

Total No. of Questions : 6]

SEAT No. :

[Total No. of Pages : 2

P2835

[5029]-102

M.Sc-I

ZOOLOGY

ZY 102(T): Cell Biology

(2013 Pattern)(Semester-I)(3 Credits)

Time :2½Hours]

[Max. Marks : 38

Instructions to the candidates:

- 1) Attempt any three questions from Q.No.1 to Q.No.5.***
- 2) Question No.6 is Compulsory.***
- 3) Neat diagrams must be drawn wherever necessary.***
- 4) Figures to the right indicate full marks.***

- Q1)*** a) Describe functions of Rough Endoplasmic reticulum. **[4]**
b) Lysosomes are suicide bags in cell. Explain **[4]**
c) Explain glycocalyx **[2]**
- Q2)*** a) Describe fluid mosaic model of plasma membrane **[5]**
b) Explain cell adhesion molecules with their significance **[3]**
c) What are plasmodesmata. **[2]**
- Q3)*** a) Explain the mechanism of synaptic transmission. **[4]**
b) Give the organic compounds of cytoplasmic matrix **[3]**
c) Describe β oxidation of fatty acids. **[3]**
- Q4)*** a) Explain the different phases of cell cycle. **[5]**
b) Explain Nucleo-cytoplasmic interactions. **[5]**
- Q5)*** a) Explain glyoxylate cycle & give its significance. **[5]**
b) Describe composition & functions of microtubules **[5]**

P.T.O.

Q6) Write short note on.(Any two):

[8]

- a) Intermediate filaments.
- b) Sketch & label ultrastructure of nucleus
- c) Protein import in mitochondria.
- d) Genetic system of chloroplast.

