

PARUL UNIVERSITY
PARUL INSTITUTE OF APPLIED SCIENCES
MID SEMESTER INTERNAL EXAMINATION, APRIL 2017
B. Sc./ M. Sc. Semester II/IV

Subject:

Paper Code: 11101251

Title of the paper: Medical microbiology

Date: 11 /04/2017

Time: 12.30 p.m. to 02.00 p.m.

Maximum Marks: 40

Instructions:

- 1. All questions are compulsory and options are given in first and second question only.**
 - 2. Numbers to the right of question indicate the marks of respective question.**
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Q. 1 Attempt any one question of the following. **(08)**

(i) Give the detailed justification of Anthrax being biological weapon.

Ans: Any 4 justification: 4x2=8

(ii) What are the different components of blood? Write down their functions

Ans: Table or diagram format no description required: with their functions: 4+4

Q. 2 Attempt any three questions of the following. **(12)**

(i) Write a short note on lab diagnosis of Cholera.

Ans: any 2 method : 2 marks each

(ii) Write a short note on Symptoms and Pathogenesis of Tetanus.

Ans: 2 marks each

(iii) Write a short note on Principles and mechanism of Blood sugar test

Ans: 2 marks each(normal range is required)

(iv) Write a short note on Coomb's test

Ans; Principles, mechanism, significance: 1+1+2

(v) ABO and Rh groups with their antigen and antibody.

Ans: A+/A-, B+/B-, AB+/ AB-, O+/O- with respective Ag and Ab name

Q. 3 Do as directed. Attempt all five questions. **(05)**

(i) What is the normal range of Bilirubin in blood?

(ii) What is phage typing?

(iii) What is the name of the plasmid found in *Bacillus anthracis*?

(iv) What is the causative agent of Tetanus?

(v) How many different kinds of strains of *Vibrio* can be found?

Q. 4 Write correct option in your answer sheet for following 15 multiple choice questions. **(15)**

MCQ 1 Syphilis is caused by

(A) Moulds

(B) *Treponema palidum*

(C) *S. aureus*

(D) *E. coli*

MCQ 2 Pus-forming disease is caused by

(A) *E. coli*

(B) Moulds

- MCQ 3 Golden colour colony can be found in
 (C) *Treponema palidum* (D) *S. aureus*
 (A) *Staphylococcus sp* (B) *Streptococcus sp*
 (C) *Micrococcus sp* (D)
- MCQ 4 Which media is used as transport media for Cholera?
 (A) Venkatraman-Ramakrishna (B) Nacl agar medium
 (VR)media
 (C) Cary- Blair media (D) None
- MCQ 5 Why Vibrio can not be found in Ganges water
 (A) Due to high amount of oxygen (B) Due to large no. of vibrioΦs
 (C) Due to chlorine (D) Due to its salinity
- MCQ 6 Liver function tests include
 (A) SGOT (B) SGPT
 (C) Alkaline Phosphatase (D) All of the above
- MCQ 7 Differentiate between *Micrococcus sp* and *Staphylococcus sp* can be done by
 (A) 16S r-DNA sequencing (B) Catalase test
 (C) Protein A test (D) All of the above
- MCQ 8 Lockjaw is observed in which disease?
 (A) Cholera (B) AIDS
 (C) Polio (D) Tetanus
- MCQ 9 Anthrax is a
 (A) Zoonotic disease (B) Plant disease
 (C) Viral disease (D) All of the above
- MCQ 10 Which blood group is considered as universal acceptor
 (A) O+ve (B) AB+ve
 (C) O - ve (D) AB-ve
- MCQ 11 Which disease causative organism can not be cultivated invitro?
 (A) Cholera (B) Syphilis
 (C) Jaundice (D) Anthrax
- MCQ 12 Bacterial colitis is associated with
 (A) *E.coli* (B) *Salmonella sp*
 (C) *Shigella sp* (D) All of above
- MCQ 13 Virulence of *Bacillus anthraxis* depends on
 (A) Toxins (B) Endospore
 (C) Capsule (D) Both A and C
- MCQ 14 WIDAL test is used in
 (A) Cholera (B) Syphilis
 (C) Typhoid (D) Anthrax
- MCQ 15 Which institute in India has firstly formulated Vibrio Cholerae phage typing?
 (A) NICED, Kolkata (B) IICB, Kolkata
 (C) SINP, Kolkata (D) BOSE Institute, Kolkata