

D-003-001631

Seat No.

Third Year B. Sc. (Sem. VI) (CBCS) Examination

April / May - 2015

Microbiology: MB-601

(Immunology & Clinical Microbiology)

Faculty Code: 003

Subject Code: 001631

Time: $2\frac{1}{2}$ Hours]

[Total Marks: 70

Instructions: (1) All questions are compulsory.

- The right side figures indicate marks of question. (2)
- (3)Draw figures wherever required.

SECTION - I

MCQ: 20 1

- (1) Example of acquired active artificial immunity is
 - (A) Vaccine
- (B) Colostrum
- (C) Saliva
- (D) None
- (2) 'Negative phase' is observed in
 - (A) Active immunity
- (B) Passive immunity
- (C) (A) and (B) both (D) None

| (3) | Any substance that enhances immunogenicity is known a | | | | |
|-----|--|-------|-----------------------------|--|--|
| | (A) Hapten | (B) | Epitope | | |
| | (C) Adjuvant | (D) | Polysaccharide | | |
| | | | | | |
| (4) | Bacteria readily escaped phagocytosis due to | | | | |
| | (A) flagella | (B) | cell wall | | |
| | (C) capsule | (D) | spore | | |
| | | | | | |
| (5) | Half life of IgG is | | | | |
| | (A) 23 days | (B) | 6 days | | |
| | (C) 10 days | (D) | 12 days | | |
| | | | | | |
| (6) | During the studies on structure of Ig, which substance is used to digest it? | | | | |
| | (A) Amylase | (B) | DNase | | |
| | (C) Papain | (D) | Ligase | | |
| | | | | | |
| (7) | Protection of blood stre | eam i | s carried out by which Ig ? | | |
| | (A) IgA | (B) | IgM | | |
| | (C) IgG | (D) | $_{\mathrm{IgD}}$ | | |
| | | | | | |

| (8) | Clor | nal selection theory | was | proposed by | |
|-----------|---|-----------------------------|--------|------------------------|--|
| | (A) | Burnet | (B) | Koch | |
| | (C) | Pasteur | (D) | None | |
| | | | | | |
| (9) | Auto | o immunity of testic | ele is | known as | |
| | (A) | Autoimmune orchit | is | | |
| | (B) | Myasthenia gravis | | | |
| | (C) | Addison's disease | | | |
| | (D) | None | | | |
| | | | | | |
| (10) | Seru | ım sickness is which | h typ | e of hypersensitivity? | |
| | (A) | Type-I | (B) | Type-II | |
| | (C) | Type-III | (D) | Type-IV | |
| | | | | | |
| (11) | Which is immunodeficiency syndrome related to disorder of | | | | |
| | - ' | gocytosis ? | | | |
| | | ADA deficiency | | | |
| | (B) | Ç V | | | |
| | (C) | (C) Lazy leucocyte syndrome | | | |
| | (D) | None | | | |
| (12) | End | otoxins are | | | |
| (/ | (A) | Δ labile | | | |
| | ` / | Proteins | | | |
| | | Produced by gm-ve | a haa | otovi a | |
| | | All of above | - nac | νσπα | |
| | (D) | An or above | | | |
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| (13) | Whi | ch organisms are re | espon | sible for food poisoning? | |
|-----------|--|-----------------------|-------|---------------------------------|--|
| | (A) | Staphylococci | (B) | Clostridia | |
| | (C) | (A) and (B) both | (D) | None | |
| | | | | | |
| (14) | When pathogens are able to cross the placental barrier an infect the foetus 'in utero' are called as | | | | |
| | (A) | Primary infection | | | |
| | (B) | Secondary infection | ı | | |
| | (C) | Iatrogenic infection | ı | | |
| | (D) | Congenital infection | n | | |
| | | | | | |
| (15) | RPR test is for the detection of | | | | |
| | (A) | Typhoid fever | (B) | Syphilis | |
| | (C) | Yellow fever | (D) | Malaria | |
| | | | | | |
| (16) | Infe as | ctious diseases trans | ferre | d from animal to man are called | |
| | (A) | Epidemic | (B) | Endemic | |
| | (C) | Zoonoses | (D) | None | |
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| _ | | - | | • | |

| (17) | The person who carries pathogens but does not show symptom are known as | | | | | | |
|------|---|----------------------|--------|-------------------|--|--|--|
| | (A) | Convalscent carrier | | | | | |
| | (B) | Healthy carrier | | | | | |
| | (C) | Chronic carrier | | | | | |
| | (D) | None | | | | | |
| | | | | | | | |
| (18) | Tub | erculosis is transmi | tted 1 | through | | | |
| | (A) | Inhalation | (B) | Water | | | |
| | (C) | Food | (D) | Insect | | | |
| | | | | | | | |
| (19) | Which organisms are responsible for dysentery ? | | | | | | |
| | (A) | Salmonella | (B) | Shigella | | | |
| | (C) | E. Coli | (D) | Bacteroids | | | |
| | | | | | | | |
| (20) | Whi | ich are pharmacolog | ically | active compounds? | | | |
| | (A) | Histamine | (B) | SRS-A | | | |
| | (C) | (A) and (B) both | (D) | None | | | |
| | | | | | | | |
| | | | | | | | |

SECTION - II (DESCRIPTIVE)

| 2 | (A) | Answer any three: | | | |
|---|-----|---------------------------------|---|----|--|
| | | (1) | Define : Hapten | | |
| | | (2) | What is IgE ? Write its function. | | |
| | | (3) | What is 'Tumor' ? | | |
| | | (4) | Which are causative agents of Malaria? | | |
| | | (5) | Which tests are required before blood transfusion | ? | |
| | | (6) | Enlist cells and organs of Immune system. | | |
| | (B) | Ans | ewer in brief: (any three) | 9 | |
| | | (1) | Enlist factors influencing immunogenicity. | | |
| | | (2) | Define: Antibody affinity and avidity. | | |
| | | (3) | What is PIDD and SIDD ? | | |
| | | (4) | Which are microbial virulence factors? | | |
| | | (5) | What is immuno fluorescence? | | |
| | | (6) | What are Isoantigens ? | | |
| | (C) | Write short notes on: (any two) | | 10 | |
| | | (1) | "Natural immunity" | | |
| | | (2) | Monoclonal antibody | | |
| | | (3) | Organ specific autoimmune diseases | | |
| | | (4) | Disease caused by Gm positive bacteria | | |
| | | (5) | Immuno electrophoresis. | | |

| 3 | (A) | Answer any three: | | | |
|---|-----|---------------------------------|---|---|--|
| | | (1) | What is Herd immunity? | | |
| | | (2) | Write biological function of IgA. | | |
| | | (3) | What is GVH ? | | |
| | | (4) | What are serovars? | | |
| | | (5) | What are vaccines ? | | |
| | | (6) | What is contact dermatisis? | | |
| | (B) | Ans | wer in brief: (any three) | 9 | |
| | | (1) | Write about lymphocytes. | | |
| | | (2) | Write structure and function of IgM. | | |
| | | (3) | Describe Arthus reaction. | | |
| | | (4) | Name of the pathogen responsible for syphilis, leprosy and typhoid. | | |
| | | (5) | Describe "Agglutination". | | |
| | | (6) | Write normal flora of urinogenital tract? | | |
| | (C) | Write short notes on: (any two) | | | |
| | | (1) | Acquired immunity | | |
| | | (2) | IgG | | |
| | | (3) | Anaphylaxis | | |
| | | (4) | Malaria | | |
| | | (5) | ELISA. | | |