

3 Hours

20

Q1. Choose appropriate option for following multiple choice based questions.

- 1 \_\_\_\_\_, clusters of rough endoplasmic reticulum found in neuronal cell bodies
  - a Soma
  - b Myelin sheath
  - c Nissl bodies
  - d Perikaryon
  
- 2 Mucous cells of the gastrointestinal tract are also known as \_\_\_\_\_
  - a Goblet cells
  - b Chief cells
  - c Parietal cell
  - d Entero endocrine cell
  
- 3 \_\_\_\_\_ muscle is primarily responsible for inspiration
  - a Detrusor Muscle
  - b Myometrium
  - c Deltoid muscle
  - d Diaphragm
  
- 4 Which one among the following is responsible for the final adjustments to urine composition?
  - a Proximal convoluted tubule
  - b Loop of Henle
  - c Collecting duct
  - d Renal corpuscle
  
- 5 Select the hormone secreted by chromaffin cells
  - a Calcitonin
  - b Epinephrine
  - c Insulin
  - d Aldosterone
  
- 6 \_\_\_\_\_ hormone stimulates the growth & maturation of follicles in the ovaries
  - a Estrogen
  - b Progesterone
  - c Follicle Stimulating Hormone (FSH)
  - d Lutenizing hormone (LH)



- 7 The type of neuroglia found in the peripheral nervous system is \_\_\_\_\_
- a Astrocytes cell
  - b Oligodendrocytes cell
  - c Microglia cell
  - d Schwann cell
- 8 The \_\_\_\_\_ cells in the liver are responsible for the phagocytosis of old red blood cells, white blood cells, and certain bacteria.
- a Hepatocytes
  - b Kupffer
  - c Clara
  - d Paneth
- 9 \_\_\_\_\_ connects the middle ear to nasopharynx
- a Oval window
  - b Eustachian tube
  - c Cochlea
  - d Tympanic membrane
- 10 Which of the following hormone reduces glomerular filtration rate (GFR)
- a Angiotensin II
  - b Atrial natriuretic peptide
  - c Parathyroid hormone
  - d Glucagon
- 11 \_\_\_\_\_ is an example of lipid soluble hormone
- a Epinephrine
  - b Antidiuretic hormone
  - c Insulin
  - d Cortisol
- 12 What is the primary function of the corpus luteum?
- a To stimulate ovulation
  - b To secrete progesterone
  - c To Regulate Menstrual Cycle
  - d To support the maturation of the oocyte
- 13 During which phase of the menstrual cycle does the Graafian follicle typically mature?
- a Menstrual phase
  - b Luteal phase
  - c Ovulatory phase
  - d Follicular phase



- 14 \_\_\_\_\_ lobe of cerebrum is the center of reasoning, planning, emotion . movement and speech
- Frontal
  - Parietal
  - Occipital
  - Temporal
- 15 \_\_\_\_\_ enzyme, released in the small intestine, transforms trypsinogen into trypsin.
- Carboxypeptidase
  - Enterokinase
  - Ribonuclease
  - Gastric amylase
- 16 Which structure is commonly known as the voice box?
- Bronchioles
  - Larynx
  - Alveoli
  - Trachea
- 17 Where does spermatogenesis occur?
- Prostate gland
  - Vas deferens
  - Spermatic Cord
  - Seminiferous tubules
- 18 \_\_\_\_\_ provides energy for sperm production and is the component of the seminal fluid secreted by the seminal vesicles.
- Fructose
  - Prostaglandin
  - Thromboxane
  - Estrogen
- 19 Which of the pancreatic islet cell secrete glucagon
- Alpha cells
  - Beta cells
  - Delta cells
  - F cells
- 20 The pH of seminal fluid is typically ranging from \_\_\_\_\_
- 1.2 - 3
  - 4.7 - 5.4
  - 9.1- 9.8
  - 7.2-7.7



Q2 A. Attempt the following (Any TWO).

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- a Explain in detail the anatomy and physiology of the Diencephalon
- b i) Explain in detail the process of inhalation  
ii) Write a note on role of kidney in acid-base balance.
- c Define and classify hormone. Explain the steps involved in formation of thyroid hormone and write the physiological actions of thyroid hormone.

Q2 B. Attempt the following (Any SEVEN).

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- a Write a note on Medulla oblongata
  - b Describe in detail different phases of neuronal action potential.
  - c Explain in detail the process of acid production in the stomach.
  - d Describe the process of chemical digestion in small intestine.
  - e With the help of neat labeled diagram, describe the process of external respiration.
  - f Write a note on functions of the kidney.
  - g Describe the renin-angiotensin-aldosterone (RAA) system.
  - h With the help of neat labeled diagram, explain the process of oogenesis.
  - i Write a note on accessory glands associated with male reproductive System.
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