



**B. Sc-Part (Semester –I) CBCS
Examination- March/April 2022
Subject- Zoology (Paper No-II,DSC-16A)
Paper title-Animal Physiology**

Question Bank

Q.1 Multiple choice question

- 1) Main function of the large intestine is -----
 - a) Absorption
 - b) absorption of food
 - c) Digestion of fats
 - d) storage of food
- 2) Anaerobic respiration occurs in-----
 - a) Taenia
 - b) Fasciola
 - c) Ascaris
 - d) none of these
- 3) Larynx is comprised of-----cartilages
 - a) 5
 - b) 9
 - c) 10
 - d) 6
- 4) In which part of nephron, absorption of filtrate is maximum?
 - a) Distal convoluted tubule
 - b) Proximal convoluted tubule
 - c) Glomerulus
 - d) Henles loop
- 5) Threshold stimulus increases permeability of plasma membrane for-----ions.
 - a) Na⁺
 - b) K⁺
 - c) Cl⁻
 - d) Ca⁺⁺
- 6) Lipochrome granules are-----colour.
 - a) Yellow
 - b) Red
 - c) Green
 - d) Blue
- 7) Nissl's granules are absent in -----

- a) Axon b) Dendron c) Cyton d) Both a and b
- 8) The potential maintained across the neuron membrane during the resting state is --
- a) +70 mV b) -70mV c) 0.5mV d) -30 mV
- 9) Repolarisation of neuron occurs due to-----
- a) Electrical force b) activation of Na⁺ K⁺ pump
c) Concentration gradient force d) cl⁻ ions
- 10) Axon arises from the part of nerve cell called -----
- a) Axon hillock b) Lipochrome c) melanin d) Dendron
- 11) Smooth muscle occurs in-----
- a) vein b) artery c) uterus d) all of these
- 12) The cytoplasm of a striated muscle fibre is termed as -----
- a) Sacroplasm b) metamere c) sarcomere d) neuromere
- 13) Titin connects -----line of skeleton muscle
- a) Z disc b) S1 c) S2 d) H zone
- 14) Fascicles are made of -----muscle fibres.
- a) 100 – 1000 b) 50 – 100 c) 1500 – 2000 d) 25-75
- 15) Impulse travels through nerve fibre in a single direction because of -----

- a) synapse b) axon c) Dendron d) Nissl's granules
- 16) In human body there are about-----known skeleton muscle.
- a) 650 b) 600 c) 635 d) 550
- 17) ----- gives banded appearance to the skeletal muscle.
- a) Sarcomere b) Sarcoplasm
c) Sarcosome d) Sarcoplasmic reticulum
- 18) Actin is made of -----protein.

- a) G-actin protein b) filamentous protein
c) Myosin protein d) non of these
- 19) The neuron cell body is made of----- micrometer.
a) 5-10 b) 50-100 c) 3-100 d) 75-100
- 20) In unipolar neuron there are about----- cytoplasmic process.
a) 2 b) 1 c) many d) 3
- 21) The dark band in sarcomere is denoted by -----band
a) A b) I c) Z d) H
- 22) The digestion of starch starts in the -----
a) Liver b) Stomach c) Intestine d) Mouth
- 23) The digestive enzyme present in saliva is -----
a) Ptyalin b) Amylase c) Lipase d) Trypsin
- 24) Proenzyme pepsinogen is activated by -----
a) Enterocrinin b) Gastrin
c) Enterokinase d)HCL
- 25) Pancreatic juice contains -----
a) "Trypsin, pepsin and amylase "
b)"Pepsin, trypsin and maltase "
c)"Trypsin, lipase and maltase "
d) "Trypsin, chymotrypsin lipase and amylase"
- 26) Main function of the large intestine is -----
a) Absorption of water b) Absorption of food
c) Digestion of fats d)Storage of stool
- 27) Troponin has ----- number of subunits
a) Two b) Three c) Four d) Five

- 28) "In mammals, surface of intestine is increased due to presence of -----"
- a) Crypts of lieberkuvin b) Brunners glands
c) Villi d) all of these
- 29) A process of exchange of oxygen from the atmosphere with carbon dioxide produced by the cell is called.....
- a) Excretion b) Secretion c) Oxidation d) Breathing
- 30)..... Are the primary sites of exchange of gases.
- a) RBCs b)Trachea c) Tissues d)Alveoli
- 31) During the inspiration the diaphragm -----
- a) Expands b) Show no change
c) Contracts and flattens d) Relaxes to become dome shaped
- 32) ----- is the functional unit of kidney.
- a) Hilum b) Neurons c) Nephrons d)Medulla
- 33) Correct sequence of urine formation is -----
- a) "Filtration, Reabsorption, Secretion "
b) "Secretion, Reabsorption, Filtration "
c) "Reabsorption, Secretion, Filtration "
d) "Reabsorption, Filtration, Secretion"
- 34) Ability of the kidneys for the production of concentrated urine is dependent on -----
- a) Active transport b) Passive transport
c) Diffusion d) Counter current mechanism
- 35) Water Reabsorption in the DCT and Collecting duct is operated under the influence of -----
- a) Aldesteron b) ADH c) Renin d) Angiotensin
- 36) Which of the following part of nephron is impermeable to water -----
- a) PCT
b) DCT

- c) Ascending limb of loop of Henle
- d) Descending limb of loop of Henle

37) Loop of Henle is surrounded by capillaries is called -----

- a) Peritubular capillaries b) Vasa recta
- c) Both a and b d) None of the above

38) The yellow colour of the urine is due to presence of -----

- a) Urochrome b) Uric acid
- c) Cholesterol d) Urea

39) Nissls granules are absent in -----

- a) Axon b) Dendron c) Cyton d) Both a and b

40) Repolarisation of neuron occurs due to ----- Electrical force

- a) Activation of Na b) K⁺ pump
- c) Concentration gradient force d) Cl⁻ ions

41) Axon arises from the part of nerve cell called -----

- a) Axon hillock b) Lipochrome c) Melanin d) Dendron

42) Smooth muscle occurs in -----

- a) Vein b) Artery c) Uterus d) All of these

43) The cytoplasm of a striated muscle fibre is termed as -----

- a) Sarcoplasm b) Metamere c) Sarcomere d) Neuromere

44) Impulse travels through nerve fibre in a single direction because of -----

- a) Synapse b) Axon c) Dendron d) Nissls granules

45) In human body there are about ----- known skeleton muscle.

- a) 650 b) 600 c) 635 d) 550

46) ----- gives banded appearance to the skeletal muscle.

- a) Sarcomere b) Sarcoplasm
- c) Sarcosome d) Sarcoplasmic reticulum

47) A nerve cell in which there is not myelin sheath surrounding its axon is called -----

- a) Myelinated neuron
- b) Non myelinated neuron
- c) Bipolar neuron
- d) Unipolar neuron

48) Collecting tubule is lined by-----

- a) Squamous epithelium
- b) Columnar epithelium
- c) Cuboidal epithelium
- d) Cuboidal & Columnar epithelium\

49) The reabsorption of water in the kidney is under the control of ----- hormone.

- a) STH
- B) ACTH
- C) LH
- D) ADH

50) Titin is also known as -----

- a) Connecting protein
- b) digestive protein
- c) Both of these
- d) none of these

Q.2 Long answer question

- 1) Describe human respiratory system in brief
- 2) Define absorption. Describe the process of absorption of fats in the gastro intestinal tract
- 3) Define digestion. Describe mechanism of digestion of food in intestine
- 4) What is impulse? Explain it with suitable diagrams and how it propagates through neuron
- 5) classify the neurons on the basis of its cytological process morphological features and functions with suitable diagrams
- 6) Explain the mechanism of muscle contraction with the help of diagrams
- 7) Describe neuromuscular junction and state its significance
- 8) Define the structure of nephron and describe mechanism of urine formation
- 9) Describe cardiac cycle of human heart

10) Define ultra structure of a skeletal muscle with help of necessary diagram.

Q.3 Write short answer question

- 1) Nephron
- 2) Absorption of proteins
- 3) Neuroplasm
- 4) Role of Bile
- 5) Counter current mechanism
- 6) Leucocytes
- 7) External structure of mammal heart
- 8) Function of heart
- 9) Explain Bohrs effect
- 10) Explain chloride shift
- 11) Explain air conducting part of human respiratory system
- 12) Give mechanism of inspiration and expiration in human
- 13) Explain transport of Oxygen and carbon di oxide between blood and tissue
- 14) Describe the structure of nephron and counter –current mechanism of urine formation
- 15) Describe the Cardiac cycle of heart
- 16) Describe in human respiratory system
- 17) Explain in brief structure of Neuron
- 18) Resting potential of a neuron
- 19) Functional types of neurons
- 20) Explain types of muscle

