


NC-2106000102030101
Second Year M.B.B.S. Examination
January - 2022
Microbiology : Paper-I
(New Course)

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दशायेव निशानीवाली विनतो उत्तरपदी पर अवश्य वपवी. Fillup strictly the details of signs on your answer book.		Seat No.:
Name of the Examination : Second Year M.B.B.S.		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Name of the Subject : Microbiology : Paper-I		<div style="border: 1px solid black; height: 100px; border-radius: 10px; display: flex; align-items: center; justify-content: center;"> Student's Signature </div>
Subject Code No. : 2 1 0 6 0 0 0 1 0 2 0 3 0 1 0 1		
Section No. (1, 2.....) : Nil		

SECTION-IA
General Microbiology and Immunology

- 1 What is complement. Explain in detail about classical and alternate complement pathway. Discuss the effector functions of complement and complement deficiency associated diseases. 12×1=12
- 2 Short Notes: (Any Four) 7×4=28
 - (1) Major Histocompatibility Complex.
 - (2) Describe in detail about type 1 hypersensitivity.
 - (3) Enumerate various methods of Horizontal gene transfer. Discuss in detail about conjugation.
 - (4) Describe in detail about principle, application and modification of polymerase chain reaction.
 - (5) Describe antimicrobial susceptibility testing method.

3 Write Short answers in 2-3 lines: 5×2=10

- (1) What is agglutination reaction ? Give two examples of agglutination reaction.
- (2) Enumerate two methods to check efficiency of sterilant and disinfection.
- (3) What is microaerophilic bacteria ? Give two examples.
- (4) Enumerate any four live vaccines.
- (5) Give two examples of type III Hypersensitivity reaction.

SECTION-IB

Infection of Bloodstream and Cardiovascular System, Gastrointestinal Tract and Hepatobiliary System

1 5 Year old child presented to OPD with 12-15 12×1=12

episodes of severe watery diarrhea and vomiting since 2 days. Stool is collected and it has rice water type of appearance.

- (1) What is your probable diagnosis.
- (2) Write in detail about laboratory diagnosis of causative organism.
- (3) Which are the other species of causative organism.

2 Short Notes: (Any Four) 7×4=28

- (1) Enlist the diarrhoeagenic E.coli. Discuss the pathogenesis and laboratory diagnosis of diarrhoeagenic E.coli.
- (2) Describe in detail about systemic candidiasis and laboratory diagnosis.
- (3) 18 year old female presented with high grade fever which rises every third day with chills and rigor. Her blood sample was subjected to rapid diagnostic test which revealed positive for Plasmodium vivax. Discuss the laboratory diagnosis in detail.
- (4) Describe in detail about pathogenesis, classification and laboratory diagnosis of Dengue virus infection.
- (5) Describe in details about importance of communication skill for Doctor-patient relationship.



3 Write Short Answer in 2-3 Lines:

5×2=10

- (1) Enlist four examples of systemic mycosis.
- (2) Name agents for lymphatic filariasis.
- (3) Name four opportunistic infection associated with HIV/AIDS.
- (4) Blood stream infection causing bacteria (Any four).
- (5) Name two parasites causing autoinfection.