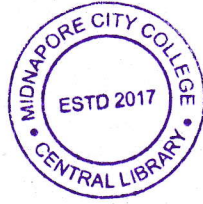


The West Bengal University of Health Sciences
B.Sc. in Medical Microbiology 1st Semester June-July, 2022
Examination



Time : 2 hrs.

Subject : General Microbiology

Full Marks : 50

Attempt all questions

1. Give the answer of the following questions : 10 x 1
 - a) What is bacterium?
 - b) What is flagellin?
 - c) What are the components of bacterial capsule?
 - d) What do you mean by bacterial morphology?
 - e) Write the structural composition of bacterial endospore.
 - f) What is the source of agar.
 - g) Write the composition of gram negative bacterial cell wall.
 - h) What is minimal media?
 - i) Differentiate between dye and stain.
 - j) What is porin?

2. Answer *any four* of the following questions : 4 x 2
 - a) Define primary stain and counter stain?
 - b) Describe the effect of counter stain on gram staining?
 - c) Define basic stain and acidic stain?
 - d) Write the principle of autoclave.
 - e) Write the function of fimbriae and pili.
 - f) Why is moist heat sterilization more effective than dry heat sterilization?

3. Answer *any four* of the following questions.

a) What is acid fast bacteria? Why are they acid fast?	2+2
b) Differ between gram positive and gram negative bacterial peptidoglycan layer.	4
c) Write the basic steps to preparation of nutrient agar media for the cultivation of bacteria.	4
d) Briefly describe the different waste generated from hospital.	4
e) Write the process of FAECES collection from patient and transport.	4
f) Differ between vegetative cell and spore form of bacteria.	4

4. Answer *any two* of the following questions:

a) Classify the bacteria with respect to their shape with diagram and give example each type. Write the function of different reserve materials present in prokaryotes.	5+3
b) Define sterilization. Describe the principle and usage of a hot air oven.	3+5
c) Write the function of capsule. Streptococcus and Staphylococcus both are coccus but their arrangement is different-explain.	4+4