PF-003-001631 Seat No. _____

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

July - 2018

Microbiology : Paper - 601

(Immunology And Clinical Microbiology)

(New Course)

Faculty Code : 003

Subject Code : 001631

Time : $2\frac{1}{2}$ Hours] [Total Marks : **70**

Instructions : (1) All Questions are compulsory.

(2) Right side figure indicate marks of the question.

(3) Draw figures wherever necessary.

(4) Write answers of all the questions in the main answer sheet.

1 Answer specifically : **1×20=20**

(1) Define Innate Immunity

(2) Define Adjuvant

(3) Enlist various cells of immune system

(4) What is the contribution of Tiselius and Kabat in immunology?

(5) Define immunoglobulin

(6) Name the scientists who developed Hybridoma technology

(7) What do you mean by Opsonization?

(8) Define Antibody affinity.

(9) Define Autoimmunity.

(10) Enlist types of immunodeficiency/

(11) What mediates Type - II Hypersensitivity?

(12) What is Hyper acute graft rejection?

(13) Define Normal Flora.

(14) Define Gnotobiotic animal.

(15) Enlist Microbial Virulence Factors

(16) Enlist three Epidemiological markers.

(17) What is Blood Transfusion?

(18) What is RIA?

(19) What is the use of Western Blot method?

(20) Who invented ABO Blood Group system?

2 (A) Answer the following (Any **Three**) **2×3=6**

(1) What is Passive Natural Immunity? Give Example.

(2) Draw a well labeled diagram of IgM

(3) What is Bruton's disease?

(4) State clinical symptoms of Malaria disease.

(5) What is SPRCA method?

(6) What is Immunoflorescence

(B) Answer the following : (Any **Three**) **3×3=9**

(1) Explain the generation of primary and secondary immune response

(2) Discuss structure and function of IgA

(3) Briefly explain the mechanism of Type - I hypersensitivity

(4) Discuss pathogenesis and treatment of Typhoid

(5) State importance of pre donation counseling

(6) Briefly discuss various types of Autoimmune diseases

(C) Write short notes : (Any **Two**) **5×2=10**

(1) Factors affecting Immunogenicity

(2) Antibody diversity

(3) Immunodeficiency diseases

(4) Pathogenesis and treatment of Amoebiosis

(5) Methods of identification of microbes in a specimen

3 (A) Answer the following : (Any **Three**) **2×3=6**

(1) What is inflammation reaction?

(2) What is Clonal selection Theory?

(3) Enlist various types of tumor antigens.

(4) Write a short account on Normal flora of skin

(5) Briefly explain the process of Blood coagulation

(6) Explain Western Blot

(B) Answer the following : (Any **Three**) **3×3=9**

(1) Explain the role of Phagocytosis in immune response

(2) Discuss biological functions of immunoglobulin

(3) Explain various types of graft rejection

(4) Explain Epidemiological tools

(5) Describe in brief the mechanism and types of ELISA

(6) Describe various types of grafts

(C) Write short notes : (Any **Two**) **5×2=10**

(1) Cells and organs of immune system

(2) Monoclonal antibody production and function

(3) Tumor diagnosis and treatment

(4) Vaccines

(5) Precipitation reactions