



**SRI BHAGAWAN MAHAVEER JAIN COLLEGE**

Vishweshwarapuram, Bangalore.

**Mock Question Paper – January 2020**

**Course:** I year PUC

**Subject:** Biology

**Max. Marks:** 70

**Duration:** 3:15hrs

**GENERAL INSTRUCTIONS:**

- 1 This questions paper consists of five parts- A, B, C, D and E.
- 2 All the parts are compulsory.
- 3 Draw diagrams wherever necessary unlabelled diagrams or illustrations do not attract any marks.

**PART-A**

**I Answer the following questions in one word or one sentence each: 10 x 1 = 10**

- 1 Define aestivation in plants.
- 2 What are taxonomic aids?
- 3 Define plasmolysis.
- 4 What is transpiration?
- 5 Name the term used to describe a sterile stamen.
- 6 Expand ECG.
- 7 Name the locomotory structures of Hydra.
- 8 Mention the glands that perform excretory function in prawn.
- 9 What are Pons?
- 10 Which type of cells of gastric glands secrete HCl.

**PART-B**

**II Answer any FIVE of the following questions in three to five sentence each: 5 x 2 = 10**

- 11 Draw a neat labelled diagram of a mitochondrion.
- 12 Define the following terms: (a) Antiport (b) Apoplast
- 13 Write any two practical applications of ethylene.
- 14 What is R.Q? Name the respiratory substrate whose RQ value is 1.
- 15 What are ammonotelic animals? Give one example.
- 16 Differentiate between open type of circulatory system and closed type of circulatory system.
- 17 Write a note on Osteoporosis.
- 18 Distinguish between septal nephridium and pharyngeal nephridium.

**PART-C**

**III Answer any FIVE of the following questions in 100-150 words wherever applicable 5 x 3 = 15**

- 19 Define placentation. Mention the types. Explain any one diagrammatically.
- 20 Mention any three micronutrients and write their deficiency symptoms.
- 21 Schematically represent cyclic photophosphorylation.
- 22 Draw a neat labelled diagram of L.S of phloem.
- 23 Explain the process of digestion in stomach.
- 24 What is pulmonary circulation? Schematically represent the same.
- 25 Give an example of the following types of joints:  
(a) Hinge joint (b) Pivot joint (c) Gliding joint.
- 26 Write the functions of any three types of WBC.

**PART-D**

**SECTION-I**

**IV Answer any FOUR of the following questions in 200-250 words wherever applicable 4 x 5 = 20**

- 27 Enumerate the salient features of Angiosperms.
- 28 Explain the stages of mitosis diagrammatically.
- 29 Write schematic representation of kreb's cycle.
- 30 Give the salient features of class Osteichthyes.
- 31 Draw a neat labelled diagram of alimentary canal of earthworm.
- 32 Briefly explain the types of chromosomes based on the position of centromere and write the function of centromere.

**SECTION-II**

- V Answer any THREE of the following questions in 200-250 words wherever applicable 3 x 5 = 15**
- 33 Explain the mechanism of ascent of sap.
- 34 (a) Draw neat labelled diagram of intrastelar secondary growth. **3**  
(b) Differentiate spring wood and Autumn wood. **2**
- 35 What are polysaccharides? Explain the types giving example for each type.
- 36 Mention any five hormones of adenohipophysis. Give one function of each.
- 37 Describe the chemical transmission of nerve impulse.

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