2023

BMLT 5th Semester Examination

Clinical Microbiology

PAPER — XIV (UNIT–27)

Full Marks : 40

Time : 2 hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer Q. No. **1** and *any* **three** questions from the rest.

1. Answer *any* **five** questions : 2×5=10

(a) What is dermatomycosis?

(b) What is the clinical importance of optochin test?

(c) What is the use of sodium hypochlorite in healthcare?

(d) What is cold sterilization?

(e) What are the best microbiological laboratory practices to kill endospore-forming bacteria?

(f) What is meant by monomicrobial infection?

(g) Define sepsis.

(h) What is the purpose of use of CLED agar?

2. (a) Differentiate between true pathogens and opportunistic pathogens.

(b) Discuss about the serotypic identification of *Escherichia coli.*

(c) What are CONS? 4+4+2=10

3. (a) Write a short note on BSL-2.

(b) Discuss about the laboratory methods used for diagnosis of suspected Black fever cases.

(c) Discuss about the causative agents of UTI and its laboratory diagnosis. 4+3+3=10

4. (a) What are the different types of lenses used in light microscope? Calculate the total viewing magnification of an object when using the 100 × objective lens.

(b) Why does *Mycoplasma* spp. not belong to Gram profile?

(c) Which lab method is considered as the gold standard for diagnosis of enteric fever? (2+2)+2+4=10

5. (a) What are the microbiological approaches to discriminate between *Pseudomonas aeruginosa* and *Klebsiella pneumoniae*?

(b) How will you biochemically identify Late Lactose Fermenter (LLF) bacteria?

(c) Write a brief note on fumigation. 4+3+3=10

6. (a) Discuss the clinical utility of antimicrobial susceptibility testing.

(b) What is the laboratory diagnosis of stool specimen collected from suspected dysentery patient? 5+5=10

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