

B.N. Bandodkar College of Science, Thane

Semester I End Examination November 2014

USHS 104

Duration 2 hrs 30 min

Max. Marks-75

- N.B.
- 1) All Questions are Compulsory.
 - 2) Every Question has internal options.
 - 3) Figures to right indicate full marks.

- Q.1) A) Answer the following in one sentence:--(any two): 2
- i) Enlist various types of epithelial tissues.
 - ii) Give functions of bone.
 - iii) Enlist various types of cartilages.
 - iv) Give the functions of blood.
- B) Select the right option from the given alternatives & rewrite the sentence : 3
(any three)
- i) The tissue macrophage is a modified _____.
a) Basophil b) Erythrocyte c) Monocyte d) Neutrophil.
 - ii) The retroperitoneal organ amongst the following is _____.
a) Urethra b) Urinary bladder c) Spleen d) Kidney
 - iii) The pleural membranes form the covering of _____.
a) Lung b) Liver c) Stomach d) Testis
 - iv) Pulmonary aorta communicates with _____.
a) Left atrium b) Left ventricle c) Right atrium d) Right ventricle
 - ii) The cells which are present in the sinusoids of liver are _____.
a) Alpha cells of Langerhans b) Mucous cells c) Kupffer's cells d) Schwann's cells
 - iii) Neurohypophysis is formed by all of the following regions EXCEPT _____.
a) Infundibulum b) Median eminence c) Pars nervosa d) Pars intermedia
- C) -i) Describe the transverse section of mammalian bone.
OR
ii) Describe the longitudinal section of kidney 5
ii) Give various functions of agranulocytes. 2
- OR
- ii) Give various functions of mast cells of connective tissue.
- D) i) Draw longitudinal, proportionate & well labeled section of human heart. 5
OR
ii) Sketch & label vertical section of human eye.
- ii) Enlist the cells of islets of Langerhans along with their secretions. 3
- OR
- ii) Give functions of ear ossicles, semicircular canals & cochlea.

- Q.2) ✓ i) Distinguish between atlas & axis vertebrae. 4
 OR
 i) Distinguish between thoracic & lumbar vertebrae.
 ii) Sketch and label scapula. 3
 OR
 ii) Sketch and label Sternum.
 B) Describe the structure of striated muscles 4
 OR
 B) Describe the structure of cardiac muscles
 C) Explain the terms flexion, extension with examples and names of muscles involved. 4
 OR
 C) Describe the bones of thigh and shank regions.
 D) ✓ Describe the term external & internal respiration. 3
 OR
 i) Give schematic representation of oogenesis.
 ii) Describe the functions of bile. 2
 OR
 ii) ✓ Sketch and label t.s. of testis.
- Q3) ✓ A) Describe the terms innate immunity. Write a note on anatomical barriers. 4
 OR
 A) Describe the process of ultra filtration.
 B) Describe the post ovulatory phase of menstrual cycle. 3
 OR
 B) ✓ Distinguish between spermatogenesis and oogenesis.
 C) Describe the terms cleavage, phagocytosis, coronary circulation, negative feedback control. 4
 OR
 C) ✓ Explain the process of inspiration and expiration. 4
 OR
 D) i). Explain mechanism of ADH control of urine formation. 3
 OR
 i) ✓ Describe the cardiac cycle.
 ii.) Write a note on antigen presenting cell. 2
 OR
 ii) ✓ Sketch and label structure of antibody.

Q.4) Attempt any three of the following questions:-

15

A) Describe with the neat and labeled diagram, transverse section of thyroid gland.

B) Enlist with number, various bones of arm or upper extremity with the pair of movements.

C) Describe the transport of CO_2 during respiration.

D) Sketch and label vertical section of testis. Name various hormones involved in maturation of testis.

E) Explain the various types of acquired active immunity.

F) Enlist various fat soluble vitamins. Add a note on their deficiency disorders with few symptoms.
