

MHT-CET Practice Question Paper

Subject : Biology

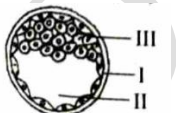
Time: 25 minutes

Test no : 06

Marks : 100

All the questions are compulsory and contain two marks for each

1. Which of the following produces testosterone?
 - a) Primordial germ vells
 - b) Leydig cells
 - c) Prostrate gland
 - d) Bulbourethral gland
2. Major part by volume of semen is contributed by _____.
 - a) Seminal vesicle
 - b) Epididymis
 - c) Cowper's gland
 - d) Prostate gland
3. The main function of mammalian corpus luteum is to produce
 - a) estrogen only
 - b) progesterone
 - c) human chorionic gonadotropin
 - d) relaxin only
4. The termination of process of oogenesis is indicated by formation of
 - a) secondary oocyte
 - b) first polar body
 - c) second polar body
 - d) perivitelline space
5. Choose the CORRECT group of labellings.



 - a) I Trophoblast, II Archenteron, III Micromeres
 - b) I Trophoblast, II Blastocoel, III Megameres
 - c) I Trophoblast, II Archenteron, III Inner mass cells
 - d) I Trophoblast, II Blastocoel, III Inner mass cells
6. hCG is secreted by
 - a) Alantois
 - b) Corona radizta
 - c) Corpus luteum
 - d) Placenta
7. cambium is essential for grafting in plants because
 - a) cambia offboard stock and scion fuse together
 - b) cambium produces new leaves
 - c) cambium produces new roots
 - d) cambium helps in the production of flowers
8. Which of the following has proved helpful in preserving pollen as fossils?
 - a) Oil content
 - b) Cellulosic intine
 - c) Pollenkitt
 - d) Sporopollenin
9. A typical embryo sac at maturity is
 - a) 7 nucleated, 8 celled
 - b) 8 nucleated, 7 celled
 - c) 8 nucleated, 8 celled
 - d) 7 nucleated, 7 celled
10. Progeny resulting from cross pollination are
 - a) genetically stable
 - b) always sterile
 - c) homozygous and less viable
 - d) genetically variable
11. Anemophily is NOT observed in
 - a) Maize
 - b) Jowar
 - c) Sugarcane
 - d) Salvia
12. Which one of the following may require pollinators, but is genetically similar to autogamy?
 - a) Geitonogamy
 - b) Xenogamy
 - c) A pogamy
 - d) Cleistogamy
13. How many different types of gametes will be formed by a pp plant with genotype TtYy?
 - a) 16
 - b) 08
 - c) 06
 - d) 04

14. In a person suffering from sickle cell anaemia, becomes half moon shaped.
 - a) RBC b) Thrombocyte
 - c) Monocyte d) Lymphocyte
15. The mechanism that causes a gene to move from one linkage group to another is called
 - a) Crossing over b) Inversion
 - c) Duplication d) Translocation
16. If a colour blind man marries a woman who is homozygous for normal colour vision, the probability of their son being colour blind is
 - a) 1 b) 0
 - c) 0.5 d) 0.75
17. The final proof for DNA as the genetic material came from the experiments of
 - a) Griffith
 - b) Hershey and Chase
 - c) Avery, Macleod and McCarty
 - d) Har Gobind Khorana
18. During DNA replication, the addition of nucleotides on the lagging strand occurs
 - a) towards the replicating fork
 - b) at a faster rate than leading strand
 - c) continuously
 - d) discontinuously
19. In Prokaryotes, the transcription of DNA is initiated with the help of
 - a) Rho factor
 - b) Elongation factor
 - c) Sigma factor
 - d) Termination factor
20. The process of removal of introns in a defined order in transcription unit is called
 - a) tailing b) splicing
 - c) capping d) translation
21. Dinosaurs were present during
 - a) Palaeozoic era
 - b) Mesozoic era
 - c) Cenozoic era
 - d) Proterozoic era
22. The reptiles like dinosaurs were dominant in ____ period.
 - a) Cretaceous
 - b) Jurassic
 - c) Tertiary
 - d) Triassic
23. The water potential of pure water is
 - a) Zero
 - b) Less than Zero
 - c) More than zero but less than one
 - d) More than one
24. Which of the following is NOT a feature of active transport of solutes in plants?
 - a) Requires ATP
 - b) Occurs against concentration gradient
 - c) Non-selective
 - d) Occurs through membranes
25. Fruit and leaf drop at early stages can be prevented by the application of
 - a) Cytokinins b) Ethylene
 - c) Auxins d) Gibberellic acid
26. Which of the following growth regulators is known as 'stress hormone'?
 - a) Abscissic acid
 - b) Ethylene
 - c) GA3
 - d) Indole acetic acid
27. Reduction in pH of blood will
 - a) Decrease the affinity of haemoglobin with oxygen
 - b) Release bicarbonate ions by the liver.
 - c) Reduce the rate of heart beat.
 - d) Reduce the blood supply to the brain.
28. In case of severe allergy and cough, the physician advises the patient to get the blood checked. What is expected in the blood smear report?
 - a) Leukemia b) Eosinophilia
 - c) Polycythemia d) Leucopenia
29. Which valve is present at the opening of coronary sinus?
 - a) Mitral valve
 - b) Eustachian valve
 - c) Thebesian valve
 - d) Tricuspid valve
30. Bradycardia indicates slow heart rate generally below ____ per minute.
 - a) 70 beats
 - b) 75 beats
 - c) 80 beats
 - d) 60 beats

31. Coughing and sneezing are controlled by _____
 a) Cerebrum
 b) Cerebellum
 c) Medulla oblongata
 d) Pons Varolii
32. Photosensitive compound in human eye is made up of
 a) opsin and retinol
 b) transducin and retinene
 c) guanosine and retinol
 d) opsin and retinal
33. Acromegaly is caused by hypersecretion of _____ in the adult.
 a) ACTH b) GH
 c) MSH d) TSH
34. The increase in blood flow to heart stimulates secretion of
 a) Renin
 b) Oxytocin
 c) Antidiuretic hormone
 d) Atrial natriuretic factor
35. Coca alkaloid or cocaine is obtained from:
 a) Datura
 b) Papaver somniferum
 c) Atropa belladonna
 d) Erythroxylum coca
36. One of the following substances interferes with the transport of dopamine.
 a) Morphine b) Heroin
 c) Cocaine d) Ganja
37. Inbreeding depression occurs due to continuous
 a) Intra-breeding
 b) Inter-breeding
 c) Inter-generic breeding
 d) Inter-specific breeding
38. Which of the following is NOT a breed of buffalo?
 a) Gir b) Nili
 c) Nagpuri d) Surati
39. Which of the following in sewage treatment removes suspended solids
 a) Tertiary treatment
 b) Secondary treatment
 c) Primary treatment
 d) Sludge treatment
40. 'Cry' gene is obtained from
 a) *Agrobacterium tumefaciens*
 b) *Bacillus thuringiensis*
 c) *Rhizobium leguminosarum*
 d) *Rhizobium phaseoli*
41. Exploitation of bioresources of a nation by multinational companies without authorization from the concerned country is referred to as
 a) Biowar b) Bioweapon
 c) Biopiracy d) Bioethics
42. Relatively small DNA molecules of plasmids can be identified
 a) due to similarity to original nuclear DNA molecule
 b) by their restriction fragment patterns
 c) by the size of bacterial cell
 d) by their circular shape
43. Which of the following is not a component of downstream processing?
 a) Expression b) Separation
 c) Purification d) Preservation
44. In gene therapy, _____ can be treated by gene DNase.
 a) Pituitary dwarfism
 b) Hepatitis - B
 c) Haemophilia
 d) Cystic fibrosis
45. An enzyme catalyzing the removal of nucleotides from ends of DNA is
 a) Protease b) DNA ligase
 c) Endonuclease d) Exonuclease
46. The transgenic animals are generally produced for all of the following needs, EXCEPT
 a) Testing of chemical safety
 b) Testing of vaccine safety
 c) Stimulation of pathogenicity
 d) Production of pharmacologically important proteins
47. Decomposers are
 a) autotrophs b) heterotrophs
 c) organotrophs d) autoheterotrophs

48. Natural reservoir of phosphorus is
- a) Sea water b) Animal bones
 - c) Rock d) Fossils
49. Which one of the following is NOT the in situ conservation of biodiversity?
- a) Zoological parks
 - b) Wildlife sanctuaries
 - c) National parks
 - d) Biosphere reserves
50. Afforestation is
- a) restoring a forest
 - b) plantation in barren lands
 - c) cultivation under agriculture
 - d) hum cultivation