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

[MBBS 0224] FEBRUARY 2024 Sub. Code :6065

M.B.B.S. DEGREE EXAMINATION

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

SECOND PROFESSSIONAL YEAR – (CBME) PAPER I – MICROBIOLOGY

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 25-year-old female visited the OPD with fever, generalized weakness, butterfly rash over the cheek and joint pains. Lab results revealed anemia, leukemia and elevated renal parameters.
 - a) What is the above clinical condition?
 - b) Classify various autoimmune diseases.
 - c) Explain the mechanism involved in this clinical condition.
 - d) Write a note on Lab diagnosis and treatment of autoimmune diseases.
- 2. A 60-year-old diabetic who underwent hysterectomy a month ago presented to the surgical outpatient department with complaints of discharge of pus from the wound with complaints of fever and pain at the site of incision.
 - a) What is your clinical diagnosis?
 - b) Enumerate the etiological agents causing post operative wound infections.
 - c) Discuss in detail about the risk factors and wound class types.
 - d) Write a note on prevention and treatment for the above clinical condition.

II. Write Short notes on:

 $(10 \times 5 = 50)$

- 1. What are the types of Electron microscope? Write on its applications in diagnostic microbiology.
- 2. What is Bacteriophage? Write in detail about lysogenic conversion and its application in medical microbiology.
- 3. Write about monoclonal antibodies and its uses.
- 4. Define Cytokines and write in detail about the major classes and their functions.
- 5. What are the strategies of antimicrobial stewardship program?
- 6. What are the barriers in implementing health care as a Universal right?
- 7. A 45 year old man presented with complaints of intense pain in the ankle joint, redness, swelling and restricted movements resembling septic arthritis. What are the probable etiological agents causing this condition and how will you diagnose by appropriate Lab test?
- 8. What is Erythema infectiosum? Explain briefly about this clinical condition.
- 9. Define viral oncogenesis. Write about oncogenic DNA viruses.
- 10. Write short notes about Ocular fungal infections.