

Higher Secondary Second Year

Micro Biology

Model Question Paper – 2

Time : 2.30Hrs

Marks : 70

Answer all the questions

15 x 1 =15

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

- 1 Which of the following is quaternary ammonium salt-310
  - a. Copper Sulphate
  - b. Silver nitrate
  - c. Cetrimide
  - d. Ferricchloride
- 2 Write the correct pair
  - a. Dark field microscope
  - b. Cone of light
  - c. Fluorescent microscope
  - d. Knoll and Ruska
  - a) UV
  - b) Electron microscope
  - c) Phase contrast microscope
  - d) Treponema pallidum

a) a-b b-c c-d d-a  
b) a-d b-c c-a d-b  
c) a-d b-c c-b d-a  
d) a-a b-d c-b d-c
- 3 Primary treatment of sewage removes which percent of BoD
  - a. 5-10
  - b. 15-20
  - c. 20-25
  - d. 30-40
- 4 Bacillus thuringiensis is a
  - a. Biofertilizer
  - b. Biopesticide
  - c. Biosurfactant
  - d. All the above
- 5 Necrotizing fasciitis is caused by which of the following
  - a. Staph aureus
  - b. Str pyogenes
  - c. C. diphtheriae
  - d. Clostridium tetani
- 6 Which statement is correct
  - a. Clostridium botulinum is an aerobic gram positive
  - b. Shigella are gram negative non motile bacilli
  - c. Vibrios are gram positive curved rods
  - d. Chlamydiae are gram positive bacteria

- 7 Azone of complete clearing of blood around the colonies is called  
 a. Alpha haemolysis                      b. Bet haemolysis  
 c. Gamma haemolysis                    d. All the above
- 8 Droplet nuclei are significant in the transmission of the disease of  
 a. Digestive System                      b. Nervous System  
 c. Reproductive System                d. Respiratory System
- 9 Genital herpes is caused by  
 a. HIV-1                                      b. HSV-1  
 c. HSV-2                                      d. HIV-2
- 10 The head of tape worm is otherwise called  
 a. Scolex                                      b. Proglottid  
 c. Brain                                        d. All the above
- 11 Infection in pregnant animals leads to abortion due to  
 a. Herpes Viruses                         b. Brucella  
 c. Borrelia                                  d. All the above
- 12 For labelling antibody for immunofluorescence test which of the following used  
 a. Fluorescein                              b. Fluorescein isothiocyanate  
 c. Fluorescence carbamide            d. All the above
- 13 Haemolytic disease of the newborn is  
 a. Rheumatic fever                        b. Potential fatal disease  
 c. Thrombocytopenic purpura        d. Hemolytic anemia
- 14 How many amino acids are present in protein  
 a. 15 amino acid                          b. 20 amino acid  
 c. 30 amino acid                          d. 10 amino acid
- 15 The restriction enzymes were discovered by  
 a. Werner Arber and Hamilton Smith  
 b. Herbert Boyer  
 c. Edward L. Tatum  
 d. All the above

#### Section – II

Answer any six questions

6 x 2 = 12

Question No 16 is compulsory

- 16 Write the causative agent of pebrin disease of silkworm and causative agent of 'wool sorters disease'  
 17 What is meant by composting and write the methods of composting

- 18 What are the four species of genus shigella? On what basis they are divided
- 19 Draw a ultra structure of promastigole and label the parts
- 20 Define fluorescence
- 21 State the significance of Transduction
- 22 List the vectors of lyme disease.
- 23 What is Glomerulonephritis
- 24 What are the tetanus spores found

### Section – III

Answer any six questions.

6 x 3 = 18

Qn. No. 32 is compulsory

- 25 Write about Enzyme regulation by feedback inhibition.
- 26 Write the uses of Biogas.
- 27 What are the types of HSV
- 28 Draw a flow chart of multiplication of chlamydia
- 29 Compare the characteristics of live and killed vaccines
- 30 What are the 4 types of alternation which can nucleotide sequence of DNA.
- 31 Describe vibrios
- 32 Where is candida albicans present in the body? When does it cause an infection
- 33 List out important organic acid

### Section – IV

Answer the following questions

5 x 5 = 25

- 34 Explain TCA cycle

(Or)

List the toxins and enzymes produced by s.aureus and explain their action

- 35 Describe the industrial process involved in wine production

(Or)

Write the difference between Eumycelis and Acrinomycele's

- 36 Write about a short notes on scanning Electron microscope

(Or)

Describe the laboratory diagnosis of mycoplasma

- 37 Write short notes on Hepatitis A Virus

(Or)

Describe the characteristics of BCG vaccine

38 Draw a flow chart of basic procedure for tissue culture and sub culture maintenance

(Or)

Describe the structure of light-chain of immunoglobulin molecule.