



Instructions –

- (1) All Questions are *Compulsory*.
- (2) Answer each next main Question on a new page.
- (3) Illustrate your answers with neat sketches wherever necessary.
- (4) Figures to the right indicate full marks.
- (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.
- (6) In case student has attempted sub-question of question no. 3 more than once, only first attempt should be considered for assessment.

Marks

<p>1. Attempt any <u>SIX</u> of the following:</p> <ol style="list-style-type: none"> a) Name the bones in the appendicular skeleton. Describe various types of joints. b) Write the composition and functions of Blood. c) With neat well labelled diagram discuss anatomy and flow of blood through heart. d) Describe the various functions of liver. e) Name the parts of brain. Describe the structure and functions of cerebrum with diagram. f) With neat well labelled diagram describe the structure of Ear. g) With neat well labelled diagram give the anatomical features of kidney. Enlist the functions of kidneys. <p>2. Attempt any <u>TEN</u> of the following:</p> <ol style="list-style-type: none"> a) Draw a well labelled diagram of cell and it's organelles. b) Define Tissue. Explain epithelial tissue in detail. c) Define blood clot. Illustrate the mechanism of blood clotting in detail. d) Describe the structure and functions of lymph node. e) Discuss the events of cardiac cycle in detail. f) Define respiration. Discuss physiology of respiration in detail. g) Give reason - pancreas is called EXO-Endocrine gland. h) Define reflex action and give it's two examples. Draw a well labelled diagram of reflex arc. i) Name any four endocrine glands. Name the hormones secreted by pituitary gland. j) Summarise the hyposecretion and hypersecretion effects of thyroid gland. k) Draw a neat well labelled diagram of female reproductive system. Enlist the functions of female reproductive system. 	30 30 30 30 30 30 30 30 30 30 30 30
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3. Attempt ALL of the following :

- a) Define Anatomy.
- b) The cavity within a bone is called as -----.
- c) Enlist the types of specialized connective tissue.
- d) The lower jaw is known as –
 - i) Maxilla
 - ii) Ethmoid bone
 - iii) Mandible
 - iv) Clavicle
- e) All of the following are Hinge Joints excepts –
 - i) Elbow Joint
 - ii) Knee Joint
 - iii) Joints between phalanges
 - iv) Wrist Joint
- f) The normal Diastolic Blood pressure in adult human being is -----.
- g) ----- are the blood vessels which transport blood away from heart.
- h) Define Residual volume.
- i) ----- is a tubular passage way for air also called as wind pipe.
- j) The duct of liver and pancreas open into –
 - i) Ileum
 - ii) Ischium
 - iii) Colon
 - iv) Duodenum
- k) Define neuromuscular junction
- l) The outer covering of the striated muscle fibre is called -----.
- m) Peripheral nervous system consist of ----- pairs of spinal nerves.
- n) ----- Nerves convey impulses from brain to other parts of the body.
- o) Which is the following is a part of middle ear –
 - i) Malleus
 - ii) Cochlea
 - iii) Vestibule
 - iv) Semicircular canals
- p) The central transparent region of eye which allows light to enter is called as -----.
- q) Olfactory nerves are present in -----.
- r) ----- system is responsible for maintenance of blood pressure.
- s) Name the site in male reproductive system where sperm maturation takes place.
- t) In male the sex hormones that maintains sexual organs and secondary sexual characteristics is –
 - i) Relaxin
 - ii) Testosterone
 - iii) Estrogen
 - iv) All of the above.