

Master of Science (M.Sc.) (Microbiology) Semester—II (C.B.C.S.) Examination

MEDICAL MICROBIOLOGY AND PARASITOLOGY (MMP)

Paper—3

Time : Three Hours]

[Maximum Marks : 80

N.B. :— ALL questions are compulsory and carry equal marks.

1. Enlist bacteria producing exotoxins and describe the action of these exotoxins. 16

OR

Describe the following :

- (a) Bacterial adhesion to mucosal surfaces. 8
(b) Acute, chronic and latest infections. 8
2. Discuss the pathogenicity and laboratory diagnosis of streptococcus pneumoniae. 16

OR

Write on the following :

- (a) Clostridium difficile. 8
(b) MDR tuberculosis. 8
3. Describe the pathogenesis and laboratory diagnosis of Cryptococcus neoformans. 16

OR

Write on the following :

- (a) Trichophyton. 8
(b) Blastomyces dermatitidis. 8
4. Describe the life cycle and laboratory diagnosis of Taenia Saginata. 16

OR

Describe the life cycle of :

- (a) Giardia Lamblia 8
(b) Hymenolepis nana. 8
5. Write short notes on :
- (a) Endotoxins 4
(b) Streptococcus suis 4
(c) Candida albicans 4
(d) Plasmodium Vivax. 4

Master of Science (M.Sc.) Semester—II (CBCS) (Microbiology) Examination**MEDICAL MICROBIOLOGY AND PARASITOLOGY (MMP)****Paper—3**

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[Maximum Marks : 80

N.B. :— (1) **ALL** questions are compulsory and carry equal marks.

(2) Illustrate answers with well labelled diagrams wherever necessary.

1. Give the list of bacteria producing protein toxins and discuss their actions. 16

OR

Describe the following :

- (a) Bacterial invasion to mucosal surfaces 8
 (b) Process of infections. 8
2. Discuss the pathogenicity and laboratory diagnosis of proteins vulgaris. 16

OR

Write on the following :

- (a) Bordetella pertusis 8
 (b) MDR tuberculosis. 8
3. Describe the morphological characteristics and laboratory diagnosis of trichophytons. 16

OR

Write on the following :

- (a) Pneumocystis carinii 8
 (b) Candida albicans. 8
4. Describe the life cycle and laboratory diagnosis of Leishmania donovani. 16

OR

Describe the life cycle of the following :

- (a) Giardia lamblia 8
 (b) Tania saginata. 8
5. Write notes on :
 (a) Portal of exit for pathogens 4
 (b) Streptococcus Pneumoniae 4
 (c) Microsporium 4
 (d) Hymenolipis nana. 4

Master of Science (M.Sc.) Semester—II (C.B.C.S.) (Microbiology) Examination

MEDICAL MICROBIOLOGY AND PARASITOLOGY (MMP)

Paper—3

Time : Three Hours]

[Maximum Marks : 80

Note :—All questions are compulsory and carry equal marks.

1. Describe the bacterial adhesion, colonization and invasion of urogenital tract mucosa. 16

OR

Write notes on :—

- (a) Process of infection. 8
- (b) Aggressins. 8
2. Discuss the pathogenicity and laboratory diagnosis of streptococcus pneumoniae. 16

OR

Write notes on :—

- (a) MDR tuberculosis. 8
- (b) MRSA. 8
3. Describe the morphological characteristics and laboratory diagnosis of microsporium. 16

OR

Write notes on :—

- (a) Trichophyton. 8
- (b) Histoplasma capsulatum. 8
4. Discuss the life cycle and laboratory diagnosis of Entamoeba histolytica. 16

OR

Describe the life cycle of the following :—

- (a) Taenia solium. 8
- (b) Leishmania donovani. 8
5. Write notes on :—
- (a) Toxins. 4
- (b) Streptococcus suis. 4
- (c) Candida albicans. 4
- (d) Giardia lamblia. 4

MSP/KS/23/1650

Master of Science (M.Sc.) Semester—II Choice Based Credit System (CBCS)
(Microbiology) Examination

IMMUNOLOGY AND IMMUNODIAGNOSTICS (IID)

Paper—4

Time : Three Hours]

[Maximum Marks : 80

N.B. : All questions are compulsory and carry equal marks.

1. Describe in detail the mechanism of cell mediated immune response. 16
- OR**
- Describe the classical pathway of complement system. 16
2. Discuss the salient features of tumor evasion. 16
- OR**
- Give an account of mechanism of Graft rejection and immunosuppressive therapy. 16
3. Discuss immediate type of hypersensitivity with examples. 16
- OR**
- What is auto immunity ? Describe SCID and Grave's disease. 16
4. Discuss mechanism and applications of precipitation reaction. 16
- OR**
- Write notes on :
- (a) Radioimmuno assay. 8
- (b) Western blotting technique. 8
5. Write short notes on :
- (a) Primary and secondary lymphoid organs. 4
- (b) Cancer Immunotherapy. 4
- (c) Guillain Barre Syndrome. 4
- (d) Describe ELISA. 4

Master of Science (M.Sc.) Semester-II Choice Based Credit System (CBCS)
(Microbiology) Examination

MEDICAL MICROBIOLOGY AND PARASITOLOGY (MMP)

Paper-3

Time : Three Hours]

[Maximum Marks : 80

N.B. :— All questions are compulsory and carry equal marks.

1. Describe the mechanism of bacterial adhesion, Colonization and invasion of respiratory tract. 16

OR

- Describe the types, stages and process of infection. 16

2. Describe the pathogenesis and laboratory diagnosis of *Vibrio Cholerae*. 16

OR

Write notes on the following new emerging infections :

- (a) Methicillin Resistant *Staphylococcus aureus*. 8

- (b) *Clostridium difficile*. 8

3. Describe the morphological characteristics, pathogenesis and laboratory diagnosis of *Candida Albicans*. 16

OR

Write notes on the laboratory diagnosis of :

- (a) *Histoplasma Capsulatum* 8

- (b) *Cryptococcus Neoformans*. 8

4. Describe the life cycle of *Entamoeba Histolytica*. Add a note on its laboratory diagnosis. 16

OR

- Describe the life cycle and laboratory diagnosis of *Leishmania Donovanii*. 16

5. Write notes on :

- (a) Aggressins 4

- (b) Multi drug resistant tuberculosis 4

- (c) Morphological characteristics of *Microsporium* 4

- (d) *Taenia Solium*. 4