



BRAINWARE UNIVERSITY

Term End Examination 2022

Programme – B.Sc.(BT)-Hons-2018/B.Sc.(BT)-Hons-2019/B.Sc.(BT)-Hons-2020/B.Sc.
(BT)-Hons-2021

Course Name – General Microbiology

Course Code - BBTH010401/BBTC101

(Semester I)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Name the scientist, who discovered Spontaneous Generation theory?
a) Muller
b) Jenner
c) Spallanzani
d) Redi
- (ii) Memorize the name of the father of Microbiology?
a) Edwin John Butler
b) Ferdinand Cohn
c) Robert Koch
d) Antoni van Leeuwenhoek
- (iii) Classify *Clostridium tetani* to be a type of microbes
a) Aerobic
b) Anaerobic
c) Facultative
d) Microaerophilic
- (iv) Recall the name of the person who developed Anthrax vaccine
a) Koch
b) Laveran
c) Lister
d) Pasteur
- (v) "Phagocytosis process" was described by:
a) Koch
b) Chamberlandt
c) Metchnikoff
d) Petri
- (vi) Malaria fever is anticipated with the liberation of:
a) cryptomerzoties
b) metacryptomerzoties
c) merozoites
d) trophozoite
- (vii) Predicted the prevention method from
a) eating balanced food
b) eating plenty of fruits
c) drinking boiled water
d) using mosquito nets
- (viii) Identify the cluster of polar flagella
a) Lophotrichous
b) Amphitrichous
c) Monotrichous
d) Petritrichous
- (ix) Some hyperthermophilic organisms that grow in highly acidic (pH, 2) habitats belong to the two groups called _____.
a) Cyanobacteria and Diatoms
b) Liverworts and Yeasts

- c) Protists and Mosses
 (x) Transduction process facilitates
 a) Bacteria obtaining DNA from the external environment
 c) Transfer of genome by conjugation
 (xi) Fungal spores produced asexually at tops or sides of hyphae collectively known as
 a) Sporangiophores
 c) Conidia
 (xii) Generation time of Escherichia coli is
 a) 20 minutes
 c) 20 seconds
 (xiii) Virus replicates and destroyed bacteria , this process of replication is known as
 a) Inhibition of bacteria
 c) Lysogenic Phase
 (xiv) Dikariyon Stage Generally shown in
 a) Asexual stage of Fungal reproduction
 c) Sexual stage of Fungal reproduction
 (xv) F-plasmid is present in
 a) Gram +ve Bacteria
 c) both Gram +ve and gram -ve Bacteria
- d) Eubacteria and Archaea
 b) Bacteria obtaining DNA from the mother cell
 d) Transfer of genetic material through virus(Y)
 b) Anthospore
 d) Meiospores
 b) 20 hours
 d) 20 days
 b) Bacterial lysis
 d) Lytic phases
 b) asexual reproduction of Bacteria
 d) Sexual reproduction of Bacteria
 b) Gram -ve Bacteria
 d) None of them

Group-B

(Short Answer Type Questions)

3 x 5=15

2. 5. Define acidophile, neutrophile. (3)
 3. Explain that viruses are so different from other groups of microbe? (3)
 4. Explain the endospore and sporulation process in bacteria? (3)
 5. Write down the procedure for elimination of pathogens from milk by pasteurization process? (3)
 6. Illustrate the procedure for measurement of Bacterial Growth quantitatively? (3)
OR
 State the Principal and Procedure of Gram Staining? (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Explain mode of action Laminar Air Flow (5)
 8. How microbial growth is measured quantitatively? (5)
 9. Explain different mode of reproduction of Bacteria. (5)
 10. How do you classify Gram positive and Gram negative bacteria (5)
 11. Explain mode of action of autoclave (5)
 12. How can we classify microbes based on nutrition? (5)

OR

- Write the different methods of sterilization highlighting their principles involved. (5)
