

Duration : 3 hours

(Total Marks : 75)

N.B. 1. All questions are compulsory

2. Figures to the right indicate full marks.

QI. Choose the correct alternative for the following.

20 M

- 1) _____ is one of the enlargements seen when the spinal cord is viewed externally.
 - a. Thoracic enlargement
 - b. Cervical enlargement
 - c. Caudal enlargement
 - d. Sacral enlargement
- 2) _____ cells secrete intrinsic factor for vit B12 absorption.
 - a. Chief
 - b. Parietal
 - c. Mucous neck
 - d. G
- 2) The additional volume of air inhaled by taking a deep breath is _____.
 - a. Inspiratory capacity
 - b. Inspiratory reserve volume
 - c. Expiratory reserve volume
 - d. Vital capacity
- 4) Kidneys produce the two hormones _____ and _____.
 - a. Thymosin and Calcitriol
 - b. Glucocorticoids and erythropoietin
 - c. Calcitriol and erythropoietin
 - d. Thymosin & Glucocorticoids
- 5) _____ is an example of Exocrine gland
 - a. Sudoriferous
 - b. Thymus
 - c. Pancreas
 - d. Ovaries
- 6) Fluid secreted by the seminal vesicles normally constitutes about _____ of the volume of semen.
 - a. 40 %
 - b. 50 %
 - c. 60 %
 - d. 100 %
- 7) _____ is the neuroglia which acts as phagocytes in CNS.
 - a. Oligodendrocyte
 - b. Astrocyte
 - c. Microglia
 - d. Schwann cells
- 8) During the _____ phase of digestion, the smell, sight, thought, or initial taste of food activates neural centers.
 - a. Gastric
 - b. Cephalic
 - c. Intestinal
 - d. Mechanical

- 9) The basic rhythm of respiration is controlled by _____ area.
- Pneumotaxic
 - Apneustic
 - Medullary rhythmicity
 - Cough reflex
- 10) Voiding Phase means.
- Transfer of materials from peritubular capillaries to renal tubular lumen
 - A relaxed bladder in which urine slowly fills in bladder
 - A contracted bladder that forces the external sphincter open and discharges urine through the urethra
 - Solutes and water are removed from the tubular fluid and transported into the blood
- 11) Thyroid-stimulating hormone is secreted by _____ glands
- Thyroid
 - Parathyroid
 - Pituitary
 - Adrenal
- 12) _____ produces progesterone, estrogens, relaxin, and inhibin hormone
- Corpus luteum
 - Corpus albicans
 - Corpus haemorrhagicum
 - Germinal epithelium
- 13) Which of these is an accessory reproductive gland in male mammals
- Thyroid
 - Ovary
 - Gastric gland
 - Prostate gland
- 14) _____ hormone is thought to promote sleepiness
- Thymosin
 - Melatonin
 - Inhibin
 - Glucocorticoids
- 15) The _____ parts of the female reproductive system is homologous to the glans penis in males.
- Labia minora
 - Labia majora
 - Clitoris
 - Mons pubis
- 16) _____ is the inhalation and exhalation of air and involves the exchange of air between the atmosphere and the alveoli of the lungs.
- Pulmonary ventilation
 - Internal respiration
 - Tissue respiration
 - External respiration

- 17) The four layers of GI tract from deep to superficial are _____
- mucosa, submucosa, muscularis, and serosa
 - submucosa, muscularis, mucosa and serosa
 - muscularis, mucosa, submucosa, and serosa
 - serosa, mucosa, submucosa and muscularis
- 18) Which of these areas is the association area in the cerebrum?
- Broca's speech area
 - Primary visual area
 - Primary auditory area
 - Wernicke's area
- 19) A dome shaped portion superior to the uterine tubes is called as _____
- Body
 - Fundus
 - Cervix
 - Vagina
- 20) Contraction of the dartos muscle causes the scrotum to become tight which _____
- Reduces heat loss
 - Absorb body heat
 - Produce sperm
 - Helps in sperm maturation

II Answer the following (Any 2 out of 3)

20 M

- Draw a neat labelled diagram of a neuron. Explain the phases of action potential generation in neuron.
- Draw a neat labelled diagram of the respiratory system and write a note on respiratory centers.
- Define and classify hormone and describe location and structure of thyroid gland, synthesis, release and storage of thyroid hormones.

III Answer the following (Any 7 out of 9)

35 M

- Describe the anatomy and structure of the cerebrum.
- Write in detail the composition, function and formation of Cerebrospinal fluid.
- Draw a neat labelled diagram of histology of the small intestine, and mention the anatomical parts of the small intestine.
- Mention the phases of digestion and describe any two in detail.
- Define Pulmonary ventilation and explain the mechanism of inhalation.
- With the help of neat labelled diagram explain the structure of the urinary bladder.
- Elaborate in detail pancreas as endocrine gland and exocrine gland and describe the regulation of insulin and glucagon secretion.
- Enlist the organs involved in the female reproductive system and describe histology of the ovary.
- Explain in detail various ducts of the male reproductive system.
