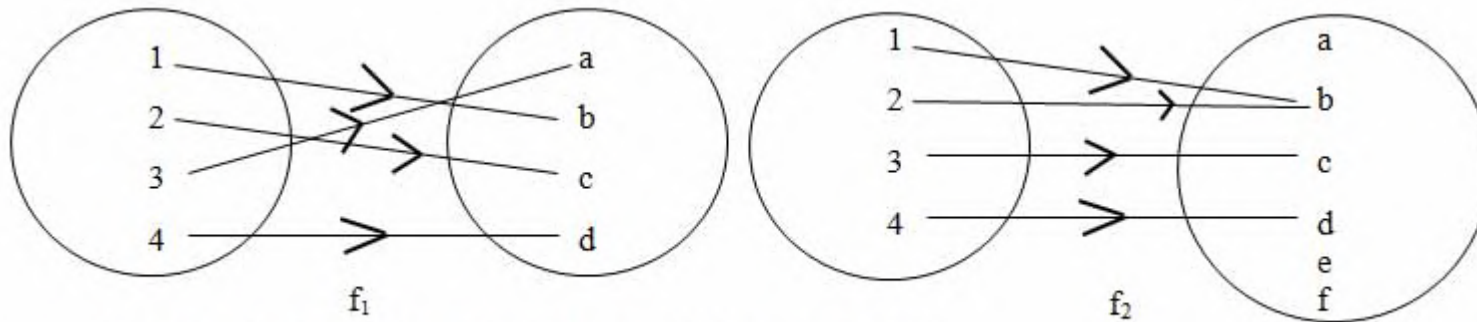
Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. f_1 is one-one, f_2 is one-one
2. f_1 is onto, f_2 is onto
3. f_1 is onto, f_2 is one-one
4. f_1 is one-one, f_2 is onto

Question Number : 109 Question Id : 97675512049 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25



उपरोक्त छवि/चित्र में f_1 और f_2 के कार्यों का प्रतिनिधित्व करती है-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. f_1 एकैकी है, f_2 एकैकी है
2. f_1 आच्छादक है f_2 आच्छादक है
3. f_1 आच्छादक है, f_2 एकैकी है
4. f_1 एकैकी है, f_2 आच्छादक है

Question Number : 110 Question Id : 97675512050 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $f: \mathbb{R} \rightarrow \mathbb{R}$ given by $f(x) = 4x + 3$, then inverse of f is

Options :

1. $f^{-1} = \frac{y-3}{4}$

2. ✖ $f^{-1} = \frac{y-4}{3}$

3. ✖ $f^{-1} = \frac{4-y}{3}$

4. ✖ $f^{-1} = \frac{3-y}{4}$

Question Number : 110 Question Id : 97675512050 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $f: \mathbb{R} \rightarrow \mathbb{R}$ द्वारा $f(x) = 4x + 3$ दिया गया है, तो f का प्रतिलोम होगा-

Options :

1. ✔ $f^{-1} = \frac{y-3}{4}$

2. ✖ $f^{-1} = \frac{y-4}{3}$

3. ✖ $f^{-1} = \frac{4-y}{3}$

4. ✖ $f^{-1} = \frac{3-y}{4}$

Question Number : 111 Question Id : 97675512051 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If a sequence $\{a_n^2\}$ converges to a^2 , then the sequence $\{a_n\}$ converges to-

Options :

1. ✖ a^2
2. ✖ $\sqrt{a}$
3. ✖ a
4. ✔ Not convergent

Question Number : 111 Question Id : 97675512051 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि कोई अनुक्रम $\{a_n^2\}$ का अभिसरण a^2 होता है तो अनुक्रम $\{a_n\}$ का अभिसरण क्या होगा?

Options :

1. ✖ a^2
2. ✖ $\sqrt{a}$
3. ✖ a
4. ✔ कोई अभिसारी नहीं

Question Number : 112 Question Id : 97675512052 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The sequence $\{x_n\}$, where $x_n = 1 + \frac{1}{3} + \frac{1}{5} + \dots + \frac{1}{2n-1}$ is-

Options :

1. ✓ Not Cauchy sequence
2. ✗ Oscillatory
3. ✗ Convergent
4. ✗ Monotonically decreasing

Question Number : 112 Question Id : 97675512052 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

अनुक्रम $\{x_n\}$, जहाँ $x_n = 1 + \frac{1}{3} + \frac{1}{5} + \dots + \frac{1}{2n-1}$, वह -

Options :

1. ✓ कौशी अनुक्रम नहीं है
2. ✗ दोलन है
3. ✗ अभिसारी है
4. ✗ एकरस (मोनोटोन) रूप में घट रहा है

Question Number : 113 Question Id : 97675512053 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The series $\sum (-1)^{n+1} \frac{1}{n}$ is-

Options :

1. ✗ Divergent
2. ✗ Absolutely convergent
3. ✗ Unbounded
4. ✓ Conditionally Convergent

Question Number : 113 Question Id : 97675512053 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

श्रेणी $\sum (-1)^{n+1} \frac{1}{n}$, _____ है-

Options :

1. ✖ अपसारी
2. ✖ पूर्ण रूप से अभिसारी
3. ✖ असीमित
4. ✔ सशर्त रूप से अभिसारी

Question Number : 114 Question Id : 97675512054 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is incorrect?

Options :

1. ✔ Every sequence has a limit point
2. ✖ Every sequence has a monotone subsequence
3. ✖ Every bounded sequence has a convergent subsequence
4. ✖ Every sequence has a countable number of terms

Question Number : 114 Question Id : 97675512054 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन सा-गलत है?

Options :

1. ✔ प्रत्येक अनुक्रम में सीमा बिन्दु है
2. ✖ प्रत्येक अनुक्रम का एक एकरस सबसीक्वेंस होता है।
3. ✖ प्रत्येक सीमित अनुक्रम में एक अभिसारी सबसीक्वेंस होता है
4. ✖ प्रत्येक अनुक्रम में क्रमों की एक गणनीय संख्या होती है

Question Number : 115 Question Id : 97675512055 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The domain of convergence for $x - \frac{x}{2} + \frac{x}{3} - \frac{x}{4} + \dots$ is

Options :

1. ✖ $[-1, 1]$
2. ✖ $(-1, 1)$
3. ✖ $[-1, 1)$
4. ✔ $(-1, 1]$

Question Number : 115 Question Id : 97675512055 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$x - \frac{x}{2} + \frac{x}{3} - \frac{x}{4} + \dots$ के लिए अभिसरण का क्षेत्र होगा-

Options :

1. ✖ $[-1, 1]$
2. ✖ $(-1, 1)$
3. ✖ $[-1, 1)$
4. ✔ $(-1, 1]$

Question Number : 116 Question Id : 97675512056 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $\sum a_n^2$ and $\sum b_n^2$ are convergent series of positive real numbers then, $\sum \sqrt{a_n \cdot b_n}$

Options :

1. ✖ is divergent
2. ✖ must be convergent
3. ✔ may or may not be convergent

4. ✖ may be convergent

Question Number : 116 Question Id : 97675512056 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $\sum a_n^2$ और $\sum b_n^2$ धनात्मक वास्तविक संख्याओं की अभिसारी श्रृंखला है,
तो $\sum \sqrt{a_n \cdot b_n}$

Options :

1. ✖ अपसारी है
2. ✖ अभिसारी होना चाहिए
3. ✔ अभिसारी हो सकता या नहीं हो सकता है
4. ✖ अभिसारी हो सकता है

Question Number : 117 Question Id : 97675512057 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following series is divergent?

Options :

1. ✖ $\sum 1/n^3$
2. ✔ $\sum \sin 1/n$
3. ✖ $\sum \sin 1/n^2$
4. ✖ $\sum 1/\sqrt{n} \tan 1/n^2$

Question Number : 117 Question Id : 97675512057 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन सी श्रृंखला अपसारी है?

Options :

1. ✖ $\sum 1/n^3$

2. ✔ $\sum \sin 1/n$

3. ✖ $\sum \sin 1/n^2$

4. ✖ $\sum 1/\sqrt{n} \tan 1/n^2$

Question Number : 118 Question Id : 97675512058 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $U_n > 0$ for all $n \in \mathbb{N}$, then $\lim_{n \rightarrow \infty} U_n^{1/n}$ is equal to-

Options :

1. ✖ $\lim_{n \rightarrow \infty} \frac{U_{n+1}}{U_n}$

2. ✖ $\lim_{n \rightarrow \infty} \frac{U_n}{U_{n+1}}$

3. ✖ $\lim_{n \rightarrow \infty} \frac{U_{n-1}}{U_n}$

4. ✓ $\lim_{n \rightarrow \infty} \frac{U_n}{U_{n-1}}$

Question Number : 118 Question Id : 97675512058 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि सभी $n \in \mathbb{N}$ के लिए $U_n > 0$, तो $\lim_{n \rightarrow \infty} U_n^{1/n}$ किस के बराबर होगा ?

Options :

1. ✗ $\lim_{n \rightarrow \infty} \frac{U_{n+1}}{U_n}$

2. ✗ $\lim_{n \rightarrow \infty} \frac{U_n}{U_{n+1}}$

3. ✗ $\lim_{n \rightarrow \infty} \frac{U_{n-1}}{U_n}$

4. ✓ $\lim_{n \rightarrow \infty} \frac{U_n}{U_{n-1}}$

Question Number : 119 Question Id : 97675512059 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following tests does not give absolute convergence of a series?

Options :

1. ✗ Comparison Test

2. ✗ Ratio Test

3. ✓ Leibnitz's test

4. ✖ Root Test

Question Number : 119 Question Id : 97675512059 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन सा परीक्षण श्रेणियों के निरपेक्ष अभिसरण नहीं देता है?

Options :

1. ✖ तुलनात्मक परीक्षण
2. ✖ अनुपात परीक्षण
3. ✔ लाइबनिट्ज परीक्षण
4. ✖ रूट परीक्षण

Question Number : 120 Question Id : 97675512060 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

A conditionally convergent series is a series which is -

Options :

1. ✖ Absolutely divergent
2. ✔ Convergent but not absolutely
3. ✖ Absolutely Convergent
4. ✖ Not convergent but absolutely convergent

Question Number : 120 Question Id : 97675512060 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

एक सशर्त अभिसरण श्रेणी एक ऐसी श्रेणी है जो -

Options :

1. ✖ निरपेक्ष अपसारी है
2. ✔ अभिसारी किन्तु निरपेक्ष नहीं है
3. ✖ निरपेक्ष अभिसारी है
4. ✖ अभिसारी नहीं बल्कि निरपेक्ष अभिसारी है

Discipline2

Group Number :	7
Group Id :	976755406
Group Maximum Duration :	0
Group Minimum Duration :	0
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

Discipline2

Section Id :	976755734
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755866
Question Shuffling Allowed :	Yes

Question Number : 121 Question Id : 97675512061 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If n is real number and $f = r^n (\cos n\theta + i.\sin n\theta)$, then

Options :

1. ✖ f is analytic everywhere except possibly at $\theta = 0$
2. ✖ f is analytic nowhere
3. ✔ f is analytic everywhere except possibly at $r = 0$
4. ✖ f is analytic everywhere

Question Number : 121 Question Id : 97675512061 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि n एक वास्तविक संख्या हो और $f = r^n (\cos n\theta + i.\sin n\theta)$ हो, तो-

Options :

1. ✖ f संभवतः $\theta = 0$ को छोड़कर हर जगह विश्लेषिक है
2. ✖ f कहीं भी विश्लेषिक नहीं है
3. ✔ f संभवतः $r = 0$ को छोड़कर हर जगह विश्लेषिक है
4. ✖ f हर जगह विश्लेषिक है

Question Number : 122 Question Id : 97675512062 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$$\text{If } f(z) = \begin{cases} \frac{|z|}{\operatorname{Re}(z)} & , \text{ if } \operatorname{Re}(z) \neq 0 \\ 0 & , \text{ if } \operatorname{Re}(z) = 0 \end{cases} \text{ , then -}$$

Options :

1. ✔ f is not continuous at 0
2. ✖ f is not continuous nowhere
3. ✖ f is not continuous everywhere
4. ✖ f is not continuous only at 0

Question Number : 122 Question Id : 97675512062 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$$\text{यदि } f(z) = \begin{cases} \frac{|z|}{\operatorname{Re}(z)} & , \text{ यदि } \operatorname{Re}(z) \neq 0 \\ 0 & , \text{ यदि } \operatorname{Re}(z) = 0 \end{cases} \text{ , तो -}$$

Options :

1. ✓ f , 0 पर संतत नहीं है
2. ✗ f कहीं भी संतत नहीं है
3. ✗ f हर जगह संतत नहीं है
4. ✗ f केवल 0 पर संतत नहीं है

Question Number : 123 Question Id : 97675512063 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $f(z) = |z|^2$, then

Options :

1. ✓ f is differentiable only at zero
2. ✗ f is differentiable everywhere except 0
3. ✗ f is differentiable everywhere
4. ✗ f is differentiable nowhere

Question Number : 123 Question Id : 97675512063 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $f(z) = |z|^2$ है तो-

Options :

1. ✓ f केवल शून्य पर अवकलनीय है
2. ✗ f केवल शून्य को छोड़कर हर जगह अवकलनीय है
3. ✗ f हर जगह अवकलनीय है
4. ✗ f कहीं भी अवकलनीय नहीं है

Question Number : 124 Question Id : 97675512064 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $f(z) = u(x, y) + i.v(x, y)$ be analytic everywhere and $u - v = (x - y).(x^2 + 4xy + y^2)$, then-

Options :

1. ✖ $f(z) = i.z^3 + c$, where c is arbitrary constant
2. ✖ $f(z) = z(1 - i.z) + c$, c is arbitrary constant
3. ✖ $f(z) = z^2(1 + i) + c$, c is arbitrary constant
4. ✔ $f(z) = -i.z^3 + c$, c is arbitrary constant

Question Number : 124 Question Id : 97675512064 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $f(z) = u(x, y) + i.v(x, y)$ हर जगह विश्लेषिक हो और $u - v = (x - y).(x^2 + 4xy + y^2)$ तो-

Options :

1. ✖ $f(z) = i.z^3 + c$, में स्वेच्छ स्थिरांक c है
2. ✖ $f(z) = z(1 - i.z) + c$, में स्वेच्छ स्थिरांक c है
3. ✖ $f(z) = z^2(1 + i) + c$ में स्वेच्छ स्थिरांक c है

4. ✓ $f(z) = -iz^3 + c$, में स्वेच्छ स्थिरांक c है

Question Number : 125 Question Id : 97675512065 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let $f(z) = \frac{1}{z}$, $z \neq 0$, then

Options :

1. ✗ f does not satisfy Cauchy – Riemann equation for all $z \neq 0$
2. ✓ f is analytic for all $z \neq 0$
3. ✗ f is continuous only but nowhere differentiable
4. ✗ f satisfies Cauchy – Riemann equation, but not analytic for all $z \neq 0$

Question Number : 125 Question Id : 97675512065 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लें कि $f(z) = \frac{1}{z}$, $z \neq 0$ तब-

Options :

1. ✗ सभी $z \neq 0$ के लिए f कौशी-रीमान समीकरण को संतुष्ट नहीं करता है
2. ✓ सभी $z \neq 0$ के लिए f विश्लेषिक है
3. ✗ f केवल निरंतर है लेकिन कहीं भी अवकलनीय नहीं है
4. ✗ सभी $z \neq 0$ के लिए f कौशी-रीमान समीकरण को संतुष्ट करता है लेकिन अवकलनीय नहीं है

Question Number : 126 Question Id : 97675512066 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The radius of convergence of the power series $\sum_{n=0}^{\infty} \frac{(n!)^2}{2n!} z^n$ is

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 2
2. 1/2
3. 4
4. 1/4

Question Number : 126 Question Id : 97675512066 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

घात श्रेणी $\sum_{n=0}^{\infty} \frac{(n!)^2}{2n!} z^n$ की अभिसरण त्रिज्या-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 2
2. 1/2
3. 4
4. 1/4

Question Number : 127 Question Id : 97675512067 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $(x, y) = x^3 - 3xy^2$ of an analytic function $f(z) = u + i.v$, then -

Options :

1. ✖ $-v$ is its harmonic conjugate and $v(x, y) = y^2 - 3x^2y + c$, c is real constant

2. ✓ v is its harmonic conjugate and $v(x,y) = 3x^2y - y^3 + c$, c is real constant
3. ✗ v is its harmonic conjugate and $v(x,y) = 3x^2y - y^3 + c$, c is any constant
4. ✗ $-v$ is its harmonic conjugate and $v(x,y) = y^3 - 3x^2y + c$, c is any constant

Question Number : 127 Question Id : 97675512067 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $u(x, y) = x^3 - 3xy^2$ एक विश्लेषिक फलन $f(z) = u + i.v$ तो-

Options :

- $-v$ इसका प्रसंवादी संयुग्म (हार्मोनिक कंज्यूगेट) है और $v(x,y) = y^2 - 3x^2y + c$, में C
1. ✗ स्वेच्छ स्थिरांक है
- v इसका प्रसंवादी संयुग्म (हार्मोनिक कंज्यूगेट) है और $v(x,y) = 3x^2y - y^3 + c$, में C
2. ✓ स्वेच्छ स्थिरांक है
- v इसका प्रसंवादी संयुग्म (हार्मोनिक कंज्यूगेट) है और $v(x,y) = 3x^2y - y^3 + c$, में C कोई
3. ✗ स्थिरांक है
- $-v$ इसका प्रसंवादी संयुग्म (हार्मोनिक कंज्यूगेट) है और $v(x,y) = y^3 - 3x^2y + c$, में c कोई
4. ✗ स्थिरांक है

Question Number : 128 Question Id : 97675512068 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The value of the integral $\int_c \frac{z^2 e^{2z}}{z^2 + 1} dz$, where c is a circle $|z| = 2$ is -

Options :

1. ✗ $-2\pi.i$
2. ✗ 0
3. ✓ $-2\pi .i. \sin 2$
4. ✗ $2\pi. i .\sin 2$

Question Number : 128 Question Id : 97675512068 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

समाकलन $\int_c \frac{z^2 e^{2z}}{z^2 + 1} dz$ जहाँ C एक वृत्त है $|z| = 2$ है, का मान है -

Options :

1. ✗ $-2\pi.i$
2. ✗ 0
3. ✓ $-2\pi .i. \sin 2$
4. ✗ $2\pi. i .\sin 2$

Question Number : 129 Question Id : 97675512069 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is not true?

Options :

1. ✗ If $f(z) = u + i.v$ is an analytic function, then u and v are both harmonic functions
2. ✗ If $f(z) = u + i.v$ is an analytic function, then $u(x, y) = c_1$ and $v(x, y) = c_2$ are orthogonal
3. ✗ If a function does not satisfy Cauchy – Riemann equations, then it is not analytic
4. ✓ If u and v are both harmonic functions then $f(z) = u + i.v$ is analytic

Question Number : 129 Question Id : 97675512069 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन सा सत्य नहीं है?

Options :

1. ✖ यदि $f(z) = u + i.v$ एक विश्लेषणात्मक फलन है, तो u और v दोनों प्रसंवादी फलन हैं
2. ✖ यदि $f(z) = u + i.v$ एक विश्लेषणात्मक फलन है, तो $u(x, y) = c_1$ और $v(x, y) = c_2$ लांबिक (ओर्थोगोनल) है
3. ✖ यदि कोई फलन कौशी-रीमान समीकरणों को संतुष्ट नहीं करता है, तो यह विश्लेषणात्मक नहीं है
4. ✔ यदि u और v दोनों प्रसंवादी फलन हैं, तो $f(z) = u + i.v$ विश्लेषणात्मक है

Question Number : 130 Question Id : 97675512070 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The value of the integral $\int_c \frac{ze^2}{(z-1)^3} dz$, where c is a circle $|z| = 2$ is-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $3\pi \cdot i \cdot c$
2. $\frac{2\pi i c}{3}$
3. $\pi i c$
4. $2\pi i c$

Question Number : 130 Question Id : 97675512070 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0.25

समाकलन $\int_C \frac{ze^z}{(z-1)^3} dz$, जहाँ C एक वृत्त है $|z| = 2$, का मान है-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $3\pi i c$

2. $\frac{2\pi i c}{3}$

3. $\pi i c$

4. $2\pi i c$

Question Number : 131 Question Id : 97675512071 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0.25

Let X be a complete metric space then no non-empty open sub-set of X is of first category. Which theorem states this?

Options :

1. ✗ Bolzano- Weierstrass Theorem

2. ✗ Cauchy's Theorem

3. ✓ The Baire category Theorem

4. ✗ Intermediate Value Theorem

Question Number : 131 Question Id : 97675512071 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए कि X एक पूर्ण वृत्तात्मक स्थान है, तो X का कोई भी अरिक्त उपसमुच्चय पहली श्रेणी का नहीं है। यह कथन किस प्रमेय में बताया गया है ?

Options :

1. ✖ बोलजानो-वीयरस्ट्रेस प्रमेय
2. ✖ कौशी की प्रमेय
3. ✔ बेयर श्रेणी प्रमेय
4. ✖ मध्यवर्ती मूल्य प्रमेय

Question Number : 132 Question Id : 97675512072 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$[A \cup (B \cup C)] \cap [A' \cap (B' \cap C')]$ is equal to -

Options :

1. ✔ null set
2. ✖ Universal set
3. ✖ $A \cap (B' \cap C')$
4. ✖ $A' \cup (B \cup C)$

Question Number : 132 Question Id : 97675512072 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$[A \cup (B \cup C)] \cap [A' \cap (B' \cap C')]$ _____ के बराबर है-

Options :

1. ✓ रिक्त समुच्चय
2. ✗ समष्टीय समुच्चय
3. ✗ $A \cap (B' \cap C')$
4. ✗ $A' \cup (B \cup C)$

Question Number : 133 Question Id : 97675512073 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following represents De Morgan's Law?

Options :

1. ✓ $(A \cup B)' = A' \cap B'$
2. ✗ $(A' \cup B') = A \cap B'$
3. ✗ $(A \cup B') = A' \cap B$
4. ✗ $A \cap B = A' \cup B'$

Question Number : 133 Question Id : 97675512073 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा डी मॉर्गन के नियम का प्रतिनिधित्व करता है?

Options :

1. ✓ $(A \cup B)' = A' \cap B'$

2. ✖ $(A' \cup B') = A \cap B'$

3. ✖ $(A \cup B') = A' \cap B$

4. ✖ $A \cap B = A' \cup B'$

Question Number : 134 Question Id : 97675512074 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If a set $A = \phi$, then how many elements are there in $P(A)$?

Options :

1. ✖ 3

2. ✖ No element

3. ✔ 1

4. ✖ 2

Question Number : 134 Question Id : 97675512074 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि एक समुच्चय $A = \phi$ है, तो $P(A)$ में कितने अवयव हैं?

Options :

1. ✖ 3

2. ✖ कोई तत्व नहीं

3. ✔ 1

4. ✖ 2

Question Number : 135 Question Id : 97675512075 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If three non-empty sets A, B, C are having relation $A \cap B = A \cap C$ and $A \cup B = A \cup C$, then –

Options :

1. ✗ $A=B=C$
2. ✗ $A=B$
3. ✗ $A=C$
4. ✓ $B=C$

Question Number : 135 Question Id : 97675512075 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि तीन अतिरिक्त समुच्चय A, B, C का संबंध $A \cap B = A \cap C$ और $A \cup B = A \cup C$ से है तो-

Options :

1. ✗ $A=B=C$
2. ✗ $A=B$
3. ✗ $A=C$
4. ✓ $B=C$

Question Number : 136 Question Id : 97675512076 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $Z_1 = \{3x: x \in \mathbb{Z}\}$

$Z_2 = \{3x+1: x \in \mathbb{Z}\}$

$Z_3 = \{3x+2: x \in \mathbb{Z}\}$ then -

Options :

1. ✗ $Z_1 \cap Z_2 \cap Z_3 = \mathbb{Z}$

2. ✖ Z_1, Z_2, Z_3 form a group under multiplication
3. ✖ Z_1, Z_2, Z_3 form a partition of $\mathbf{R}$
4. ✔ Z_1, Z_2, Z_3 form a partition of $\mathbf{Z}$

Question Number : 136 Question Id : 97675512076 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $Z_1 = \{3x : x \in \mathbf{Z}\}$

$Z_2 = \{3x + 1 : x \in \mathbf{Z}\}$

$Z_3 = \{3x + 2 : x \in \mathbf{Z}\}$ तो-

Options :

1. ✖ $Z_1 \cap Z_2 \cap Z_3 = \mathbf{Z}$
2. ✖ Z_1, Z_2, Z_3 समूह गुणन के तहत बनाते हैं
3. ✖ Z_1, Z_2, Z_3 $\mathbf{R}$ का विभाजन बनाते हैं
4. ✔ Z_1, Z_2, Z_3 $\mathbf{Z}$ का विभाजन बनाते हैं

Question Number : 137 Question Id : 97675512077 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $U = \{1,2,3,4,5,6,7,8,9\}$

$A = \{1,2,3,4\}$

$B = \{2,4,6,8\}$, then $(A \cup B)'$ is –

Options :

1. ✖ $\{1,3,5,7,9\}$
2. ✖ $\{2,4,6,8\}$
3. ✖ $\{1,2,3,4,6,8\}$
4. ✔ $\{5,7,9\}$

Question Number : 137 Question Id : 97675512077 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $U = \{1,2,3,4,5,6,7,8,9\}$

$A = \{1,2,3,4\}$

$B = \{2,4,6,8\}$, तब $(A \cup B)'$ है –

Options :

1. ✖ $\{1,3,5,7,9\}$
2. ✖ $\{2,4,6,8\}$
3. ✖ $\{1,2,3,4,6,8\}$
4. ✔ $\{5,7,9\}$

Question Number : 138 Question Id : 97675512078 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If X and Y are two non-empty sets such that $n(X)=17$, $n(Y)=23$ and $n(X \cup Y)=38$, then $n(X \cap Y)$ is –

Options :

1. ✖ 6

- 2. ✓ 2
- 3. ✗ 16
- 4. ✗ 10

Question Number : 138 Question Id : 97675512078 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि X और Y दो अरिक्त समुच्चय हैं, जैसे $n(X) = 17$, $n(Y) = 23$ और $n(X \cup Y) = 38$,
तब $n(X \cap Y)$ होगा-

Options :

- 1. ✗ 6
- 2. ✓ 2
- 3. ✗ 16
- 4. ✗ 10

Question Number : 139 Question Id : 97675512079 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

In a group of 400 players, 250 play football and 200 play cricket, then how many people play both the games?

Options :

- 1. ✗ 200
- 2. ✗ 250
- 3. ✓ 50
- 4. ✗ 100

Question Number : 139 Question Id : 97675512079 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

400 खिलाड़ियों के समूह में 250 लोग फुटबॉल खेलते हैं, और 200 लोग क्रिकेट खेलते हैं। तो कितने लोग दोनों खेल खेलते हैं?

Options :

1. ✖ 200
2. ✖ 250
3. ✔ 50
4. ✖ 100

Question Number : 140 Question Id : 97675512080 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following is true?

Options :

1. ✖ $A \times (B \cup C) = (A \times B) \cap (A \times C)$
2. ✔ $(A - B) \times C = (A \times C) - (B \times C)$
3. ✖ $A \times (B - C) = (A \times C) - (A \times B)$
4. ✖ $A \times (B \cap C) = (A \times B) \cup (A \times C)$

Question Number : 140 Question Id : 97675512080 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौनसा सत्य है

Options :

1. ✖ $A \times (B \cup C) = (A \times B) \cap (A \times C)$
2. ✔ $(A - B) \times C = (A \times C) - (B \times C)$
3. ✖ $A \times (B - C) = (A \times C) - (A \times B)$

4. ✖ $A \times (B \cap C) = (A \times B) \cup (A \times C)$

Discipline3

Group Number :	8
Group Id :	976755407
Group Maximum Duration :	0
Group Minimum Duration :	0
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

Discipline3

Section Id :	976755735
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755867
Question Shuffling Allowed :	Yes

Question Number : 141 Question Id : 97675512081 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The angle between the lines represented by $x^2 - 2xy - y^2 + 2x + 3y - 1 = 0$, is -

Options :

1. ✖ $\frac{\pi}{4}$

2. ✖ $\tan^{-1}(1/4)$

3. ✖ $\tan^{-1}(1/2)$

4. ✔ $\frac{\pi}{2}$

Question Number : 141 Question Id : 97675512081 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$x^2 - 2xy - y^2 + 2x + 3y - 1 = 0$ के द्वारा दर्शाये गये रेखाओं के बीच का कोण है-

Options :

1. ✖ $\frac{\pi}{4}$

2. ✖ $\tan^{-1}(1/4)$

3. ✖ $\tan^{-1}(1/2)$

4. ✔ $\frac{\pi}{2}$

Question Number : 142 Question Id : 97675512082 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The equation $xy - ax - by + ab = 0$ represents -

Options :

1. ✖ a circle
2. ✔ a pair of straight lines
3. ✖ an ellipse
4. ✖ a hyperbola

Question Number : 142 Question Id : 97675512082 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

समीकरण $xy - ax - by + ab = 0$ दर्शाता है-

Options :

1. ✖ एक वृत्त
2. ✔ सरल रेखाओं का युग्म
3. ✖ एक दीर्घवृत्त
4. ✖ एक अतिपरवलय

Question Number : 143 Question Id : 97675512083 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $lx + my + n = 0$ be the normal to the circle $x^2 + y^2 + a^2$ then -

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $n = a^2$
2. $n = 0$
3. $n = a$

4. $n = 1$

Question Number : 143 Question Id : 97675512083 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $lx + my + n = 0$, एक वृत्त $x^2 + y^2 = a^2$, के लिए अभिलंब हो तो फिर -

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $n = a^2$
2. $n = 0$
3. $n = a$
4. $n = 1$

Question Number : 144 Question Id : 97675512084 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

From a hyperbola or ellipse how many normals can be drawn?

Options :

1. ✖ One
2. ✖ Two
3. ✖ Three
4. ✔ Four

Question Number : 144 Question Id : 97675512084 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

एक अतिपरवलय या दीर्घवृत्त से कितने अभिलंब निकाले जा सकते हैं?

Options :

1. ✖ एक
2. ✖ दो
3. ✖ तीन
4. ✔ चार

Question Number : 145 Question Id : 97675512085 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If the normals at the point $(ct_1, \frac{c}{t_1})$ on the hyperbola $xy = c^2$ meets it again at the point $(ct_2, \frac{c}{t_2})$ then-

Options :

1. ✔ $t_2 t_1^3 = -1$
2. ✖ $t_2^3 t_1 = -1$
3. ✖ $t_1^2 t_2 = -1$
4. ✖ $t_2^2 t_1 = -1$

Question Number : 145 Question Id : 97675512085 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि अतिपरवलय $xy = c^2$ के बिंदु $(ct_1, \frac{c}{t_1})$ पर अभिलंब फिर से बिंदु $(ct_2, \frac{c}{t_2})$ पर मिलते हैं, तो-

Options :

1. ✓ $t_2 t_1^3 = -1$

2. ✗ $t_2^3 t_1 = -1$

3. ✗ $t_1^2 t_2 = -1$

4. ✗ $t_2^2 t_1 = -1$

Question Number : 146 Question Id : 97675512086 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If any tangents to the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ makes intercepts of lengths h and k on the axis, then –

Options :

1. ✓ $\frac{a^2}{h^2} + \frac{b^2}{k^2} = 1$

2. ✗ $\frac{a^2}{h^2} - \frac{b^2}{k^2} = 1$

3. ✗ $\frac{h^2}{a^2} - \frac{k^2}{b^2} = 1$

4. ✗ $\frac{h^2}{a^2} + \frac{k^2}{b^2} = 1$

Question Number : 146 Question Id : 97675512086 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि एक दीर्घवृत्त $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ पर कोई स्पर्शरेखा अक्ष पर लंबाई h और k का अंतःखंड बनाती है, तो-

Options :

1. ✓ $\frac{a^2}{h^2} + \frac{b^2}{k^2} = 1$

2. ✗ $\frac{a^2}{h^2} - \frac{b^2}{k^2} = 1$

3. ✗ $\frac{h^2}{a^2} - \frac{k^2}{b^2} = 1$

4. ✗ $\frac{h^2}{a^2} + \frac{k^2}{b^2} = 1$

Question Number : 147 Question Id : 97675512087 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let l be the focal chord of a parabola and d be the distance from vertex, then-

Options :

1. ✗ $l \propto d^2$

2. ✗ $l \propto \frac{1}{d}$

3. ✓ $1 \propto \frac{1}{d^2}$

4. ✗ $1 \propto d$

Question Number : 147 Question Id : 97675512087 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए । एक परवलय की केन्द्रीय जीवा है और d शीर्ष से दूरी है, तो-

Options :

1. ✗ $1 \propto d^2$

2. ✗ $1 \propto \frac{1}{d}$

3. ✓ $1 \propto \frac{1}{d^2}$

4. ✗ $1 \propto d$

Question Number : 148 Question Id : 97675512088 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The polar co-ordinate of a centre of the circle $r = 4.\cos \theta + 3.\sin \theta$ is-

Options :

1. ✗ $(5, \tan^{-1} \frac{3}{4})$

2. ✓ $(\frac{5}{2}, \tan^{-1} \frac{3}{4})$

3. ✗ $(\frac{5}{2}, \tan^{-1} \frac{2}{3})$

4. ✗ $(\frac{3}{4}, \tan^{-1} \frac{2}{3})$

Question Number : 148 Question Id : 97675512088 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

वृत्त $r = 4 \cos \theta + 3 \sin \theta$ के केन्द्र का ध्रुवीय निर्देशांक है-

Options :

1. ✗ $(5, \tan^{-1} \frac{3}{4})$

2. ✓ $(\frac{5}{2}, \tan^{-1} \frac{3}{4})$

3. ✗ $(\frac{5}{2}, \tan^{-1} \frac{2}{3})$

4. ✗ $(\frac{3}{4}, \tan^{-1} \frac{2}{3})$

Question Number : 149 Question Id : 97675512089 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The eccentricity and semi – latus rectum of the curve $\frac{1}{r} = 8 + 5.\cos \theta$, are respectively –

Options :

1. ✖ $\frac{1}{8}, \frac{5}{8}$

2. ✔ $\frac{5}{8}, \frac{1}{8}$

3. ✖ $\frac{5}{8}, 8$

4. ✖ $\frac{1}{8}, 8$

Question Number : 149 Question Id : 97675512089 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

वक्र $\frac{1}{r} = 8 + 5.\cos \theta$ की उत्केन्द्रता (Eccentricity) और अर्ध-नाभि लम्ब (Semi-latus rectum) क्रमशः हैं-

Options :

1. ✖ $\frac{1}{8}, \frac{5}{8}$

2. ✔ $\frac{5}{8}, \frac{1}{8}$

3. ✖ $\frac{5}{8}, 8$

4. ✖ $\frac{1}{8}, 8$

Question Number : 150 Question Id : 97675512090 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Two conjugate diameters of the hyperbola are such that -

Options :

1. ✔ Both meet the curve at imaginary points
2. ✖ One meets the curve at real point and another meets at imaginary point
3. ✖ Both meet the curve at real point
4. ✖ They meet the curve at infinity

Question Number : 150 Question Id : 97675512090 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

अतिपरवलय की दो संयुग्मी व्यास इस प्रकार है कि-

Options :

1. ✔ दोनों वक्र से काल्पनिक बिंदुओं पर मिलते हैं
2. ✖ एक वक्र से वास्तविक बिंदु पर मिलता है और दूसरा काल्पनिक बिंदु पर मिलता है
3. ✖ दोनों वक्र से वास्तविक बिंदु पर मिलते हैं
4. ✖ वे वक्र से अनंत पर मिलते हैं

Question Number : 151 Question Id : 97675512091 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The equation of the plane through the point (1, 2, -3) and normal to the straight line joining the points (-1, 3, 4) and (5, 2, -1) is-

Options :

1. ✖ $x - 2y - 3z - 17 = 0$
2. ✔ $6x - y - 5z - 19 = 0$
3. ✖ $6x - y + 5z + 19 = 0$
4. ✖ $3x - 2y - 5z - 9 = 0$

Question Number : 151 Question Id : 97675512091 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

बिन्दु $(1, 2, -3)$ के माध्यम से गुजरने वाली और बिन्दुओं $(-1, 3, 4)$ और $(5, 2, -1)$ को जोड़ने वाली सीधी रेखा के अभिलंब समतल का समीकरण होगा-

Options :

1. ✖ $x - 2y - 3z - 17 = 0$
2. ✔ $6x - y - 5z - 19 = 0$
3. ✖ $6x - y + 5z + 19 = 0$
4. ✖ $3x - 2y - 5z - 9 = 0$

Question Number : 152 Question Id : 97675512092 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The general equation of the cone which passes through the co-ordinate axes is-

Options :

1. ✖ $x^2y^2 + y^2z^2 + z^2x^2 = 0$
2. ✔ $hxy + fyz + gzx = 0$
3. ✖ $xy + yz - zx = 0$
4. ✖ $ax^2 + b^2 + cz^2 + 2hxy + 2fyz + 2gzx = 0$

Question Number : 152 Question Id : 97675512092 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निर्देशांक अक्षों से गुजरने वाले शंकु का सामान्य समीकरण है –

Options :

1. ✖ $x^2y^2 + y^2z^2 + z^2x^2 = 0$

2. ✔ $hxy + fyz + gzx = 0$

3. ✖ $xy + yz - zx = 0$

4. ✖ $ax^2 + b^2 + cz^2 + 2hxy + 2fyz + 2gzx = 0$

Question Number : 153 Question Id : 97675512093 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The surface of revolution of the straight line $z^2 = y, x = 0$ about the y axis is-

Options :

1. ✔ $x^2 + z^2 = y$

2. ✖ $y^4 = x^2 + z^2$

3. ✖ $z^4 = x^2 + y^2$

4. ✖ $y^2 + z^2 = x$

Question Number : 153 Question Id : 97675512093 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Y अक्ष पर सीधी रेखा $z^2 = y$, $x = 0$ की भ्रमण सतह (surface of revolution) है-

Options :

1. ✓ $x^2 + z^2 = y$

2. ✗ $y^4 = x^2 + z^2$

3. ✗ $z^4 = x^2 + y^2$

4. ✗ $y^2 + z^2 = x$

Question Number : 154 Question Id : 97675512094 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The shortest distance between the z-axis and the line $\frac{x-2}{1} = \frac{y-1}{2} = \frac{z+1}{2}$ is-

Options :

1. ✗ $\frac{5}{\sqrt{3}}$

2. ✗ $\frac{2}{\sqrt{5}}$

3. ✓ $\frac{3}{\sqrt{5}}$

4. ✗ $3\sqrt{5}$

Question Number : 154 Question Id : 97675512094 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Z-अक्ष और रेखा $\frac{x-2}{1} = \frac{y-1}{2} = \frac{z+1}{2}$ के बीच की न्यूनतम दूरी है-

Options :

1. ✖ $\frac{5}{\sqrt{3}}$

2. ✖ $\frac{2}{\sqrt{5}}$

3. ✔ $\frac{3}{\sqrt{5}}$

4. ✖ $3\sqrt{5}$

Question Number : 155 Question Id : 97675512095 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The equation $ax^2 + by^2 + cz^2 + 2ux + 2vy + 2wz + d = 0$, represents a cone if-

Options :

1. ✖ $(b+c).u^2 + (a+c).v^2 + (a+b).w^2 = d$

2. ✖ $bcu + acv + abw = d$

3. ✖ $au^2 + bv^2 + cw^2 = d$

4. ✔ $\frac{u^2}{a} + \frac{v^2}{b} + \frac{w^2}{c} = d$

Question Number : 155 Question Id : 97675512095 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

समीकरण $ax^2 + by^2 + cz^2 + 2ux + 2vy + 2wz + d = 0$ एक शंकु का प्रतिनिधित्व करेगा, यदि-

Options :

1. ✖ $(b+c).u^2 + (a+c).v^2 + (a+b).w^2 = d$

2. ✖ $bcu + acv + abw = d$

3. ✖ $au^2 + bv^2 + cw^2 = d$

4. ✔ $\frac{u^2}{a} + \frac{v^2}{b} + \frac{w^2}{c} = d$

Question Number : 156 Question Id : 97675512096 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

In three dimension, the equation $x^2 = 2.\lambda.y$, $\lambda \neq 0$ represents –

Options :

1. ✓ a parabolic cylinder
2. ✗ a hyperbolic cylinder
3. ✗ an elliptic cylinder
4. ✗ a cylinder

Question Number : 156 Question Id : 97675512096 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

त्री-विमीय में समीकरण $x^2 = 2\lambda y, \lambda \neq 0$ दर्शाता है -

Options :

1. ✓ एक परवलयिक बेलन
2. ✗ एक अपरवलयिक बेलन
3. ✗ एक दीर्घवृत्तीय बेलन
4. ✗ एक बेलन

Question Number : 157 Question Id : 97675512097 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The image of the point $(-3, 8, 4)$ in the plane $6x - 3y - 2z + 1 = 0$, is -

Options :

1. ✗ $(0, 2, 9)$
2. ✗ $(-2, 1, 3)$
3. ✗ $(1, 2, -2)$
4. ✓ $(9, 2, 0)$

Question Number : 157 Question Id : 97675512097 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

समतल $6x - 3y - 2z + 1 = 0$ पर स्थित बिंदु $(-3, 8, 4)$ का प्रतिबिम्ब है-

Options :

1. ✖ (0, 2, 9)
2. ✖ (-2, 1, 3)
3. ✖ (1, 2, -2)
4. ✔ (9, 2, 0)

Question Number : 158 Question Id : 97675512098 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $S_1 = 0$ and $S_2 = 0$ are the equations of a sphere, then $S_1 + \lambda.S_2 = 0$ represents –

Options :

1. ✖ a circle
2. ✔ a sphere passing through the circle of intersection of the spheres
3. ✖ a plane
4. ✖ a sphere passing through the plane of intersection

Question Number : 158 Question Id : 97675512098 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $S_1=0$ और $S_2=0$ एक गोले का समीकरण हैं, तो $S_1 + \lambda.S_2=0$ दर्शाता है-

Options :

1. ✖ एक वृत्त
2. ✔ गोले के प्रतिच्छेदन के वृत्त से गुजरने वाला एक गोला
3. ✖ एक सतह
4. ✖ प्रतिच्छेदन के तल से गुजरने वाला एक गोला

Question Number : 159 Question Id : 97675512099 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

A plane passes through a point (1, -2, 1) and is perpendicular of two planes $2x - 2y + z = 0$ and $x - y + 2z = 4$. The distance of the plane from the

point (1, 2, 2) is -

Options :

- 1. ✖ 1
- 2. ✖ 2
- 3. ✔ $2\sqrt{2}$
- 4. ✖ $\sqrt{2}$

Question Number : 159 Question Id : 97675512099 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

एक सतह बिंदु (1, -2, 1) से गुजरता है और दो समतल $2x - 2y + z = 0$ एवं $x - y + 2z = 4$ के लंबवत है। बिन्दु (1, 2, 2) से समतल की दूरी है-

Options :

- 1. ✖ 1
- 2. ✖ 2
- 3. ✔ $2\sqrt{2}$
- 4. ✖ $\sqrt{2}$

Question Number : 160 Question Id : 97675512100 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Equation of the sphere that passes through the points (0, 0, 0), (a, 0, 0), (0, b, 0), (0, 0, c) is -

Options :

1. ✖ $x^2 + y^2 + z^2 = a^2 + b^2 + c^2$

2. ✔ $(x - \frac{a}{2})^2 + (y - \frac{b}{2})^2 + (z - \frac{c}{2})^2 = \frac{1}{4} (a^2 + b^2 + c^2)$

3. ✖ $(x-a)^2 + (y-b)^2 + (z-c)^2 = \frac{1}{2} \sqrt{(a^2 + b^2 + c^2)}$

4. ✖ $(x - \frac{a}{2})^2 + (y - \frac{b}{2})^2 + (z - \frac{c}{2})^2 = \frac{1}{2} (a^2 + b^2 + c^2)$

Question Number : 160 Question Id : 97675512100 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

उस गोले का समीकरण क्या होगा, जो बिंदु $(0, 0, 0)$, $(a, 0, 0)$, $(0, b, 0)$, $(0, 0, c)$ से होकर गुजरता है?

Options :

1. ✖ $x^2 + y^2 + z^2 = a^2 + b^2 + c^2$

2. ✔ $(x - \frac{a}{2})^2 + (y - \frac{b}{2})^2 + (z - \frac{c}{2})^2 = \frac{1}{4} (a^2 + b^2 + c^2)$

3. ✖ $(x-a)^2 + (y-b)^2 + (z-c)^2 = \frac{1}{2} \sqrt{(a^2 + b^2 + c^2)}$

4. ✖ $(x - \frac{a}{2})^2 + (y - \frac{b}{2})^2 + (z - \frac{c}{2})^2 = \frac{1}{2} (a^2 + b^2 + c^2)$

Discipline4

Group Number :	9
Group Id :	976755408
Group Maximum Duration :	0
Group Minimum Duration :	0
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

Discipline4

Section Id :	976755736
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755868
Question Shuffling Allowed :	Yes

Question Number : 161 Question Id : 97675512101 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $\cos^{-1}\left(\frac{p}{a}\right) + \cos^{-1}\left(\frac{q}{b}\right) = \alpha$, then $\frac{p^2}{a^2} + k \cos \alpha + \frac{q^2}{b^2} = \sin^2 \alpha$ where k is equal

to:

Options :

1. ✖ $\frac{2pq}{ab}$

2. ✔ $-\frac{2pq}{ab}$

3. ✖ $\frac{pq}{ab}$

4. ✖ $-\frac{pq}{ab}$

Question Number : 161 Question Id : 97675512101 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $\cos^{-1}\left(\frac{p}{a}\right) + \cos^{-1}\left(\frac{q}{b}\right) = \alpha$, तो $\frac{p^2}{a^2} + k \cos \alpha + \frac{q^2}{b^2} = \sin^2 \alpha$ तो k का मान किसके बराबर है ?

Options :

1. ✖ $\frac{2pq}{ab}$

2. ✔ $-\frac{2pq}{ab}$

3. ✖ $\frac{pq}{ab}$

4. ✖ $-\frac{pq}{ab}$

Question Number : 162 Question Id : 97675512102 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $\operatorname{cosec} \alpha + \cot \alpha = 2 + \sqrt{5}$, then value of $\cos \alpha$ is-

Options :

1. ✖ $\frac{1}{\sqrt{3}}$

2. ✔ $\frac{2}{\sqrt{5}}$

3. ✖ $\frac{\sqrt{5}}{2}$

4. ✖ $\sqrt{3}$

Question Number : 162 Question Id : 97675512102 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $\operatorname{cosec} \alpha + \cot \alpha = 2 + \sqrt{5}$ है, तो, $\cos \alpha$ का मान होगा-

Options :

1. ✖ $\frac{1}{\sqrt{3}}$

2. ✓ $\frac{2}{\sqrt{5}}$

3. ✗ $\frac{\sqrt{5}}{2}$

4. ✗ $\sqrt{3}$

Question Number : 163 Question Id : 97675512103 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Find the value of: $\frac{\sec 8A (\tan 10A + \tan 6A)}{4(\tan 10A - \tan 6A)}$

Options :

1. ✗ $\sin 4A$

2. ✓ $\cos 4A$

3. ✗ $\tan 4A$

4. ✗ $\sin 2A$

Question Number : 163 Question Id : 97675512103 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$\frac{\sec 8A (\tan 10A + \tan 6A)}{4(\tan 10A - \tan 6A)}$ का मान ज्ञात करें:

Options :

1. ✗ $\sin 4A$

2. ✓ $\cos 4A$

3. ✗ $\tan 4A$

4. ✗ $\sin 2A$

Question Number : 164 Question Id : 97675512104 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If A lies in the first quadrant and $2\sqrt{3}\sin A \cos A = \cos^2 A - \sin^2 A$, then the value of $\cos A \cos(A/2) \sin(A/2)$ is:

Options :

1. ✖ $\frac{1}{4}$

2. ✔ $\frac{1}{8}$

3. ✖ 8

4. ✖ 4

Question Number : 164 Question Id : 97675512104 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि A पहले चतुर्थांश पर है और $2\sqrt{3}\sin A \cos A = \cos^2 A - \sin^2 A$, है तो $\cos A \cos(A/2) \sin(A/2)$ का मान क्या होगा?

Options :

1. ✖ $\frac{1}{4}$

2. ✔ $\frac{1}{8}$

3. ✖ 8

4. ✖ 4

Question Number : 165 Question Id : 97675512105 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The value of $\sqrt{3} \sin 10^\circ$ is equal to –

Options :

1. ✖ $\sin 20^\circ + \sin 40^\circ$

2. ✔ $\cos 50^\circ - \cos 70^\circ$

3. ✖ $\cos 50^\circ + \cos 70^\circ$

4. ✖ $\sin 70^\circ + \sin 50^\circ$

Question Number : 165 Question Id : 97675512105 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$\sqrt{3} \sin 10^\circ$ का मान _____ के बराबर है-

Options :

1. ✖ $\sin 20^\circ + \sin 40^\circ$

2. ✔ $\cos 50^\circ - \cos 70^\circ$

3. ✖ $\cos 50^\circ + \cos 70^\circ$

4. ✖ $\sin 70^\circ + \sin 50^\circ$

Question Number : 166 Question Id : 97675512106 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Find the value of $\frac{\cot^3 2A + 3\cot 2A \operatorname{cosec}^2 2A}{\operatorname{cosec}^3 2A (\cos^6 A - \sin^6 A)}$

Options :

1. ✖ 3
2. ✖ 2
3. ✔ 4
4. ✖ 1

Question Number : 166 Question Id : 97675512106 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$\frac{\cot^3 2A + 3\cot 2A \operatorname{cosec}^2 2A}{\operatorname{cosec}^3 2A (\cos^6 A - \sin^6 A)} =$ का मान ज्ञात करें:

Options :

1. ✖ 3
2. ✖ 2
3. ✔ 4
4. ✖ 1

Question Number : 167 Question Id : 97675512107 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $X = \cot \theta + \cos \theta$ and $Y = \cot \theta - \cos \theta$, then find the value of $\frac{X^2 - Y^2}{\sqrt{XY}}$.

Options :

1. ✖ 2
2. ✖ 0
3. ✔ 4
4. ✖ 1

Question Number : 167 Question Id : 97675512107 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $X = \cot\theta + \cos\theta$ और $Y = \cot\theta - \cos\theta$ है, तो $\frac{X^2 - Y^2}{\sqrt{XY}}$ का मान ज्ञात करें।

Options :

1. ✖ 2
2. ✖ 0
3. ✔ 4
4. ✖ 1

Question Number : 168 Question Id : 97675512108 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$\sin 6^\circ \cdot \sin 66^\circ$ is -

Options :

1. ✖ $\frac{\sqrt{5}-1}{4}$
2. ✖ $\frac{3-\sqrt{5}}{4}$
3. ✔ $\frac{3-\sqrt{5}}{8}$
4. ✖ $\frac{\sqrt{5}-1}{8}$

Question Number : 168 Question Id : 97675512108 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$\sin 6^\circ \cdot \sin 66^\circ$ का मान है -

Options :

1. ✖ $\frac{\sqrt{5}-1}{4}$

2. ✖ $\frac{3-\sqrt{5}}{4}$

3. ✔ $\frac{3-\sqrt{5}}{8}$

4. ✖ $\frac{\sqrt{5}-1}{8}$

Question Number : 169 Question Id : 97675512109 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Value of $\cot \left(7\frac{1}{2}\right)^\circ$ is -

Options :

1. ✔ $2+\sqrt{2}+\sqrt{3}+\sqrt{6}$

2. ✖ $2+\sqrt{3}+\sqrt{5}+\sqrt{6}$

3. ✖ $\sqrt{2}+\sqrt{3}+\sqrt{5}+\sqrt{6}$

4. ✖ $3+\sqrt{2}+\sqrt{3} + \sqrt{6}$

Question Number : 169 Question Id : 97675512109 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$\cot\left(7\frac{1}{2}\right)^{\circ}$ का मान होगा-

Options :

1. ✔ $2+\sqrt{2}+\sqrt{3} + \sqrt{6}$

2. ✖ $2+\sqrt{3}+\sqrt{5} + \sqrt{6}$

3. ✖ $\sqrt{2}+\sqrt{3}+\sqrt{5} + \sqrt{6}$

4. ✖ $3+\sqrt{2}+\sqrt{3} + \sqrt{6}$

Question Number : 170 Question Id : 97675512110 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $\sin 3A = \cos (A-30)$, where $3A$ and $(A-30)$ are acute angles, find the value of $(\sin 2A + \cos 2A)$

Options :

1. ✖ $\frac{\sqrt{3}-1}{2}$

2. ✓ $\frac{\sqrt{3}+1}{2}$

3. ✗ $\frac{\sqrt{3}+1}{3}$

4. ✗ $\frac{\sqrt{3}-1}{3}$

Question Number : 170 Question Id : 97675512110 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $\sin 3A = \cos (A-30)$ है, जहां $3A$ और $(A-30)$ न्यून कोण हैं, तो $(\sin 2A + \cos 2A)$ का मान ज्ञात करें।

Options :

1. ✗ $\frac{\sqrt{3}-1}{2}$

2. ✓ $\frac{\sqrt{3}+1}{2}$

3. ✗ $\frac{\sqrt{3}+1}{3}$

4. ✗ $\frac{\sqrt{3}-1}{3}$

Question Number : 171 Question Id : 97675512111 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $P(\vec{r})$ is a point on a surface, then P will be a singularity of the surface if –

Options :

1. ✖ $\vec{r}_1 = \vec{r}_2$

2. ✔ $\vec{r}_1 \times \vec{r}_2 = 0$

3. ✖ $\vec{r}_1 = \vec{r}_2 = 0$

4. ✖ $\vec{r}_1 \times \vec{r}_2 \neq 0$

Question Number : 171 Question Id : 97675512111 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए $P(\vec{r})$, एक सतह पर एक बिंदु है, तो उस सतह पर P एक विलक्षणता होगा, यदि -

Options :

1. ✖ $\vec{r}_1 = \vec{r}_2$ हो

2. ✔ $\vec{r}_1 \times \vec{r}_2 = 0$ हो

3. ✖ $\vec{r}_1 = \vec{r}_2 = 0$ हो

4. ✖ $\vec{r}_1 \times \vec{r}_2 \neq 0$ हो

Question Number : 172 Question Id : 97675512112 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

On the surface $xyz = 4$, what shall be the equation of the tangent plane at the point $(1, 2, 2)$?

Options :

1. ✓ $2x + y + z = 6$
2. ✗ $x - 2y - z + 1 = 0$
3. ✗ $x + 2y + z - 1 = 0$
4. ✗ $x + 2y + z = 2$

Question Number : 172 Question Id : 97675512112 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

सतह $xyz = 4$ पर बिंदु $(1, 2, 2)$ पर स्पर्श रेखा का समीकरण क्या होगा?

Options :

1. ✓ $2x + y + z = 6$
2. ✗ $x - 2y - z + 1 = 0$
3. ✗ $x + 2y + z - 1 = 0$
4. ✗ $x + 2y + z = 2$

Question Number : 173 Question Id : 97675512113 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let there be a surface, $x = u \cos v$, $y = u \sin v$, $z = cv$. The first fundamental coefficients are respectively—

Options :

1. ✗ $0, 0, u^2 + c^2$
2. ✗ $1, 0, \sqrt{u^2 + c^2}$
3. ✓ $1, 0, u^2 + c^2$

4. ✖ $\cos v, \sin v, u^2 + 1$

Question Number : 173 Question Id : 97675512113 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए कि एक सतह है, $x = u \cos v, y = u \sin v, z = cv$ हो, तो प्रथम मूलभूत मौलिक गुणांक क्रमशः हैं -

Options :

1. ✖ $0, 0, u^2 + c^2$

2. ✖ $1, 0, \sqrt{u^2 + c^2}$

3. ✔ $1, 0, u^2 + c^2$

4. ✖ $\cos v, \sin v, u^2 + 1$

Question Number : 174 Question Id : 97675512114 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

What shall be the appropriate matrix of the coefficient of Frenet–Serret formula?

Options :

1. ✖ $\begin{bmatrix} 0 & -\tau & 0 \\ \tau & 0 & -k \\ 0 & k & 0 \end{bmatrix}$

2. ✖ $\begin{bmatrix} 0 & -k & 0 \\ k & 0 & -\tau \\ 0 & \tau & 0 \end{bmatrix}$

3. ✓ $\begin{bmatrix} 0 & k & 0 \\ -k & 0 & \tau \\ 0 & -\tau & 0 \end{bmatrix}$

4. ✗ $\begin{bmatrix} 0 & \tau & 0 \\ -\tau & 0 & k \\ 0 & -k & 0 \end{bmatrix}$

Question Number : 174 Question Id : 97675512114 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

फ्रेनेट-सेरेट फॉर्मूला के गुणांक का उपयुक्त आव्यूह कौनसा है?

Options :

1. ✗ $\begin{bmatrix} 0 & -\tau & 0 \\ \tau & 0 & -k \\ 0 & k & 0 \end{bmatrix}$

2. ✗ $\begin{bmatrix} 0 & -k & 0 \\ k & 0 & -\tau \\ 0 & \tau & 0 \end{bmatrix}$

3. ✓ $\begin{bmatrix} 0 & k & 0 \\ -k & 0 & \tau \\ 0 & -\tau & 0 \end{bmatrix}$

4. ✗ $\begin{bmatrix} 0 & \tau & 0 \\ -\tau & 0 & k \\ 0 & -k & 0 \end{bmatrix}$

Question Number : 175 Question Id : 97675512115 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Express the relation between radius of spherical-curvature R and the radius of curvature ρ of the curve P and σ (the reciprocal of the torsion).

Options :

1. ✖ $R^2 = \sigma^2 + (\rho' \rho)^2$

2. ✔ $R^2 = \rho^2 + (\rho' \sigma)^2$

3. ✖ $R^2 = \rho'^2 + (\rho \sigma)^2$

4. ✖ $R^2 = \sigma^2 + \left(\frac{\rho^1}{\sigma}\right)^2$

Question Number : 175 Question Id : 97675512115 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

वक्र P और σ (मरोड़ का व्युत्क्रम) की गोलाकार वक्रता की त्रिज्या R और वक्रता त्रिज्या ρ के बीच सम्बन्ध ज्ञात कीजिए।

Options :

1. ✖ $R^2 = \sigma^2 + (\rho' \rho)^2$

2. ✔ $R^2 = \rho^2 + (\rho' \sigma)^2$

3. ✖ $R^2 = \rho'^2 + (\rho \sigma)^2$

4. ✖ $R^2 = \sigma^2 + \left(\frac{\rho^1}{\sigma}\right)^2$

Question Number : 176 Question Id : 97675512116 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

For a curve to be a helix which of the following should be the most necessary and sufficient condition?

Options :

1. ✖ The curvature is constant
2. ✖ The torsion is constant
3. ✔ The ratio of the curvature and the torsion is constant
4. ✖ The product of the curvature and the torsion constant

Question Number : 176 Question Id : 97675512116 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

वक्र के कुंडलित वक्रता (हेलिक्स) होने के लिए आवश्यक और पर्याप्त शर्त यह है कि -

Options :

1. ✖ वक्रता स्थिर है
2. ✖ मरोड़ (टॉरशियन) स्थिर है
3. ✔ वक्रता और मरोड़ (टॉरशियन) स्थिरांक का अनुपात स्थिर है
4. ✖ वक्रता और मरोड़ (टॉरशियन) स्थिरांक का गुणनफल स्थिर है

Question Number : 177 Question Id : 97675512117 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The element of surface ds is given by-

Options :

1. ✖ $ds = H^2 \sqrt{du^2 + dv^2}$
2. ✖ $ds = H^2 du dv$

3. ✖ $ds=H\sqrt{du^2 + dv^2}$

4. ✔ $ds=H.dudv$

Question Number : 177 Question Id : 97675512117 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

सतह ds का अवयव किसके द्वारा दिया गया है?

Options :

1. ✖ $ds=H^2\sqrt{du^2 + dv^2}$

2. ✖ $ds=H^2dudv$

3. ✖ $ds=H\sqrt{du^2 + dv^2}$

4. ✔ $ds=H.dudv$

Question Number : 178 Question Id : 97675512118 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

What should be a necessary and sufficient condition for the curve $v = \text{constant}$ to be a Geodesic on the general surface?

Options :

1. ✔ $EE_2+FE_1-2EF_1=0$

2. ✖ $EE_2+FE_1+2EF_1=0$

3. ✖ $EE_2 - FE_1 - 2EF_1 = 0$

4. ✖ $EE_2 - FE_1 + 2EF_1 = 0$

Question Number : 178 Question Id : 97675512118 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

सामान्य सतह पर वक्र $v =$ स्थिरांक (अचर), को अल्पान्तरी (जियोडेसिक) होने के लिए एक आवश्यक और पर्याप्त शर्त क्या होनी चाहिए?

Options :

1. ✔ $EE_2 + FE_1 - 2EF_1 = 0$

2. ✖ $EE_2 + FE_1 + 2EF_1 = 0$

3. ✖ $EE_2 - FE_1 - 2EF_1 = 0$

4. ✖ $EE_2 - FE_1 + 2EF_1 = 0$

Question Number : 179 Question Id : 97675512119 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Equation of asymptotic lines is given by-

Options :

1. ✔ $Ldu^2 + 2M dudv + Ndv^2 = 0$

2. ✖ $Ldu^2 - Ndv^2 = 0$

3. ✖ $M \, du \, dv = 0$

4. ✖ $-Ldu^2 - 2M \, du \, dv + Ndv^2 = 0$

Question Number : 179 Question Id : 97675512119 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

स्पर्शोन्मुख रेखाओं का समीकरण किसके द्वारा दिया जाता है?

Options :

1. ✔ $Ldu^2 + 2M \, du \, dv + Ndv^2 = 0$

2. ✖ $Ldu^2 - Ndv^2 = 0$

3. ✖ $M \, du \, dv = 0$

4. ✖ $-Ldu^2 - 2M \, du \, dv + Ndv^2 = 0$

Question Number : 180 Question Id : 97675512120 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

For a paraboloid of revolution $z = x^2 + y^2$, the asymptotic lines is given by -

Options :

1. ✖ $du^2 + dv^2 = 0$

2. ✔ $du^2 + u^2 dv^2 = 0$

3. ✖ $u^2 du^2 + v^2 dv^2 = 0$

4. ✖ $du^2 - dv^2 = 0$

Question Number : 180 Question Id : 97675512120 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

परिक्रमण-परवलयज $z = x^2 + y^2$ (ठोस अनुवृत्त या पैराबोलोयड) की स्पर्शोन्मुख रेखाएँ किसके द्वारा दी जाती हैं?

Options :

1. ✖ $du^2 + dv^2 = 0$

2. ✔ $du^2 + u^2 dv^2 = 0$

3. ✖ $u^2 du^2 + v^2 dv^2 = 0$

4. ✖ $du^2 - dv^2 = 0$

Discipline5

Group Number :

10

Group Id :

976755409

Group Maximum Duration :

0

Group Minimum Duration :

0

Show Attended Group? :

No

Edit Attended Group? :	No
Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

Discipline5

Section Id :	976755737
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755869
Question Shuffling Allowed :	Yes

Question Number : 181 Question Id : 97675512121 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$y(t)$ is a real valued function of a real variable with period T . Its trigonometric Fourier series expansion contains no terms of frequency $\omega = 2\pi \left(\frac{2k}{T}\right)$, $k = 1, 2, \dots$. Also no terms are present. Then $y(t)$ satisfies the equation:

Options :

1. ✖ $y(t) = y(T - t) = -y(t - T/2)$

2. ✔ $y(t) = y(t - T) = y(t - T/2)$

3. ✖ $y(t) = y(t - T) = -y(t - T/2)$

4. ✖ $y(t) = y(t+T) = y(t+T/2)$

Question Number : 181 Question Id : 97675512121 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$y(t)$ अवधि T के साथ एक वास्तविक चर का एक वास्तविक मान फलन है। इसकी त्रिकोणमितीय फूरियर श्रृंखला के विस्तार (expansion) में आवृत्ति $w = 2\pi (\frac{2k}{T})$, $k = 1, 2, \dots$ का कोई पद नहीं है। इसके अलावा कोई शर्त मौजूद नहीं है। तब $y(t)$ समीकरण को संतुष्ट करता है :

Options :

1. ✖ $y(t) = y(T-t) = -y(t-T/2)$

2. ✔ $y(t) = y(t-T) = y(t-T/2)$

3. ✖ $y(t) = y(t-T) = -y(t-T/2)$

4. ✖ $y(t) = y(t+T) = y(t+T/2)$

Question Number : 182 Question Id : 97675512122 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The running integrator given by $y(t) = \int_{-\infty}^{\infty} x(t)dt$:

Options :

1. ✖ Produces a bounded output for every anticausal bounded input

2. ✖ Has no finite zeros in its double-sided Laplace transform $Y(s)$.
3. ✖ Has no finite singularities in its double sided Laplace transform $Y(s)$
4. ✔ Produces an abounded output for every causal bounded input

Question Number : 182 Question Id : 97675512122 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$y(t) = \int_{-\infty}^{\infty} x(t)dt$ द्वारा दिया गया संचालन समाकलक (रनिंग इंटीग्रेटर):

Options :

1. ✖ प्रत्येक अकारण बाध्य इनपुट के लिए एक बाध्य आउटपुट उत्पन्न करता है
2. ✖ इसके दोनों तरफ लाप्लास ट्रांसफॉर्म $Y(s)$ में कोई परिमित शून्यता नहीं है
3. ✖ इसके दोनों तरफ लाप्लासट्रांसफॉर्म $Y(s)$ में कोई परिमित विलक्षणता नहीं है
4. ✔ प्रत्येक बाध्य इनपुट के लिए एक परित्यक्त आउटपुट का उत्पादन करता है

Question Number : 183 Question Id : 97675512123 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The Fourier series for the function $f(x) = \sin^2(x)$ is:

Options :

1. ✔ $0.5 - 0.5 \cos 2x$
2. ✖ $0.5 + 0.5 \sin 2x$
3. ✖ $0.5 - 0.5 \sin 2x$
4. ✖ $0.5 + 0.5 \cos 2x$

Question Number : 183 Question Id : 97675512123 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

फलन $f(x) = \sin^2(x)$ के लिए फूरियर शृंखला (Fourier series) कौन सा है?

Options :

1. ✓ $0.5 - 0.5 \cos 2x$
2. ✗ $0.5 + 0.5 \sin 2x$
3. ✗ $0.5 - 0.5 \sin 2x$
4. ✗ $0.5 + 0.5 \cos 2x$

Question Number : 184 Question Id : 97675512124 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The continuous time system described by the equation $y(t) = x(t^2)$ comes under the category of –

Options :

1. ✗ Causal, linear and time-varying
2. ✓ Non-causal, linear and time-variant
3. ✗ Non-causal, non-linear and time-variant
4. ✗ Causal, non-linear and time-varying

Question Number : 184 Question Id : 97675512124 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

समीकरण $y(t) = x(t^2)$ द्वारा वर्णित निरंतर समय प्रणाली कौन सी श्रेणी के अंतर्गत आता है?

Options :

1. ✗ कारण, रैखिक और समय परिवर्तनीय (Causal, linear and time-varying)
2. ✓ गैर-कारण (अकारण), रैखिक और समय परिवर्तनीय (Non-causal, linear and time-variant)
3. ✗ गैर-कारण (अकारण), गैर-रैखिक (अरैखिक) और समय परिवर्तनीय (Non-causal, non-linear and time-variant)
4. ✗ कारण, गैर-रैखिक (अरैखिक) और समय-परिवर्तनीय (Causal, non-linear and time-varying)

Question Number : 185 Question Id : 97675512125 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The system characterized by the differential equation $\frac{d^2y(t)}{dt^2} - \frac{dy}{dt} - 2y(t) = x(t)$ is -

Options :

1. ✖ Linear and stable
2. ✔ Linear and unstable
3. ✖ Non-linear and unstable
4. ✖ Non-linear and stable

Question Number : 185 Question Id : 97675512125 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

अवकल समीकरण $\frac{d^2y(t)}{dt^2} - \frac{dy}{dt} - 2y(t) = x(t)$ द्वारा वर्णित प्रणाली है-

Options :

1. ✖ रैखिक और स्थिर
2. ✔ रैखिक और अस्थिर
3. ✖ अरेखीय और अस्थिर
4. ✖ अरेखीय और स्थिर

Question Number : 186 Question Id : 97675512126 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The CTFT of a continuous time signal $x(t) = e^{-A|t|}$, $A > 0$ is _____

Options :

1. ✔ $\frac{2A}{(A^2 + \omega^2)}$

2. ✖ $\frac{A}{(A^2 + \omega^2)}$

3. ✖ $\frac{2A}{(\omega^2)}$

4. ✖ $\frac{A}{(\omega^2)}$

Question Number : 186 Question Id : 97675512126 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

एक सतत समय संकेत $x(t) = e^{-A|t|}$, $A > 0$ सी.टी.एफ.टी. (CTFT) की है:

Options :

1. ✔ $\frac{2A}{(A^2 + \omega^2)}$

2. ✖ $\frac{A}{(A^2 + \omega^2)}$

3. ✖ $\frac{2A}{(\omega^2)}$

4. ✖ $\frac{A}{(\omega^2)}$

Question Number : 187 Question Id : 97675512127 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

A signal $x(t)$ is given by
$$x(t) = \begin{cases} 1, & -\frac{T}{4} < t \leq \frac{3T}{4} \\ -1, & \frac{3T}{4} < t \leq \frac{7T}{4} \\ -x(t+T) \end{cases}$$

Which among the following gives the fundamental Fourier terms of $x(t)$?

Options :

1. ✖ $\frac{4}{\pi} \cos\left(\frac{\pi t}{T} + \frac{\pi}{4}\right)$

2. ✔ $\frac{4}{\pi} \sin\left(\frac{\pi t}{T} - \frac{\pi}{4}\right)$

3. ✖ $\frac{4}{\pi} \cos\left(\frac{\pi t}{T} - \frac{\pi}{4}\right)$

4. ✖ $\frac{4}{\pi} \sin\left(\frac{\pi t}{T} + \frac{\pi}{4}\right)$

Question Number : 187 Question Id : 97675512127 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

एक संकेत $x(t) = \begin{cases} 1, & -\frac{T}{4} < t \leq \frac{3T}{4} \\ -1, & \frac{3T}{4} < t \leq \frac{7T}{4} \\ -x(t+T) \end{cases}$ द्वारा दिया जाता है

निम्नलिखित में कौन सा $x(t)$ के मौलिक फॉरियर पद देता है?

Options :

1. ✖ $\frac{4}{\pi} \cos\left(\frac{\pi t}{T} + \frac{\pi}{4}\right)$

2. ✔ $\frac{4}{\pi} \sin\left(\frac{\pi t}{T} - \frac{\pi}{4}\right)$

3. ✖ $\frac{4}{\pi} \cos\left(\frac{\pi t}{T} - \frac{\pi}{4}\right)$

4. ✖ $\frac{4}{\pi} \sin\left(\frac{\pi t}{T} + \frac{\pi}{4}\right)$

Question Number : 188 Question Id : 97675512128 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is true?

1. $(1.01)^{1000000} > 10000$

2. $(98)^{55} > 9500000000$

Options :

1. ✖ Only 1

2. ✖ Only 2

3. ✔ Both 1 and 2

4. ✖ Neither 1 nor 2

Question Number : 188 Question Id : 97675512128 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौनसा सत्य है?

1. $(1.01)^{1000000} > 10000$
2. $(98)^{55} > 9500000000$

Options :

1. ✖ केवल 1
2. ✖ केवल 2
3. ✔ दोनों 1 और 2
4. ✖ ना तो 1 ना ही 2

Question Number : 189 Question Id : 97675512129 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Root of the number $(6 + 4\sqrt{3})$

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $\sqrt{3}(\sqrt{3}+1)^2$
2. $\sqrt{3}(\sqrt{3}-1)^2$
3. $3(\sqrt{2}+1)^2$
4. $3(\sqrt{3}+1)^2$

Question Number : 189 Question Id : 97675512129 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$(6 + 4\sqrt{3})$ संख्या का मूल है-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $\sqrt{3}(\sqrt{3}+1)^2$
2. $\sqrt{3}(\sqrt{3}-1)^2$
3. $3(\sqrt{2}+1)^2$
4. $3(\sqrt{3}+1)^2$

Question Number : 190 Question Id : 97675512130 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $4.5^x = 500$, then the value of x^x is-

Options :

1. ✖ 8
2. ✖ 1
3. ✖ 64
4. ✔ 27

Question Number : 190 Question Id : 97675512130 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $4.5^x = 500$ है, तो x^x का मान है -

Options :

1. ✖ 8
2. ✖ 1
3. ✖ 64
4. ✔ 27

Question Number : 191 Question Id : 97675512131 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Find by using binomial theorem $(2^{3n} - 7n - 1)$ is divisible by which of the following numbers?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 7
2. 49
3. 15
4. 27

Question Number : 191 Question Id : 97675512131 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

द्विपद प्रमेय का उपयोग करके ज्ञात करें कि $(2^{3n} - 7n - 1)$ किससे विभाज्य है?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 7
2. 49
3. 15
4. 27

Question Number : 192 Question Id : 97675512132 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The middle term in the expansion of $\left(x^2 + \frac{1}{x^2} + 2\right)^n$ is:

Options :

1. ✖ $\frac{n}{\left[\left(\frac{n}{2}\right)!\right]^2}$

2. ✖ $\frac{(2n!)}{\left[\left(\frac{n}{2}\right)!\right]^2}$

3. ✖ $\frac{1.2.5..(2n+1)}{n!} 2^n$

4. ✔ $\frac{(2n)!}{(n!)^2}$

Question Number : 192 Question Id : 97675512132 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$\left(x^2 + \frac{1}{x^2} + 2\right)^n$ के प्रसार में मध्य पद है:

Options :

1. ✖ $\frac{n}{\left[\left(\frac{n}{2}\right)!\right]^2}$

2. ✖ $\frac{(2n!)}{\left[\left(\frac{n}{2}\right)!\right]^2}$

3. ✖ $\frac{1.2.5..(2n+1)}{n!} 2^n$

4. ✔ $\frac{(2n)!}{(n!)^2}$

Question Number : 193 Question Id : 97675512133 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The largest coefficient of $(x + 1)^{20}$ is:

Options :

1. ✖ $\frac{(20)!}{6!4!}$

2. ✖ $\frac{(20)!}{10!5!}$

3. ✔ $\frac{(20)!}{(10!)^2}$

4. ✖ $\frac{(20)!}{5!4!}$

Question Number : 193 Question Id : 97675512133 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$(x + 1)^{20}$ का सबसे बड़ा गुणांक है:

Options :

1. ✖ $\frac{(20)!}{6!4!}$

2. ✖ $\frac{(20)!}{10!5!}$

3. ✔ $\frac{(20)!}{(10!)^2}$

4. ✖ $\frac{(20)!}{5!4!}$

Question Number : 194 Question Id : 97675512134 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The remainder when $75^{75^{75}}$ is divided by 37:

Options :

1. ✖ 0

2. ✔ 1

3. ✖ 5

4. ✖ 7

Question Number : 194 Question Id : 97675512134 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि 75^{75} को 37 से विभाजित किया जाता है, तो शेषफल क्या होगा?

Options :

1. ✖ 0
2. ✔ 1
3. ✖ 5
4. ✖ 7

Question Number : 195 Question Id : 97675512135 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Find the remainder when 2^{252} is divided by 210?

Options :

1. ✖ 1
2. ✔ 106
3. ✖ 141
4. ✖ 208

Question Number : 195 Question Id : 97675512135 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि 2^{252} को 210 से विभाजित किया जाता है, तो शेषफल क्या होगा?

Options :

1. ✖ 1
2. ✔ 106
3. ✖ 141
4. ✖ 208

Question Number : 196 Question Id : 97675512136 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Find the sum of coefficient of the expansion $(1+x-3x^2)^{4165}$

Options :

1. ✖ 0
2. ✖ 1
3. ✔ -1
4. ✖ 2

Question Number : 196 Question Id : 97675512136 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$(1+x-3x^2)^{4165}$ इनके विस्तार (आयाम) का गुणांक का योग ज्ञात करें-

Options :

1. ✖ 0
2. ✖ 1
3. ✔ -1
4. ✖ 2

Question Number : 197 Question Id : 97675512137 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Coefficient of x^{-2} of this expansion $\left(2x^3 - \frac{7}{x}\right)^8$

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 60
2. 90
3. 72
4. 40

Question Number : 197 Question Id : 97675512137 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$\left(2x^3 - \frac{7}{x}\right)^8$ के विस्तार (आयाम) के x^{-2} का गुणांक है-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 60
2. 90
3. 72
4. 40

Question Number : 198 Question Id : 97675512138 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $(a + b) = 2$, then the value of $\sum_{r=0}^n {}^nC_r a^r b^{n-r}$

Options :

1. ✓ 2^n
2. ✗ 0
3. ✗ 1

4. ✖ -2^n

Question Number : 198 Question Id : 97675512138 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $(a + b) = 2$ है तो, $\sum_{r=0}^n {}^nC_r a^r b^{n-r}$ का मान है-

Options :

1. ✔ 2^n

2. ✖ 0

3. ✖ 1

4. ✖ -2^n

Question Number : 199 Question Id : 97675512139 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is true?

Options :

1. ✖ Every discontinuous function is integrable

2. ✖ Every integrable function is continuous

3. ✔ Every monotone function is integrable

4. ✖ Every integrable function is monotone increasing

Question Number : 199 Question Id : 97675512139 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में कौन सा सत्य है?

Options :

1. ✖ प्रत्येक असन्तत (अनिरन्तर) फलन समाकलनीय होता है।
2. ✖ प्रत्येक समाकलनीय फलन संतत होता है।
3. ✔ प्रत्येक एकदिष्ट फलन समाकलनीय है।
4. ✖ प्रत्येक समाकलनीय फलन एकदिष्ट वर्धमान है

Question Number : 200 Question Id : 97675512140 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If f is a continuous function, then $\lim_{n \rightarrow \infty} \sum_{r=0}^{n-1} \frac{1}{n} f\left(\frac{r}{n}\right)$ can be expressed as -

Options :

1. ✖ $\int_0^1 xf(x) dx$
2. ✖ $\int_0^1 \frac{1}{x} f\left(\frac{1}{x}\right) dx$
3. ✖ $\int_0^1 f\left(\frac{1}{x}\right) dx$
4. ✔ $\int_0^1 f(x) dx$

Question Number : 200 Question Id : 97675512140 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि f एक सतत फलन है, तो $\lim_{n \rightarrow \infty} \sum_{r=0}^{n-1} \frac{1}{n} f\left(\frac{r}{n}\right)$ को _____ रूप में व्यक्त किया जा सकता है-

Options :

1. ✖ $\int_0^1 xf(x) dx$

2. ✖ $\int_0^1 \frac{1}{x} f\left(\frac{1}{x}\right) dx$

3. ✖ $\int_0^1 f\left(\frac{1}{x}\right) dx$

4. ✔ $\int_0^1 f(x) dx$

Discipline6

Group Number :

11

Group Id :

976755410

Group Maximum Duration :

0

Group Minimum Duration :

0

Show Attended Group? :

No

Edit Attended Group? :

No

Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

Discipline6

Section Id :	976755738
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755870
Question Shuffling Allowed :	Yes

Question Number : 201 Question Id : 97675512141 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which one of the inequality is true?

Options :

1. ✖ $\frac{1}{e} < \int_0^1 e^{x^2} dx < \frac{1}{2}$

2. ✖ $e < \int_0^1 e^{x^2} dx < 1$

3. ✔ $1 < \int_0^1 e^{x^2} dx < e$

4. ✖ $-1 < \int_0^1 e^{x^2} dx < 1$

Question Number : 201 Question Id : 97675512141 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

कौन-सी असमानता सत्य है?

Options :

1. ✖ $\frac{1}{e} < \int_0^1 e^{x^2} dx < \frac{1}{2}$

2. ✖ $e < \int_0^1 e^{x^2} dx < 1$

3. ✔ $1 < \int_0^1 e^{x^2} dx < e$

4. ✖ $-1 < \int_0^1 e^{x^2} dx < 1$

Question Number : 202 Question Id : 97675512142 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The integral $\int_0^1 \frac{x^2 \cos 3x}{2+x^2} dx$ lies between?

Options :

1. ✔ $-\frac{1}{2}$ and $\frac{1}{2}$

2. ✖ $-\frac{3}{2}$ and $\frac{3}{2}$

3. ✖ -1 and 1

4. ✖ $-\frac{1}{3}$ and $\frac{1}{3}$

Question Number : 202 Question Id : 97675512142 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

समाकलन $\int_0^1 \frac{x^3 \cos 3x}{2+x^2}$ _____ के बीच स्थित है।

Options :

1. ✔ $-\frac{1}{2}$ और $\frac{1}{2}$

2. ✖ $-\frac{3}{2}$ और $\frac{3}{2}$

3. ✖ -1 और 1

4. ✖ $-\frac{1}{3}$ और $\frac{1}{3}$

Question Number : 203 Question Id : 97675512143 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following improper integral is convergent?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $\int_1^{\infty} \frac{1}{x^3} dx$

2. $\int_1^{\infty} \frac{1}{\sqrt{x}} dx$

3. $\int_1^{\infty} \frac{1}{x^2} dx$

4. $\int_1^{\infty} \frac{1}{x^{3/2}} dx$

Question Number : 203 Question Id : 97675512143 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन सा अनुचित समाकलन अभिसारी है?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $\int_1^{\infty} \frac{1}{x^3} dx$

2. $\int_1^{\infty} \frac{1}{\sqrt{x}} dx$

3. $\int_1^{\infty} \frac{1}{x^2} dx$

4. $\int_1^{\infty} \frac{1}{x^{3/2}} dx$

Question Number : 204 Question Id : 97675512144 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let $I_n = \int \tan^n x dx$, ($n > 1$). $I_4 + I_6 = a \tan^5 x + bx^5 + c$, where c is a constant of integration, then the order pair (a , b) is equal to-

Options :

1. ✖ $\left(-\frac{1}{5}, 1\right)$

2. ✖ $\left(\frac{1}{5}, \frac{4}{5}\right)$

3. ✔ $\left(\frac{1}{5}, 0\right)$

4. ✖ $\left(-\frac{1}{5}, -1\right)$

Question Number : 204 Question Id : 97675512144 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए $I_n = \int \tan^n x \, dx$, $(n > 1)$. $I_4 + I_6 = a \tan^5 x + bx^5 + c$ है, जहाँ c समाकलन का एक स्थिरांक एकीकरण है, तो क्रम युग्म (a, b) _____ के बराबर है -

Options :

1. ✖ $\left(-\frac{1}{5}, 1\right)$

2. ✖ $\left(\frac{1}{5}, \frac{4}{5}\right)$

3. ✔ $\left(\frac{1}{5}, 0\right)$

4. ✖ $\left(-\frac{1}{5}, -1\right)$

Question Number : 205 Question Id : 97675512145 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is true?

Let $f: [0, 1] \rightarrow \mathbb{R}$ be defined by

$$f(x) = \begin{cases} (-1)^{r-1}, & \text{when } \frac{1}{r+1} < x \leq \frac{1}{r}, \quad r = 1, 2, 3, \dots \\ 0, & \text{when } x = 0 \end{cases}$$

Options :

1. ✔ f is integrable on $[0, 1]$

2. ✖ f is not integrable in $[0, 1]$

3. ✖ f is integrable on $[0, 1]$, but f is bounded
4. ✖ f is integrable on $[0, 1]$, but f is unbounded

Question Number : 205 Question Id : 97675512145 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौनसा विकल्प सही है?

मान लीजिए $f : [0, 1] \rightarrow \mathbb{R}$ परिभाषित होता है -

$$f(x) = \begin{cases} (-1)^{r-1}, & \text{जब } \frac{1}{r+1} < x \leq \frac{1}{r}, \quad r = 1, 2, 3, \dots \text{ से} \\ 0, & \text{जब } x = 0 \end{cases}$$

Options :

1. ✔ f $[0, 1]$ में समाकलनीय है
2. ✖ f , $[0, 1]$ में समाकलनीय नहीं है
3. ✖ f $[0, 1]$ पर समाकलनीय है, लेकिन f परिबद्ध है
4. ✖ f $[0, 1]$ पर समाकलनीय है, लेकिन f में अबाध है

Question Number : 206 Question Id : 97675512146 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following improper integral is convergent?

Options :

1. ✖ $\int_1^2 \frac{\sqrt{x}}{\log x} dx$

2. ✖ $\int_2^\infty \frac{1}{\log x} dx$

3. ✖ $\int_0^{\pi} \frac{1}{1-\cos x} dx$

4. ✔ $\int_0^1 \frac{1}{\sqrt{x}(x+1)} dx$

Question Number : 206 Question Id : 97675512146 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन सा अनुचित समाकलन (improper integral) अभिसारी है-

Options :

1. ✖ $\int_1^2 \frac{\sqrt{x}}{\log x} dx$

2. ✖ $\int_2^{\infty} \frac{1}{\log x} dx$

3. ✖ $\int_0^{\pi} \frac{1}{1-\cos x} dx$

4. ✔ $\int_0^1 \frac{1}{\sqrt{x}(x+1)} dx$

Question Number : 207 Question Id : 97675512147 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $I_n = \int_0^{\pi/2} x^n \sin x dx$, $n > 1$, then $I_n + n(n-1)I_{n-2}$ is equal to :

Options :

1. ✖ $\left(\frac{\pi}{2}\right)^{n-1}$

2. ✔ $n\left(\frac{\pi}{2}\right)^{n-1}$

3. ✖ $n\left(\frac{\pi}{2}\right)^n$

4. ✖ $\left(\frac{\pi}{2}\right)$

Question Number : 207 Question Id : 97675512147 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $I_n = \int_0^{\pi/2} x^n \sin x \, dx$, $n > 1$, तो $I_n + (n-1) I_{n-2}$ के बराबर है _____.

Options :

1. ✖ $\left(\frac{\pi}{2}\right)^{n-1}$

2. ✔ $n\left(\frac{\pi}{2}\right)^{n-1}$

3. ✖ $n\left(\frac{\pi}{2}\right)^n$

4. ✖ $\left(\frac{\pi}{2}\right)$

Question Number : 208 Question Id : 97675512148 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $f(x) = x|x|$, then for any real numbers a and b with $a < b$, the value of $\int_a^b f(x)dx$ equals -

Options :

1. ✖ $\frac{1}{3}(a^3 + b^3)$

2. ✔ $\frac{1}{3}(|b|^3 - |a|^3)$

3. ✖ $\frac{1}{3}(|b^3 - a^3|)$

4. ✖ $\frac{1}{3}(a^3 - b^3)$

Question Number : 208 Question Id : 97675512148 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $f(x) = x|x|$ हो, तो किसी भी वास्तविक संख्या a और b , जहां $a < b$ हो, के लिए $\int_a^b f(x)dx$ होगा-

Options :

1. ✖ $\frac{1}{3}(a^3 + b^3)$

2. ✓ $\frac{1}{3} (|b|^3 - |a|^3)$

3. ✗ $\frac{1}{3} (|b^3 - a^3|)$

4. ✗ $\frac{1}{3} (a^3 - b^3)$

Question Number : 209 Question Id : 97675512149 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

By mathematical ascending method the value of $1+2+3+\dots\dots\dots + n$ is _____.

Options :

1. ✗ $\frac{(n+1)(n+2)}{3}$

2. ✓ $\frac{n(n+1)}{2}$

3. ✗ $\frac{n(n+1)}{3}$

4. ✗ $\frac{(n+1)(n+2)}{2}$

Question Number : 209 Question Id : 97675512149 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

गणितीय आरोही विधि से $1+2+3+\dots\dots\dots + n$ का मान _____ है-

Options :

1. ✖ $\frac{(n+1)(n+2)}{3}$

2. ✔ $\frac{n(n+1)}{2}$

3. ✖ $\frac{n(n+1)}{3}$

4. ✖ $\frac{(n+1)(n+2)}{2}$

Question Number : 210 Question Id : 97675512150 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$(3^{2n+1} + 2^{n+2})$ is divisible by

Options :

1. ✔ 7

2. ✖ 3

3. ✖ 5

4. ✖ 2

Question Number : 210 Question Id : 97675512150 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$(3^{2n+1} + 2^{n+2})$ _____ से विभाज्य है-

Options :

1. ✔ 7

- 2. ✖ 3
- 3. ✖ 5
- 4. ✖ 2

Question Number : 211 Question Id : 97675512151 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

For what value of n , the statement $P(n) : n! < \left(\frac{n+1}{2}\right)^n$, is true? Where n is a positive whole number.

Options :

- 1. ✖ 1
- 2. ✖ 3
- 3. ✔ 2
- 4. ✖ 4

Question Number : 211 Question Id : 97675512151 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

n के किस मान के लिए कथन $P(n) : n! < \left(\frac{n+1}{2}\right)^n$ सत्य है? जहाँ n एक धनात्मक पूर्णांक संख्या है।

Options :

- 1. ✖ 1
- 2. ✖ 3
- 3. ✔ 2
- 4. ✖ 4

Question Number : 212 Question Id : 97675512152 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$P(n) : 1.1! + 2.2! + 3.3! + n.n! = (n + 1)! - 1$, then $P(n)$ statement is true -

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. For $n > 1$
2. For all values of n
3. For $n > 4$
4. For all negative values of n

Question Number : 212 Question Id : 97675512152 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$P(n) : 1.1! + 2.2! + 3.3! +n.n! = (n + 1)! - 1$, तो कथन $P(n)$ सत्य है-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $n > 1$ के लिये
2. n के सभी मान के लिए
3. $n > 4$ के लिये
4. n के सभी ऋणात्मक मान के लिए

Question Number : 213 Question Id : 97675512153 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The statement $(x^n - y^n)$ is divisible by -

Options :

1. ✖ $(x + y)$

2. ✓ $(x-y)$

3. ✗ $(x+y)(x-y)$

4. ✗ (x^2+y^2)

Question Number : 213 Question Id : 97675512153 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

कथन $(x^n - y^n)$ _____ से विभाजित है।

Options :

1. ✗ $(x+y)$

2. ✓ $(x-y)$

3. ✗ $(x+y)(x-y)$

4. ✗ (x^2+y^2)

Question Number : 214 Question Id : 97675512154 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The statement $(5^{2n} - 1)$ is always divisible by-

Options :

1. ✗ 42

2. ✓ 24

3. ✖ 15

4. ✖ 25

Question Number : 214 Question Id : 97675512154 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

कथन $(5^{2n} - 1)$ _____ से हमेशा विभाजित होता है-

Options :

1. ✖ 42

2. ✔ 24

3. ✖ 15

4. ✖ 25

Question Number : 215 Question Id : 97675512155 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Find the value of statement P(n): $1.6 + 2.9 + 3.12 + \dots + n(3n + 3)$

Options :

1. ✔ $n(n + 1)(n + 2)$

2. ✖ $(n + 1)(n + 2)(n + 3)$

3. ✖ $n(n + 6)$

4. ✖ $(n + 3)(n + 6)$

Question Number : 215 Question Id : 97675512155 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

P(n): $1.6 + 2.9 + 3.12 + \dots + n(3n + 3)$ कथन का मान ज्ञात करें -

Options :

1. ✔ $n(n + 1)(n + 2)$

2. ✖ $(n + 1)(n + 2)(n + 3)$

3. ✖ $n(n+6)$

4. ✖ $(n+3)(n+6)$

Question Number : 216 Question Id : 97675512156 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The statement $1.2 + 2.2^2 + 3.2^2 + \dots + n.2^2$ can be written in the form of –

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $(n+1)2^n + 2$

2. $(n-1)2^n + 2$

3. $(n-1)2^{n+1} + 2$

4. $(n+1)2^{n+1} + 2$

Question Number : 216 Question Id : 97675512156 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

कथन $1.2 + 2.2^2 + 3.2^2 + \dots + n.2^2$ को _____ के रूप में लिखा जा सकता है-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $(n+1)2^n + 2$
2. $(n-1)2^n + 2$
3. $(n-1)2^{n+1} + 2$
4. $(n+1)2^{n+1} + 2$

Question Number : 217 Question Id : 97675512157 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which statement is true?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $n! > \left(\frac{n+1}{2}\right)^n$
2. $n! < \left(\frac{n}{2}\right)^n$
3. $n! > (n)^n$
4. $n! < \left(\frac{n+1}{2}\right)^n$

Question Number : 217 Question Id : 97675512157 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

इनमें से कौन सा कथन सत्य है-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $n! > \left(\frac{n+1}{2}\right)^n$

2. $n! < \left(\frac{n}{2}\right)^n$

3. $n! > (n)^n$

4. $n! < \left(\frac{n+1}{2}\right)^n$

Question Number : 218 Question Id : 97675512158 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

General form of the statement is $\left(1 + \frac{1}{1}\right) \left(1 + \frac{1}{2}\right) \left(1 + \frac{1}{3}\right) \dots \left(1 + \frac{1}{n}\right)$ is-

Options :

1. ✓ $(n+1)$

2. ✗ $\left(n + \frac{1}{n}\right)$

3. ✖ $(n+1)^2$

4. ✖ $\left(1 + \frac{1}{n}\right)$

Question Number : 218 Question Id : 97675512158 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

कथन $\left(1 + \frac{1}{1}\right) \left(1 + \frac{1}{2}\right) \left(1 + \frac{1}{3}\right) \dots \left(1 + \frac{1}{n}\right)$ का सामान्य रूप है-

Options :

1. ✔ $(n+1)$

2. ✖ $\left(n + \frac{1}{n}\right)$

3. ✖ $(n+1)^2$

4. ✖ $\left(1 + \frac{1}{n}\right)$

Question Number : 219 Question Id : 97675512159 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The solution of the differential equation $x^2 \frac{d^2y}{dx^2} - 3x \frac{dy}{dx} + 4y = 0$ is:

Options :

1. ✖ $y = (c_1 + c_2 \log x) e^{2x}$

2. ✖ $y = (c_1 + c_2 \log x) x$

3. ✔ $y = (c_1 + c_2 \log x) x^2$

4. ✖ $y = (c_1 + c_2 \log x) e^x$

Question Number : 219 Question Id : 97675512159 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

अवकलन समीकरण $x^2 \frac{d^2 y}{dx^2} - 3x \frac{dy}{dx} + 4y = 0$ का हल है -

Options :

1. ✖ $y = (c_1 + c_2 \log x) e^{2x}$

2. ✖ $y = (c_1 + c_2 \log x) x$

3. ✔ $y = (c_1 + c_2 \log x) x^2$

4. ✖ $y = (c_1 + c_2 \log x) e^x$

Question Number : 220 Question Id : 97675512160 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The solution of the differential equation $(2D+1)2y = 0$ is -

Options :

1. ✘ $y = (A + B) e^{-x/2}$
2. ✘ $y = (A + Bx) e^{-x/2}$
3. ✘ $y = (A + Bx) e^{-x}$
4. ✔ $y = Ae^{-x/2}$

Question Number : 220 Question Id : 97675512160 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

अवकलन समीकरण $(2D+1)y = 0$ का हल है-

Options :

1. ✘ $y = (A + B) e^{-x/2}$
2. ✘ $y = (A + Bx) e^{-x/2}$
3. ✘ $y = (A + Bx) e^{-x}$
4. ✔ $y = Ae^{-x/2}$

Discipline7

Group Number :

12

Group Id :

976755411

Group Maximum Duration :	0
Group Minimum Duration :	0
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

Discipline7

Section Id :	976755739
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755871
Question Shuffling Allowed :	Yes

Question Number : 221 Question Id : 97675512161 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$e^x(c_1 \cos\sqrt{3x} + c_2 \sin\sqrt{3x}) + c_3 e^{2x}$ is the general solution of-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

$$1. \frac{d^2x}{dy^2} + 8y = 0$$

$$2. \frac{d^2x}{dy^2} + 4y = 0$$

$$3. \frac{d^3x}{dy^3} + x \frac{dx}{dy} - 3x = 0$$

$$4. \frac{d^3y}{dx^3} - 2 \frac{d^2y}{dx^2} + \frac{dy}{dx} - 2y = 0$$

Question Number : 221 Question Id : 97675512161 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$e^x(c_1 \cos\sqrt{3x} + c_2 \sin\sqrt{3x}) + c_3 e^{2x}$ _____ का सामान्य हल है-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

$$1. \frac{d^2x}{dy^2} + 8y = 0$$

$$2. \frac{d^2x}{dy^2} + 4y = 0$$

3. $\frac{d^3x}{dy^3} + x \frac{dx}{dy} - 3x = 0$

4. $\frac{d^3y}{dx^3} - 2 \frac{d^2y}{dx^2} + \frac{dy}{dx} - 2y = 0$

Question Number : 222 Question Id : 97675512162 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The particular integral of $(D^2 + a^2)y = \sin ax$ ($D \equiv \frac{d}{dx}$) is –

Options :

1. ✓ $-\frac{x}{2a} \cos ax$

2. ✗ $\frac{xa}{2} \cos ax$

3. ✗ $\frac{x}{2a} \cos ax$

4. ✗ $-\frac{xa}{2} \cos ax$

Question Number : 222 Question Id : 97675512162 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$(D^2 + a^2)y = \sin ax$ ($D \equiv \frac{d}{dx}$) का विशेष समाकल है।

Options :

1. ✓ $-\frac{x}{2a} \cos ax$

2. ✗ $\frac{xa}{2} \cos ax$

3. ✗ $\frac{x}{2a} \cos ax$

4. ✗ $-\frac{xa}{2} \cos ax$

Question Number : 223 Question Id : 97675512163 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The solution of the differential equation is $\frac{d^2y}{dx^2} - 3\frac{dy}{dx} + 2y = e^{3x}$ is-

Options :

1. ✗ $y = c_1 e^{-x} + c_2 e^{2x} + \frac{1}{2} e^{-3x}$

2. ✗ $y = c_1 e^x + c_2 e^{-2x} + \frac{1}{2} e^{-3x}$

3. ✗ $y = c_1 e^x + c_2 e^{-2x} + \frac{1}{2} e^{3x}$

4. ✓ $y = c_1 e^x + c_2 e^{2x} + \frac{1}{2} e^{3x}$

Question Number : 223 Question Id : 97675512163 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

अवकलन समीकरण $\frac{d^2y}{dx^2} - 3\frac{dy}{dx} + 2y = e^{3x}$ का हल है-

Options :

1. ✖ $y = c_1 e^{-x} + c_2 e^{2x} + \frac{1}{2} e^{-3x}$

2. ✖ $y = c_1 e^x + c_2 e^{-2x} + \frac{1}{2} e^{-3x}$

3. ✖ $y = c_1 e^x + c_2 e^{-2x} + \frac{1}{2} e^{3x}$

4. ✔ $y = c_1 e^x + c_2 e^{2x} + \frac{1}{2} e^{3x}$

Question Number : 224 Question Id : 97675512164 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

A particular solution of differential equation $\frac{d^2y}{dx^2} - \frac{dy}{dx} - 2y = \cos x + 3 \sin x$ is-

Options :

1. ✖ $-\cos x$

2. ✖ $\sin x$

3. ✔ $-\sin x$

4. ✖ $\cos x$

Question Number : 224 Question Id : 97675512164 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$\frac{d^2y}{dx^2} - \frac{dy}{dx} - 2y = \cos x + 3 \sin x$ अवकलन समीकरण का एक विशेष हल है-

Options :

1. ✗ $-\cos x$
2. ✗ $\sin x$
3. ✓ $-\sin x$
4. ✗ $\cos x$

Question Number : 225 Question Id : 97675512165 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The general solution of the differential equation $\frac{d^2y}{dx^2} + 2\frac{dy}{dx} + y = e^x \cos x$ is-

Options :

1. ✗ $(c_1 + c_2 x)e^{-x} + \frac{e^x}{9} (4 \sin x - 3 \cos x)$
2. ✗ $(c_1 + c_2 x)e^{-x} + \frac{e^x}{4} (4 \sin x + 3 \cos x)$
3. ✓ $(c_1 + c_2 x)e^{-x} + \frac{e^x}{25} (4 \sin x + 3 \cos x)$
4. ✗ $(c_1 + c_2 x + \sin x)e^{-x}$

Question Number : 225 Question Id : 97675512165 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$\frac{d^2y}{dx^2} + 2\frac{dy}{dx} + y = e^x \cos x$ अवकल समीकरण का सामान्य हल है-

Options :

1. ✖ $(c_1 + c_2 x)e^{-x} + \frac{e^x}{9} (4 \sin x - 3 \cos x)$
2. ✖ $(c_1 + c_2 x)e^{-x} + \frac{e^x}{4} (4 \sin x + 3 \cos x)$
3. ✔ $(c_1 + c_2 x)e^{-x} + \frac{e^x}{25} (4 \sin x + 3 \cos x)$
4. ✖ $(c_1 + c_2 x + \sin x)e^{-x}$

Question Number : 226 Question Id : 97675512166 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $x = A \cos (mt - \alpha)$, then the differential equation satisfying the relation is -

Options :

1. ✔ $\frac{d^2x}{dt^2} = -m^2x$
2. ✖ $\frac{d^2x}{dt^2} = m^2x$
3. ✖ $\frac{d^2x}{dt^2} = -\alpha^2x$

4. ✖ $\frac{dx}{dt} = 1 - x^2$

Question Number : 226 Question Id : 97675512166 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $x = A \cos (mt - \alpha)$ हो, तो इस संबंध को संतुष्ट करने वाला अवकल समीकरण है-

Options :

1. ✔ $\frac{d^2x}{dt^2} = -m^2x$

2. ✖ $\frac{d^2x}{dt^2} = m^2x$

3. ✖ $\frac{d^2x}{dt^2} = -a^2x$

4. ✖ $\frac{dx}{dt} = 1 - x^2$

Question Number : 227 Question Id : 97675512167 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The linearly independent solutions of the differential equation $4\frac{d^2y}{dx^2} + 4\frac{dy}{dx} + 5y = 0$ is –

Options :

1. ✖ $e^{x/2} \cos x$ and $e^{x/2} \sin x$

2. ✓ $e^{-x/2} \cos x$ and $e^{-x/2} \sin x$

3. ✗ $e^{-x/2} \cos x$ and $e^{x/2} \sin x$

4. ✗ $e^{x/2} \cos x$ and $e^{-x/2} \sin x$

Question Number : 227 Question Id : 97675512167 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

अवकल समीकरण $4 \frac{d^2 y}{dx^2} + 4 \frac{dy}{dx} + 5y = 0$ का रैखिक रूप में स्वतंत्र समाधान है-

Options :

1. ✗ $e^{x/2} \cos x$ और $e^{x/2} \sin x$

2. ✓ $e^{-x/2} \cos x$ और $e^{-x/2} \sin x$

3. ✗ $e^{-x/2} \cos x$ और $e^{x/2} \sin x$

4. ✗ $e^{x/2} \cos x$ और $e^{-x/2} \sin x$

Question Number : 228 Question Id : 97675512168 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $y = x$ is a solution of the differential equation $x^2 y'' + xy' - y = 0$, then the second linearly independent solution of the above equation is –

Options :

1. ☒ $\frac{1}{x}$
2. ☐ x^{-2}
3. ☐ x^2
4. ☐ x^3

Question Number : 228 Question Id : 97675512168 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि अवकल समीकरण $x^2 y'' + xy' - y = 0$, का समाधान $Y = X$ है, तो दिये गए समीकरण का द्वितीय रैखिक रूप से स्वतंत्र समाधान है-

Options :

1. ☒ $\frac{1}{x}$
2. ☐ x^{-2}
3. ☐ x^2
4. ☐ x^3

Question Number : 229 Question Id : 97675512169 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is not true?

Options :

1. ✖ Every commutative subgroup of a group is normal subgroup of the group

2. ✔ If H is normal subgroup of a finite group G , then $[G:H] = 2$.

Let G be a group in which $(ab)^3 = a^3 b^3$ for all $a, b \in G$, then

3. ✖ $H = \{x^3 : x \in G\}$ is normal subgroup of G

Let G is non – commutative group of order $2p$, p is prime and

4. ✖ there exists at least one element a of order p , then $\langle a \rangle$ is normal in G .

Question Number : 229 Question Id : 97675512169 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा सत्य नहीं है।

Options :

समूह का प्रत्येक क्रमविनिमेय (commutative) उपसमूह, उस समूह का सामान्य उपसमूह होता

1. ✖ है।

2. ✔ यदि H एक परिमित समूह G का सामान्य उपसमूह है, तो $[G:H] = 2$.

मान लीजिए G , एक ऐसा समूह है जिसमें $(ab)^3 = a^3 b^3$ सभी $a, b \in G$ के लिए है, तो $H = \{x^3 : x \in G\}$, G का सामान्य उपसमूह है

3. ✖

मान लीजिये G , क्रम $2p$ का गैर-क्रमविनिमेय समूह है, p अभाज्य है और कम से कम एक

4. ✖ अवयव a उपस्थित है जिसका क्रम p है, तो $\langle a \rangle$, G में सामान्य है।

Question Number : 230 Question Id : 97675512170 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let H be a subgroup of a group G and K be a normal subgroup of a group G , then -

Options :

1. ✖ K is not a normal subgroup of HK
2. ✖ K is a normal subgroup of $HK \cap KH$
3. ✖ K is a normal subgroup of KH
4. ✔ K is a normal subgroup of HK

Question Number : 230 Question Id : 97675512170 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए कि H , समूह G का उपसमूह है और K , समूह G का सामान्य उपसमूह है, तो

Options :

1. ✖ K, HK का सामान्य उपसमूह नहीं है।
2. ✖ $K, HK \cap KH$ का एक सामान्य उपसमूह है
3. ✖ K, KH का एक सामान्य उपसमूह है
4. ✔ K, HK का एक सामान्य उपसमूह है

Question Number : 231 Question Id : 97675512171 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let (G, o) and $(G', *)$ be two groups and $f: G \rightarrow G'$ be a homomorphism, then $f(G)$

Options :

1. ✔ Is a cyclic subgroup of G' if G may not be cyclic
2. ✖ Is a cyclic subgroup of G'
3. ✖ Is not a cyclic subgroup of G' if G is cyclic
4. ✖ Is a cyclic subgroup of G' is commutative

Question Number : 231 Question Id : 97675512171 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए (G, o) और $(G', *)$ दो समूह हैं और $f: G \rightarrow G'$ एक समरूपता (homomorphism) है, तो $f(G)$ -

Options :

1. ✓ G' का एक चक्रीय उपसमूह है, जहाँ G चक्रीय नहीं हो सकता है
2. ✗ G' का चक्रीय उपसमूह है
3. ✗ G' का चक्रीय उपसमूह नहीं है, यदि G चक्रीय है
4. ✗ G' का चक्रीय उपसमूह क्रमविनिमेय है।

Question Number : 232 Question Id : 97675512172 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let (G, o) and $(G', *)$ be two finite groups and $\Phi: G \rightarrow G'$ be an epimorphism then -

Options :

1. ✗ $O(G)$ is a divisor of $O(G')$.
2. ✓ $O(G')$ is a divisor of $O(G)$.
3. ✗ $O(G')$ is not a divisor $O(G)$.
4. ✗ $O(G)$ is not a divisor of $O(G')$

Question Number : 232 Question Id : 97675512172 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए (G, o) और $(G', *)$ दो परिमित (सीमित) समूह हैं और $\Phi: G \rightarrow G'$ एक आच्छादक समाकारिता (epimorphism) है, तो -

Options :

1. ✗ $O(G), O(G')$ का भाजक है।
2. ✓ $O(G'), O(G)$ का भाजक है।
3. ✗ $O(G'), O(G)$ का भाजक नहीं है।
4. ✗ $O(G), O(G')$ का भाजक नहीं है।

Question Number : 233 Question Id : 97675512173 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let (G, o) and $(G', *)$ be two groups and $\Phi: G \rightarrow G'$ be a epimorphism. Then Φ is an isomorphism if and only if-

Options :

1. ✖ $\text{Ker } \Phi \subset \{eG\}$
2. ✖ $\text{Ker } \Phi \subset \{eG'\}$
3. ✔ $\text{Ker } \Phi = \{eG\}$
4. ✖ $\text{Ker } \Phi = \{eG'\}$

Question Number : 233 Question Id : 97675512173 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए (G, o) और $(G', *)$ दो समूह हैं और $\Phi: G \rightarrow G'$ एक आच्छादक समाकारिता (epimorphism) है। तो Φ समरूप समाकृतिक (isomorphism) है यदि और केवल यदि -

Options :

1. ✖ $\text{Ker } \Phi \subset \{eG\}$ हो तो
2. ✖ $\text{Ker } \Phi \subset \{eG'\}$ हो तो
3. ✔ $\text{Ker } \Phi = \{eG\}$ हो तो
4. ✖ $\text{Ker } \Phi = \{eG'\}$ हो तो

Question Number : 234 Question Id : 97675512174 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If f is continuous mapping of compact metric space X into a metric space Y then:

Options :

1. ✖ f is not continuous
2. ✔ f is uniformly continuous
3. ✖ f has a jump at $x = \theta$
4. ✖ f is a step function

Question Number : 234 Question Id : 97675512174 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि f सघन वृत्तात्मक स्थान X का वृत्तात्मक स्थान Y में निरंतर मानचित्रण कर रहा है तो-

Options :

1. ✖ f निरंतर नहीं है
2. ✔ f समान रूप से निरंतर है
3. ✖ f , $x = 0$ पर परिवर्तन हुआ
4. ✖ f एक सोपान (step) फलन है

Question Number : 235 Question Id : 97675512175 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If G is a group such that $a^2 = c$ for all $a \in G$, then G is:

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. Field
2. Ring
3. Abelian Group
4. Non – abelian group

Question Number : 235 Question Id : 97675512175 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि G इस प्रकार का एक समूह है, कि सभी $a \in G$ के लिए $a^2 = c$ है, तो G है-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. क्षेत्र (field)
2. वलय (Ring)
3. अबेलियन समूह
4. गैर-अबेलियन समूह

Question Number : 236 Question Id : 97675512176 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

A commutative group G is simple if and only if -

Options :

1. ✖ $O(G) = n$, n is an odd integer
2. ✔ $O(G) = n$, n is a prime integer
3. ✖ $O(G) = n$, n is an even integer
4. ✖ $O(G) = n$, n is a positive integer

Question Number : 236 Question Id : 97675512176 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

क्रमविनिमेय समूह G प्रसामान्य है, यदि और केवल यदि-

Options :

1. ✖ $O(G) = n$, n विषम पूर्णांक है
2. ✔ $O(G) = n$, n अभाज्य पूर्णांक है
3. ✖ $O(G) = n$, n सम पूर्णांक है
4. ✖ $O(G) = n$, n सकारात्मक पूर्णांक है

Question Number : 237 Question Id : 97675512177 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The number of onto homomorphism from Z_8 to Z_4 is-

Options :

1. ✔ 2

- 2. ✖ 1
- 3. ✖ 4
- 4. ✖ 3

Question Number : 237 Question Id : 97675512177 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Z_8 से Z_4 में आच्छादक समरूपता की संख्या है

Options :

- 1. ✔ 2
- 2. ✖ 1
- 3. ✖ 4
- 4. ✖ 3

Question Number : 238 Question Id : 97675512178 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If ${}^{2n+1}P_{n-1} : {}^{2n-1}P_n = 3 : 5$, then what is the value of n ?

Options :

- 1. ✖ 2
- 2. ✖ 3
- 3. ✖ 0
- 4. ✔ 4

Question Number : 238 Question Id : 97675512178 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि ${}^{2n+1}P_{n-1} : {}^{2n-1}P_n = 3 : 5$ है, तो n का मान क्या है?

Options :

- 1. ✖ 2

- 2. ✖ 3
- 3. ✖ 0
- 4. ✔ 4

Question Number : 239 Question Id : 97675512179 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If ${}^9P_5 + 5 \cdot {}^9P_4 = {}^{10}P_r$, then r is -

Options :

- 1. ✖ 9
- 2. ✖ 8
- 3. ✔ 5
- 4. ✖ 10

Question Number : 239 Question Id : 97675512179 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि ${}^9P_5 + 5 \cdot {}^9P_4 = {}^{10}P_r$ हो, तब r है-

Options :

- 1. ✖ 9
- 2. ✖ 8
- 3. ✔ 5
- 4. ✖ 10

Question Number : 240 Question Id : 97675512180 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Using digits 1, 2, 3, 4, 5 and 6 how many numbers between 3000 and 4000 can be made if no digit should be repeated?

Options :

- 1. ✖ 100
- 2. ✔ 60

3. ✖ 70

4. ✖ 90

Question Number : 240 Question Id : 97675512180 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

1, 2, 3, 4, 5,6 इन अंकों का उपयोग कर के , सिर्फ एक ही बार , 3000 और 4000 के बीच की कितनी संख्याएँ बनायीं जा सकती हैं?

Options :

1. ✖ 100

2. ✔ 60

3. ✖ 70

4. ✖ 90

Discipline8

Group Number :	13
Group Id :	976755412
Group Maximum Duration :	0
Group Minimum Duration :	0
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

Discipline8

Section Id :	976755740
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20

Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755872
Question Shuffling Allowed :	Yes

Question Number : 241 Question Id : 97675512181 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

In how many of the distinct permutation of letters in JUXTAPOSED do the four vowels come together?

Options :

1. ✓ 120960
2. ✗ 102960
3. ✗ 190026
4. ✗ 182900

Question Number : 241 Question Id : 97675512181 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

JUXTAPOSED में अक्षरों के कितने अलग क्रमपरिवर्तन में चार स्वर एक साथ आते हैं?

Options :

1. ✓ 120960
2. ✗ 102960
3. ✗ 190026
4. ✗ 182900

Question Number : 242 Question Id : 97675512182 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If no two '-' signs can be repeated, then in how many ways a line can be made from six '+' signs and four '-' signs?

Options :

1. ✖ 53
2. ✖ 15
3. ✔ 35
4. ✖ 50

Question Number : 242 Question Id : 97675512182 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि किसी भी दो '⌊' चिह्न की पुनरावृत्ति नहीं हो सकती है तो छः '+' चिह्न और चार '⌊' चिह्न से कितने प्रकार से रेखा बनाई जा सकती है?

Options :

1. ✖ 53
2. ✖ 15
3. ✔ 35
4. ✖ 50

Question Number : 243 Question Id : 97675512183 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If ${}^{25}C_r = {}^{25}C_{2r+1}$, then what is the value of rC_5 ?

Options :

1. ✖ 65
2. ✔ 56
3. ✖ 50
4. ✖ 64

Question Number : 243 Question Id : 97675512183 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि ${}^{25}C_r = {}^{25}C_{2r+1}$ तो rC_5 का मान क्या होगा?

Options :

1. ✖ 65
2. ✔ 56
3. ✖ 50
4. ✖ 64

Question Number : 244 Question Id : 97675512184 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If ${}^nP_r = 336$ and ${}^nC_r = 56$, then what is the value of n and r ?

Options :

1. ✖ $n = 7, r = 8$
2. ✖ $n = 14, r = 4$
3. ✔ $n = 8, r = 3$
4. ✖ $n = 3, r = 2$

Question Number : 244 Question Id : 97675512184 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि ${}^nP_r = 336$ और ${}^nC_r = 56$ है, तो n और r का मान क्या होगा?

Options :

1. ✖ $n = 7, r = 8$
2. ✖ $n = 14, r = 4$
3. ✔ $n = 8, r = 3$
4. ✖ $n = 3, r = 2$

Question Number : 245 Question Id : 97675512185 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

There is a group of 11 cricketers. 4 can bat and 7 can bowl. In how many ways can a group of 5 cricketers be selected if the group has at least one batsman and bowler?

Options :

- 1. ✖ 669
- 2. ✔ 441
- 3. ✖ 237
- 4. ✖ 745

Question Number : 245 Question Id : 97675512185 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

11 क्रिकेटर्स का एक समूह है। 4 बल्लेबाजी कर सकते हैं और 7 गेंदबाजी कर सकते हैं। 5 क्रिकेटर्स के समूह को कितने तरीकों से चुना जा सकता है यदि समूह में कम से कम एक बल्लेबाज और एक गेंदबाज हो?

Options :

- 1. ✖ 669
- 2. ✔ 441
- 3. ✖ 237
- 4. ✖ 745

Question Number : 246 Question Id : 97675512186 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The function $f(x) = x \sin (1/x)$, if $x = 0$ and $f(0) = 1$ has discontinuity at _____.

Options :

- 1. ✔ 0
- 2. ✖ 2
- 3. ✖ 1
- 4. ✖ 3

Question Number : 246 Question Id : 97675512186 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $x = 0$ और $f(0) = 1$ में ___ पर अनिरंतरता हो तो फलन $f(x) = x \sin (1/x)$ ।

Options :

1. ✓ 0
2. ✗ 2
3. ✗ 1
4. ✗ 3

Question Number : 247 Question Id : 97675512187 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Find the number of diagonals of a polygon whose number of sides is "n".

Options :

1. ✗ $n(n - 1)/2$
2. ✗ $(n - 1)(n - 2)/3$
3. ✓ $n(n - 3)/2$
4. ✗ $(n - 2)(n - 5)/3$

Question Number : 247 Question Id : 97675512187 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

एक बहुभुज के विकर्ण की संख्या ज्ञात कीजिए जिसकी भुजाओं की संख्या "n" है।

Options :

1. ✗ $n(n - 1)/2$
2. ✗ $(n - 1)(n - 2)/3$
3. ✓ $n(n - 3)/2$
4. ✗ $(n - 2)(n - 5)/3$

Question Number : 248 Question Id : 97675512188 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $|m\vec{a}| = 2$ then what is the value of m?

Options :

1. ✗ 2

2. ✖ $\frac{2}{|\vec{a}|}$

3. ✖ $-\frac{2}{|\vec{a}|}$

4. ✔ $\pm \frac{2}{|\vec{a}|}$

Question Number : 248 Question Id : 97675512188 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $|m\vec{a}| = 2$ हो, तो m का मान क्या होगा?

Options :

1. ✖ 2

2. ✖ $\frac{2}{|\vec{a}|}$

3. ✖ $-\frac{2}{|\vec{a}|}$

4. ✔ $\pm \frac{2}{|\vec{a}|}$

Question Number : 249 Question Id : 97675512189 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The position-vectors of point A, B, C and D are $3\mathbf{i} - \mathbf{j}$, $2\mathbf{i} + 2\mathbf{j}$, $-2\mathbf{i} - 3\mathbf{j}$, $-4\mathbf{i} + 3\mathbf{j}$, respectively such that $AB \parallel CD$, then what is the ratio of their modulus?

Options :

1. ✖ 2:1
2. ✔ 1:2
3. ✖ 2:3
4. ✖ 3:2

Question Number : 249 Question Id : 97675512189 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

बिन्दु A, B, C और D की स्थिति-सदिश क्रमशः $3\mathbf{i} - \mathbf{j}$, $2\mathbf{i} + 2\mathbf{j}$, $-2\mathbf{i} - 3\mathbf{j}$, $-4\mathbf{i} + 3\mathbf{j}$, है
जैसे की $AB \parallel CD$ हो, तो उनके मापांको का अनुपात क्या है?

Options :

1. ✖ 2:1
2. ✔ 1:2
3. ✖ 2:3
4. ✖ 3:2

Question Number : 250 Question Id : 97675512190 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If two vectors $p\mathbf{i} + 2\mathbf{j}$ and $3\mathbf{i} - 3\mathbf{j}$ are aligned, then what is the value of p?

Options :

1. ✖ 2
2. ✔ -2
3. ✖ -1
4. ✖ 1

Question Number : 250 Question Id : 97675512190 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यहाँ दो सदिश $\vec{pi} + 2\vec{j}$ और $3\vec{i} - 3\vec{j}$ संरेखित हैं, तो P का मान क्या होगा?

Options :

1. ✖ 2
2. ✔ -2
3. ✖ -1
4. ✖ 1

Question Number : 251 Question Id : 97675512191 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Find the unit vector which is paralleled to the addition of two vectors $\vec{r_1} = 3\vec{i} - 2\vec{j}$ and $\vec{r_2} = -4\vec{i} + 4\vec{j}$

Options :

1. ✖ $1/5 (\vec{i} - 2\vec{j})$
2. ✖ $1/\sqrt{5} (\vec{i} + 2\vec{j})$
3. ✔ $1/\sqrt{5} (-\vec{i} + 2\vec{j})$
4. ✖ $1/5 (-\vec{i} - 2\vec{j})$

Question Number : 251 Question Id : 97675512191 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

इकाई सदिश ज्ञात करिये जो दो इकाई सदिशों $\vec{r}_1 = 3\vec{i} - 2\vec{j}$

व $\vec{r}_2 = -4\vec{i} + 4\vec{j}$ के योग के समांतर है-

Options :

1. ✖ $1/5 (\vec{i} - 2\vec{j})$
2. ✖ $1/\sqrt{5} (\vec{i} + 2\vec{j})$
3. ✔ $1/\sqrt{5} (-\vec{i} + 2\vec{j})$
4. ✖ $1/5 (-\vec{i} - 2\vec{j})$

Question Number : 252 Question Id : 97675512192 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If two position-vectors of A and B are $8\vec{i} + 3\vec{j}$ and $2\vec{i} - 5\vec{j}$,
then determine the direction of AB vector-

Options :

1. ✖ $\cos^{-1} (3/5)$
2. ✔ $\cos^{-1} (-3/5)$
3. ✖ $\sin^{-1} (5/3)$
4. ✖ $\sin^{-1} (-5/3)$

Question Number : 252 Question Id : 97675512192 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि A और B दो स्थिति-सदिश $8\vec{i} + 3\vec{j}$ और $2\vec{i} - 5\vec{j}$ हो, तो सदिश AB की निर्धारित दिशा होगी-

Options :

1. ✖ $\cos^{-1}(3/5)$
2. ✔ $\cos^{-1}(-3/5)$
3. ✖ $\sin^{-1}(5/3)$
4. ✖ $\sin^{-1}(-5/3)$

Question Number : 253 Question Id : 97675512193 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

(1, 1), (-1, -1) and $(-\sqrt{3}, \sqrt{3})$ are vectors of:

Options :

1. ✖ Right angle triangle
2. ✔ Equilateral triangle
3. ✖ Isosceles triangle
4. ✖ Collinear points

Question Number : 253 Question Id : 97675512193 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

(1, 1), (-1, -1) और $(-\sqrt{3}, \sqrt{3})$ _____ के सदिश है।

Options :

1. ✖ समकोण त्रिभुज
2. ✔ समबाहु त्रिभुज
3. ✖ समद्विबाहु त्रिभुज
4. ✖ समरेखित बिन्दु

Question Number : 254 Question Id : 97675512194 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The points A $(-2\vec{i} + 3\vec{j} + 5\vec{k})$, B $(\vec{i} + 2\vec{j} + 3\vec{k})$, C $(7\vec{i} - \vec{k})$ are-

Options :

1. ✓ Collinear
2. ✗ Non-Collinear
3. ✗ Formed a Right angle triangle
4. ✗ Formed a equilateral triangle

Question Number : 254 Question Id : 97675512194 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

बिन्दुएँ $A(-2\vec{i} + 3\vec{j} + 5\vec{k})$, $B(\vec{i} + 2\vec{j} + 3\vec{k})$, $C(7\vec{i} - \vec{k})$ हैं-

Options :

1. ✓ समरेख
2. ✗ असमरेख
3. ✗ . एक समकोण त्रिभुज बनाया
4. ✗ एक समबाहु त्रिभुज बनाया

Question Number : 255 Question Id : 97675512195 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $(\vec{x} - \vec{a})(\vec{x} + \vec{a}) = 8$ and $\vec{a}$ is a unit vector, then $\vec{x}$ will have value of:

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 4
2. 8
3. 3
4. 9

Question Number : 255 Question Id : 97675512195 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $(\vec{x} - \vec{a})(\vec{x} + \vec{a}) = 8$ और $\vec{a}$ इकाई सदिश है तो $\vec{x}$ का मान होगा-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 4
2. 8
3. 3
4. 9

Question Number : 256 Question Id : 97675512196 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $\vec{a}$ is a non-zero vector of magnitude 'a' and λ is a non-zero scalar, then $\lambda\vec{a}$ is unit vector if –

Options :

1. ✗ $\lambda = -1$
2. ✗ $a = |\lambda|$
3. ✓ $a = \frac{1}{|\lambda|}$
4. ✗ $\lambda = 1$

Question Number : 256 Question Id : 97675512196 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $\vec{a}$, परिमाण 'a' का एक गैर-शून्य सदिश है और λ एक गैर-शून्य अदिश है, तो $\lambda\vec{a}$ एक इकाई सदिश होगा यदि -

Options :

1. ✖ $\lambda = -1$ हो
2. ✖ $a = |\lambda|$ हो
3. ✔ $a = \frac{1}{|\lambda|}$ हो
4. ✖ $\lambda = 1$ हो

Question Number : 257 Question Id : 97675512197 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Find the intervals in which the function f given by strictly increasing $f(x) = 2xx^2 - 3x$:

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $\frac{3}{4}, \infty$
2. $-\frac{3}{4}, \infty$
3. $\infty, \frac{3}{4}$

4. $-\infty, \frac{3}{4}$

Question Number : 257 Question Id : 97675512197 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

उस अंतराल को ज्ञात कीजिए जिसमें $f(x) = 2x^2 - 3x$, द्वारा प्रदत्त फलन f निरंतर वर्धमान है -

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $\frac{3}{4}, \infty$

2. $-\frac{3}{4}, \infty$

3. $\infty, \frac{3}{4}$

4. $-\infty, \frac{3}{4}$

Question Number : 258 Question Id : 97675512198 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let $R = (\mathbb{Z}_2 \times \mathbb{Z}_2, +, \cdot)$ forms a ring of module 2 such that $(a, b) + (c, d) = (a + c, d + d)$ and $(a, b) \cdot (c, d) = (a \cdot c, b \cdot d)$ for $(a, b), (c, d) \in \mathbb{Z}_2 \times \mathbb{Z}_2$ then-

Options :

1. ✓ R is a commutative ring with unity and it contains divisor of zero
2. ✗ R is a non commutative ring with unity and it contains divisor of zero

3. ✖ R is a commutative ring without unity and it contains no divisor of zero
4. ✖ R is a commutative ring with unity and it contains no divisor of zero

Question Number : 258 Question Id : 97675512198 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए $R = (Z_2 \times Z_2, +, \cdot)$ मापांक 2 का एक वलय बनाता है, जैसे की $(a, b) + (c, d) = (a + c, b + d)$ और $(a, b) \cdot (c, d) = (a \cdot c, b \cdot d)$; $(a, b), (c, d) \in Z_2 \times Z_2$ के लिए तो-

Options :

1. ✔ R, एक तत्समकी क्रमविनिमेय वलय (commutative ring with unity) है व इसमें शून्य का भाजक होता है
2. ✖ R, एक अक्रमविनिमेय तत्समकविहीन वलय (non commutative ring with unity) है और इसमें शून्य का भाजक होता है
3. ✖ R, एक तत्समकी अक्रमविनिमेय वलय (commutative ring without unity) है और इसमें शून्य का भाजक नहीं होता है
4. ✖ R, एक तत्सम की क्रमविनिमेय वलय (commutative ring with unity) है, जिसमें शून्य का भाजक नहीं होता है

Question Number : 259 Question Id : 97675512199 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If the ring R is a commutative ring with unity, then the polynomial ring $R[x]$ is-

Options :

1. ✖ a commutative ring without unity
2. ✔ a commutative ring with unity
3. ✖ a non commutative ring without unity
4. ✖ a non-commutative ring with unity

Question Number : 259 Question Id : 97675512199 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि वलय R, तत्समकी क्रमविनिमेय वलय (commutative ring with unity) है, तो बहुपद वलय $R[x]$ है-

Options :

1. ✖ एकात्मकता के बिना एक विनिमेयशील रिंग (commutative ring without unity)

2. ✓ एकात्मकता के साथ एक विनिमेयशील रिंग (commutative ring with unity)
3. ✗ एकात्मकता के बिना एक अविनिमेयशील रिंग (non commutative ring with unity)
4. ✗ एकात्मकता के साथ एक अविनिमेयशील रिंग (a non-commutative ring with unity)

Question Number : 260 Question Id : 97675512200 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The ring of Matrix $S = \left\{ \begin{pmatrix} 2a & 0 \\ 0 & 2b \end{pmatrix} : a, b \in \mathbb{Z} \right\}$ contains-

Options :

1. ✗ divisors of zero with unity
2. ✗ no divisors of zero without unity
3. ✓ divisors of zero without unity
4. ✗ no divisors of zero with unity

Question Number : 260 Question Id : 97675512200 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

वलय के आव्यूह $S = \left\{ \begin{pmatrix} 2a & 0 \\ 0 & 2b \end{pmatrix} : a, b \in \mathbb{Z} \right\}$ में शामिल में निम्न में से क्या होता है?

Options :

1. ✗ एकात्मकता सहित शून्य के भाजक
2. ✗ एकात्मकता के बिना शून्य के भाजक नहीं होते
3. ✓ एकात्मकता के बिना शून्य के भाजक
4. ✗ एकात्मकता सहित शून्य के भाजक नहीं होते

Discipline9

Group Number :

14

Group Id :

976755413

Group Maximum Duration :

0

Group Minimum Duration :	0
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

Discipline9

Section Id :	976755741
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755873
Question Shuffling Allowed :	Yes

Question Number : 261 Question Id : 97675512201 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The set of all units in a ring R with unity forms _____.

Options :

1. ✖ a field
2. ✖ a ring with unity
3. ✔ a group with respect to multiplication
4. ✖ an integral domain

Question Number : 261 Question Id : 97675512201 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

तत्समकी वलय R के सभी तत्समक का समुच्चय एक _____ बनाएगा-

Options :

1. ✖ क्षेत्र
2. ✖ तत्समकी वलय
3. ✔ गुणन के संबंध में समूह
4. ✖ एक अभिन्न डोमेन

Question Number : 262 Question Id : 97675512202 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$f: \mathbb{R} - \{-2\} \rightarrow \mathbb{R}$ defined by $f(x) = \frac{x+1}{x+2}, \forall x \in \mathbb{R} - \{-2\}$ is an example of -

Options :

1. ✖ Modulus Function
2. ✔ Rational Function
3. ✖ Polynomial Function
4. ✖ Signum Function

Question Number : 262 Question Id : 97675512202 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

नियम $f(x) = \frac{x+1}{x+2}, \forall x \in \mathbb{R} - \{-2\}$, द्वारा परिभाषित फलन $f: \mathbb{R} - \{-2\} \rightarrow \mathbb{R}$, _____ का एक उदाहरण है।

Options :

1. ✖ मापांक फलन
2. ✔ परिमेय फलन
3. ✖ बहुपदीय फलन

4. ❌ चिह्न फलन

Question Number : 263 Question Id : 97675512203 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following ring is an integral domain?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $(\mathbb{Z}_8, +, \cdot)$
2. $(2\mathbb{Z}, +, \cdot)$
3. $(\mathbb{Z} \times \mathbb{Z}, +, \cdot)$
4. $(\rho, +, \cdot)$

Question Number : 263 Question Id : 97675512203 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन सा वलय एक पूर्णाकीय प्रांत (integral domain) है?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. $(\mathbb{Z}_8, +, \cdot)$
2. $(2\mathbb{Z}, +, \cdot)$
3. $(\mathbb{Z} \times \mathbb{Z}, +, \cdot)$
4. $(\rho, +, \cdot)$

Question Number : 264 Question Id : 97675512204 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The ring $(\mathbb{Z}_n, +, \cdot)$ is an integral domain if and only if:

Options :

1. ✓ n is prime
2. ✗ n is odd
3. ✗ n is odd prime
4. ✗ n is positive integer

Question Number : 264 Question Id : 97675512204 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

वलय $(\mathbb{Z}_n, +, \cdot)$ एक पूर्णाकीय प्रांत (integral domain) है, यदि और केवल यदि:

Options :

1. ✓ n अभाज्य है
2. ✗ n विषम है
3. ✗ n विषम अभाज्य है
4. ✗ n धनात्मक पूर्णांक है

Question Number : 265 Question Id : 97675512205 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let $M_2(\mathbb{R})$ be the set of all 2×2 matrices, then $(M_2(\mathbb{R}), +, \cdot)$ is -

Options :

1. ✗ a commutative ring without zero divisors
2. ✗ a commutative ring with zero divisors
3. ✓ a non commutative ring with zero divisors
4. ✗ a non commutative ring without zero divisors

Question Number : 265 Question Id : 97675512205 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए $M_2(\mathbf{R})$ सभी 2×2 आव्यूहों का समुच्चय है, तो $(M_2(\mathbf{R}), +, \cdot)$ है -

Options :

1. ✖ शून्य के भाजकों रहित क्रमविनिमेय वलय
2. ✖ शून्य के भाजकों सहित क्रमविनिमेय वलय
3. ✔ शून्य के भाजकों सहित अक्रमविनिमेय वलय
4. ✖ शून्य के भाजकों रहित अक्रमविनिमेय वलय

Question Number : 266 Question Id : 97675512206 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The ring of residue classes (mod m) is an integral domain if m is:

Options :

1. ✔ prime
2. ✖ an integer
3. ✖ a rational number
4. ✖ a natural number

Question Number : 266 Question Id : 97675512206 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

अवशेष-वर्ग वलय (mod m) एक पूर्णाकीय प्रांत (integral domain) है, यदि m है -

Options :

1. ✔ अभाज्य
2. ✖ एक पूर्णांक
3. ✖ एक परिमेय संख्या
4. ✖ एक प्राकृतिक संख्या

Question Number : 267 Question Id : 97675512207 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following ring of matrix is not a field?

Options :

1. ✖ $\left\{ \begin{pmatrix} a & b \\ 2b & a \end{pmatrix} : a, b \in \mathbb{Q} \right\}$

2. ✖ $\left\{ \begin{pmatrix} a & b \\ 3b & a \end{pmatrix} : a, b \in \mathbb{Q} \right\}$

3. ✖ $\left\{ \begin{pmatrix} a & b \\ -b & a \end{pmatrix} : a, b \in \mathbb{R} \right\}$

4. ✔ $\left\{ \begin{pmatrix} a & b \\ 2b & a \end{pmatrix} : a, b \in \mathbb{R} \right\}$

Question Number : 267 Question Id : 97675512207 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा आव्यूह का वलय एक क्षेत्र (field) नहीं है?

Options :

1. ✖ $\left\{ \begin{pmatrix} a & b \\ 2b & a \end{pmatrix} : a, b \in \mathbb{Q} \right\}$

2. ✖ $\left\{ \begin{pmatrix} a & b \\ 3b & a \end{pmatrix} : a, b \in \mathbb{Q} \right\}$

3. ✖ $\left\{ \begin{pmatrix} a & b \\ -b & a \end{pmatrix} : a, b \in \mathbb{R} \right\}$

4. ✔ $\left\{ \begin{pmatrix} a & b \\ 2b & a \end{pmatrix} : a, b \in \mathbb{R} \right\}$

Question Number : 268 Question Id : 97675512208 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The sequence $\left\{P + \frac{(-1)^n q}{n}\right\}$ is-

Options :

1. ✖ oscillatory
2. ✔ bounded
3. ✖ Unbounded
4. ✖ divergent

Question Number : 268 Question Id : 97675512208 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

अनुक्रम $\left\{P + \frac{(-1)^n q}{n}\right\}$ है-

Options :

1. ✖ दोलन
2. ✔ परिबद्ध
3. ✖ अपरिबद्ध
4. ✖ अपसारी

Question Number : 269 Question Id : 97675512209 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let $\sum U_n$ be a convergent series of positive terms and let $\sum V_n$ be a divergent series of positive terms. Then

Options :

1. ✔ The sequence $\{U_n\}$ converges to 0
2. ✖ Both the sequences $\{U_n\}$ and $\{V_n\}$ are convergent

3. ✖ The sequence $\{V_n\}$ diverges to ∞
4. ✖ The sequence $\{U_n\}$ is convergent and the sequence $\{V_n\}$ is divergent

Question Number : 269 Question Id : 97675512209 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए $\sum U_n$ धनात्मक पदों का अभिसारी श्रेणी है और $\sum V_n$ धनात्मक पदों का अपसारी श्रेणी है, तो-

Options :

1. ✔ अनुक्रम $\{U_n\}$, 0 में अभिसारी होता है
2. ✖ दोनों अनुक्रम $\{U_n\}$ और $\{V_n\}$ अभिसारी हैं
3. ✖ अनुक्रम $\{V_n\}$, ∞ में अभिसारी है
4. ✖ अनुक्रम $\{U_n\}$ अभिसारी है और अनुक्रम $\{V_n\}$ अपसारी है

Question Number : 270 Question Id : 97675512210 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following is TRUE?

Options :

1. ✖ Every sequence that has a convergent sequence is a bounded sequence
2. ✖ The sequence $\{n \cos \frac{1}{n}\}$ has a convergent sequence
3. ✔ The sequence $\{\sin n\}$ has a convergent subsequence
4. ✖ Every sequence that has a convergent subsequence is a Cauchy sequence

Question Number : 270 Question Id : 97675512210 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सा सत्य है:

Options :

1. ✖ प्रत्येक अनुक्रम जिसमें एक अभिसरण अनुक्रम होता है वह एक परिबद्ध अनुक्रम (bounded sequence) होता है
2. ✖ अनुक्रम $\{n \cos \frac{1}{n}\}$ में अभिसारी अनुक्रम है
3. ✔ अनुक्रम $\{\sin n\}$ का अभिसारी क्रम (सबसीक्वेंस) है
4. ✖ प्रत्येक अनुक्रम जिसमें एक अभिसरण अनुक्रम होता है, एक कौशी (Cauchy) अनुक्रम होता है

Question Number : 271 Question Id : 97675512211 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The sequence $\{2 + (-1)^n\}$ has-

Options :

1. ✖ exactly three constant subsequence
2. ✔ exactly two constant subsequence
3. ✖ exactly one constant subsequence
4. ✖ no constant subsequence

Question Number : 271 Question Id : 97675512211 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

अनुक्रम $\{2 + (-1)^n\}$ में _____ है-

Options :

1. ✖ यथार्थतः तीन अचर अनुवर्ती (constant subsequence)
2. ✔ यथार्थतः दो अचर अनुवर्ती (constant subsequence)
3. ✖ यथार्थतः एक अचर अनुवर्ती (constant subsequence)
4. ✖ कोई अचर अनुवर्ती (constant subsequence) नहीं

Question Number : 272 Question Id : 97675512212 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The series $\sum_{n=1}^{\infty} \left[\frac{1}{\sqrt{n}} + \frac{(-1)^n}{n^{3/2}} \right]$ is -

Options :

1. ✖ oscillatory
2. ✖ convergent
3. ✔ divergent
4. ✖ bounded

Question Number : 272 Question Id : 97675512212 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

श्रृंखला $\sum_{n=1}^{\infty} \left[\frac{1}{\sqrt{n}} + \frac{(-1)^n}{n^{3/2}} \right]$ है -

Options :

1. ✖ दोलन
2. ✖ अभिसारी
3. ✔ अपसारी
4. ✖ परिबद्ध

Question Number : 273 Question Id : 97675512213 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let $\{U_n\}$ be a sequence of real number such that $\lim_{n \rightarrow \infty} U_n$ exists, then

Options :

1. ✖ $\lim_{n \rightarrow \infty} U_{2n}$ does not exist but $\lim_{n \rightarrow \infty} U_{2n+1}$ exists

2. ✖ $\lim_{n \rightarrow \infty} U_{2n}$ exists but $\lim_{n \rightarrow \infty} U_{2n+1}$ does not exist
3. ✖ both $\lim_{n \rightarrow \infty} U_{2n}$ and $\lim_{n \rightarrow \infty} U_{2n+1}$ do not exist
4. ✔ both $\lim_{n \rightarrow \infty} U_{2n}$ and $\lim_{n \rightarrow \infty} U_{2n+1}$ exist

Question Number : 273 Question Id : 97675512213 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लें की $\{U_n\}$ वास्तविक संख्या का एक अनुक्रम है, जैसे कि $\lim_{n \rightarrow \infty} U_n$ मौजूद है, तो -

Options :

1. ✖ $\lim_{n \rightarrow \infty} U_{2n}$ मौजूद नहीं लेकिन $\lim_{n \rightarrow \infty} U_{2n+1}$ मौजूद है।
2. ✖ $\lim_{n \rightarrow \infty} U_{2n}$ मौजूद है लेकिन $\lim_{n \rightarrow \infty} U_{2n+1}$ मौजूद नहीं है।
3. ✖ दोनों $\lim_{n \rightarrow \infty} U_{2n}$ और $\lim_{n \rightarrow \infty} U_{2n+1}$ मौजूद नहीं है।
4. ✔ दोनों $\lim_{n \rightarrow \infty} U_{2n}$ और $\lim_{n \rightarrow \infty} U_{2n+1}$ मौजूद है।

Question Number : 274 Question Id : 97675512214 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

If $\lim_{n \rightarrow \infty} \frac{U_n}{n} = l \neq 0$, then the sequence $\{U_n\}$

Options :

1. ✔ is not bounded

2. ✖ may or may not be bounded
3. ✖ is bounded
4. ✖ is convergent

Question Number : 274 Question Id : 97675512214 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

यदि $\lim_{n \rightarrow \infty} \frac{U_n}{n} = 1 \neq 0$, तो अनुक्रम $\{U_n\}$

Options :

1. ✔ परिबद्ध नहीं है
2. ✖ परिबद्ध हो सकता या नहीं हो सकता है
3. ✖ परिबद्ध है
4. ✖ अभिसारी है

Question Number : 275 Question Id : 97675512215 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$\lim_{n \rightarrow \infty} \left(\frac{2}{1} \cdot \frac{3}{2} \cdot \frac{4}{3} \cdots \frac{n+1}{n} \right)^{1/n}$ is equal to

Options :

1. ✖ 0
2. ✔ 1
3. ✖ ∞
4. ✖ e

Question Number : 275 Question Id : 97675512215 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$\lim_{n \rightarrow \infty} \left(\frac{2}{1} \cdot \frac{3}{2} \cdot \frac{4}{3} \cdots \frac{n+1}{n} \right)^{1/n}$ _____ के बराबर है।

Options :

1. ✖ 0
2. ✔ 1
3. ✖ ∞
4. ✖ e

Question Number : 276 Question Id : 97675512216 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The value of $\lim_{n \rightarrow \infty} \frac{1}{n} \left[\left(\frac{1}{2}\right)^n + \left(\frac{1}{2}\right) \left(\frac{1}{2}\right)^{n-1} + \dots + \left(\frac{1}{n}\right) \left(\frac{1}{2}\right) \right]$ is

Options :

1. ✖ 1
2. ✖ does not exist
3. ✖ ∞
4. ✔ 0

Question Number : 276 Question Id : 97675512216 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

$\lim_{n \rightarrow \infty} \frac{1}{n} \left[\left(\frac{1}{2}\right)^n + \left(\frac{1}{2}\right) \left(\frac{1}{2}\right)^{n-1} + \dots + \left(\frac{1}{n}\right) \left(\frac{1}{2}\right) \right]$ का मान है-

Options :

1. ✖ 1
2. ✖ मान नहीं निकलता
3. ✖ ∞
4. ✔ 0

Question Number : 277 Question Id : 97675512217 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Let M be non-zero $n \times n$ real matrix with $n \geq 2$. Which of the following statements is true?

Options :

1. ✖ $\det(M) = 0 \Rightarrow \text{rank}(M) = 0$
2. ✔ $\det(M) = 1 \Rightarrow \text{rank}(M) \neq 0$
3. ✖ $\text{rank}(M) = n \Rightarrow \det(M) \neq 1$
4. ✖ $\text{rank}(M) = 1 \Rightarrow \det(M) \neq 0$

Question Number : 277 Question Id : 97675512217 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए कि $n \geq 2$ के साथ M अशून्य $n \times n$ वास्तविक आव्यूह है। निम्नलिखित में से कौन सा/ कथन सत्य है?

Options :

1. ✖ $\det(M) = 0 \Rightarrow \text{rank}(M) = 0$
2. ✔ $\det(M) = 1 \Rightarrow \text{rank}(M) \neq 0$
3. ✖ $\text{rank}(M) = n \Rightarrow \det(M) \neq 1$
4. ✖ $\text{rank}(M) = 1 \Rightarrow \det(M) \neq 0$

Question Number : 278 Question Id : 97675512218 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Suppose the matrix $A = \begin{pmatrix} 40 & -29 & -11 \\ -18 & 30 & -12 \\ 26 & 24 & -50 \end{pmatrix}$ has a certain eigen value

$\lambda \neq 0$. Which of the following must be eigen value of A?

Options :

1. ✖ -20- λ
2. ✖ λ -20
3. ✔ 20- λ
4. ✖ λ +20

Question Number : 278 Question Id : 97675512218 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

मान लीजिए आव्यूह $A = \begin{pmatrix} 40 & -29 & -11 \\ -18 & 30 & -12 \\ 26 & 24 & -50 \end{pmatrix}$ का एक निश्चित अभिलक्षणिक

मान $\lambda \neq 0$ है। निम्न में से कौन-सा A का अभिलक्षणिक मान होगा?

Options :

1. ✖ -20- λ
2. ✖ λ -20
3. ✔ 20- λ
4. ✖ λ +20

Question Number : 279 Question Id : 97675512219 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The integral $\int_0^{\infty} \frac{|\sin x|}{x} dx$

Options :

1. ✓ is convergent but not absolutely
2. ✗ is not convergent
3. ✗ is absolutely convergent
4. ✗ is divergent

Question Number : 279 Question Id : 97675512219 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

एक समाकलन $\int_0^{\infty} \frac{|\sin x|}{x} dx -$

Options :

1. ✓ अभिसारी है लेकिन पूर्ण रूप से नहीं
2. ✗ अभिसरण नहीं है
3. ✗ पूर्ण रूप से अभिसारी है
4. ✗ अपसारी है

Question Number : 280 Question Id : 97675512220 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The integral $\int_0^{\infty} \sin x dx -$

Options :

1. ✗ Exists and is equal to 1
2. ✗ Exists and is equal to 0
3. ✗ Exists and is equal to -1

4. ✓ Does not exist

Question Number : 280 Question Id : 97675512220 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

एक अभिन्न $\int_0^\infty \sin x \, dx$

Options :

1. ✗ अस्तित्व में है और 1 के बराबर है
2. ✗ अस्तित्व में है और 0 के बराबर है
3. ✗ अस्तित्व में है और -1 के बराबर है
4. ✓ अस्तित्व में नहीं है

Teaching Methodology

Group Number :	15
Group Id :	976755414
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	20
Is this Group for Examiner? :	No

Teaching Methodology

Section Id :	976755742
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory

Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	976755874
Question Shuffling Allowed :	Yes

Question Number : 281 Question Id : 97675512221 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Who said that "Mathematics is the language in which God has written the universe"?

Options :

1. ✖ Marshal Stone
2. ✔ Galileo Galilei
3. ✖ Aryabhatta
4. ✖ Bertrand Russell

Question Number : 281 Question Id : 97675512221 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्न लिखित में से किसने कहा है कि "गणित वह भाषा है जिसमें ईश्वर ने ब्रह्मांड लिखा है"?

Options :

1. ✖ मार्शल स्टोन
2. ✔ गैलीलियो गैलीली
3. ✖ आर्यभट्ट
4. ✖ बर्ट्रेण्ड रसेल

Question Number : 282 Question Id : 97675512222 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

A good mathematics teacher is one who -

Options :

1. ✖ encourages convergent thinking
2. ✖ follows the same method always
3. ✖ gives only a lot of problems to practice with
4. ✔ remains helpful, insightful and explain things well

Question Number : 282 Question Id : 97675512222 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

गणित का एक अच्छा शिक्षक वह होता है जो -

Options :

1. ✖ अभिसरण सोच को प्रोत्साहित करता है
2. ✖ हमेशा एक ही विधि का पालन करता है
3. ✖ अभ्यास करने के लिए केवल बहुत सारी समस्याएं देता है
4. ✔ सहायक, अंतर्दृष्टिपूर्ण रहता है और चीजों को अच्छी तरह समझाता है

Question Number : 283 Question Id : 97675512223 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is /are true regarding the aims of teaching mathematics?

1. To develop a good ability to solve problem
2. To develop the ability to make decision
3. To develop a good understanding of numbers and number system

Options :

1. ✖ Only 1 and 2
2. ✖ Only 2 and 3
3. ✖ Only 1 and 3
4. ✔ 1, 2 and 3

Question Number : 283 Question Id : 97675512223 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कोनसा या कौनसे कथन गणित पढ़ाने के उद्देश्य के संबंध में सत्य है ?

1. समस्या को हल करने की अच्छी क्षमता विकसित करना
2. निर्णय लेने की क्षमता विकसित करना
3. संख्याओं और संख्या प्रणाली की अच्छी समझ विकसित करने के लिए

Options :

1. ✖ केवल 1 और 2
2. ✖ केवल 2 और 3
3. ✖ केवल 1 और 3
4. ✔ 1, 2 और 3

Question Number : 284 Question Id : 97675512224 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which is not true about lesson plan?

Options :

1. ✖ It helps in orderly delivery to content
2. ✔ It is developed by students
3. ✖ It develops confidence in teacher
4. ✖ It saves from haphazard teaching

Question Number : 284 Question Id : 97675512224 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

उपरोक्त में से पाठ योजना के बारे में कौन सा कथन सही नहीं है?

Options :

1. ✖ यह सामग्री को व्यवस्थित रूप से वितरित करने में मदद करता है
2. ✔ यह छात्रों द्वारा विकसित किया गया है
3. ✖ यह शिक्षक में विश्वास विकसित करता है
4. ✖ यह बेतरतीब शिक्षण से बचाता है

Question Number : 285 Question Id : 97675512225 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is/ are not the principle of Curriculum-construction of mathematics?

Options :

1. ✖ Integrity of theory with practice
2. ✖ Principle of unit
3. ✔ Should not be child-centric
4. ✖ The principle of preparation for life

Question Number : 285 Question Id : 97675512225 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

उपरोक्त में से कौन सा गणित के पाठ्यचर्या एवं निर्माण का सिद्धांत नहीं है?

Options :

1. ✖ अभ्यास के साथ सिद्धांत की अखंडता
2. ✖ इकाई का सिद्धांत
3. ✔ बाल केंद्रित न होना
4. ✖ जीवन की तैयारी का सिद्धांत

Question Number : 286 Question Id : 97675512226 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following subject/s Mathematics is a part of?

Options :

1. ✖ Geography
2. ✖ Economics
3. ✖ Commerce
4. ✔ Geography, Economics and Commerce

Question Number : 286 Question Id : 97675512226 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौनसे विषयों का/विषय का गणित एक भाग है?

Options :

1. ✖ भूगोल
2. ✖ अर्थशास्त्र
3. ✖ वाणिज्य
4. ✔ भूगोल, अर्थशास्त्र और वाणिज्य

Question Number : 287 Question Id : 97675512227 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The term Mathematics was coined by-

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. Pythagoras
2. Pythagorean
3. Pythagoreans
4. Pythagoriscour

Question Number : 287 Question Id : 97675512227 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

उपरोक्त में से किसके द्वारा गणित शब्द की रचना हुई है -

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. पाइथागोरस
2. पाइथानोरियन
3. पाइथायोरियन्स

4. पाइथामासियोर

Question Number : 288 Question Id : 97675512228 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Who of the following invented the letter system?

Options :

1. ✖ Bhahmagupta
2. ✖ Sidhanta
3. ✔ Arya- Bhatta- I
4. ✖ Kumargupta

Question Number : 288 Question Id : 97675512228 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से किसके द्वारा अक्षर प्रणाली का आविष्कार किया गया था ?

Options :

1. ✖ भामगुप्त
2. ✖ सिद्धांत
3. ✔ आर्य-भट्ट- I
4. ✖ कुमारगुप्ता

Question Number : 289 Question Id : 97675512229 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Who said— “instructional objectives are best described in terms of the terminal behaviour expected from the learners”?

Options :

1. ✔ Robert Mager
2. ✖ Robert Miller's
3. ✖ Robert Wadra
4. ✖ Sumit Samele

Question Number : 289 Question Id : 97675512229 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्न लिखित में से यह कथन किसके द्वारा कहा गया - "शिक्षार्थियों से अपेक्षित अंतिम व्यवहार के संदर्भ में निर्देशात्मक उद्देश्यों का सबसे अच्छा वर्णन किया जाता है"?

Options :

1. ✓ रॉबर्ट मैगर
2. ✗ रॉबर्ट मिलर
3. ✗ रॉबर्ट वाड्रा
4. ✗ सुमित समेले

Question Number : 290 Question Id : 97675512230 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is not related to early number concept?

Options :

1. ✗ class inclusion
2. ✗ conservation
3. ✓ measurement
4. ✗ classification

Question Number : 290 Question Id : 97675512230 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन प्रारंभिक संख्या अवधारणा से संबंधित नहीं है?

Options :

1. ✗ वर्ग समावेश
2. ✗ संरक्षण
3. ✓ माप
4. ✗ वर्गीकरण

Question Number : 291 Question Id : 97675512231 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Educational objectives have been divided into -

Options :

1. ✖ Four domains
2. ✖ Five domains
3. ✔ Three domains
4. ✖ Two domains

Question Number : 291 Question Id : 97675512231 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से किस कार्यक्षेत्र में शैक्षिक उद्देश्यों को विभाजित किया गया है -

Options :

1. ✖ चार कार्यक्षेत्रों में
2. ✖ पांच कार्यक्षेत्रों में
3. ✔ तीन कार्यक्षेत्रों में
4. ✖ दो कार्यक्षेत्रों में

Question Number : 292 Question Id : 97675512232 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The hypothesis underlying team teaching is

Options :

1. ✖ A single teacher cannot control the class
2. ✖ Teachers are not competent
3. ✔ The best teachers in schools are shared by more students.
4. ✖ Teachers feel bore while marking alone

Question Number : 292 Question Id : 97675512232 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

शिक्षण दल में अंतर्निहित परिकल्पना क्या है ?

Options :

1. ✖ एक अकेला शिक्षक कक्षा को नियंत्रित नहीं कर सकता
2. ✖ शिक्षक सक्षम नहीं हैं
3. ✔ स्कूलों में सबसे अच्छे शिक्षक अधिक छात्रों द्वारा साझा किए जाते
4. ✖ शिक्षक अकेले अंकन करते समय बोर महसूस करते हैं

Question Number : 293 Question Id : 97675512233 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Cooperative learning is an alternative to

Options :

1. ✖ Teaching models
2. ✔ Competitive models
3. ✖ Microteaching
4. ✖ Lesson plan

Question Number : 293 Question Id : 97675512233 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

उपरोक्त में से किसके लिए सहकारी अधिगम एक विकल्प है?

Options :

1. ✖ शिक्षण मॉडल
2. ✔ प्रतिस्पर्धी मॉडल
3. ✖ सूक्ष्म शिक्षण
4. ✖ पाठ योजना

Question Number : 294 Question Id : 97675512234 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option

Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

The number of students in cooperative learning groups are

Options :

1. ✖ Eight to ten
2. ✔ Three to four
3. ✖ Ten to Fifteen
4. ✖ Five to Six

Question Number : 294 Question Id : 97675512234 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

उपरोक्त मे से सहकारी अधिगम समूहों में विद्यार्थियों की संख्या कौन सी है:

Options :

1. ✖ आठ से दस
2. ✔ तीन से चार
3. ✖ दस से पंद्रह
4. ✖ पांच से छः

Question Number : 295 Question Id : 97675512235 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following statements is correct?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 1 is the smallest prime number
2. Sum of two prime numbers is always a prime number
3. A composite number cannot be odd
4. There is no even prime numbers

Question Number : 295 Question Id : 97675512235 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन सा कथन सही है?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. 1 सबसे छोटी अभाज्य संख्या है
2. दो अभाज्य संख्याओं का योग हमेशा एक अभाज्य संख्या होती है
3. एक भाज्य संख्या विषम नहीं हो सकती
4. कोई सम अभाज्य संख्याएँ नहीं होतीं

Question Number : 296 Question Id : 97675512236 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

A learner exhibiting difficulty in sorting, recognising pattern, orienting numbers and shape, telling time and measurement may have dyscalculia with difficulty in

Options :

1. ✖ Visual memory
2. ✖ Language processing
3. ✔ Visual motor coordination
4. ✖ Visual motor skills

Question Number : 296 Question Id : 97675512236 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्न लिखित में से किसमें एक शिक्षार्थी को छँटाई करने, पैटर्न को पहचानने, संख्याओं और आकार को उन्मुख करने, समय और माप बताने में कठिनाई हो सकती है ?

Options :

1. ✖ दृश्य स्मृति
2. ✖ भाषा प्रसंस्करण

3. ✓ दृश्य मोटर समन्वय

4. ✗ दृश्य मोटर कौशल

Question Number : 297 Question Id : 97675512237 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following is not a mathematical process?

Options :

1. ✗ Estimation

2. ✓ Memorization

3. ✗ Measurement

4. ✗ Visualization

Question Number : 297 Question Id : 97675512237 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सी एक गणितीय प्रक्रिया नहीं है?

Options :

1. ✗ अनुमान

2. ✓ स्मरण

3. ✗ मापन

4. ✗ विज़ुअलाइज़ेशन

Question Number : 298 Question Id : 97675512238 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

According to Piaget when the child is at formal operational stage, it is appropriate to introduce

Options :

1. ✗ Data handling

2. ✗ Numbers

3. ✗ Geometry

4. ✓ Ratio and proportion

Question Number : 298 Question Id : 97675512238 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

पियाजे के अनुसार जब बालक औपचारिक क्रियात्मक अवस्था में होता है, तब उपरोक्त में से उसे किस का परिचय देना उचित होता है ?

Options :

1. ✗ अकड़ो का प्रबंधन
2. ✗ संख्या
3. ✗ ज्यामिति
4. ✓ अनुपात एवं समानुपात

Question Number : 299 Question Id : 97675512239 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

In a mathematics classroom emphasis is placed on

Options :

1. ✓ mathematical content process and reasoning
2. ✗ problem solving strategies
3. ✗ mathematical algorithm and process
4. ✗ mathematical content

Question Number : 299 Question Id : 97675512239 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्न लिखित में से गणित की कक्षा में किस पर बल दिया जाता है?

Options :

1. ✓ गणितीय सामग्री प्रक्रिया और तर्क
2. ✗ समस्या समाधान रणनीतियाँ
3. ✗ गणितीय एल्गोरिथम और प्रक्रिया
4. ✗ गणितीय सामग्री

Question Number : 300 Question Id : 97675512240 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following is not a problem-solving strategy in mathematics?

Options :

1. ✖ drawing
2. ✖ solving backwards
3. ✔ Rote learning
4. ✖ trial and error

Question Number : 300 Question Id : 97675512240 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0.25

निम्नलिखित में से कौन-सी गणित में समस्या-समाधान की रणनीति नहीं है?

Options :

1. ✖ चित्रकारी
2. ✖ पीछे की ओर से हल करना
3. ✔ रट कर सीखना
4. ✖ परीक्षण और त्रुटि