## Madhya Pradesh Medical Science University, Jabalpur MBBS Second Professional Examination January 2025 Subject- Microbiology

Paper- II (new scheme)

Time: 3:00 Hours

Maximum Marks: 100

## Instructions:

- a) All questions are compulsory
- b) Draw diagrams wherever necessary
- c) Answers of Questions and Sub-questions must be written strictly according to serial order of question paper.
- d) MCQ has to be answered in theory answer book
- e) Please write MCQ answer neatly and in serial order with black or blue pen in brackets; for example: 1. (a) 2. (c)
- f) MCQ has to be answered only once, any kind of repetition or cutting or erasing or whitener will be considered as malpractice, such answers will not be counted in marks and action will be taken according to UFM rules of university.
- g) Subjective answer should be answered in up to 30 words per marks. For example, if a question having 2 marks should answered in up to 60 marks.

Q1. Total MCQs: 10 10 x 1 = 10

1 Microbiological waste sho	buld be segregated in which o	colour hags	
			(d) Plack
(a) Yellow	(b) Red	(c) Blue	(d) Black
2. Subacute sclerosing panencephalitis (SSPE) is a complication following which viral infection?			
(a) Mumps	(b) Measle	(c) Rubella	(d) Influenza
3. Characteristic feature of anaerobic bacterial infections are all except:			
(a) Foul smelling discharge	(b) Blue green colour pus	(c) Failed to grow in aerobic media	(d) Gas in tissue
4. Which is the best indicator organism of fecal contamination of water?			
(a) Vibrio cholerae	(b) Shigella	(c) Fecal Streptococci	(d) Fecal E. coli
5. Definitive host in paragonimiasis is.			
(a) Snail	(b) Fish	(c) Man	(d) Mosquito
6. Mechanism of action of tetanospasmin is			
(a) Inhibition of cGMP	(b) Inhibition of cAMP	(c) Inactivation of Ach	(d) Inhibition of GABA
		receptors	release
7. Which is not vaccine deriv	'		
(a) cVDPV	(b) mVDPV	(c) iVDPV	(d) aVDPV
8. Mode of transmission of	1		
(a) Contamination of	(b) Flies	(c) Direct contact with	(d) Any of the above
clothes		discharge	
	· DATA		
9. All of the following Oncog			
(a) Hepatitis B virus	(b) Hepatitis C virus	(c) HIV	(d) Varicella zoster virus
10. Organisms that does not			
(a) Trichophyton	(b) Epidermophyton	(c) Microsporum	(d) Candida albicans

- a. A 23-year-old male having a history of sexual exposure with a commercial sex worker, is presented in OPD with single painless hard indurated genital ulcer & painless hard non suppurative lymph node.
- I. What is most probable clinical diagnosis & etiological agent. (1+1)
- II. Discuss the pathogenesis of disease. (4)
- III. Enlist other causative agents of sexually transmitted infections. (4)
- IV. Discuss the laboratory diagnosis of above-mentioned disease. (10)
  - b. A 40-year-old male visited his local doctor complaining of difficulty in swallowing liquids, loss of appetite and restlessness. He had a history of dog bite one month back.
  - What is the most probable etiological diagnosis? (2)
- II. Draw a labeled diagram of the morphology of the causative agent of this condition. (3)
- III. Discuss the laboratory diagnosis. (10)
- IV. Prophylaxis against this disease. (5)

## Q3. Brief Answer Questions

 $6 \times 05 = 30$ 

- a. Define healthcare associated infections (HAIs) & list major types of HAIs. Discuss measures to prevent them.
- b. Discuss suppurative infection caused by Streptococcus pyogenes and its laboratory diagnosis.
- c. Laboratory diagnosis of diphtheria infection.
- d. Cryptococcal meningitis.
- e. Prion disease.
- f. Aspergillosis.

## Q4. Short Answer Questions

 $10 \times 2 = 20$ 

- a. Why indwelling catheter is risk of UTI?
- b. Human metapneumovirus
- c Congenital infections
- d. What is TORCH.
- e. Enumerate etiological agents of pyogenic meningitis.
- f. Enumerate etiological agents of Superficial mycoses.
- g. Draw labelled diagram of LD bodies.
- h. Lepromin test.
- i. Sequential steps to be followed after needle stick injury.
- j. Spaulding's classification.