

I PUC Mock Paper – January 2025

Course: I PUC

Subject: Biology

Max. Marks: 70

Duration: 3 hour

PART -A

I.			
1. The Scientific name of Mange is			
(a) Mangifera indica	(b) Mangifera Indica	(c) Magefera indica	(d) magifera udica
2. Methanogens are found in the	, ,	() &	· / · · C
(a) Mouth of ruminants	(b) Guts of ruminants		
(c) Cow's respiratory System	(d)cow's ribs		
3. Most primitive Vascular plants			
(a)Mosses	(b) Cycads	(c) kelps	(d)Ferns
4. In Case of Poriferans, the Spongocoel is lined with flagellated Cells Called			
(a)oscula	(b) Choanocytes	(c)Mesenchymal Cell	s (d) ostia
5. The limbless amphibian is	•	•	` '
(a) Ichthyophis	(b) Hyla	(c) Rana	(d) Salamander
6. The mode of arrangement of Sepals or petals in floral bud is Known as			
(a) phyllotaxy	(b) Aestivation	(c) placentation	(d) polypeptalous
7. Casparian Strip is made up of		· / I	· / 1
(a) chitin	(b)Cellulose	(c)pectin	(d) Suberin
8. Glycoproteins and Glycolipids are	e Synthesized at		
(a) SER	(b) RER	(c) Golgi apparatus	(d)Mitochondria
9. Which of the following is a neutra	al amino-acid		
(a)Glutamic acid	(b)Lysine	(c) Aspartic acid	(d) Valine
10. The complex formed by a pair of Synapsed homologous chromosomes is called			
(a)Bivalent	(b)Axoneme	(c)Equatorial plane	(d)kinetochore
11. The end product of Oxidative ph	nosphorylation is		
(a)NADH	(b)ATP and Water	(c)ADP	(d)Oxygen
12. The potent weed killer is			
(a) Gibberellin	(b)2,4-D	(c)Abscissic acid	(d)Ethylene
13. The volume of anatomical dead	Space air is normally		
(a)230ml	(b)210ml	(c)190 ml	(d)150ml
14. The epithelial Cells of Bowman	's Capsule are called		
(a)Renal Cells	(b)Podocytes	(c)Slit pores	(d)Vasa Recta
15. Which of the following is an amino acid derived hormone?			
(a)Epinephrine	(b)Cortisol	(c)Estradiol	(d)Progesterone
II.			
(kranz, polysomes, Nodes of Ranvier hyoid, Semi-lunar platypus)			
16is an Oviparous mammal.			
17. A Single U-Shaped bone calledis Present.			
18. The Second heart Sound (dub) is associated with closure of theValves.			
19. The C4 plants bundle sheath Cells of leaves have special type of anatomy Called			
20. Many ribosomes attached to a m- RNA is			

PART-B

III.

- 21. Draw a neat labelled diagram of Stomata.
- 22. What are polysaccharides? Give two examples.
- 23. Give any two economic importance of algae.
- 24. Differentiate between Cyclic photophosphorylation and non-cyclic photophosphorylation.
- 25. Assign the following animals to their respective phyla
 - (a) Taenia
- (b) Columba
- (c) Meandrina.
- (d) Cucumaria
- 26. Define cell cycle. During which Phase of the cell cycle DNA replication Occurs.
- 27. Draw a neat labelled diagram of human excretory System.

PART-C

IV.

- 28. Write the taxonomic Categories Showing Hierarchical arrangement in ascending order.
- 29. Name the following biomolecule
 - (a) Most abundant protein in animal world.
 - (b) Most abundant protein in the whole Biosphere.
 - (c) Protein fight against infectious Organisms.
- 30. Mention the fundamental Characters of Phylum: Chordata.
- 31. Define (a) Aestivation Be (b) placentation (c) venation
- 32. Write three differences between Chondrichthyes and Osteichthyes.
- 33. Baud on the type of Pigments Classify plastids.
- 34. Explain erythroblastosis foetalis.

Part -D Section -1

- 35. Draw a neat labelled diagram of the structure of a bacterium.
- 36. Explain briefly the prophase I of meiosis I.
- 37. Write the characteristic features of phylum mollusca.
- 38. Assign a function to each of the following:
 - (a) Comb plates (b)Flame cells (c)Radula (d)Cnidoblast (e)Tympanum.
- 39. Draw a neat labelled diagram of digestive system of Frog.
- 40. Draw a neat labelled diagram of an animal cell.
- 41. (a) Right to uses of diatomaceous Earth.
 - (b) Name a Dinoflagellate that causes red tide.
 - (c) Name the algal and fungal component of lichens.
- 42. Give the schematic representation of glycolysis.
- 43. Explain the mechanism of carbon dioxide transport.
- 44. Draw a neat labelled diagram of vertical section of human brain.

Section -II

V.

- 45. Name the organelles in which of the following structures are found
 - (a) Cristae (b) Centrioles (c) Thylakoids (d) Nucleolus (e) Tonoplast
- 46. List the salient features of amphibia.
- 47. Sketch and label the transverse section of dicot stem.