

Roll No.

Total No. of Pages : 03

Total No. of Questions : 14

B.Sc (MLT) (Sem.-4)

MICROBIOLOGY

Subject Code : BSCMLT-401

Paper ID : C1719

Time : 3 Hrs.

Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A will be compulsory and have 20 questions of 1 mark each.
2. SECTION-B will have 8 short answer type questions of 5 marks each, out of which candidate will have to attempt any 5.
3. SECTION-C will have 5 long answer type questions of 10 marks each, out of which candidate will have to attempt any 3.

SECTION-A

1. Multiple Choice Questions :

- A) Each of the following parasite is transmitted by mosquitoes except :
- a. *Leishmania donovani*
 - b. *Wuchereria bancrofti*
 - c. *Plasmodium vivax*
 - d. *Plasmodium falciparum*
- B) Which of the following disinfectant is effective against viruses?
- a. Hydrogen peroxide
 - b. 4% hypochlorite
 - c. Formaldehyde
 - d. 1% alcohol
- C) The habitat is the large intestine.
- a. *Entamoeba gingivalis*
 - b. *Giardia lamblia*
 - c. *Entamoeba histolytica*
 - d. *Naegleria fowleri*
- D) Routine method for the diagnosis of malaria :
- a. Thick blood film.
 - b. Thin blood film,
 - c. Serology.
 - d. All of above.
- E) The infective stage of *entamoeba histolytica* to man has
- a. Pseudopodia
 - b. Bull's eye karyosome
 - c. Ingested red blood cells
 - d. a & c

- F) The most commonly involved area in amoebiasis is
- Brain
 - Liver
 - Cecum
 - Recto-sigmoid region
- G) Stage of the parasite that may produce loeffler's syndrome to man.
- Adult
 - Larva
 - Egg
 - a & c
- H) Malarial parasite was discovered by
- Ronald ross
 - Paul muller
 - Laveran
 - Pampania
- I) Clear zone around the antibiotic disc depends upon
- Size of the inoculum
 - Type of medium
 - Diffusibility of the drug
 - All options
- J) Vector of plasmodium is
- Flea
 - Tsetse fly
 - Sand fly
 - Mosquito

State true or false :

- K) Viruses may contain cell wall.
- L) ZN stain is used to stain malaria parasite.
- M) Zone of inhibition show the sensitivity of the antimicrobial drugs.
- N) The eggs of *A. duodenale* floats in saturated solution of common salt.
- O) Antibiotic discs should be sterile before use.

Fill in the blanks :

- P) pH of the mueller hington agar should fall between
- Q) Fertilized eggs of *A. lumbricoides* measures
- R) *Giardia lamblia* was discovered by
- S) Antibiotic sensitivity discs should be stored at °C.
- T) Malarial anemia is type.

SECTION-B

2. Describe the method to maintain culture of *E. histolytica*.
3. Write a short note on axenic cultures.
4. What is the importance of thick smear to diagnosis malaria parasite?
5. Discuss various types of culture media used for cultivating parasites.
6. Briefly explain the principle of animal cell cultures.
7. Describe the preparation of antibiotic discs.
8. Discuss various laboratory animals used in virology.
9. Write a note on inoculum preparation for mycobacteria culture.

SECTION-C

10. What is MIC? Write notes on the Mueller-Hinton agar medium for antimicrobial sensitivity testing.
11. What are precautions should be taken to prevent malaria.
12. What is the role of institutional animal care & use committee for animals used in laboratory?
13. Describe in detail the antimicrobial susceptibility testing of mycobacterium.
14. Discuss the method of preparation and preservation of media for blood parasites.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.