

## XII – BIO-ZOOLOGY

### TEXT BOOK ONE MARK QUESTIONS

#### LESSON -1 HUMAN PHYSIOLOGY

1. Intake of less amount of protein leads to deficiency disease called.....
  - a. Beri Beri
  - b. Rickets
  - c. Anaemia
  - d. Kwashiorkar
2. Each gram of lipid is capable of yielding.....
  - a. 9.3 calories
  - b. 8.2 calories
  - c. 7.1 calories
  - d. 6 calories
3. Deficiency of Vitamin D causes.....
  - a. Nyctalopia
  - b. Xerophthalmia
  - c. Osteomalacia
  - d. Pellagra
4. The calorie requirement for IRM at heavy work during occupational activities is.....
  - a. 1100 calories
  - b. 750 calories
  - c. 2200 calories
  - d. 460 calories
5. The normal BMI ( Body Mass Index) range for adults is .....
  - a. 10-15
  - b. 12-24
  - c. 15-20
  - d. 19-25
6. The normal blood glucose level during fasting is.....
  - a. 70 to 110 mg/dl
  - b. 80 to 200 mg /dl
  - c. 100 to 150 mg /dl
  - d. 200 to 250 mg/dl
7. During emulsification, the bile salts convert bigger fat particles into smaller globules called.....
  - a. Granules
  - b. Oil
  - c. Chilomicrons
  - d. millimicrons
8. During root canal treatment, the cavity of the tooth is filled with a sealing paste made of .....
  - a. Chitin
  - b. Calcium carbonate
  - c. Iodised salt
  - d. Gutta-percha resin
9. The gall stones are formed of .....
  - a. Calcium
  - b. Growing infected tissue
  - c. Cholesterol
  - d. Sodium crystals
10. A fracture can be caused by .....
  - a. Shock
  - b. loss of blood supply
  - c. Impact of force
  - d. malnutrition
11. The granulation of tissues around the site of fracture is called.....
  - a. Nodule
  - b. papilla
  - c. Rudiment
  - d. callus
12. An inflammation of synovial membrane is called as.....
  - a. Infective arthritis
  - b. Osteoarthritis
  - c. Rheumatic arthritis
  - d. Mechanical arthritis.
13. During the contraction of muscles the ATP molecules bind with the active site of .....
  - a. Myosin filament
  - b. Myofibrils
  - c. Nerve endings
  - d. Actin filaments
14. Ca ions necessary for the contraction of muscles are released from.....
  - a. Blood
  - b. Protoplasm
  - c. Synovial membraned.
  - d. Sarcoplasmic reticulum
15. What is the substance that destroys the muscle protein during rigor mortis.....
  - a. Proteolytic enzymes
  - b. Mitochondrial enzymes
  - c. Lysosome enzymes
  - d. esterases
16. The surface area of skin in our body is.....
  - a. 1.1-2.2 m<sup>2</sup>
  - b. 2.2-3.3 m<sup>2</sup>
  - c. 1-2 m
  - d. 0.5-1.5 m<sup>2</sup>
17. An oily substance called sebum is secreted by.....
  - a. Sweat gland
  - b. Sebaceous gland
  - c. Thyroid gland
  - d. Tear gland
18. Albinism is an extreme degree of generalized.....
  - a. Hyperpigmentation
  - b. Hypopigmentation
  - c. Failure of pigmentation

- d.perioral pigmentation
19. Partial albinism causes.....
- a. Leucoderma                      b. Vitiligo                      c. Melanoma                      d. dermatitis
20. Excessive exposure to U-V rays can cause.....
- a. Vomiting                      b.redness of eye                      c. Colour change                      d. Skin cancer
21. Rag weed plant causes allergic responses and results in.....
- a. Photo dermatitis                      b. Herpectiformis dermatitis                      c. Dermatitis artifacta                      d. All the above
22. The amount of urea present in blood is.....
- a.0.02 gms/ 100 ml                      b. 0.06 gms/100 ml                      c. 0.08 gms/ 100 ml                      d. 0.01 gms/ 100 ml
23. Urea biosynthesis takes place in.....
- a. Blood                      b.Liver                      c. Cerebro spinal fluid                      d. kidney
24. Number of ATP molecules spent to convert ammonia to urea is.....
- a. Four                      b.two                      c.three                      d. one
25. During glomerular filtration the malpighian body acts like a .....
- a. Structural unit                      b. Biological filter                      c. Biological buffer                      d. Acid-base balancer
26. The amount of blood supplied to the kidneys is about.....
- a. 20-25% of cardiac output                      b. 25-30 % cardiac output
- c. 30-35 % of cardiac output                      d. 35-40 % of cardiac output
27. Net filtration force which is responsible for the filtration in glomerulus is.....
- a. 25 mm Hg                      b. 50 mm Hg                      c. 75 mm Hg                      d. 80 mm Hg
28. The amount of urea reabsorbed in the urinary tubules is.....
- a. 5 gm                      b. 17 gm                      c. 21 gm                      d. 20 gm
29. Area responsible for reabsorption of water, glucose,sodium phosphate and bicarbonates is .....
- a. Glomerulus                      b. Proximal convoluted tubule                      c. Collecting duct
- d. Descending limb of Henley's loop
30. The volume of water found in the glomerular filtrate is.....
- a. 170 Lit                      b. 168.5 lit                      c. 165 lit                      d. 162.8 lit
31. In recent days the insulin resistant diabetes is commonly noticed in the age group of .....
- a. 10-15 years                      b. 40- 50 years                      c. 35- 40 years                      d. 20-25 years
32. Which of the following is called the artificial kidney?.....
- a. Donar kidney                      b. Dializer                      c. Tissue- matched kidney                      d. Preserved kidney

### LESSON- 2 MICROBIOLOGY

33. Who initially developed the vaccine for rabies in man?
- a. Robert Koch                      b. Joseph Lister                      c. Louis pasteur                      d. Stanley
34. Which one of the following fields paved the way for modern microbiology?
- a. Development of vaccines                      b. Technique of new viral strains                      c. Discovery of new viral strains
- d. Development of pure culture technique
35. Which one of the following statement is incorrect regarding the structure of viruses?
- a. Nucleic materials are covered by protein coat, called capsid
- b. The capsid is made up of capsomeres
- c. Some animal viruses have an additional envelope made up of glycoprotein

- d. The additional envelope is made up of glycoprotein
36. Virions contain only a single copy of nucleic acid, hence they are called.....
- a. Incomplete viruses b. Haploid viruses c. Ploidy viruses d. Complete viruses
37. Tumour inducing viruses are called.....
- a. Pathogenic viruses b. Oncogenic viruses c. Para viruses d. Variola viruses
38. Which one of the following is a protozoan disease?
- a. African sleeping sickness b. Measles c. Cholera d. Taeniasis
39. Sexual reproduction of Plasmodium takes place in.....
- a. Liver cells of man b. RBC's of Man c. Plasma of Man d. body of mosquito
40. The pathogenic form of Entamoeba histolytica is.....
- a. Encysted spores b. Vegetative trophozoite c. Merozoite d. Schizont
41. The more promising chemotherapeutic agent for treating viral disease is.....
- a. Tetracycline b. Ampicillin c. Interferon d. Anthramycin

### LESSON – 3 IMMUNOLOGY

42. Which of the following can induce immunity?
- a. Bacteria b. Virus c. Parasite d. All the above
43. Skin is a/an.....
- a. Anatomical barrier b. Physiological barrier c. Phagocytic barrier d. Inflammatory barrier
44. Which among the following is anti-bacterial.....
- a. Interferon b. Lysozyme c. Hormone d. Protein
45. Which among the following is anti-viral.....
- a. Lysozyme b. Interferon c. Protein d. Hormone
46. Identify the phagocytic cells from the following combinations.....
- a. Macrophage and neutrophil b. Lymphocyte and eosinophil  
c. Macrophage and eosinophil d. Eosinophil and neutrophil
47. Histamine is secreted by.....
- a. Epithelial cells b. Mast cells c. Red blood cells d. White blood cells
48. Humoral immunity consists of.....
- a. Normal cells b. Pathological cells c. Cytotoxic cells d. Immunoglobulin molecules
49. Which type of graft is used in plastic surgery.....
- a. Xenograft b. Allograft c. Autograft d. isograft
50. MHC genes in mouse is located in.....
- a. Chromosome 1 b. Chromosome 2 c. Chromosome 4 d. Chromosome 6
51. Which of the following is an autoimmune disease?
- a. AIDS b. Multiple Sclerosis c. Cancer d. Asthma
52. Which antibody characterizes the allergic reaction?
- a. IgG b. IgA c. IgM d. IgE
53. SCID is due to.....
- a. Adenosine deaminase deficiency b. Glucose oxidase deficiency c. Phosphatase deficiency  
d. Lactate dehydrogenase deficiency
54. Which of the following causes AIDS?

- a. Bacteria                      b. Fungus                      c. Retro virus                      d. TMV
55. Thymus growth occurs upto.....
- a. 17 years                      b. 12 years                      c. 5 years                      d. 30 years
56. Which of the following secretes immunoglobulin?
- a. T-lymphocyte                      b. B-lymphocytes                      c. Macrophage                      d. Mast cells
57. The H-chain of immunoglobulin has a molecular weight.....
- a. Equivalent to that of light chain                      b. Twice that of light chain
- c. Triple amount of light chain                      d. Twice as that of dark chain
58. Immunoglobulins are chemically.....
- a. Glycogens                      b. Glycoproteins                      c. Glycolipids                      d. Lipo-proteins
59. Hypervariability regions are present in.....
- a. Heavy chain only                      b. Light chain only                      c. Heavy and light                      d. Dark chain
60. Organ transplantation from pig to human is an example for.....
- a. Autograft                      b. Allo-graft                      c. Iso-graft                      d. Xeno-graft
61. Graft between identical twins is called.....
- a. Xenograft                      b. Allograft                      c. Auto graft                      d. Iso graft

#### LESSON- 4 MODERN GENETICS

62. In which prokaryote has voluminous genetics works been made.....
- a. TMV virus                      b. Phage                      c. Escherichia coli                      d. Coliform bacteria
63. Who discovered the double helix DNA model?
- a. H.G.korana                      b. Mendel                      c. T.H.Morgan                      d. Watson and crick
64. About how many hereditary diseases in human beings had been identified?
- a. More than 300                      b. Less than 300                      c. about 400                      d. about 100
65. Which of the methods help in obtaining of information about genetic characters in man?
- a. Biochemical test                      b. Hybridisation                      c. Pedigree analysis                      d. inbreeding
66. Sickle cell anaemia is due to.....
- a. Autosomal gene                      b. Sex chromosomal gene                      c. Vitamin deficiency                      d. hormone imbalance
67. Albinism is due to.....
- a. Absence of melanin                      b. Absence of vitamins                      c. Presence of melanin                      d. absence of hormone
68. Name the human disease due to autosomal dominant gene.....
- a. Sickle cell anaemia                      b. Thalassaemia                      c. SCID                      d. Huntington's chorea
69. Idiogram means .....
- a. Diagrammatic representation of genes                      b. Diagrammatic representation of chromosome
- c. Graph showing heart defect                      d. Electro cardiogram
70. In human chromosome karyotyping the chromosomes 4 and 5 belong to group.....
- a. A                      b. B                      c. D                      d. D
71. What is the name for mobile genetic elements.....
- a. Plasmids                      b. Pili                      c. Barr body                      d. transposons

#### Lesson –5 ENVIRONMENTAL SCIENCE

72. What is the rate of growth of human population?
- a. 10 billion per year                      b. 90 billion per year                      c. 1 billion per year                      d. 80 billion per year

73. The present sudden acceleration of population is called as.....
- a. Population explosion    b. Population bomb    c. Population trap    d. all the above
74. Global warming is caused due to.....
- a. Lack of rainfall    b. Presence of a hole in ozone layer    c. Human activities against nature  
d. extinction of animals and plants
75. The most abundant green house gas is.....
- a. NO<sub>2</sub>    b. CO<sub>2</sub>    c. O<sub>3</sub>    d. SO<sub>2</sub>
76. Which of the following gas destroys ozone layer faster?
- a. Chlorofluorocarbons    b. hydrofluorocarbons    c. Both(a) and (b)    d. Sulphur di oxide
77. Which is a better method to dispose large amounts of water carrying relatively small amounts of chemical wastes?
- a. Land filling method    b. Deep well injection    c. Surface impoundments    d. incineration
78. Which of the following organisms play a vital role in pollination of trees in tropical forest?
- a. Mimic moths    b. Orchid bees    c. Rhinoceros beetles    d. Humming birds
79. Which is commonly considered as a biologists paradise?
- a. Gulf of Mannar Biosphere reserve    b. Nilgiri Biosphere Reserve    c. Nanda devi    d. Great Nicobar
80. The amount of energy the earth receives from the sun, per year is
- a. 1000 K calories    b.  $10 \times 10^{30}$  K calories    c.  $5 \times 10^{20}$  K calories    d.  $15 \times 10^{25}$  K calories
81. Which is considered as a source of power, that can meet our future unlimited demand?
- a. Hydel power    b. Hydrogen    c. Thermal power    d. Solar power
82. Of the total amount of water ,how much is available as fresh water?
- a. 10 %    b. 3 %    c. 15 %    d. 50 %
83. Which of the following countries depend on desalination process for getting fresh water?
- a. Dubai    b. Oman    c. Bahrain    d. all the above

#### Lesson – 6 APPLIED BIOLOGY

84. The breeds of cattle now available in India are.....
- a. 29 species    b. 30 species    c. 26 species    d. 20 species
85. Which one of the following is not a drought breed?
- a. Kangayam    b. Khillar    c. Kankrej    d. Hallikar
86. The other name for the cattle 'sindhi' is.....
- a. Kongu    b. Nellore    c. Red Karachi    d. Decan
87. Kangayam originated from .....
- a. Punjab    b. Coimbatore    c. Karnataka    d. Kathiawar
88. Which of the following is not an exotic breed?
- a. Jersey    b. Gir    c. Brown swiss    d. Ayarshire
89. Which one of the following is a contagious disease of the cattle?
- a. Constipation    b. Milk fever    c. Cow pox    d. diabetes
90. Feeding jaggery along with lime water is one of the first and measure for.....
- a. Diarrhoea    b. Constipation    c. Milk-fever    d. anthrax
91. Mating of closely related animals is called.....
- a. Outbreeding    b. Artificial insemination    c. Cross breeding    d. Inbreeding

92. The milk which the following cow is characterised by high carotene content?

- a. Sindhi                      b. Haryana                      c. Gir                      d. Jersey

93. For anthrax of the following symptom can be seen.....

- a. Swelling of udder   b. Blood discharge from natural openings   c. Lack of chewing

### LESSON – 7 THEORIES OF EVOLUTION

94. The book ‘Philosophic Zoologique’ was published by.....

- a. Charles Darwin   b. August weissman                      c. Mc.Dougal   d. Lamark

95. The german scientist who segregated germplasm from somatoplasm for the first time was.....

- a. Lamark                      b. Malthus                      c. Weisman                      d. Hugo de vries

96. McDougall supported neo-lamarkism and proved the concept of.....

- a. Direction of environment or organism  
b. Learning is an acquired character  
c. Speed of learning increased from generation to generation                      d. All the above

97. Through which of the following concepts did Darwin explain his theory of evolution?

- a. Arrival of the fittest                      b. Survival of the fittest                      c. The differentiation of germplasm and somatoplasm                      d. genetic recombination

98. The book “Process of organic evolution” to support modern synthetic theory of evolution was written by.....

- a. Dobzhansky                      b. G.L.Stebbins                      c. Hardy weingberg                      d. Hugo de vries

99. The factor that enriches the genepool with new modified genes.....

- a. Mutation                      b.somatic variation                      c. Decrease in chromosome                      d. increase in cytoplasm

\*\*\*\*\*ALLTHE BEST\*\*\*\*\*

### Bio-Zoology – One Mark Answers

Question No	Answer	Question No	Answer	Question No	Answer	Question No	Answer
1	D	33	C	65	C	97	B
2	A	34	D	66	A	98	B
3	C	35	D	67	A	99	A
4	C	36	B	68	D		
5	D	37	B	69	B		
6	A	38	A	70	B		
7	C	39	D	71	D		
8	D	40	B	<b>72</b>	B		

9	C	41	C	73	D		
10	C	<b>42</b>	D	74	C		
11	D	43	A	75	B		
12	C	44	B	76	C		
13	D	45	D	77	C		
14	D	46	A	78	B		
15	C	47	B	79	A		
16	A	48	D	80	C		
17	B	49	C	81	B		
18	B	50	D	82	B		
19	A	51	B	83	B		
20	D	52	D	<b>84</b>	C		
21	C	53	A	85	C		
22	D	54	C	86	C		
23	B	55	B	87	B		
24	C	56	B	88	B		
25	B	57	B	89	C		
26	A	58	B	90	C		
27	A	59	C	91	D		
28	D	60	D	92	D		
29	B	61	D	93	B		
30	A	<b>62</b>	C	<b>94</b>	D		
31	B	63	D	95	C		
32	B	64	A	96	D		