

Total No. of Printed Pages: 2

SUBJECT CODE NO: - SS-6547
FACULTY OF SCIENCE AND TECHNOLOGY
M.Sc. (Zoology) (Sem-IV)
Examination May / June - 2023
General and Comparative Physiology ZOO-402

[Time: 3:00 Hours]

[Max. Marks: 80]

Please check whether you have got the right question paper.

N. B

- 1) All questions carry equal marks.
- 2) Attempt any five questions from part B.

Part A

Q1 Attempt the following multiple choice questions

20

- 1) Which of the following is a function of the kidney.
 - a) Release of hormones
 - b) Maintenance of plasma pH
 - c) Maintenance of pH(Electrolyte)
 - d) All of these
- 2) Which of the following is not required for the light independent reaction
 - a) NADPH
 - b) ATP
 - c) Oxygen
 - d) RuBP a five carbon sugar
- 3) During ovulation all of the following occur except
 - a) Rapture of graffian follicle
 - b) Corpus luteum is formed
 - c) Estrogen production reaches its lowest point
 - d) FSH and LH plasma level surge
- 4) Which hormone bind to intracellular receptor
 - a) Insulin
 - b) Growth hormone
 - c) Triiodothyronine
 - d) Thyroid stimulating hormone
- 5) The tidal volume in normal man at rest is about.....
 - a) 0.5 L
 - b) 1.2 L
 - c) 2.5 L
 - d) 4.9 L
- 6) Radioactive iodine can be incorporate into.....
 - a) Serine
 - b) Threonine
 - c) Tyrosine
 - d) Leucine
- 7) The receptor for which of the following hormone is a transcription factor
 - a) Insulin
 - b) Glucagon
 - c) Estradiol
 - d) Adrenaline
- 8) The majority of reabsorption occurs in the
 - a) Renal capsule
 - b) Proximal convoluted tubule
 - c) Collecting duct
 - d) Ascending limb of the loop of Henle

- 9) The gall bladder.....
- | | |
|-------------------------------|----------------------------|
| a) Produce bile | b) Is attached to pancreas |
| c) Store and concentrate bile | d) Produce cholecystokinin |
- 10) The fighter fight response is developed by the hormone of the
- | | |
|-------------------|-------------------------------|
| a) Hypothalamus | b) Adrenal medulla |
| c) Adrenal cortex | d) Adrenal pancreatic complex |

Part B

- Q2 Explain excretory system with neat and labelled diagram and their regulation **12**
- Q3 What are digestion? Explain coordination of digestive activities **12**
- Q4 Describe Growth, molting and metamorphosis in the vertebrates **12**
- Q5 Define respiration. Differentiate between aquatic and areal breathing with suitable example **12**
- Q6 Describe the comparative anatomy of heart structure **12**
- Q7 Explain oxygen as limiting factor in the environment **12**
- Q8 Attempt any two **12**
- | |
|--|
| a) Write a short note on coagulation of blood |
| b) Comparative physiology of excretion |
| c) Regulation of electrolyte balance and acid base balance |