**SY.Bsc. Semester-III A.T.K.T Examination** Zoology-I

VCD 9/10/19

**Paper-II USZO402**

**Total Marks: 100**

**Duration 3 hrs.**

Note:

1) All the questions are compulsory.
2) Figures at right indicates marks.
3) Draw diagrams wherever necessary.
4) Answer in serial order.

**Q1) A Fill in the blanks.** **(05)**

1) In the prokaryotes cells division is by ..... ( mitosis, simple fission, meosis)
2) Rough endoplasmic reticulum is responsible for synthesis of .....( lipids, proteins, vitamins)
3) ..... was discovered by Chirstain de Duve ( SER, Lysosomes, Goligi complex)
4) Cellulose is a .....( monosaccharide, polysaccharide, oligosaccharide)
5) .....is a positively charged amino acid (Aspartic acid, Luecine, arginine)

**B) Match the following** **(05)**

| | |
|---|---|
| 1) Anchoring junction | A) Glucogenic amino acid |
| 2) Mitochondria | B) Pauling and Corey |
| 3) Nucleus | C) Desmosomes |
| 4) Alanine | D) Powerhouse |
| 5) αhelix | E) Nuclear envelope |

**C) True or False** **(05)**

1) Histidine is non- essential in adults.

2)Golgi complex was discovered by Pflugir(1869).

3) Pinnocytosis means cellular eating.

4) Residual bodies are present in lysosomes.

5) β form was first recognised in β keratin.

**D) Answer in one sentence.** **(05)**

1) Who coined the term protein?
2) Define simple diffusion.

3) What are marker enzymes of mitochondria?
4) Define microvilli.
5) Define Vitamins.

**Q2) Answer the following (Any 2)** **(20)**

1) Describe Flid Mosiac model of plasma membrane.
2) Explain endocytosis and its types.
3) Differentiate between Prokarotic and eukaryotic cells
4) Describe Microfilament and its function

**Q3)Answer the following (Any2)** **(20)**

1)Describe ultrastructure of Endoplasmic reticulum

2)Explain in detail ultrastrucure of Golgi complex with its significance.

3) Biogenesis in Mitochondria

4)Structure and functions of Lysosomes.

Q4) Answer the following (Any2) (20)

1)Discuss the properties of carbohydrates.
2)Describe the structure of water and add a note on its physic-chemical properties.
3)Define Amino acid. Discuss its classification based on R group.
4)Define Lipids. Explain its classification in detail.

**Q5) Write short note (Any4)** **(20)**

1)Saturated fatty acid
2)Cell theory
3)Structure of Nucleus
4)Proteins
5)Labilizers and Stabilizers
6)Collogen
7)Anomers
8)Active transport