

**Master of Pharmacy Examination, 2017
2nd Semester**

Microbiology - A (II)

Time: Three Hours

Full Marks: 100

Answer any five questions

1. What is poliomyelitis? Briefly discuss the mode of transmission, prognosis of disease, prevention and treatment of the victims. What is the PULSE Polio immunization?

4+12+4 = 20

2. What is Hansen's disease? Differentiate: Tuberculoid and Lepromatous leprosy. Write the role of Dapsone and Clofazimine for the treatment of leprosy with mechanism of action. Mention the demerits of Clofazimine therapy. What is MDR-TB?

2+8+4+2+4=20

3. Write short notes on any two of the following:

- a) Extrapulmonary tuberculosis.
- b) OPV vaccines and its clinical trials.
- c) Baltimore classification of viruses.
- d) *H. pylori* – causative agent for stomach carcinoma.

10x2=20

4. (a) Describe the characteristics of adaptive immunity.
(b) How B lymphocyte and T lymphocyte mediated immunities are generated?
(c) Write a note on Antigen presenting cell and Antigen presentation.

6+ (5+5) +4 =20

5. (a) Write a note on any four of the following autoimmune diseases
(i) Autoimmune anemias (ii) Insulin dependent diabetes mellitus (iii) Graves' disease (iv) Myasthenia Gravis (v) Systemic lupus erythematosus (vi) Rheumatoid arthritis
(b) Write a note on role of released sequestered antigens on auto immune disease

(4x4)+4=20

6. (a) What do you mean by DNA mutation? Explain different types of point mutations with examples.

(b) What are chemical mutagens?

2+14+4 = 20

7. (a) Explain double helix model of DNA proposed by Watson & Crick with proper diagram.

(b) Draw the structure of complementary base pair found in DNA.

(c) Write short note on – Genetic Code, Transformation

10+4+3+3=20