



Subject : Biology

BOARD QUESTION PAPER

Total Marks : 70

Class : XII

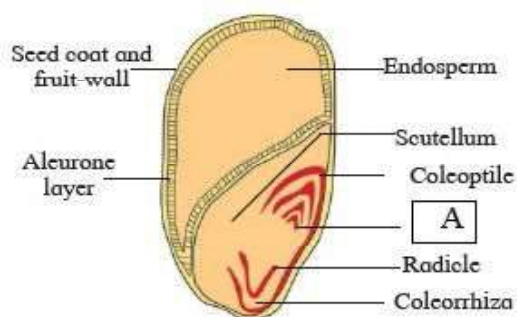
Prelim No. - I

Time : 3 Hour

Section - A

Q1. Select and write the correct answer:(10)

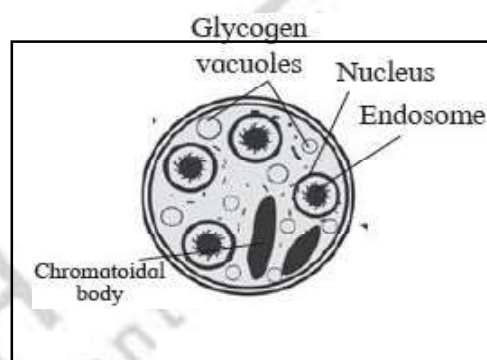
- i) Phagocytic cells was discovered by
 (a) Decastello (b) Landsteiner
 (c) Metchnikoff (d) Edward Jenner
- ii) Marked portion A indicate?



- (a) Embryo (b) Epicotyl
 (c) Endosperm (d) Plumule
- iii) Most used substrate for industrial production of beer is
 (a) barley (b) wheat
 (c) corn (d) sugarcane molasses
- iv) Which of the following statement is Not true about human nervous system?
 (a) It is broadly classified into two parts.
 (b) It is broadly classified into three parts.
 (c) The peripheral nervous system consists of neurons and ganglia.
 (d) The nervous system in human is well developed and complex
- v) _____ respiratory system is not caused

by bacteria and viruses.

- (a) Sinusitis (b) Pneumonia
 (c) Laryngitis (d) Emphysema
- vi) Identify the following diagram



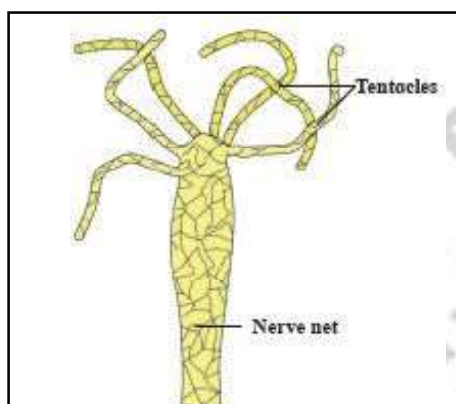
- (a) Trophozoite (b) Binucleate cyst
 (c) Cyst (d) Quadrinucleate cyst
- vii) Which is not a true statement for Gestation:
 (a) Contraction of uterine wall
 (b) The slimy secretion of oviduct wall
 (c) It refers to the period between fertilization and parturition.
 (d) It is the condition of carrying embryos in the uterus.
- viii) Bacillus thuringiensis is used as biocontrol agent against
 (a) Cockroach (b) Birds
 (c) Butterfly (d) Locust
- ix) Which is employed for artificial ripening of banana fruits?
 (a) Auxin (b) Ethylene
 (c) Cytokinin (d) Gibberellin



- x) The single shield shaped cotyledon is called
 (a) coleoptiles (b) scutellum
 (c) perisperm (d) tegmen

Q.2. Answer the following: (8)

- Define :Commensalism
 - How improvement in oil content and quality of oil crop can be achieved?
 - How many nitrogen bases are present in a codon (singlet codon)?
 - Identify the name and use of maps generated in Human Genome Project.
 - How many nucleotides are present in a Codon?
 - What is hydrophily?
 - Give the significance of Golden rice.
 - What are vectors in genetic engineering?
 - Name the addicting component found in tobacco.
- x) Identify the diagram.



Section - B

Attempt any Eight: (16)

- Enlist any three organisms used in study of human genome project?
- What do you mean by vulnerable species and endangered species?
- Distinguish between: Blood and lymph.
- What is dichogamy?
- Name the causative agents of the Ascariasis, Lymphatic Filariasis, Typhoid, Dermatophytosis, and AIDS?

Q.8. Write a note on the histology of the heart wall.

Q.9. Match the below pairs

Column "A"	Column "B"
I) Turtles	A. Book gills
II) Flatworms	B. Book lungs
III) Scorpions	C. Underwater
IV) Arthropod	D. Semi-aquatic

Q.10. What is adaptation, how are the plants adapted to survive in the desert

Q.11. Give the microbial sources of various vitamins.

Q.12. What are Nucleoside and Nucleotide?

Q.13. Define test cross and explain its significance.

Q.14. Enlist some important functions of placenta other than its endocrine function.

Section - C

Attempt any Eight: (24)

Q.15. Transgenic mice are used for cancer research. Give reasons for introducing transgenic farm animals.

Q.16. Give the relation of mental health and adolescence.

Q.17. With a suitable diagram explain structure of sperm.

Q.18. A man's pulse rate is 68 and cardiac output is 5500 cm³. Find the stroke volume.

Q.19. Give a note on erythrocytes.

Q.20. Mention the contributions of the following scientists in the evolution?

- Gregor Mendel-
- Walter Sutton and Theodor Boveri
- W. Waldeyer-
- Bateson-
- T. H. Morgan
- John Langdon

Q.21. Define niche, how many types of niches are found in environment?

Q.22. Write a short note on ploidy?

Q.23. Explain the following terms in simple words.

- a. Synaptic fatigue
- b. Synaptic delay
- c. Refractory period

Q.24. Give a detail account on common cold.

Q.25. List the significance of double fertilization in flowering plants?

Q.26. Enlist different types of restriction enzymes commonly used in rDNA technology? Write on their role.

Section D

Attempt any Three:

(12)

Q.27. Why do we need to protect and conserve

biodiversity? Explain by giving example.

Q.28. Define innate immunity and explain how epithelial surface acts as a natural defense system of the body

Q.29. Explain the steps in process of rDNA technology with suitable diagrams.

Q.30. Explain with suitable example an independent assortment.

Q.31. With suitable example explain the process predation.
