

Question Paper

Exam Date & Time: 18-Apr-2022 (10:00 AM - 12:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER B.Sc. M.I.T. / BACHELOR OF OPTOMETRY DEGREE EXAMINATION - APRIL 2022

SUBJECT: MCB2101 - MICROBIOLOGY

(2020 SCHEME)

Answer ALL questions.

Draw diagrams wherever necessary.

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1) With a neat labelled diagram explain the bacterial cell structure. (10)
(5+5 = 10 marks)
- 2) Define and classify immunity. Write in detail the mechanisms of innate immunity. (10)
(1+2+7 = 10 marks)

3. Write short notes on:

- 3A) Cultivation of viruses (5)
- 3B) Mechanism of Anaphylaxis (5)
- 3C) ELISA (5)
- 3D) Cell mediated immune response (5)

4. Answer the following:

- 4A) Write any TWO important contributions of Louis Pasteur (2)
- 4B) Enumerate any TWO disinfectants (2)
- 4C) Write any TWO modes of transmission of infection (2)
- 4D) List any TWO enriched media (2)
- 4E) Classify fungi based on morphology (2)

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THIRD SEMESTER BSc. CND / BSc. PFT / BSc. RRT & DT / BSc. AOTT / BSc. CVT / BSc. EMT / BSc. RT DEGREE
EXAMINATION - APRIL 2022
SUBJECT: MCB2103 - MICROBIOLOGY
(2020 SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1) Classify the methods of sterilization. Explain the moist heat sterilization method employing heat above 100°C. Give examples of three articles sterilized using this instrument. (10)
(2+5+3 = 10 marks)
- 2) Explain the pathogenesis and laboratory diagnosis of pneumonia caused by Streptococcus pneumoniae. Add a note on preventive measures (10)
(4+5+1 = 10 marks)

3. Write short notes on:

- 3A) Pathogenesis of cholera (5)
- 3B) Mechanism of type I hypersensitivity reaction (5)
- 3C) Differences between primary and secondary immune response (5)
- 3D) Etiopathogenesis of poliomyelitis (5)

4. Answer the following:

- 4A) Name any TWO fungi causing infections in humans (2)
- 4B) Write TWO causative agents of bacterial meningitis (2)
- 4C) List FOUR seromarkers of acute hepatitis B viral infection (2)
- 4D) Write FOUR virulence factors of Staphylococcus aureus (2)
- 4E) Name TWO etiological agents causing urinary tract infections (2)

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