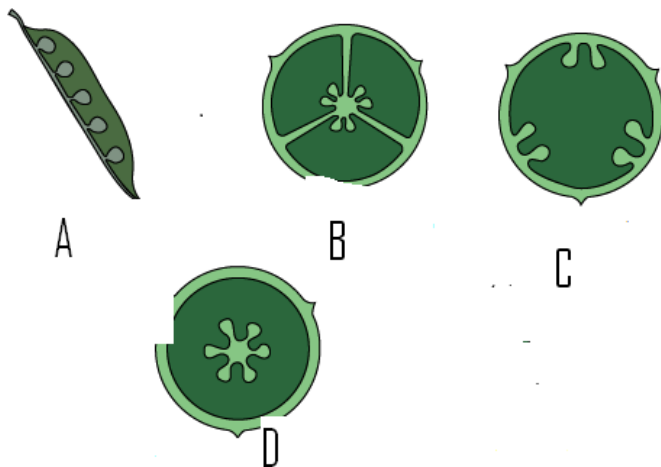


## KCET

1. Which of the following hormones does not promote apical dominance?  
(a) NAA (b) BAP (c) IAA (d) IBA
2. The process of expelling urine from the urinary bladder through urethra is called as  
(a) Micturition (b) Urination (c) Secretion (d) Defecation
3. During DNA replication, the helicase enzyme helps  
(a) Breaking and resealing of DNA strand (b) Unwinding the DNA double helix  
(c) Joining Okazaki fragments (d) Repairing enzyme
4. The fruit wall and seed coat remain fused in  
(a) Caryopsis (b) Cypsela (c) Capsule (d) Legume
5. With regard to C<sub>4</sub> plants which one of the following statement is wrong?  
(a) They are adapted to saline condition (b) They do not show photorespiration  
(c) Bundle sheath cells are chlorenchymatous (d) Mesophyll cells are differentiated
6. According to NeoDarwinism, all of the following contributes to change in gene frequency except  
(a) Mutation (b) Gene flow (c) Speciation (d) Isolation
7. A tissue culture company intends to produce virus free plants. Which of the following methods is best suited for this  
(a) Stem culture (b) Meristem culture  
(c) Anther culture (d) Protoplast culture
8. In a family the blood group of both father and mother are heterozygous for B, the possible blood group in their children's is  
(a) A and B (b) O and A (c) O and AB (d) O and B
9. The main excretory product of ureotelic animals is  
(a) Urea (b) Uric acid (c) Ammonia (d) Creatinine
10. The lack of vitamin K fails to normal blood clotting mechanism. Among these which one of the functions is not worked properly  
(a) Formation of prothrombin (b) Synthesis of antiheparin  
(c) Release of calcium ions (d) Synthesis of fibrinogen
11. Which of the following hormones is a not steroid?  
(a) Oxytocin (b) Androgens (c) Estrogen (d) Glucocorticoids
12. RNA is the genetic material in  
(a) All viruses (b) Few viruses like bacteriophages  
(c) Few viruses like parvovirus (d) Few viruses like TMV

13. The most appropriate and rapid cause for decline in wildlife is due to  
 (a) Overgrazing (b) Global warming (c) Mining (d) Habitat destruction
14. If a bag surrounded by parchment membrane containing sucrose solution is placed in water container the volume of the sugar solution in the bag  
 (a) Decreases (b) Increases (c) Unchanged (d) Bag bursts
15. A person has been diagnosed as having autoimmune disease. Which of the following is likely to be the disease?  
 (a) Parkinson's disease (b) Chronic renal failure  
 (c) Rheumatoid arthritis (d) Asthma
16. The diagram of the different types of placentation is given below. Identify the types of placentation labeled A, B, C and D



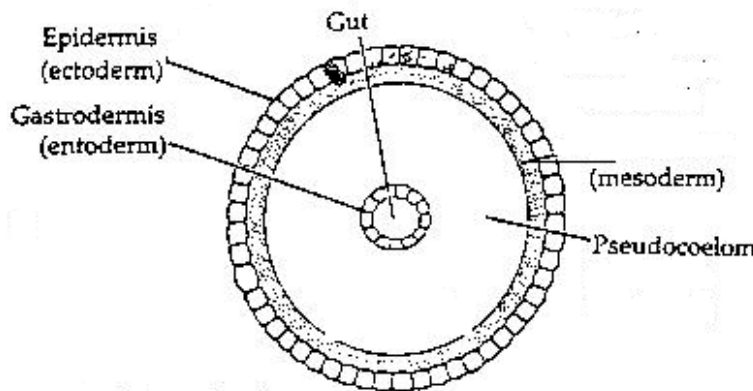
- (a) A= marginal, B= axile, C=parietal, D=free central  
 (b) A= parietal, B= marginal, C=axile, D=free central  
 (c) A= free central, B= marginal, C=axile, D=parietal  
 (d) A= parietal, B= marginal, C=free central, D=axile
17. Examples of secondary meristem are  
 (a) Procambium and intrafascicular cambium (b) Interfascicular cambium and phellogen  
 (c) Phellem and phelloderm (d) Procambium and phelloderm
18. The correct sequence of development of Frog is  
 (a) fertilization-cleavage-blastula-gastrula-neural  
 (b) fertilization-blastula-cleavage-gastrula-neural  
 (c) fertilization- cleavage-blastula- neural-gastrula  
 (d) fertilization- cleavage-neural- blastula-gastrula
19. A bacterium is responsible for sever food poisoning. Identify the species  
 (a) Salmonella spp (b) Shigella serotypes  
 (c) Haemophilus aegyptius (d) Clostridium botulinum

20. In the absence of \_\_\_\_\_ hormone metamorphosis of tadpole would be affected  
(a) Growth hormone (b) ACTH (c) Thyroxin (d) FSH
21. The appropriate definition for lesser known food plant is  
(a) They are known in some area only  
(b) They are restricted to certain places only  
(c) They are nutritional value but unexplored and cultivated  
(d) They are less in number and uncultivated
22. Ranikhet disease of poultry is caused by  
(a) Fungus (b) Protozoa (c) Bacterium (d) Virus
23. Forensic department officials are investigating the crime. But only a small amount of tissue is left over in the murder spot and get a little DNA. What would be the appropriate method for further investigation?  
(a) Treating the DNA with REN (b) Treating the DNA with ligase  
(c) Southern blotting technique (d) Polymerase chain reaction
24. A person is suffering from measles. What kind of substances you expect in his body  
(a) Phagocytes (b) Kinins (c) Histamines (d) Interferon
25. Aphid sty let technique is used to collect and analyze  
(a) Xylem sap (b) Phloem sap (c) Tissue fluid (d) Cell sap
26. The RQ value for anaerobic respiration is high and even infinity. It is because  
(a) Absence of oxygen consumed (b) Absence of carbon dioxide liberated  
(c) Presence of oxygen in high concentration (d) Presence of high carbon dioxide concentration
27. The industrial countries agreed to reduce the emission of green house gases by an average of 5.2% by 2010 under  
(a) Kyoto protocol (b) Montreal protocol  
(c) GAAT protocol (d) New Delhi protocol
28. An animal whose secondary oocyte has 16 chromosomes. What shall be the number of chromosomes in their ootid?  
(a) 8 (b) 32 (c) 16 (d) 4
29. Flame cells are the excretory organs of  
(a) Annelid (b) Platyhelminthes (c) Arthropod (d) Mollusk
30. Compare the statements A and B  
Statement A: Blood sugar level elevates soon after carbohydrate rich meal  
Statement B: decreased response of cells to insulin causes maturity onset diabetes mellitus  
Select the correct description  
(a) Statement A is correct and B is wrong  
(b) Statement A is wrong and B is correct  
(c) Both Statement A and B are correct and B is not the reason for A  
(d) Both Statement A and B are correct and B is the reason for A

31. What is false about spring wood?
- (a) Contain large amounts of xylem fibers (b) It is also called late wood  
(c) Xylem vessels have comparatively thin walls (d) Vessels have broad lumen
32. Compare the statements A and B  
Statement A: BAP is responsible for Richmond- Long effect  
Statement B: ABA promotes senescence  
Select the correct description
- (a) Statement A is correct, and B is wrong  
(b) Statement A is wrong, and B is correct  
(c) Both Statement A and B are correct, and B is not the reason for A  
(d) Both Statement A and B are correct, and B is the reason for A
33. Guard cells turgid due to
- (a) Influx of protons followed by endosmosis  
(b) Efflux of potassium ions followed by endosmosis  
(c) Decrease in water potential followed by endosmosis  
(d) Increase in water potential followed by endosmosis
34. Compare the statements A and B  
Statement A: Okazaki fragments are synthesized on leading strand of DNA  
Statement B: RNA synthesis occurs on sense strand of DNA  
Select the correct description
- (a) Statement A is correct, and B is wrong  
(b) Statement A is wrong, and B is correct  
(c) Both Statement A and B are correct  
(d) Both Statement A and B are wrong
35. Which of the following is not properly matched?
- (a) Protozoa-sporozoa-plasmodium (b) Platyhelminthes-Trematoda-liver fluke  
(c) Arthropoda -crustacea-prawn (d) Mollusca-Cephalopoda-pila globosa
36. The thermostat of the body is called
- (a) Thalamus (b) Cerebellum (c) Pons varoli (d) Hypothalamus
37. The viroid causes
- (a) CJD (b) Kuru (c) Potato spindle tuber (d) Mad cow disease
38. The production of polyploidy requires ----- chemical for chromosomal doubling
- (a) Polyethylene glycol (b) Sodium hypochlorite  
(c) 2, 4, D (d) Colchicine's

39. The sequential steps involved in menstrual cycle of human female  
 (a) ovulation-menstrual phase-proliferative phase-luteal phase  
 (b) Ovulation phase-menstrual phase-follicular phase-luteal phase  
 (c) Menstrual phase-ovulation-follicular phase-luteal phase  
 (d) Menstrual phase-follicular phase-ovulation phase-luteal phase
40. Identify the wrong statement with respect to non cyclic photophosphorylation  
 (a) It involves both PSI and PSII  
 (b) Photo oxidation of water occurs  
 (c) At the end only ATP molecules are produced  
 (d) Oxygen is evolved as a by product
41. Guttation is due to  
 (a) Transpiration pull  
 (b) Root pressure  
 (c) Vital force  
 (d) Capillary force
42. Corollary corona, sagittate anthers and dumbbell shaped stigma are salient features of  
 (a) Apocynaceae  
 (b) Arecaceae  
 (c) Solanaceae  
 (d) Malvaceae
43. The vision in cockroach is said to be  
 (a) Monocular  
 (b) Binocular  
 (c) Mosaic  
 (d) Direct
44. Compare the statements A and B  
 Statement A: Eri silk is produced by *philosamia ricini*  
 Statement B: Eri silkworm feeds on some plant  
 Select the correct description  
 (a) Statement A is correct, and B is wrong  
 (b) Statement A is wrong, and B is correct  
 (c) Both Statement A and B are correct  
 (d) Both Statement A and B are wrong

45. The diagram of the cross section of a body plan of an invertebrate is given below. Based on that identify the phylum



- (a) Nematodes  
 (b) Platyhelminthes  
 (c) Annelida  
 (d) Arthropoda
46. Nephric filtrate does not contain  
 (a) Glucose  
 (b) Urea  
 (c) RBC  
 (d) Amino acids

47. Which of the following recordings is true when separation of photosynthetic pigments by paper chromatography will be made?
- (a) Chlorophyll b moves slowly whereas carotene moves fast  
 (b) Chlorophyll a moves slowly whereas xanthophylls is fast  
 (c) Chlorophyll b moves slowly whereas chlorophyll a is fast  
 (d) Carotenes moves slowly whereas chlorophyll b moves fast

48. Match the compounds given in column I with the number of carbon atoms present in column II choose the answer which gives the correct combination of alphabets of the two columns

	Column I		Column II
A)	Malic acid	p)	5-c compound
B)	DHAP	q)	6-c compound
C)	Oxalosuccinate	r)	3-c compound
D)	Alpha ketoglutarate	s)	4-c compound
		t)	2-c compound

(a) A=s, B=r, C=q, D=p

(b) A=s, B=p, C=t, D=r

(c) A=q, B=t, C=s, D=r

(d) A=s, B=r, C=p, D=t

49. Identify the correct statement

- (a) Xylem shows centrifugal developments in roots  
 (b) Polyarch is a feature of dicot root  
 (c) Root hairs are short lived and are continuously replaced by new root hairs  
 (d) Ground tissue in monocot stem is differentiated into cortex, pericycle and pith

50. Identify the correct matched pairs of germ layers and their derivatives

A-mesoderm-gonad

B-Ectoderm-pancreas

C-Endoderm-lungs

D-Ectoderm-skin derivatives

E-mesoderm-bone

(a) A, C, D and E only

(b) A and B only

(c) A and D only

(d) A, C and D only

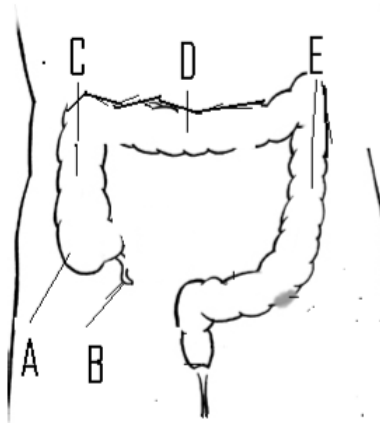
51. The functional stage of lysosome is

- (a) Primary lysosome and secondary lysosome  
 (b) Primary lysosome and autophagosome  
 (c) Residual body and autophagosome  
 (d) Primary lysosome, secondary lysosome, autophagosome and residual body

52. Match the following: in the I column common names of the plants are listed and in the II column scientific names are listed

	Column I		Column II
A)	Sarpagandha	p)	Dalbergia sissoo
B)	Ashwagandha	q)	Vinca rosea
C)	Rose wood	r)	Withania somnifera
D)	Ground nut	s)	Rauwolfia serpentina
		t)	Arachis hypogea

- (a) A=s, B=r, C=q, D=p  
 (b) A=s, B=p, C=t, D=r  
 (c) A=q, B=t, C=s, D=r  
 (d) A=s, B=r, C=p, D=t
53. A patient lacks ADA gene and functional T lymphocytes. He is suffering from  
 (a) AIDS  
 (b) Muscular dystrophy  
 (c) Cystic fibrosis  
 (d) SCID
54. The diagram of large intestine of man is given below. Identify the parts labeled A, B, C, D and E



- (a) A=Caecum, B=vermiform appendix, C= ascending colon= D=transverse colon, E= descending colon  
 (b) A=Caecum, B=descending colon, C= ascending colon= transverse colon, E= vermiform appendix  
 (c) A=Caecum, B=vermiform appendix, C= ascending colon= transverse colon, E= sigmoid curve  
 (d) A=Caecum, B=vermiform appendix, C= sigmoid curve= transverse colon, E= descending colon
55. FSH in human male promotes  
 (a) Spermatogenesis  
 (b) Growth of pubic hairs  
 (c) Libido  
 (d) Descending the testes into scrotum
56. The white matter of ----- is called Arbor vitae  
 (a) Cerebrum  
 (b) Cerebellum  
 (c) Mid brain  
 (d) Thalamus
57. The chromosomal complement of Turner's syndrome  
 (a) 44A+XXY  
 (b) 44A+XO  
 (c) 45A+XX  
 (d) 45A+XY
58. Which one among the following is not the consequences, if hypertension is untreated  
 (a) Heart attach  
 (b) Liver cirrhosis  
 (c) Strokes  
 (d) Renal failure

59. The single horned rhinoceros is protected in
- (a) Kazi Ranga National Park (b) Kanha National Park  
(c) Rajiv Gandhi National Park (d) Gir National Park
60. What will be the proportion of dwarf progeny, if heterozygous tall plant is crossed with homozygous dwarf plant
- (a) 100% (b) 75% (c) 50% (d) 25%

