

# Question Paper

Exam Date & Time: 19-Jun-2024 (10:00 AM - 12:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER BPT/BOT/BSc. (CVT / PHYSICIAN ASSISTANT / AOTT / RRT & DT / CND / RT / EMT / PFT) DEGREE

EXAMINATION - JUNE 2024

SUBJECT: MCB2103/MICR 201 - MICROBIOLOGY

(2022/2020/2019/2016 SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1) Classify hypersensitivity. Explain the mechanism and mediators of type I hypersensitivity reactions. (10)  
(2+5+3 = 10 marks)
- 2) Explain the prevention and investigations in healthcare associated infections. (10)  
(5+5 = 10 marks)

3) Write short notes on:

- 3A) Bacterial growth curve (5)
- 3B) Mechanisms of autoimmunity (5)
- 3C) Explain the structure of gram negative cell wall (5)
- 3D) Laboratory diagnosis of fungal infections (5)

4) Answer the following:

- 4A) Classify protozoa with examples (2)
- 4B) Name TWO enriched media (2)
- 4C) Classify immunity (2)
- 4D) Write TWO contribution of Louis Pasteur (2)
- 4E) List any TWO live attenuated vaccines. (2)

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# Question Paper

Exam Date & Time: 18-Jun-2024 (10:00 AM - 12:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER BSc. (BPT / RT / EMT / MIT / PHYSICIAN ASSISTANT / RRT & DT / PFT / BAOTT / CVT / BOT)  
DEGREE EXAMINATION - JUNE 2024  
SUBJECT: PAT2103 - PATHOLOGY  
(2020/2022 SCHEME)

Answer ALL questions.  
Draw diagrams wherever necessary.

Marks: 50

Duration: 120 mins.

Answer all the questions.

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|-----|---|-----|
| 1A) | Define necrosis.  | (1) |
| 1B) | Describe the various types of necrosis and give clinical examples of each.<br>(6+3 = 9 marks)   | (9) |
| 2A) | Define anemia. Classify anemia based on morphology.<br>(1+2 = 3 marks)  | (3) |
| 2B) | List the clinical features, mention the etiology and discuss the basic laboratory investigations for iron deficiency anemia.<br>(2+2+3 = 7 marks) | (7) |
| 3A) | List the clinical features of rheumatoid arthritis and osteoarthritis.  | (5) |
| 3B) | Describe the events in wound healing by primary intention with diagrams.  | (5) |
| 3C) | Describe the morphology of tuberculoid and lepromatous leprosy.   | (5) |
| 3D) | List the clinical features and discuss the basic laboratory investigations of hemophilia.   | (5) |
| 4A) | Name two main types of carcinogens with one example each.   | (2) |
| 4B) | Mention the causes of cardiac failure.  | (2) |
| 4C) | List the etiological factors for gastric ulcer.   | (2) |
| 4D) | Define liver failure. List any two causes.  | (2) |
| 4E) | Define embolism. List any two types of embolism.  | (2) |

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