

KALOJI NARAYANA RAO UNIVERSITY OF HEALTH SCIENCES

WARANGAL, TELANGANA- 506 002

MBBS SECOND YEAR DEGREE EXAMINATIONS: JUNE, 2025

MICROBIOLOGY

Paper –I

Time: 3 Hours

Max Marks: 100

Note: Answer all questions

Give Diagrammatic representation wherever necessary

Multiple Choice Questions:

10 X 1 = 10

- 1 Robertson's cooked meat medium is an example of:
a) Enriched medium b) Enrichment medium
c) Anaerobic medium d) Selective medium
- 2 Mechanism of direct transfer of free DNA is:
a) Transformation b) Transposition
c) Conjugation d) Transduction
- 3 Filariasis in India is transmitted by
a) Musca domestica b) Anopheles gambiae
c) Culex quinquefasciatus d) Aedes aegypti
- 4 BCG vaccine is an example of:
a) Natural active immunity b) Natural passive immunity
c) Artificial passive immunity d) Artificial active immunity
- 5 Which of the following samples is not useful in diagnosis of Enteric fever?
a) Blood b) Stool
c) Urine d) Sputum
- 6 Which of the following parasite causes megaloblastic anaemia?
a) Ancylostoma duodenale b) Plasmodium falciparum
c) Diphyllbothrium latum d) All of the above
- 7 Which one of the following is an enriched medium?
a) Selenite F Broth b) Peptone water
c) MacConkey agar d) Blood agar
- 8 Organisms producing extended spectrum β -lactamases (ESBL) are:
a) Resistant to all penicillins- 1st, 2nd & 3rd generation cephalosporins and monobactams b) Resistant to penicillins
c) Resistant to cephalosporins of 1st, 2nd & 3rd generation d) Resistant to cephalosporins of 4th generation
- 9 Which of the following can be converted to toxoid by formaldehyde
a) Exotoxin b) Endotoxin
c) Endospore d) All of the above
- 10 All waste sharps should be discarded in:
a) Cardboard boxes with blue coloured markings b) Puncture proof and leak proof white containers
c) Red coloured non-chlorinated container d) Yellow coloured container

Essay/ Long Answer Questions:**2 X 15 = 30**

11. Define and classify Hypersensitivity Reactions. Write in detail about type IV Hypersensitivity Reactions. (4+4+7)
12. A 7 year old female child presented to cardiology OPD with swollen red tender joints which migrated from one joint to another over a period of hours. The child was having abnormal gait. She also complained of painless small mobile lumps beneath the skin overlying bony prominences. On auscultation murmur was heard over the Mitral valve area. ECG showed prolongation of P-R interval. Child gives a history of sore throat 3 weeks back.
- What is the probable clinical diagnosis and its aetiological agent?
 - Describe the diagnosis criteria used for this condition.
 - How will you prevent recurrence of such episodes? (3+7+5)

Short Answer Questions:**7 X 6 = 42**

- Anaerobic culture methods.
- Bacterial Flagella.
- Polymerase chain reaction.
- Transduction.
- Methods of detecting Viral Growth in Cells.
- Stool concentration techniques.
- Laboratory diagnosis of Fungal Infection.

Very Short Answer Questions:**6 X 3 = 18**

- Negri body
- Four differences between Classical and El Tor Vibrios.
- Sheathed Microfilaria.
- Visceral Larva Migrants.
- Give three examples of Heterophile Agglutination reactions.
- What is the principle of a Fluorescence Microscope.
