PG Even Semester (CBCS) Exam., May—2017

LIFE SCIENCE AND BIOINFORMATICS

(4th Semester)

Course No. : LS–402 (Z) (C)

(Animal Physiology)

Full Marks : 75
Pass Marks : 30

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. With the help of a diagram, explain the role of extrinsic and intrinsic pathways with reference to the mechanism of blood coagulation. 15

OR

2. Describe the structure and functions of hemoglobin. Write a note on sickle-cell anemia. 15

3. What is gaseous exchange? Describe the regulatory mechanism of respiration. 15

OR

4. Write notes on the following : 7½×2=15

(a) Alveolar ventilation

(b) Pulmonary volume and capacities

5. Explain the process of water excretion with the help of a diagram. 15

OR

6. Write notes on the following : 7½×2=15

(a) Nephron

(b) Glomerular filtration

7. Write notes on the following : 7½×2=15

(a) Neurotransmitters

(b) Ultrastructure of muscle fiber

OR

8. Explain the structure and function of various types of glial cells with diagrams. 15

9. Write notes on the following : 7½×2=15

(a) Free radicals

(b) Toxic agents—their dose response relationship

OR

10. How do cells respond to toxic agents? Explain the role of antioxidants in the cellular defence system. 15

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