

(6 pages)

Reg. No. :

Code No. : 30559 E Sub. Code : CSMI 31

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2023.

Third Semester

Microbiology

Skill Based Core – MEDICAL LAB TECHNOLOGY

(For those who joined in July 2021 – 2022)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The first aid kit should have the following materials except
 - (a) Sterile cotton or cotton wool and gauze
 - (b) Medicinal adhesive tapes
 - (c) Sodium metasilphate
 - (d) Rollar bandages of various widths and scissors

2. _____ examines specimens for the presence of abnormal cells.
 - (a) Microbiology
 - (b) Cytology
 - (c) Biochemistry
 - (d) Physiology
3. _____ who draws the blood specimen from the patients.
 - (a) Phlebotomist
 - (b) Biochemist
 - (c) Microbiologist
 - (d) Zoologist
4. Blood metabolism can be suppressed or inhibited by the addition of _____.
 - (a) Fluoride ion
 - (b) Monoidoacetate
 - (c) EDTA
 - (d) All the above
5. Which type of Blood is known as the 'Universal Donor'?
 - (a) A
 - (b) O
 - (c) B
 - (d) AB
6. The flocculation technique is best applied in the _____ test.
 - (a) WIDAL
 - (b) VDRL
 - (c) XLD
 - (d) SS

7. An increased level of ALP in blood is associated with
- (a) Liver or bone disorder
 - (b) Typhoid
 - (c) Cholera
 - (d) Shigella
8. An elevated level of creatine kinase is seen in case of _____ except.
- (a) Muscle damage
 - (b) Muscle disorder
 - (c) Heart attack
 - (d) Liver disorder
9. The average pH of the semen is _____.
- (a) 4 (b) 3
 - (c) 9.4 (d) 7.6
10. Normal urine is clear and _____ in colour.
- (a) Golden yellow
 - (b) Pale yellow colour
 - (c) White
 - (d) Pale white

PART B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) State the functions of Haematology and Blood Banking laboratories.
- Or
- (b) State the uses of each of the things kept in a first-aid box.
12. (a) List the formed elements of the blood and state their functions.
- Or
- (b) Describe the clinical significance of haematocrit determination. How would you report haematocrit?
13. (a) Explain the most important blood group in Humans. How will you identify them?
- Or
- (b) Summarize the technique for the serodiagnosis of streptococcal infections.

14. (a) Describe the clinical importance of lactic dehydrogenase enzyme.

Or

(b) Explain briefly about pregnancy test.

15. (a) Report the clinically important structures in urine and state their characteristic features.

Or

(b) Tell the tests done with CSF? State the clinical significance of each test.

PART C — (5 × 8 = 40 marks)

Answer ALL the questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Describe in detail about collection and transport of clinical specimen to the lab.

Or

(b) Prepare a neat chart about clinical lab records.

17. (a) Write a detail notes on blood clotting mechanisms.

Or

(b) Describe in detail about ESR.

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18. (a) State the serological test for syphilis and write down its principle and experimental procedure.

Or

(b) Tell the principle and procedure of WIDAL test.

19. (a) Describe in detail about blood gases and bicarbonate.

Or

(b) Focus on lipid profile test and write about its clinical importance.

20. (a) Summarize the clinical significance of urea analysis.

Or

(b) Describe in detail about Billrubin.

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