

The Bodwad Sarvajanic Co-op. Education Society Ltd. Bodwad Sanchalit  
**Arts, Commerce and Science College, Bodwad**

**Question Bank**

Class- S.Y.B.Sc. (CBCS)

Semester- III

Subject- Zoology-I

Paper Name: Zoo-301 Physiology

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**Unit-1**

- \_\_\_\_\_ is the largest cell in the vertebrate's body.  
a. Smooth Muscles    b. Skeletal Muscle    c. Cardiac Muscle    **d. Nerve Cell**
- \_\_\_\_\_ is the basic unit of nervous system  
a. **Neuron**    b. Brain    c. Spinal cord    d. Ganglion
- \_\_\_\_\_ is the structural and functional unit of Nervous tissue.  
a. Smooth Muscles    b. Skeletal Muscle    c. Cardiac Muscle    **d. Neuron**
- It is estimated that there are \_\_\_\_\_ Neurons in the human Nervous System  
a.  $10^1$  to  $10^{10}$     **b.  $10^1$  to  $10^{11}$**     c.  $10^1$  to  $10^{12}$     d.  $10^1$  to  $10^{13}$
- Due to the absence of \_\_\_\_\_ neuron lost the power to divide.  
a. Chromosome    **b. Centrosome**    c. Centromere    d. Chromomer
- In neuroplasm of cyton numerous small basophilic bodies called \_\_\_\_\_ granules.  
a. **Nissl's**    b. Nestal    c. Nissam    d. Nisslars
- A highly branched dendrite can be send up to \_\_\_\_\_ signals to a single interneuron.  
a. 1000    **b. 10000**    c. 100000    d. 1000000
- The place of origin of the axon is like a conical projection, known as axon \_\_\_\_\_.  
a. Hook    b. Hillock    **c. Hillock**    d. None
- Difference in charge in either side of the membrane of a resting neuron is the \_\_\_\_\_ potential.  
a. **Resting**    b. Graded    c. Polarized    d. Repolarized
- During excitation \_\_\_\_\_ is dislodged from its binding site and the permeability to sodium is increased.  
a. Potassium    b. Chloride    c. Hydrogen    **d. Calcium**
- Transmission of the impulses along neurons is \_\_\_\_\_.  
a. Multidirectional    b. Bidirectional    **c. Unidirectional**    d. Randomly
- In medullated nerve fibres, the impulse \_\_\_\_\_ from node to node, it is called salutatory propagation.  
a. **Jumps**    b. Spread    c. Increase    d. Amplify
- The sarcomere, which is the segment between 2 successive \_\_\_\_\_ lines.  
a. A    b. I    **c. Z**    d. H

## Unit-2

14. \_\_\_\_\_ is a process of enzymatic conversion of undiffusible form of food into diffusible or simpler form for absorption and assimilation.
- a. **Digestion**      b. Consumption      c. Conversion      d. Combustion
15. The wall of gastrointestinal tract is protected by \_\_\_\_\_
- a. **Mucous**      b. Saliva      c. Enzymes      d. Hormones
16. The space or pouch between the lips and jaws is the \_\_\_\_\_
- a. Cavity      b. Coelom      **c. Vestibule**      d. Mouth
17. The stensen's duct is also called \_\_\_\_\_ duct.
- a. Rivinus      b. Wharton's      **c. Parotid**      d. None
18. Breakdown of starch to glucose is carried out by \_\_\_\_\_
- a. Gastric juice      **b. Saliva**      c. Bile      d. Lipase
19. The pH of saliva is \_\_\_\_\_
- a. **6.8**      b. 8.6      c. 7.8      d. 5.6
20. Chief cells produces the enzymes \_\_\_\_\_ and renin.
- a. Zymase      b. kimase      **c. pepsin**      d. alkaline
21. \_\_\_\_\_ cells of gastric gland secretes hydrochloric acid.
- a. Mucous      b. peptic      **c. parietal**      d. argentaffin
22. The mixing contractions serve to mix the \_\_\_\_\_ with intestinal secretion.
- a. Chyme**      b. chemicals      c. enzymes      d. dry food
23. All the hepatic cells continually produce a \_\_\_\_\_
- a. Juice      **b. bile**      c. fluid      d. hormones
24. Food generally takes \_\_\_\_\_ hours to move through the small intestine.
- a. 2-3      **b. 3-6**      c. 6-8      d. more than 8
25. The \_\_\_\_\_ has a major role in completion of the digestive processes and absorption of the final products.
- a. Oesophagus      b. Stomach      **c. Small intestine**      d. Large intestine
26. In digestion lipids are converted into \_\_\_\_\_ and glycerol.
- a. Amino acid      b. Fructose      c. Glucose      **d. Fatty acid**
27. The human body does not possess enzymes necessary for \_\_\_\_\_ digestion.
- a. **Cellulose**      b. Starch      c. Lactose      d. Sucrose
28. Lactose is broken down into glucose and \_\_\_\_\_
- a. **Galactose**      b. Fructose      c. Maltose      d. Sucrose
29. Glucose is synthesized from proteins is known as \_\_\_\_\_
- a. Glucogenesis      b. Glucolysis      c. Glucogenolysis      **d. Gluconeogenesis**
30. Sucrose is mainly absorbed in the \_\_\_\_\_ in man.
- a. Jejunum**      b. ileum      c. duodenum      d. small intestine
31. Digestion of protein is initiated in the \_\_\_\_\_ by the action of the enzyme pepsin.
- a. Mouth      **b. Stomach**      c. Oesophagus      d. Small intestine
32. The milk is clotted by gastric enzyme known as \_\_\_\_\_
- a. Pepsinogen      **b. Renin**      c. Pepsin      d. Trypsin
33. \_\_\_\_\_ gland's some part acts as exocrine and some as a endocrine in function.
- a. Thyroid      b. Liver      **c. Pancreatic**      d. Thymus

34. Nearly \_\_\_\_\_ ml pancreatic juice is secreted daily in human beings.  
 a. 100-500                      **b. 1000-1500**                      c. 2000-2500                      d. more than 2500
35. Trypsin is activated by an intestinal enzyme \_\_\_\_\_  
 a. Lactase                      b. Amylase                      c. Maltase                      **d. Enterokinase**

### Unit-3

36. Moving of air in and out of the lungs is called as \_\_\_\_\_  
 a. Conduction                      **b. Ventilation**                      c. Circulation                      d. None
37. Thoracic cavity is separated from abdominal cavity by \_\_\_\_\_  
 a. **Diaphragm**                      b. Ribs                      c. Pericardium                      d. None
38. Under normal conditions, the average adult takes \_\_\_\_\_ breath a minute.  
 a. 12 to 13                      **b. 12 to 15**                      c. 12 to 16                      d. 12 to 17
39. About \_\_\_\_\_ ml/100 ml blood of O<sub>2</sub> is carried by haemoglobin under saturation as oxyhaemoglobin.  
 a. 19                      **b. 19.6**                      c. 19.7                      d. 19.8
40. Carbon dioxide is mainly transported in the form of \_\_\_\_\_  
 a. Carbamino compound                      b. Carbonic acid  
 c. **Bicarbonates**                      d. None
41. \_\_\_\_\_ is the volume inspired and expired in normal, quiet breathing.  
 a. Expiratory reserve volume                      b. Residual volume  
 c. **Tidal volume**                      d. Inspiratory reserve volume
42. Normal tidal volume is about \_\_\_\_\_ ml.  
 a. 50                      **b. 500**                      c. 5000                      d. 5
43. \_\_\_\_\_ is the volume remaining in the lungs following maximal expiration.  
 a. Expiratory reserve volume                      **b. Residual volume**  
 c. Tidal volume                      d. Inspiratory reserve volume
44. \_\_\_\_\_ is the volume that can be expired following expiration of a tidal volume during maximal expiration.  
 a. **Expiratory reserve volume**                      b. Residual volume  
 c. Tidal volume                      d. Inspiratory reserve volume
45. Expiratory reserve volume is approximately \_\_\_\_\_ ml.  
 a. 12                      b. 120                      **c. 1200**                      d. 210
46. \_\_\_\_\_ is the total volume inspired during maximal inspiration.  
 a. Inspiratory capacity                      **b. Functional residual capacity**  
 c. Vital capacity                      d. Total lung capacity
47. \_\_\_\_\_ is the sum of all the lung volumes  
 a. Inspiratory capacity                      b. Functional residual capacity  
 c. Vital capacity                      **d. Total lung capacity**
48. Total lung capacity is about \_\_\_\_\_ ml.  
 a. **2400**                      b. 240                      c. 24                      d. 4
49. Inspiratory capacity (IC) is about \_\_\_\_\_ ml.  
 a. 6                      b. 36                      c. 360                      **d. 3600**

50. \_\_\_\_\_ is not measured by spirometry, but with a helium dilution method or a body plethysmograph.  
 a. Expiratory reserve volume  
 c. Tidal volume  
 b. **Residual volume**  
 d. Inspiratory reserve volume
51. An instrument called a \_\_\_\_\_ is used to measure the volume of air that moves into and out of the lungs.  
 a. **Spirometer**  
 b. Speedometer  
 c. Spirometry  
 d. Spectrometer
52. \_\_\_\_\_ is the volume that can be inspired above tidal volume during maximal inspiration.  
 a. Expiratory reserve volume  
 c. Tidal volume  
 b. Residual volume  
 d. **Inspiratory reserve volume**
53. Inspiratory reserve volume is approximately \_\_\_\_\_ ml.  
 a. **3100**  
 b. 3000  
 c. 2100  
 d. 2000
54. Residual volume is approximately \_\_\_\_\_ ml.  
 a. 12  
 b. 120  
 c. **1200**  
 d. 210
55. \_\_\_\_\_ is the total volume that can expire following maximal inspiration.  
 a. Inspiratory capacity  
 c. **Vital capacity**  
 b. Functional residual capacity  
 d. Total lung capacity

#### Unit-4

56. Bowman's capsule and glomerulus together constitutes  
 a. Nothing  
 c. **Malpighian corpuscles**  
 b. Nephron  
 d. Nephric capsule
57. The entire volume of blood in the body is filtered by the kidneys \_\_\_\_\_ times a day.  
 a. 40  
 b. 50  
 c. **60**  
 d. 70
58. In mammalian kidney Loop of Henle's present in \_\_\_\_\_  
 a. Cortex  
 b. Caput epididymis  
 c. **Medulla**  
 d. Ureter
59. The vessel leading blood (containing nitrogenous waste) into the Bowman's capsule is known as \_\_\_\_\_  
 a. **Afferent arteriole**  
 b. Efferent arteriole  
 c. Renal artery  
 d. Renal vein
60. In mammals the main excretory organ is \_\_\_\_\_  
 a. Heart  
 b. Brain  
 c. **Kidney**  
 d. None
61. Excretion removes \_\_\_\_\_ waste from the body.  
 a. Carbohydrates  
 b. **Nitrogenous**  
 c. Fat  
 d. None
62. Glomerular membrane acts as \_\_\_\_\_  
 a. **Biological filter**  
 b. Chemical filter  
 c. Physical filter  
 d. None
63. Reabsorption in kidney tubules is facilitated by \_\_\_\_\_  
 a. ACTH  
 b. **ADH**  
 c. Androgen  
 d. Oestrogen
64. Daily \_\_\_\_\_ ml of glomerular filtrate is produced by human kidneys.  
 a. 170 lit.  
 b. **180 lit.**  
 c. 190 lit.  
 d. 200 lit.
65. Kidney perform the function of \_\_\_\_\_  
 a. Respiration  
 b. **filtration**  
 c. Thermoregulation  
 d. None

### Unit-5

66. Human erythrocyte is about \_\_\_\_\_ in diameter.  
a. 10 u                      **b. 7.5 u**                      c. 2.3 u                      d. 15 u
67. Formation of erythrocytes is called \_\_\_\_\_  
**a. Erythropoiesis**      b. Leucopoiesis      c. Erythropenia      d. Leucocytosis
68. The life of the erythrocytes in mammalian blood is about \_\_\_\_\_ days  
**a. 120**                      b. 150                      c. 190                      d. 180
69. Leucocytes are produced in  
a. Bone marrow    b. Lymph nodules  
c. Peyer's patches and tonsils                      **d. All of these**
70. Which blood cell play important role in immune response by producing antibodies.  
a. Erythrocytes                      **b. Leucocytes**                      c. Thrombocytes                      d. None
71. Blood plasma contain \_\_\_\_\_ anticoagulant.  
a. Haemocyanin      b. Haemoglobin      c. Haemocyte                      **d. Heparin**
72. The platelets are \_\_\_\_\_ blood corpuscles.  
a. Red                      b. Yellow                      **c. Colourless**                      d. Purple
73. \_\_\_\_\_ is a complex physiological process involving cells in soluble and insoluble Proteins.  
**a. Hemostasis**      b. Hemolysis      c. Hemophilia      d. Haemoglobin
74. Mammalian heart contains \_\_\_\_\_ chambers.  
a. 2                      b. 3                      **c. 4**                      d. 5
75. Ventricular systole consumes \_\_\_\_\_ seconds, ventricular diastole that lasts for 0.5 second.  
a. 0.1                      b. 0.2                      **c. 0.3**                      d. 0.4
76. AV valve on the right side of the heart is called  
a. Unicupsid Valve      b. Bicupsid Valve      **c. Tricupsid Valve**      d. None
77. AV valve on the left side of the heart is called  
a. Unicupsid Valve      **b. Bicupsid Valve**      c. Tricupsid Valve      d. None
78. Pulmonary veins has \_\_\_\_\_ valve  
a. Unicupsid Valve      b. Bicupsid Valve      c. Tricupsid Valve      **d. None**
79. Which arteries supply oxygenated blood to the heart  
a. Subclavian                      b. Pulmonary                      c. Systemic                      **d. Coronary**
80. Which veins supply deoxygenated blood to the heart  
a. Subclavian                      b. Pulmonary                      c. Systemic                      **d. Coronary**
81. Pacemaker is located at which chamber of heart.  
**a. Rt. Auricle**      b. Rt. Ventricle      c. Lt. Auricle      d. Lt. Ventricle
82. Contraction of heart is called  
**a. Systole**                      b. Diastole                      c. Stroke                      d. None
83. Relaxation of Auricle is called  
a. Auricular Systole      **b. Auricular Diastole**      c. Pause                      d. None

## Unit-6

84. The thick connective tissue layer which covers testis is known as .....
- a. tunica vasculosa    **b. Tunica albuginea**    c. Tunica intima    d. None
85. In seminiferous tubules, seminiferous epithelium surrounded by.....
- a. tunica albuginea    b. lamina propria    c. tunica lamina    **d. tunica propria**
86. Sertoli cells are of .....type.
- a. cuboidal    b. stratified    **c. columnar**    d. none of these
87. The process of formation of sperm is known as .....
- a. spermiolysis    b. Oogenesis    c. Spermiogenesis    **d.Spermatogenesis**
88. Differentiation of spermatids into the sperm is known as .....
- a. spermiolysis    b. Oogenesis    **c. Spermiogenesis**    d.Spermatogenesis
89. Corpus luteum secretes the hormone .....
- a. Testosterone    b. Oestrogen    **c. Progesterone**    d. Androgen
90. Insulin is secreted by..... cells of pancreas.
- a. Pancreatic    **b. islets of Langerhans**    c. duct    d. none of these
91. Chromaffin cells of adrenal medulla secrete .....hormone.
- a. Testosterone    b. Aldosterone    c. Androgen    **d. Epinephrine**
92. In endocrine system..... Gland is known as master gland.
- a. Pituitary**    b. Hypothalamus    c. Thyroid    d. Adrenal
93. Alpha cells of pancreas secrete the hormone.....
- a. Insulin**    b. Glucagon    c. Testosterone    d. Thyroxin.
94. ....is essential for spermiogenesis.
- a. FSH    b. LH    c. TSH    **d. Oestrogen**
95. ....is essential for controlling the background metabolic functions of testes.
- a. FSH    b. LH    c. TSH    **d. GH**
96. .... joins the two lateral lobes of thyroid gland.
- a. Isthmus**    b. Istomath    c. Istamus    d.None
97. Hormone secreted by posterior pituitary or neurohypophysis is .....
- a. Prolactin    **b. Oxytocin**    c. ACTH    d. TSH
98. By about ..... Day the Graafian follicle reaches to its maximum size.
- a. 10th    b. 12th    **c. 14th**    d. 16<sup>th</sup>
99. The menstrual cycle is of .....day cycle.
- a. 26    **b. 28**    c. 30    d. 32
100. Vitellogenesis involves the synthesis of ..... In the ovum.
- a. Albumen    **b. Yolk**    c. Both    d. None of these

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