

**DBT STAR COLLEGE SCHEME 2021-22**  
**DEPARTMENT OF ZOOLOGY**

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**सूचना**

B.Sc. II (BZ) और B.Sc. III (BZ,ZC,ZD) के सभी छात्रों एवं छात्राओं को सूचित किया जाता है कि दिनांक 29/11/2021 को जन्तु विज्ञान विभाग द्वारा डी० बी० टी० योजना के अन्तर्गत एक क्यूज परीक्षा का आयोजन किया गया था जिसका Paper और Answer Sheet आज दिनांक 03/12/2021 को महाविद्यालय के वेब साइट पर अपलोड किया जा रहा है। परीक्षा परिणाम की घोषणा शीघ्र ही प्रेषित की जायेगी।

*SKM*  
*03.12.21*

भवदीय

डॉ० (संजय कुमार श्रीवास्तव)



# DBT STAR SCHEME QUIZ 2021-2022



DEPARTMENT OF ZOOLOGY

U. P. COLLEGE (AUTONOMOUS), VARANASI

Name of Student : .....Father's Name.....

Class : .....Section : ..... ID Number : .....

Time : 1.30 hr

Maximum Marks-100

Attempt all questions, All questions are multiple choice type mark (✓) to right answer.

1. The term "Biology" was coined by
 

A Jean-Baptiste Lamarck	B Robert Hook
C Aristotle	D Horace Walpole
2. The Study of distribution, causes and control of infectious disease is called
 

A Pathology	B Parasitology
C Pharmacology	D Epidemiology
3. The branch of biology deals with Agriology
 

A Custome of Primitive Man	B Flying animals
C Farming , raising crops and husbandry	D Blood and Lymph vessels
4. The Father of Virology was
 

A Wendell M. Stanley	B Edward Jenner
C Paul Berg	D Martinus Willem Beijerinck
5. Who was the first Indian Physician to present the concept of digestion, metabolism and immunity?
 

A Maharshi Susruta	B Maharshi Bhaskara
C Maharshi Dhanvantari	D Maharshi Charaka
6. Branch of Zoology dealing with the study of fishes is known as
 

A Herpetology	B Ichthyology
C Ornithology	D Myrmecology
7. Olericulture is the cultivation of
 

A Vegetables	B Fruits
C Crop plants	D Mushrooms
8. Mitosis was discovered by
 

A R. Brown	B W. Flemming
C A. Weismann	D Strasburger
9. Dr Har Govind Khorana was born in Indian state
 

A Punjab	B Haryana
C Uttar Pradesh	D Himanchal Pradesh
10. Match the names of branches of biology listed under column I with the field of study given under column II Choose correct answer
 

Colum I	Colum II
A Sericulture	Silkworm
B Oncology	Pollen
C Phycology	Cancer
D Palynology	Fungi
11. The scientist who cut the tails of mouse in many generations but found that it is not inherited
 

A Bateson	B Weismann
C Lamarck	D Darwin
12. The term Ecosystem was proposed by
 

A Lindeman	B Stanley
C Odum	D Tensely
13. The energy transformation in the nervous system is
 

A Chemical to radiant	B Chemical to Electrical
C Chemical to Mechanical	D Mechanical to radiant



14. **All the synthesis reactions in the body form a division of Metabolism called**  
 A Anabolism B Catabolism  
 C Chemical reaction D None of these
15. **Enzymes are biological catalysts. They all share which of the following characteristics?**  
 A Increase the rate of reaction B Lower the activation of energy of reaction  
 C Are not consumed in chemical reaction D All of the above
16. **Which of the following statements is true about death?**  
 A Death occurs only due to accidents B An organism dies because all its cells die  
 C Death occurs only in multicellular animals D Death helps in recycling and maintain the balance of matter in nature
17. **Bones of Birds are**  
 A Hollow B Pneumatic  
 C Hollow and Pneumatic D None
18. **Largest virus is**  
 A Pox Virus B Penicillium virus  
 C Coli phage lamda D Wound tumour virus
19. **AIDS virus has**  
 A Single Stranded RNA B Double Stranded RNA  
 C Double Stranded DNA D Single Stranded DNA
20. **Corona virus is infected which part of the body?**  
 A Heart B Lungs  
 C Liver D Brain
21. **Prokaryotes called.....are similar in many ways to eukaryotic organism.**  
 A Protozoa B Eubacteria  
 C Cyanobacteria D Archaeobacteria
22. **A coelom (Body cavity) derived from blastocoel is known as**  
 A Schizocoel B Pseudocoel  
 C Haemocoel D Enterocoel
23. **Animal with radial symmetry in adult and bilateral symmetry in larva are-**  
 A Annelids B Echinoderms  
 C Coelenterates D Platyhelminthes
24. **G1 phase in cell cycle is characterized by the**  
 A Synthesis of DNA B Division of Centriole  
 C Synthesis of RNA D Aster formation
25. **During meiosis centromere divides at which stage**  
 A Prophase I B Metaphase II  
 C Anaphase I D Anaphase II
26. **In Which phase of cell division chromosomes are arranged on the equator?**  
 A Anaphase B Telophase  
 C Metaphase D Interphase
27. **The drug colchicine has inhibitory effect on cell cycle in which stage?**  
 A S B Metaphase  
 C G<sub>2</sub> D G<sub>2</sub>
28. **Starch and Sugar together are named as**  
 A Carbohydrate B Proteins  
 C Glucose D Fats
29. **Chiasmata are formed-**  
 A Exchange of part of paired homologous chromosomes.  
 B Exchange of part of unpaired non-homologous chromosomes.  
 C Duplication of part of paired homologous chromosomes .  
 D Loss of some part of homologous chromosomes.
30. **Proteins are synthesized at**  
 A Mitochondria B Ribosomes  
 C Golgi bodies D Plasma membrane

31. **Nucleotide is**  
 A Base-Sugar-OH  
 C Sugar phosphate  
 B Base-Sugar-Phosphate  
 D Base-sugar-base
32. **Which of the following is the simplest amino acid?**  
 A Glycine  
 C Keratin  
 B Tyrosine  
 D Haemoglobin
33. **Nitrogenous bases in DNA are**  
 A ATGC  
 C AUGC  
 B ATUC  
 D UTGC
34. **What is true about enzymes?**  
 A All proteins are enzymes  
 C All enzymes are not proteins  
 B All enzymes are proteins  
 D All enzymes are vitamins
35. **Induced-fit-model of enzymatic actions was proposed by**  
 A Koshland  
 C Emil Fischer  
 B Buchner  
 D Beadle and Tatum
36. **Basal metabolic rate in an animal is controlled by**  
 A Pancrease  
 C Pituitary  
 B Liver  
 D Thyroid
37. **The term " Crossing over was introduced by**  
 A Beadle and Tatum  
 C Bateson and Punnett  
 B Sutton and Boveri  
 D Morgan and Cattell
38. **Mitochondria are "Power House" of cells because**  
 A They produce energy currency of cell  
 C They generate electric power  
 B They produce ATP  
 D Both A and B
39. **Which of these is not a vertebrate?**  
 A Whale  
 C Sparrow  
 B Amphioxus  
 D Otter
40. **Larva of Balanoglossus is**  
 A Tornaria  
 C Kentrogen larava  
 B Muller's larva  
 D Tadpole
41. **Amnion and Allantois are found in**  
 A Fish, Frog and Fowl  
 C Fowl and Fox  
 B Fish, Fox  
 D Frog, Fowl and Fox
42. **In vertebrates which one of the following structure is believed to have been transformed into thyroid gland?**  
 A Urostyle  
 C Endostyle  
 B Pygostyle  
 D Anal Style
43. **The jawless vertebrate is**  
 A Fox  
 C Petromyzon  
 B Hyla  
 D Crocodile
44. **Most fishes, amphibians and reptiles are**  
 A Oviparous  
 C Homeiothermal  
 B Viviparous  
 D Scaly
45. **Glycolysis is a process in which**  
 A Glucose is converted into glycogen  
 B Glycogen is converted into glucose which is then transformed into pyruvic acid.  
 C Glucose is transformed to pyruvic acid  
 D Sucrose is converted into fructose and glucose
46. **Living fossil is**  
 A Dogfish  
 C Flying fish  
 B Coelacanth (Latimeria)  
 D Climbing perch
47. **Fish is a good source of**  
 A Carbohydrate  
 C Fats  
 B Proteins  
 D Minerals



48. Scoliodon is commonly called dogfish due to one of its following characteristics?  
 A Gait B Mouth  
 C Power of Smell D Carnivorous
49. Fresh water bony fishes maintain water balance by  
 A Excreting hypotonic urine B Excreting salt across their gill  
 C Drinking small amount of water D Excreting waste in the form of uric acid
50. Which one of the following is a true fish?  
 A Starfish B Dogfish  
 C Jellyfish D Cuttlefish
51. Which one of the following animal has a notochord throughout its life?  
 A Fishes B Birds  
 C Amphioxus D Snakes
52. Blood vascular system in hemichordate is  
 A Open type B Closed type  
 C Reduced type D Absent
53. Non cleidoic eggs occurs in  
 A Birds B Fishes  
 C Reptiles D Platypus
54. Retention of larval characters in adults is called  
 A Ontogenesis B Parthenogenesis  
 C Neotany D Phylogenesis
55. Which one of the following is a poisonous amphibian?  
 A Hayla B Bufo marinus  
 C Rana tigrina D Necturus
56. Scales are found in  
 A Fishes B Snakes  
 C Both fishes and snakes D None of these
57. Eggs of Reptiles and Birds can be designated as  
 A Alecithal B Isolecithal  
 C Homolecithal D Telolecithal
58. Study of Snakes is called  
 A Ichthiology B Serpentology  
 C Enterology D Entomology
59. Foramen of Panizzae is found in heart of  
 A Frog B Pigeon  
 C Crocodile D Rabbit
60. Metanephric kidneys are found in  
 A Reptiles B Birds  
 C Mammals D Reptiles, Birds and Mammals
61. Air sacs of Birds  
 A Keep body worm B Facilitate blood circulation  
 C Maintain body temperature D Reduce body weight
62. Pecten a comb like structure is found in the eye of  
 A Birds B Fishes  
 C Frogs D Mammals
63. Name the " Bird Man of India"  
 A Karm Narayan Bahl B M.L. Bhatia  
 C Salim Ali D E. M. Thailayampalam
64. A well known bird sanctuary of our country is situated at  
 A Kaziranga Bird Sanctuary B Bharatpur Bird Sanctuary  
 C Bandipur Bird Sanctuary D Palamu Bird Sanctuary
65. The smallest measuring unit in cell biology is  
 A Electron B Angstrom  
 C Nano meter D Micro meter

66. **Resolving power of a microscope means the capacity to**  
 A Magnify the image  
 B Distinguish between two objects  
 C Distinguish between two organelles  
 D Distinguish between two Close Points
67. **Cell theory was given by**  
 A Metchnikoff  
 B August Weismann  
 C Sutton and Boveri  
 D Schleiden and Schwann
68. **The statement "Omnis cellula e cellula" (All cells from cells) given by**  
 A Robert Brown  
 B Rudolf Virchow  
 C M.J. Schleiden  
 D Theodor Schwann
69. **Cell organelles common in Protista and Monera is**  
 A Vacuole  
 B Ribosomes  
 C Lysosomes  
 D Chloroplast
70. **Which among of the following can be seen only under the electron microscope?**  
 A Chromosomes  
 B Leucoplast  
 C Ribosomes  
 D Chloroplast
71. **Organelles involved in photorespiration are**  
 A Glyoxysomes, Peroxisomes and Mitochondria  
 B Chloroplast, Mitochondria, peroxisomes  
 C Mitochondria, chloroplast and ribosomes  
 D Mitochondria, nucleus and ribosomes
72. **The Nucleolus is the site of formation of**  
 A Ribosomes  
 B Peroxisomes  
 C Chromosomes  
 D Spindle fibers
73. **Which cell organelle is absent in human sperm?**  
 A Endoplasmic reticulum  
 B Nucleus  
 C Centrioles  
 D Mitochondria
74. **Lysosomes are formed by**  
 A Endoplasmic reticulum  
 B Mitochondria  
 C Golgi membrane  
 D Both A and C
75. **Anaerobic respiration is a type of**  
 A Complete oxidation  
 B Purification  
 C Fermentation  
 D Anabolic reaction
76. **Maximum amount of energy is liberated on oxidation of**  
 A Fats  
 B Proteins  
 C Carbohydrates  
 D Nucleic acid
77. **In human beings anaerobic respiration occur in**  
 A Neurons  
 B Liver  
 C White muscles  
 D Brain
78. **The energy currency of a cell is**  
 A NAD  
 B AMP  
 C ATP  
 D Glucose
79. **The high energy bonds of ATP are between**  
 A C-N  
 B C-C  
 C O-P  
 D C-O
80. **In a monohybrid cross the genotypic ratio of  $F_2$  is**  
 A 3 : 1  
 B 1 : 2 : 1  
 C 4 : 0  
 D 1 : 1 : 1 : 1
81. **Phenotypic dihybrid ratio in  $F_2$  generation is**  
 A 1 : 3  
 B 1 : 2 : 1  
 C 9 : 3 : 3 : 1  
 D 1 : 1 : 1 : 1
82. **In heredity, the genes are obtained from**  
 A Father  
 B Mother  
 C Both from Father and Mother  
 D None of these



Alok  
Datta

83. The term "Transposon" was introduced by  
A Baedle and Tatum  
C R.W.Hedges and A.E. Jacob  
B Morgon and Bridge  
D Nirenberg and Khorana
84. Colchicine brings about  
A Cell division  
C Cell elongation  
B Polyploidy  
D Cell differentiation
85. Mutation by radiation was first experimentally demonstrated by  
A H.J. Muller  
C James Watson  
B Hugo de Vries  
D Har Govind Khorana
86. Maternal inheritance is due to the genes present in  
A Nucleoplasm  
C Mitochondria  
B Nucleous  
D Lysosomes
87. The term "Chromosome" was coined by  
A C. Benda  
C Robert Hooke  
B W. Waldeyer  
D T. H. Morgan
88. Which of the following techniques is used for separating DNA fragments and identification of cloned genes?  
A Western blotting  
C Northern blotting  
B Southern blotting  
D None of these
89. Complementary DNA is produced from RNA by  
A DNA helicase  
C Reverse transcriptase  
B DNA Polymerase  
D DNA dependent RNA Polymerase
90. Abiogenesis means  
A Spontaneous generation  
C Origin of pansperia  
B Germplasm Theory  
D Physico-chemical origin of life
91. Life originated  
A In water  
C In air  
B On land  
D In all these
92. Which one is present today but was absent about 3 to 5 million years ago?  
A O<sub>2</sub>  
C H<sub>2</sub>  
B N<sub>2</sub>  
D CH<sub>4</sub>
93. When gall bladder of a man is removed  
A Fat digestion is not possible  
C Effect of pancreatic juice upon food is impaired  
B Acidity continues in duodenum  
D All of these
94. Largest variety of digestive enzymes are found in  
A Omnivores  
C Carnivores  
B Herbivores  
D Parasites
95. During inspiration, the diaphragm  
A Relaxes to become dome shaped  
C Expand  
B Contracts and Flattens  
D Shows no change
96. During hibernation frog respire  
A Only by lungs  
C Only by skin  
B Only by mouth  
D By skin and lungs
97. Residual air mostly occurs in  
A Nostril  
C Bronchus  
B Alveoli  
D Trachea
98. The Book "Philosophic Zoologique" was written by  
A Lamarck  
C Hugo de Varies  
B Mendel  
D Haeckel
99. Which of the following is a by product of RBC breakdown?  
A Insulin  
C Haemoglobin  
B Bilirubin  
D Strapthevidin
100. Which is a classical example of co dominance?  
A Blood Type A  
C Blood Type AB  
B Blood Type B  
D Blood Type O



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U. P. COLLEGE (AUTONOMOUS), VARANASI

## QUIZ ANSWER SHEET

EXAMINATION DATE 29/11/2021

Q.1	A	Q.26	C	Q.51	C	Q.76	A
Q.2	D	Q.27	B	Q.52	A	Q.77	C
Q.3	A	Q.28	A	Q.53	B	Q.78	C
Q.4	D	Q.29	A	Q.54	C	Q.79	C
Q.5	D	Q.30	B	Q.55	B	Q.80	B
Q.6	B	Q.31	B	Q.56	C	Q.81	C
Q.7	A	Q.32	A	Q.57	D	Q.82	C
Q.8	D	Q.33	A	Q.58	B	Q.83	C
Q.9	A	Q.34	C	Q.59	C	Q.84	B
Q.10	A	Q.35	A	Q.60	D	Q.85	A
Q.11	B	Q.36	D	Q.61	D	Q.86	C
Q.12	D	Q.37	D	Q.62	A	Q.87	B
Q.13	B	Q.38	D	Q.63	C	Q.88	B
Q.14	A	Q.39	B	Q.64	B	Q.89	C
Q.15	D	Q.40	A	Q.65	C	Q.90	A
Q.16	D	Q.41	C	Q.66	D	Q.91	A
Q.17	C	Q.42	C	Q.67	D	Q.92	A
Q.18	A	Q.43	C	Q.68	B	Q.93	A
Q.19	A	Q.44	A	Q.69	B	Q.94	A
Q.20	B	Q.45	C	Q.70	C	Q.95	B
Q.21	D	Q.46	B	Q.71	B	Q.96	C
Q.22	B	Q.47	B	Q.72	A	Q.97	B
Q.23	B	Q.48	C	Q.73	A	Q.98	A
Q.24	A	Q.49	A	Q.74	D	Q.99	B
Q.25	D	Q.50	B	Q.75	C	Q.100	C