

[162]

SEAT No. _____

No. of Printed Pages: 02

SARDAR PATEL UNIVERSITY

M. Sc. (Integrated) Biotechnology – Sixth Semester Examination

Saturday, 30th March, 2019

02:00 p.m. to 05:00 p.m.

PS06CIGB06: ANIMAL PHYSIOLOGY

Note: (1) Figures to the right indicate marks.

(2) Draw diagram wherever necessary.

Total marks: 70

Q – 1 Choose the most appropriate alternative for the following:

(08)

1. Bilirubin and biliverdin are present in _____.
(a) pancreatic juice (b) saliva
(c) intestinal juice (d) bile
2. Salivary amylase splits _____ into smaller fragments.
(a) starch (b) proteins
(c) lipids (d) sucrose
3. The phase of heart contraction is called _____.
(a) intervals (b) diastole
(c) systole (d) waves
4. _____ factor is released from damaged tissues and initiates a chain of clotting events.
(a) Tissue factor (b) Fibrin stabilizing factor
(c) Hageman factor (d) Stuart factor
5. Multipolar neurons are present in _____.
(a) inner ear (b) retina of eyes
(c) spinal cord (d) ganglia of cranial nerves
6. An axon conducts nerve impulses _____ the cell body.
(a) away from (b) both towards and away from
(c) towards (d) around
7. The Bowman's capsules are found in _____.
(a) cortex (b) medulla
(c) convoluted tubule (d) loop of henle
8. _____ hormone is secreted by adrenal glands.
(a) Epinephrine (b) T₃
(c) Calcitonin (d) Oxytocin

Q – 2 Attempt ANY SEVEN from the following:

(14)

1. Define digestion. Enlist the different steps involved in the digestion process.
2. What is Bolus?
3. Mention the functions of saliva.
4. Give the functions of blood.
5. What are Anticoagulants?
6. State the functions of Neurons.
7. What is resting membrane potential of neurons?
8. Mention the role of oxytocin.
9. State the composition of urine.

(1)

(P.T.O.) 1

- Q - 3 (a) Give an account on digestion of carbohydrates. (06)
(b) Describe the regulation of gastric secretions. (06)
OR
(b) Write a note on : Composition and functions of pancreatic juice. (06)
- Q - 4 (a) Give an account on : Blood Cells (06)
(b) Write a note on blood clotting mechanism. (06)
OR
(b) Describe the structure of mammalian heart. (06)
- Q - 5 (a) Explain the structure of multipolar neuron. (06)
(b) Describe the conduction of nerve impulse along non-myelinated nerve fiber. (06)
OR
(b) Mention the functions of cerebrum , cerebellum and medulla oblongata. (06)
- Q - 6 (a) Describe the structure of nephron. (06)
(b) Explain the role of hormones of adenohipophysis. (06)
OR
(b) Write a note on structure of kidney. (06)

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2