

SEAT No. _____

No. of Printed Pages : 2

[73]

SARDAR PATEL UNIVERSITY EXAMINATION

Day- ~~Monday~~

DATE - 4/01/22

TIME: 2:00- 4:00 P.M.

Course: US03CGEN22

SUBJECT: ANIMAL PHYSIOLOGY

CLASS- S.Y.B.Sc

SEMESTER-III

MAX. MARKS- 70

Q1- Select the correct from the following Multiple Choice: [1 X 10]

[10]

- (i) _____ carries deoxygenated blood to the lungs from the right ventricle.
a) Pulmonary artery b) Pulmonary vein
c) Aorta d) None of the above
- (ii) _____ is a blood disorder where the haemoglobin is defective
a) Heterochromia b) Alopecia c) Haemolysis d) Sickle cell anaemia
- (iii) The impulses that stimulate the heartbeat originate in the
a) sinoatrial node b) systole c) atrioventricular node d) diastole
- (iv) Which of the following is a chronic respiratory disorder caused by smoking?
a) Emphysema b) Asthma c) Respiratory alkalosis d) Respiratory acidosis
- (v) Which of the following hormones are responsible for the "fight-or-flight" response?
a) Epinephrine and norepinephrine b) Insulin and glucagon.
c) Estrogen and progesterone d) Thyroxin and melatonin.
- (vi) Which of the following organs only receives oxygenated blood?
a) Lungs b) Gills c) Liver d) Spleen
- (vii) Which of the following has both endocrine and exocrine functions?
a) anterior pituitary b) thyroid c) adrenal medulla d) pancreas
- (viii) The clusters of cells in the pancreas that produce hormones are the:
a) Nodules. b) Islets of Langerhans.
c) Pancreatic medulla. d) Pancreatic cortex.
- (ix) Desert lizards are havingtype of skin
a) Hydroscopic b) Hydrophobic c) Hygroscopic d) None of the above
- (x) Which of the following parasites is responsible for the cause of African sleeping sickness
a) Leishmania b) Trypanosoma c) Entamoeba d) Trichomonas

Q2- Fill in the blanks and True –False (1X8)

[8]

- (i) Most of the carbon dioxide produced in the tissues is transported to the lungs as.....
- (ii) Cushing Syndrome is due to the hyper secretion of
- (iii)is responsible for increasing red blood cell precursors.
- (iv) The vector for sleeping sickness is.....
- (v) During exercise, the heart rate increases and the blood pressure decreases [TRUE/FALSE]
- (vi) People get infected with Leishmania parasites through the bite of an infected female sandfly. [TRUE/FALSE]

[4]

[P.T.O.]

- (vii) The posterior pituitary stores and releases: Oxytocin and antidiuretic hormone (ADH).
[TRUE/FALSE]
- (viii) Correct order of structures in the respiratory passageways → pharynx, larynx, trachea, bronchi, bronchioles
[TRUE/FALSE]

Q3- Short Answer Questions (Attempt any 10 out of 12) (10X2) [20]

- (i) Name all the heart valves with their locations.
- (ii) Name all the clotting factors responsible for blood clotting.
- (iii) Give the functions of the peripheral vascular system?
- (iv) What is COPD? Give detail.
- (v) What is Electrocardiogram? Give its significance.
- (vi) Write 4 differences between steroid hormones and peptide hormones
- (vii) Explain the effect of hyper secretion and hypo secretion of thyroid gland
- (viii) What are the functions of the mucus and cilia on the walls of the trachea?
- (ix) Give the symptoms and cause of Addison disease.
- (x) Define camouflage with an example.
- (xi) Define Mimicry with examples.
- (xii) How is *Balantidium coli* transmitted?

Q4- Long Answer Questions (attempt any 4 out of 8) (4X8) [32]

- (i) Describe the three general components of the circulatory system in humans.
- (ii) Write a detailed note on coronary artery disease.
- (iii) Describe the anatomy of the lung along with figure.
- (iv) Write a note on disease associated with respiratory system.
- (v) Explain the locations, hormonal secretions and functions of anterior and posterior pituitary gland.
- (vi) What are hormones? Discuss its types, mechanism of action and significance.
- (vii) Discuss with example about fresh water and burrowing adaptation.
- (viii) Explain the life cycle with all the stages for *Enterobius vermicularis*

————— 8 —————