

[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

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) What is Bio- 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)?