

Higher Secondary Second year

Model Question Paper – 1

Zoology

Time : 2.30 hours

Marks : 70

Section- I

I) Answer all the questions

15X 1 = 15

Choose the most suitable answer from the given four alternatives and write the option code and the Corresponding answer

- 1 The structural and functional unit of proteins is
 - a) Peptide
 - b) Aminoacid
 - c) Peptone
 - d) Polypeptide
- 2 Selected the wrongly matched pair
 - a) Albumin - Osmotic Pressure
 - b) Globulin - Antibody formation
 - c) Fibrinogen - Anti coagulant
 - d) Bilirubin - Waste product of RBC
- 3 Select the number of (isohedral) virus from the following:
Adenovirus, SV15, Pox virus, Polio virus, Mumps virus
 - a) 2
 - b) 3
 - c) 4
 - d) 5
- 4 The organisms which are referred to as obligate intra cellular parasites are
 - a) Bacteria
 - b) Mycoplasma
 - c) Fungi
 - d) Virus
- 5 The organism that belongs to lentiviral subfamily is
 - a) RNA virus
 - b) Pox virus
 - c) DNA virus
 - d) Influenza virus
- 6 Identity the bacteriolytic enzyme among the following
 - a) Lysosome
 - b) Lysozyme
 - c) Isozyme
 - d) Endosome
- 7 Hassall's corpuscles are located in
 - a) Thymus
 - b) Lymph node
 - c) Spleen
 - d) Tonsil
- 8 During karyotyping the cells are immersed in
 - a) Isotonic Solution
 - b) Hypotonic Solution

- c) Hypertonic solution d) Homogenous solution
- 9 Identify the correct palindrome sequence among the following base pairs for
5' GTTCCA 3'
- a) 3' CAAGGT 5' b) 3' ACCAAT 5' c) 3' CGGAAT 5' d) 3' CAATTG 5'
- 10 The halogen involved in destruction of ozone layer is
- a) Bromine b) Bromine, Iodine
c) Bromine chlorine d) Fluorine, Bromine
- 11 Montreal Protocol was signed in the year
- a)1986 b) 1987
c) 1988 d) 1989
- 12 The presence of β -carotene in jersey's milk imparts _____ colour to it.
- a) White b) Orange
c) Straw d) Yellow
- 13 Identify the fowl breed which has black coloured flesh
- a) Aseel b) Brahma
c) Busra d) Karaknath
- 14 The wax of honey bees is mixed with the secretions of _____ gland to be converted into propolis
- a) Wax gland b) Cephalic gland
c) Salivary gland d) resinous gland
- 15 The book 'process of organic evolution' was written by
- a) Dobzhansky b) Iwnaeowsky
c) Ernest mayr d) G.L Stebbins

Section- II

Write any 6 questions(Q.20 Compulsory)

6x2 = 12

- 16 Why women/females have low blood volume when compared to men?
- 17 Which is called sailor's disease? What are the symptoms associated with it?
- 18 Write a note on the features that help in identification of bacteria.
- 19 Differentiate T cell and B cell.
- 20 What is Human genetics? What are its contributions to the field of genetics?
- 21 Differentiate ecumen and non-ecumen areas.

- 22 List out the technique/methods used for assessing urine-sugar analysis
- 23 Define Lamarckism.
- 24 Elaborate : i) Pens ii) Bouchots

Section- III

Answer any Six of the following in which question no. 30 is compulsory **6x3 = 18**

- 25 Functions of Nephron.
- 26 What are dental caries? Give reasons.
- 27 What are the advantages of studying microbiology?
- 28 Differentiate specific non-specific immunity.
- 29 List out the factors that help in identification of chromosomes during Karyotyping.
- 30 Why studying of ecology is gaining importance these days?
- 31 How are poultry breeds classified? Give Examples
- 32 Why has the utility of auto analyser become inevitable these days?
- 33 Define theory of pangenesis

Section- IV

Give the answer for the following questions **5 X 5 = 25**

- 34 i) Enumerate the valves of Air circulation system, write a note on their location, their function's
- a) ii) What is Haemostasis? Write about the steps involved in it.
- (or)
- b) I) Elucidate how rhythmicity is ensured during breathing.
- ii) Differentiate inspiration and expiration.
- 35 Explain in detail about protozoan microbiology in man.
- Or
- What are antibiotics? Give Examples, Write in detail about the mode of action of antibiotics.
- 36 What is immuno deficiency disorder? Explain about it detail with examples.
- Or)
- Write a note on different methods of gene transfer.

37 Enumerate/name the organizations involved in Bio-diversity conservation.

Or)

List out the zoological names of cultivable fishes of India with their common names.

38 Explain about the mechanism of silk formation in silk worm .

(Or)

Write in detail about mariculture.