Total No. of Questions : 6]

SEAT No. :

P1429

[Total No. of Pages : 2

[5124]-23
M.Sc.
BIOCHEMISTRY
BCH:273:Membrane Biochemistry & NuclicAcid (2008 Pattern)
BCH:273:Membrane Biochemistry & Genetics (2010 Pattern)
(Semester - II)

Time : 3 Hours] *[Max. Marks : 80*

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***All questions carry equal marks.***
3) ***Figures to the right indicate full marks.***
4) ***Draw neat labelled diagrams wherever necessary.***
5) ***Answer to both sections should be written on seperate answer sheets.***

SECTION - I

(Membrane Biochemistry) (2008 Pattern)

(Membrane Biochemistry) (2010 Pattern)

Q1) Answer any three of following: **[15]**

a) Write in detail role of Na-K-ATPase in membrane transport.

b) Explain specialized mechanism for transport of macromolecules.

c) Explain with a labelled diagram biological membrane.

d) Write in detail receptor mediated endocytosis.

Q2) Attempt any three : **[15]**

a) Explain structure & function of nuclear Pores.

b) Write note on bacterial toxins.

c) What is photo-transferase system.

d) Explain mechanism and role of valinomycin.

P.T.O.

Q3) Write notes on any two: **[10]**

a) ATP - ADP exchanger system.

b) Protein targetting

c) Membrane assymetry.

SECTION - II

(NuclicAcids) (2008 Pattern)

(Genetics) (2010 Pattern)

Q4) Answer any three of the following : **[15]**

a) What is specialized transduction? How it differs from generalized transduction.

b) Write note on Mendelian law of inheritance with examples.

c) Write short on different forms of DNA.

d) Discuss experiment to prove DNA as genetic material.

Q5) Answer any three the following : **[15]**

a) DNA replication is semiconservative. Explain.

b) What are auxotrophs and prototrophs. Add note on application of auxotrophs.

c) Give regulation of lactase operon. Add note on its functions.

d) Explain complementation test

Q6) Write note on any two : **[10]**

a) Tetrad analysis.

b) One-gene-one cistron.

c) Plasmids & their types.