

[A-80]

Number of Printed Pages = 2

SC

SARDAR PATEL UNIVERSITY
M. Sc. (Integrated) Biotechnology – Sixth Semester Examination
Saturday, 9th April, 2016
2:30 p.m. to 5:30 p.m.
PS06CIGB06: ANIMAL PHYSIOLOGY

Note:

1. Figures to the right indicate mark
2. Draw diagram wherever necessary
3. For MCQ's, students should write both correct option and correct answer against the chosen option

TOTAL MARKS: 70

Q.1 Tick mark / select the correct answer for the following. (Only correct option against given question number needs to be written in provided answer book) **(08 Marks)**

- 1) Which of the following is not considered to be an accessory organ of the digestive system?
 - a) teeth
 - b) rectum
 - c) pancreas
 - d) gall bladder

- 2) Production of bile is one of several important functions of the _____
 - a) Small intestine
 - b) Gall bladder
 - c) Liver
 - d) Pancreas

- 3) Which factor neutralizes the effect of heparin during blood clotting?
 - a) Fibrinogen
 - b) Thromboplastin
 - c) Fibrin stabilising factor
 - d) Labile factor

- 4) _____ vein carry oxygenated blood
 - a) Renal
 - b) Superior vena cava
 - c) Coronary sinus
 - d) Pulmonary vein

- 5) Threshold value for formation of nerve impulse is _____
 - a) -55 mV
 - b) -70 mV
 - c) -45 mV
 - d) +30 mV

- 6) Axon carries nerve impulse _____
 - a) Away from the cyton
 - b) Towards the cyton
 - c) Through the cyton
 - d) None of these

- 7) Which gland regulates the "Biological Clock" of human body?
 - a) Adrenal gland
 - b) Parathyroid gland
 - c) Pineal gland
 - d) Thyroid gland

- 8) The Bowman's capsules are found in _____
 - a) Renal cortex
 - b) Renal medulla
 - c) Renal pyramid
 - d) Renal pelvis

- Q.2** Answer **any seven** from the following: **14**
- a) Enlist the organs of digestive system in sequence.
 - b) Narrate about gastric gland.
 - c) Write about anti-coagulating substances.
 - d) Enlist the functions of blood.
 - e) Give the types of ion channels.
 - f) Write about graded potential
 - g) Enlist the functions of Kidney.
 - h) Write the differences between exocrine glands and endocrine glands.
 - i) Write the physiological effects of ADH on urine formation.
- Q.3** (A) Write an explanatory note on Salivary glands. **6**
- (B) Explain the structure and functions of pancreas. **6**
- OR**
- (B) Describe the process of digestion in small intestine. **6**
- Q.4** (A) Describe the structure and composition of blood. **6**
- (B) Write an explanatory note on blood clotting factors. **6**
- OR**
- (B) Explain four chamber heart with suitable diagram. **6**
- Q.5** (A) Describe the structure of neuron with suitable diagram. **6**
- (B) What is nerve impulse? Explain the different phases of nerve impulse formation. **6**
- OR**
- (B) Enlist the different parts of brain and with detailed function **6**
- Q.6** (A) Explain the structure of kidney with a neat labeled diagram. **6**
- (B) Describe the structure of pituitary gland. Give a brief note on its endocrine secretions. **6**
- OR**
- (B) Write short notes on the following: **6**
- (i) Net Filtration Pressure
 - (ii) Adrenal Cortex

X=X=X