

1. When is Corona Radiata shed by the Ovum ?
 - (1) Just before fertilisation
 - (2) After reaching the uterus
 - (3) Immediately after fertilisation
 - (4) Immediately after release from ovary

2. Which of the following hormone is responsible for ejection of milk after parturition ?
 - (1) Vasopressin
 - (2) Relaxin
 - (3) Oxytocin
 - (4) Progesterone

3. In-vivo fertilization is :
 - (1) fusion of gametes in the laboratory
 - (2) to assist females who cannot conceive
 - (3) transfer of an ovum collected from a donor into the fallopian tube of another female who cannot produce one
 - (4) for females who cannot produce ova

4. Choose the incorrect option about IUDs as contraceptives for the females who want to delay pregnancy or space children because :
 - (1) decrease phagocytosis of sperms within the uterus
 - (2) Cu ions released suppress sperm motility and fertilising capacity of sperms
 - (3) makes uterus unsuitable for implantation
 - (4) cervix becomes hostile to sperms

5. ZIFT (Zygote intra-fallopian transfer) has greater success rates than with GIFT and IVF. Select one option which ensures this method :
 - (1) Transfer of sperm in fallopian tube
 - (2) Transfer of ovum in other's fallopian tube
 - (3) Transfer of pre formed embryo
 - (4) Transfer of sperms and eggs into the oviduct

6. Match the features developed in the embryo (given in **Column-I**) with the time period of pregnancy (given in **Column-II**).

Column-I (Embryonic development)	Column II (Time period)
(a) Formation of heart	(i) Second month of pregnancy
(b) Foetus develops limbs and digits	(ii) fifth month of pregnancy
(c) first movement and appearance of hair on head	(iii) end of 24 weeks
(d) body covered with hair, eye lids separate and eye lashes formed	(iv) one month of pregnancy

Options :

- (1) (a)-(iv), (b)-(i), (c)-(ii), (d)-(iii)
 - (2) (a)-(iv), (b)-(ii), (c)-(iii), (d)-(i)
 - (3) (a)-(i), (b)-(ii), (c)-(iii), (d)-(iv)
 - (4) (a)-(ii), (b)-(i), (c)-(iii), (d)-(iv)
7. Acrosome of Male sperm is formed from
- (1) Mitochondria
 - (2) Nucleus
 - (3) Centrioles
 - (4) Golgi body
8. In an embryo sac, the cells that degenerate after fertilisation are
- (1) synergids and primary endosperm cell
 - (2) synergids and antipodals
 - (3) antipodals and primary endosperm cell
 - (4) egg and antipodals
9. A false fruit is the one which
- (1) does not contain seeds
 - (2) has fused thalamus and other floral parts
 - (3) requires no pollination
 - (4) develops from superior ovary
10. In which of the following group of Plants, the carpels are fused ?
- (1) Mango, Rice
 - (2) *Michelia*, Wheat
 - (3) *Ranunculus*, Cotton
 - (4) *Hibiscus*, *Papaver*

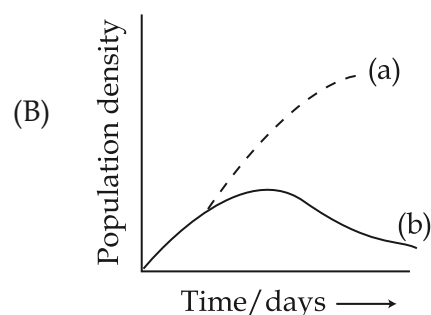
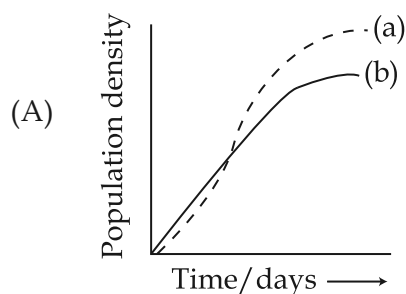
11. Read **Assertion** and **Reason** carefully and Choose the **correct** option.

Assertion : The average efficiency of energy transfer from plants to herbivores (about 10%) is more than from animal to animal (about 20%).

Reason : Plants contain a high proportion of cellulose and sometimes wood which are relatively undigestible and therefore unavailable as energy source for most herbivores.

Options :

- (1) Both **Assertion** and **Reason** are true and **Reason** is correct explanation of **Assertion**.
 - (2) Both **Assertion** and **Reason** are true but **Reason** is not correct explanation of **Assertion**.
 - (3) **Assertion** is true but **Reason** is false
 - (4) **Assertion** is false but **Reason** is true
12. *Paramecium aurelia* (a) has competitive advantage over *Paramecium caudatum* (b). When these two species were cultured separately and cultured together, the following graphs, (A) and (B) were obtained.

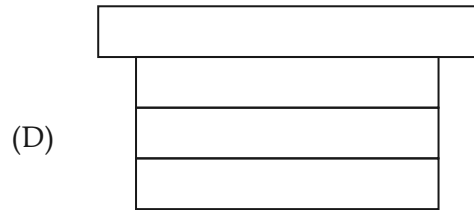
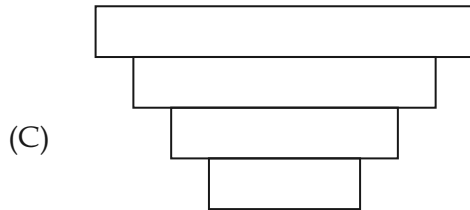
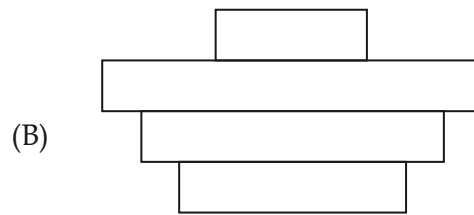
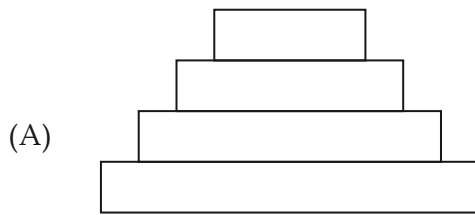


Observe the graphs thoroughly and select the phenomenon that can be explained through these experiments.

Option :

- (1) Competitive release
- (2) Competitive exclusion
- (3) Resource partitioning
- (4) Intraspecific competition

13. Which of the following representations shows the pyramid of energy in a pond ecosystem ?



Options :

- (1) (B)
- (2) (C)
- (3) (D)
- (4) (A)

14. The question consists of two statement the **Assertion** and **Reason**. Read them carefully and choose the **correct** option.

Assertion : Very Small animals are rarely found in tropical region.

Reason : Small animals have a larger surface area relative to their volume.

Options :

- (1) Both **Assertion** and **Reason** are true and **Reason** is a correct explanation of **Assertion**.
- (2) Both **Assertion** and **Reason** are true but **Reason** is not correct explanation of **Assertion**.
- (3) **Assertion** is true but **Reason** is false.
- (4) **Assertion** is false but **Reason** is true.

15. Read the below given statement **I** and **II** and answer accordingly.

Statement I : Anaerobic destructive distillation of the non-biodegradable and combustible constituents of the solid wastes at high temperature is known as pyrolysis.

Statement II : Composting is simple and economical method to manage the urban solid wastes and reclaim the low-lying areas for better use.

Options :

- (1) Both the statement **I** and **II** are correct
- (2) Both the statement **I** and **II** are incorrect
- (3) Only statement **I** is correct
- (4) Only statement **II** is correct

16. Read the Statement I and II and choose the correct option.

- Statement I** : If a new habitat is just being colonised, immigration may contribute more significantly to population growth than birth rate.
- Statement II** : Percent cover or biomass is meaningful measure of the population size.

Options :

- (1) Only statement I is correct
 - (2) Only statement II is correct
 - (3) Both statement I and II are correct
 - (4) Both statement I and II are incorrect
17. Choose the correct option that is safe noise level for human ears.
- (1) 140 dB
 - (2) 80 dB
 - (3) 100 dB
 - (4) 150 dB

18. Match the following with correct combination

Column I		Column II
(i) Bacteria and fungi	-	(a) Humus
(ii) Fragmentation	-	(b) Catabolism
(iii) Leeching	-	(c) Earthworm
(iv) Accumulation of dark coloured amorphous substance in soil	-	(d) Going down of water soluble inorganic nutrient into soil

Options :

- (1) (i)-(b), (ii)-(c), (iii)-(a), (iv)-(d)
 - (2) (i)-(b), (ii)-(c), (iii)-(d), (iv)-(a)
 - (3) (i)-(b), (ii)-(d), (iii)-(c), (iv)-(a)
 - (4) (i)-(b), (ii)-(a), (iii)-(c), (iv)-(d)
19. Which of the following strategy was not adopted by Mendel while performing different crosses in pea plant ?
- (a) Emasculation of the flower of pea plant was done just before the transfer of pollens from other flower.
 - (b) In order to ascertain the true breeding variety of pea plant successive breeding were done by selfing of a plant of specific trait for many generation.
 - (c) After cross breeding of two varieties of plants successive generation were raised by selfing only.

Select the **correct** answer from the options given below.

- (1) Only (a) of the above
- (2) Only (c) of the above
- (3) Only (a) and (b) of the above
- (4) Only (a) and (c) of the above

20. In which of the following conditions of blood group of parents, O-blood group is not possible among any of the offspring.
- (a) Father with A and mother with AB blood group
 - (b) Father with A and mother with B blood group
 - (c) Father with O and mother with AB blood group
- Select the **correct** answer from the options given below :
- (1) (a) and (b) of the above
 - (2) (b) and (c) of the above
 - (3) (a) and (c) of the above
 - (4) Only (a) of the above
21. In Griffith's experiment of bacterial transformation which of the following situation led to pneumonia in mouse and its death ?
- (1) Injection of heat killed rough strain of the bacteria
 - (2) Injection of heat killed smooth strain of the bacteria
 - (3) Injection of heat killed rough strain and live smooth strain of the bacteria
 - (4) Injection of heat killed rough as well as smooth strain of bacteria
22. Identify the Incorrect statement about the process of DNA replication from the following options.
- (1) Both prokaryotes and eukaryotes' DNA molecules has multiple origin site
 - (2) The direction of DNA replication is always $5' \rightarrow 3'$
 - (3) Okazaki fragments are called lagging strand
 - (4) RNA primers are needed for formation of each of the Okazaki fragments.
23. In lac-operon the repressor molecule remains bound with which of the following component
- (a) Promoter
 - (b) Operator
 - (c) Regulator
- Select the **correct** answer from the options given below.
- (1) Only (a) of the above
 - (2) Only (b) of the above
 - (3) Only (c) of the above
 - (4) (b) and (c) of the above
24. As per the available fossil records how old the origin and ancestry of hominids can be traced ? (mya in option represent million years ago)
- (1) More than 15 mya
 - (2) Between 02-15 mya
 - (3) Approx. 02 mya
 - (4) Approx. 01mya

25. Formation of a diploid embryo-sac from a megaspore mother cell without a regular meiotic division is termed as :
- (1) Adventive embryony
 - (2) Generative apospory
 - (3) Vegetative reproduction
 - (4) Somative apospory

26. Which of the following can not bring change in the frequency of genes or alleles according to Hardy-Weinberg equilibrium ?
- (a) Recombination
 - (b) Migration
 - (c) Random inheritance of genes or alleles
 - (d) Random genetic drift

Select the **correct** answer from the following options.

- (1) (a) and (b) of the above
 - (2) (a) and (c) of the above
 - (3) (c) and (d) of the above
 - (4) (b) and (c) of the above
27. We observe variations in many organism. Sickle cell anaemia is an example of variation of haemoglobin variety in human blood. Which of following is not the correct reason for such a variation in haemoglobin ?
- (a) Crossing over or recombination
 - (b) Chromosomal aberration
 - (c) Mutation

Select the **correct** answer from the options given below.

- (1) Only (a) of the above
 - (2) (a) and (b) of the above
 - (3) Only (c) of the above
 - (4) (b) and (c) of the above
28. The example of peppered moth in which the dark coloured moth started getting favoured is an example of :
- (a) Mutation
 - (b) Natural Selection
 - (c) Founder effect

Select the **correct** answer from the following

- (1) (a) and (b) of the above
- (2) Only (b) of the above
- (3) (b) and (c) of the above
- (4) Only (c) of the above

29. RNA polymerase is a holoenzyme in which one factor is associated to the core enzyme to form it holoenzyme. Which of the following is that factor ?

- (a) σ -factor
- (b) ρ -factor
- (c) γ -factor

Select the **correct** answer from the following options.

- (1) (a) only
- (2) (b) only
- (3) (c) only
- (4) (a) and (b) of the above

30. Which of the following is **not** a neurotransmitter in vertebrates ?

- (a) Acetyl Choline
- (b) Calcium ion
- (c) Potassium ion
- (d) Noradrenaline

Select the **correct** answer from the options given below :

- (1) Only (a) and (d) of the above
- (2) Only (b) and (c) of the above
- (3) Only (a) and (b) of the above
- (4) Only (c) and (d) of the above

31. Hammer shaped bone present in the the Ear is called :

- (1) Incus
- (2) Eustachian tube
- (3) Malleus
- (4) Stapes

32. The Parotid glands are present :

- (1) Below the Tongue
- (2) Below the Jaws
- (3) Near the Ears
- (4) Near the Eyes

33. Who is 'Father of Electro Cardiography' ?

- (1) Einthoven
- (2) Christian Barnard
- (3) Strasburger
- (4) Robert Hooke

34. Paneth cells are found in :

- (1) Duodenum
- (2) Jejunum
- (3) Ileum
- (4) Rectum

35. Exophthalmic goitre is also called :

- (1) Hashimoto's disease
- (2) Simple goitre
- (3) Cretinism
- (4) Grave's disease

36. Which of the following is achieved by the cells of the body with the type of nuclear division known as mitosis ?

- (1) have same number of chromosomes
- (2) have reduced number of chromosomes
- (3) have the restored number of chromosomes
- (4) have twice the number of chromosomes

37. Select the **incorrect** option to explain why enzymes are biological catalysts.

- (1) Enzymes are protein molecules made by living cells
- (2) The same enzyme is able to perform all types of functions
- (3) Enzymes function in temperatures suitable for living organisms
- (4) In the absence of enzymes, reactions in the cell would be too slow to sustain life

38. The glomerular capillary blood pressure causes filtration of blood through 3 layers except.

- (1) Endothelium of glomerular blood vessels
- (2) Epithelium of glomerular blood vessel
- (3) Epithelium of Bowman's capsule
- (4) Basement membrane

39. In the question given below two statements are marked as **Assertion (A)** and **Reason (R)**. Select the **correct** answer as per the code given below the statement.

Assertion (A) : Animals store extra fat when hibernating especially in cold climates.

Reason (R) : This helps to maintain buoyancy

Codes :

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A).
- (2) Both (A) and (R) are true but (R) is not the correct explanation of (A).
- (3) (A) is true but (R) is false.
- (4) (A) is false but (R) is true.

40. Maltose are commonly found in :

- (1) sugarcane
- (2) milk
- (3) germinating seeds
- (4) sugar beet

41. Failure of Meiosis in megaspore mother cell during megagametogenesis would result in

- (1) n egg cell and $2n$ Secondary nucleus
- (2) $2n$ egg cell and $4n$ Secondary nucleus
- (3) n egg cell and $2n$ Synergid cell
- (4) $2n$ egg cell and n Synergid cell

42. Circinnate veneration is characteristic of the leaves of
- (1) Conifers
 - (2) *Thuja*
 - (3) Cycads
 - (4) *Gnetum*
43. Ascocarps are characteristic fruiting bodies of :
- (1) *Peziza*
 - (2) *Mucor*
 - (3) *Rhizopus*
 - (4) *Phytophthora*
44. Double stranded DNA or ds DNA is found in
- (1) Coliphage MS 2
 - (2) Coliphage Φ X174
 - (3) Herpes Virus (linear)
 - (4) Coli phage fd (linear)
45. Which of the following feature separates fungus from plant to be classified in a separate kingdom as per five kingdom classification ?
- (a) Non cellulosic cell wall
 - (b) Mitochondria
 - (c) Heterotrophy
- Select the **correct** answer from the options given below.
- (1) Only (a) of the above
 - (2) (a) and (c) of above
 - (3) Only (c) of the above
 - (4) (a), (b) and (c) all of the above
46. Which of the following is **not** a criteria of phylogenetic system of classification ?
- (a) Based on evolutionary history
 - (b) Based on simple resemblances and differences
 - (c) Based on the studies of fossil evidences
- Select the **correct** answer from the following options.
- (1) (a) and (c) of the above
 - (2) (b) and (c) of the above
 - (3) Only (b) of the above
 - (4) Only (a) of the above
47. Which of the following statement is INCORRECT about the Phylum Arthropoda ?
- (1) Animals of this group is triploblastic, bilaterally symmetrical with segmented body.
 - (2) Appendages present on the body of different animals show modifications to perform functions like jaws & legs.
 - (3) Animals of this group respire either by tracheae or by book lungs only.
 - (4) Open circulatory system is found with heart and body cavity called haemocoel.

48. The term 'Southern Blotting' refers to :

- (1) transfer of DNA fragments from *in vitro* cellulose membrane to electrophoretic gel.
- (2) attachment of probes to DNA fragments
- (3) transfer of DNA fragments from electrophoretic gel to nitrocellulose sheet
- (4) comparison of DNA fragments from two sources

49. Which of the following is correctly matched ?

- | | | |
|--------------------------------------|---|--------------------|
| (1) <i>Thermus aquaticus</i> | - | Bt gene |
| (2) pBR 322 | - | Enzyme |
| (3) Ligase | - | Molecular scissors |
| (4) <i>Agrobacterium tumefaciens</i> | - | Tumour |

50. Which one of the following is used to replace the defective gene in gene therapy ?

- (1) Adenovirus
- (2) Cosmid
- (3) R_i plasmid
- (4) T_i plasmid

51. In genetic fingerprinting, the 'probe' refers to

- (1) a radioactively labelled single stranded DNA molecule
- (2) a radioactively labelled single stranded RNA molecule
- (3) a radioactively labelled double stranded RNA molecule
- (4) a radioactively labelled double stranded DNA molecule

52. The genetically modified (GM) brinjal in India has been developed for :

- (1) Insect - resistance
- (2) Enhancing shelf life
- (3) Enhancing mineral content
- (4) Drought resistance

53. Damage to thymus in a child may lead to :

- (1) Loss of cell mediated immunity
- (2) Loss of antibody mediated immunity
- (3) Reduction in stem cell production
- (4) Reduction in haemoglobin content of blood

54. Lysozyme present in perspiration, saliva and tears destroys :

- (1) All types of viruses
- (2) Most virus infected cells
- (3) Certain fungi
- (4) Certain types of bacteria

55. If a person shows the production of interferons in his body, chances are that he is suffering from :
- (1) Anthrax
 - (2) Malaria
 - (3) Tetanus
 - (4) Measles
56. The sites on antigen that are recognised by antibodies and receptors present on T and B cells are
- (a) antigenic determinants
 - (b) epitopes
 - (c) Paratopes
- Select **correct** answer from the following options
- (1) Only (a) of the above
 - (2) Only (c) of the above
 - (3) Only (b) and (c) of the above
 - (4) Only (a) and (b) of the above
57. Cancer is caused by :
- (1) Uncontrolled meiosis
 - (2) Uncontrolled mitosis
 - (3) Rupturing of cells
 - (4) Loss of immunity in the cells
58. Which type of cancer is found in lymph nodes and spleen ?
- (1) Lymphoma
 - (2) Carcinoma
 - (3) Sarcoma
 - (4) Leukaemia
59. Which of the following human parasites require mosquito to complete their life cycle ?
- (1) *Ascaris lumbricoides* and *Wuchereria bancrofti* both
 - (2) *Ascaris lumbricoides* and *Plasmodium ovale* both
 - (3) *Ascaris lumbricoides* and *Leishmania donovani* both
 - (4) *Wuchereria bancrofti* and *Plasmodium ovale* both
60. Common cold differs from pneumonia in that :
- (1) Pneumonia is a communicable disease whereas the common cold is a nutritional deficiency disease
 - (2) Pneumonia can be prevented by a live attenuated vaccine whereas the common cold has no effective vaccine
 - (3) Pneumonia is caused by a virus while the common cold is caused by the bacterium *Haemophilus influenzae*
 - (4) Pneumonia pathogen infects alveoli whereas the common cold affects nose and respiratory passage but not the lungs.

61. Which of the following is a pair of biofertiliser?

- (1) *Nostoc* and legume
- (2) *Rhizobium* and grasses
- (3) *Azolla* and blue green algae
- (4) *Salmonella* and *Escherichia coli*

62. Match **Column I** with **Column II** and Select the correct option from codes given below:

Column I	Column II
(a) Neomycin	(i) <i>Strepto-mycetes fradiae</i>
(b) Terramycin	(ii) <i>Penicillium notatum</i>
(c) Viridin	(iii) <i>Streptomyces rimosus</i>
(d) Penicillin	(iv) <i>Glociadium virens</i>

Options :

- (1) (a)-(iii), (b)-(i), (c)-(iv), (d)-(ii)
- (2) (a)-(iii), (b)-(iv), (c)-(i), (d)-(ii)
- (3) (a)-(i), (b)-(iii), (c)-(iv), (d)-(ii)
- (4) (a)-(iv), (b)-(i), (c)-(iii), (d)-(ii)

63. Methanogenic bacteria are **not** found in :

- (1) Rumen of cattle
- (2) Gobar gas plant
- (3) Bottom of water-logged paddy fields
- (4) Activated sludge

64. Which of the following is **not** used as a biopesticides ?

- (1) *Trichoderma harzianum*
- (2) *Nucleopolyhedro virus* (NPV)
- (3) *Xanthomonas campestris*
- (4) *Bacillus thuringiensis*

65. In the question given below two statements are marked as **Assertion (A)** and **Reason (R)**. Select the correct answer from the codes given below the statement

Assertion (A) : Microbes have been genetically modified to help in cleaning the polluted environment.

Reason (R) : *Pseudomonas* species for removing heavy metal pollutants and flavobacterium for decomposition of 2, 4-D are genetically modified

Select the **correct** option :

- (1) Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**.
- (2) Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**.
- (3) **(A)** is true but **(R)** is false
- (4) Both **(A)** and **(R)** are false

66. Usually, water and the substances dissolved in it move into and out of living cells by :
- (1) bulk flow
 - (2) imbibition
 - (3) one molecule at a time
 - (4) plasmolysis
67. During ascent of sap in a vascular plant cohesive property of the water molecules help create a continuous column of water from the soil to the surface of leaf before it vapourises into the air. Where does the adhesion property of water plays an important role in this pathway? Choose the correct choice.
- (1) Epidermal cells of the leaves
 - (2) Water molecules in the vacuoles of root-cortex
 - (3) Water molecules in the xylem
 - (4) Walls of tracheary elements and water column
68. When the roots of plants are subjected to the inhibitors of respiration, the accumulation of ions in the tracheary elements of shoots :
- (1) increases
 - (2) takes place via plasmodesmata
 - (3) remains unaffected
 - (4) decreases
69. Which of the following element is also an essential elements for the microbes, diatoms and some-flagellate Chrysophyceae members ?
- (1) Molybdenum
 - (2) Aluminium
 - (3) Sodium
 - (4) Silicon
70. Triacylglycerols are primarily present in seeds and some fruits. They help
- (a) attract animals to consume these fruits and help in seed dispersal
 - (b) overcome weight/carbon content ratio to make seeds lighter
 - (c) store carbon required for biosynthetic processes during seed germination
 - (d) signaling function
- Choose the **correct** answer from combination from the code :
- (1) (a), (c) & (d) of the above
 - (2) (b), (c) & (d) of the above
 - (3) (a), (b) & (c) of the above
 - (4) (a), (c) & (d) of the above

71. The reason that chemicals KCN and CO are highly poisonous is because they

- (1) block complex I of mitochondrial respiratory chain
- (2) block complex III of mitochondrial respiratory chain
- (3) block complex IV of mitochondrial respiratory chain
- (4) damage mitochondria

72. Select the correct combination of **true** statements.

- (a) Triose phosphate isomerase catalyzes the isomerization of glyceraldehyde phosphate to dihydroxyacetone phosphate
- (b) Triose phosphate isomerase catalyzes the synthesis of glyceraldehyde phosphate to dihydroxyacetone phosphate
- (c) Five out of six of triose phosphate formed during photosynthesis is required for regeneration of ribulose 1,5- biphosphate.
- (d) About only half of triose phosphate formed by photosynthesis is required for regeneration of ribulose 1,5-biphosphate

Code :

- (1) (a) and (d)
- (2) (b) and (c)
- (3) (a) and (c)
- (4) (c) and (d)

73. Match the plant hormones mentioned in **Column A** to the functions they are involved-in, as mentioned in the **Column B** :

Column A	Column B
(a) Auxins	(i) Fruit ripening
(b) Ethylene	(ii) Apical dominance
(c) Absciscic Acid	(iii) Stimulate cell division
(d) cytokinins	(iv) closure of stomatal opening

Choose the **correct** code :

- (1) (a)-(i), (b)-(ii), (c)-(iii), (d)-(iv)
- (2) (a)-(ii), (b)-(i), (c)-(iv), (d)-(iii)
- (3) (a)-(iii), (b)-(iv), (c)-(ii), (d)-(i)
- (4) (a)-(iv), (b)-(iii), (c)-(i), (d)-(ii)

74. Match the observations listed in **Column I** to the kind of plant movements mentioned in **Column II**.

Column I	Column II
(a) Upward bending of an organ	(i) Thigmonasty
(b) Sleep movements in leaves of <i>Albizia</i> tree, Silk tree	(ii) Hyponasty
(c) 'Touch' movements in leaves of <i>Mimosa</i>	(iii) Hygronasty
(d) Folding and rolling of grass of grass leaves (<i>Poa</i>)	(iv) Nyctinasty

Choose the **correct** code :

- (1) (a)-(i), (b)-(iv), (c)-(iii), (d)-(ii)
(2) (a)-(ii), (b)-(iii), (c)-(iv), (d)-(i)
(3) (a)-(iii), (b)-(i), (c)-(ii), (d)-(iv)
(4) (a)-(iv), (b)-(ii), (c)-(i), (d)-(iii)
75. Read the following statements and select the code that represents all correct statements
- (a) All Organisms that are sensitive to relatively high salt concentration are called halophytes.
(b) Xerophytes grow where water is scarce most of the time
(c) Desert ephemerals are annual plants that escape drought by existing as dormant seeds during dry season.
(d) Plants such as *Prosopis glandulosa* and alfalfa that have roots that extend very deep in soil to reach water table, and seldom experience negative water potential.

Code :

- (1) (a) and (c) only
(2) (b) and (c) only
(3) (b), (c) and (d) of the above
(4) (a), (b) and (c) of the above
76. Which of the following feature or structure is not found in cockroaches ?
- (a) Excretion in the form of Urea
(b) Presence of Ommatidia
(c) Presence of dorsal nerve cord

Select the **correct** answer from the following options:

- (1) (a) only
(2) (a) and (b) only
(3) (a) and (c) only
(4) (b) and (c) only

77. Floating Roots are characteristic of :

- (1) *Ceratophyllum*
- (2) *Vanda*
- (3) *Duranta*
- (4) *Viscum*

78. Ginger rhizome is an example of

- (1) sympodial shoot axis
- (2) fleshy bulb
- (3) monopodial shoot axis
- (4) dichotomous branching

79. Select an option from the following parts of the human female mammary gland which is not present.

- (1) alveoli
- (2) duct
- (3) Sinuses
- (4) Cartilaginous support

80. Read the statement I and II and answer accordingly.

Statement I : In alveoli, where there is high pO_2 , low pCO_2 , lesser H^+ concentration and lower temperature, the factors are favourable for the formation of Oxyhaemoglobin.

Statement II : Every 100 ml of oxygenated blood deliver around 15ml of O_2 to the tissues under normal physiological condition.

Options :

- (1) Both statement I and II are correct
- (2) Both statement I and II are incorrect
- (3) Only statement I is correct
- (4) Only statement II is correct