

Total No. of Questions : 8]

SEAT No :

**P 1950**

**[5324]-302**

[Total No. of Pages :2

**M.Sc.**

**BIOCHEMISTRY**

**BCH - 371 : Medical Biochemistry and Immunology  
(2013 Pattern) (Semester-III) (Credit System)**

*Time : 3 Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) Neat labelled diagrams must be drawn wherever necessary.*
- 2) Figures to the right indicate full marks.*
- 3) Question 4 & 8 are compulsory.*
- 4) Solve any two question from Q. No. 1 to 3 and any two questions from Q. No. 5 to 7.*

**SECTION-I**

**(Medical Biochemistry)**

**Q1)** Attempt the following:

- a) Write in brief about anti fungal drugs. [2]
- b) Write a note on mycobacterium & enlist antibiotics used against it. [4]
- c) Describe the life cycle of influenza virus. [4]

**Q2)** Answer the following:

- a) Give the type of mutation seen in sickle cell anaemia be thatering. [2]
- b) Explain in detail extrinsic and intrinsic mechanism of apoplosis. [4]
- c) Elaborate on puronycin and streplonycine. [4]

**Q3)** Answer the following:

- a) What are hemoglobinopathies. [2]
- b) Explain the mode of action of antibiotics that inhibit the biosynthesis of cell wall with example. [4]
- c) Explain LSD. [4]

**P.T.O.**

**Q4)** Answer any one of the following: [5]

- a) Describe critically the interpretation of diagnosis of the following enzyme in serum.
  - i) LDH
  - ii) Creatinine kinase
  - iii) Aspartate transaminase
- b) Describe the concept of programmed cell death.

## **SECTION-II**

### **(Immunology)**

**Q5)** Answer the following:

- a) List out antibodies (IgG) with its special function. [2]
- b) Classify immuno diffusion techniques and elaborate on the procedure of any one technique. [4]
- c) Discuss the etiology and development of AIDS. [4]

**Q6)** Answer the following:

- a) Give the mechanism of phagocytosis. [2]
- b) Explain hypersensitivity reactions in detail. [4]
- c) Enlist the different types of immunity generated in body and explain the correlation between humeral and acquired immunity. [4]

**Q7)** Answer the following:

- a) Explain primary lymphoid organ. [2]
- b) Describe the principle of Immuno fluorescence and give its uses. [4]
- c) Elaborate on the mechanism of development of any one auto immune disease. [4]

**Q8)** Answer any one of the following:

- a) Differentiate between the characteristic feature and production of mono clonal & polyclonal antibodies. [5]
- b) Explain vaccination principle with live and attenuated vaccines. [5]

