THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MBBS 0322] MARCH 2022 Sub.Code :6065

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2019-2020 Batch onwards)
PAPER III – MICROBIOLOGY – I

O.P. Code: 526065

Time: Three hours Maximum: 100 Marks (80 Theory + 20MCQs)

Answer all the Questions

I. Essay: $(2 \times 15 = 30)$

- 1. a) What is Bio-Medical waste (BMW)?
 - b) Why BMW Management is important?
 - c) How BMW are segregated, collected and disposed?
 - d) Add a note on Needle-stick injury management
- 2. A 25 year old male was admitted in the hospital four days after Road Traffic Accident (RTA). On examination, crush injury right foot with soiled gauze contaminated with soil was observed. There was edema, crushed muscles and pain at the site. On palpation crepitus was felt.
 - a. What is the clinical condition?
 - b. Mention the etiological agent responsible for this condition?
 - c. Describe the pathogenesis and clinical manifestations of this condition?
 - d. Describe in detail the laboratory diagnosis and treatment of this disease?

II. Write Short notes on:

 $(10 \times 5 = 50)$

- 1. Enumerate the different types of antigen-antibody reactions? Write in detail about principle, procedure and applications of ELISA?
- 2. Mention the various methods of gene transfer. Write in detail about transformation?
- 3. Write sample collection and laboratory diagnosis of Bubonic plague
- 4. Classify autoimmune diseases? Write in detail about the mechanism of autoimmunity?
- 5. Describe in detail about air surveillance in the operation theatre?
- 6. Classify fungal infection? Write in detail about superficial fungal infection?
- 7. What is congenital infection? List the various organism causing congenital infection? Write in detail about congenital syphilis?
- 8. What is bacterial growth curve? Write in detail about the factors that affect the growth of the bacteria?
- 9. Define sterilization? Write in detail about Central Sterile Supplies Department (CSSD)?
- 10. Describe in detail about Methicillin Resistant Staphylococcus aureus (MRSA)?

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MBBS 0822] AUGUST 2022 Sub. Code :6065

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2019-2020)

SECOND YEAR- SUPPLEMENTARY (CBME) PAPER III – MICROBIOLOGY – I

Q.P. Code: 526065

Time: Three hours Maximum: 100 Marks (80 Theory + 20MCQs)

Answer all the Questions

I. Essay: $(2 \times 15 = 30)$

- 1. A 55 year old male patient attend the ortho OP with c/o pain and swelling over right knee joint. O/E there is fever and tenderness over the joint. Radio diagnosis shows Periosteal thickening and the signs of osteomyelitis. Gram's staining of synovial fluid shows Gram Positive Cocci in groups.
 - a. What is the causative organism and enumerate other organisms causing osteomyelitis.
 - b. Explain the clinical features and pathogenesis of the causative organism.
 - c. Write its lab diagnosis and management.
- 2. Explain the general structure of immunoglobulin and describe the function of different classes of immunoglobulins

II. Write Short notes on:

 $(10 \times 5 = 50)$

- 1. Explain the working mechanism of Phase contrast Microscope.
- 2. Describe the diagnostic methods of mucocutanous candidiasis.
- 3. Write about the types of Bacterial Culture Media.
- 4. Write a short notes on Transposons.
- 5. Explain the function of Natural killer cells.
- 6. Write about cytokines and its function.
- 7. Explain Plasma Sterlization and its uses.
- 8. Write the preventive measures on German measles.
- 9. Short notes on chlamydial conjuctivits.
- 10. Explain the prophylaxis of Human Papilloma virus.
