Time 3 hrs

MM: 52

Attempt two question from the each Section A and B and the section C is compulsory

Section A Define the terms "Innate immunity and Acquired immunity". Discuss the 1 8 barriers of innate immunity in detail 2 Explain Complement system describing in detail about the activation of 8 complement cascade? Discuss the overview of humoral and cell mediated branches of the 3 8 immune system in the humoral response. 4. Explain class switching? How it is responsible for generation of diversity 8 in antibody? Section B 5 Give a detailed account on different types of hypersensitivity. 8 6 What is transplation? Write down the mechanism of Graft rejections 8 What are monoclonal antibodies? Write the method of their production. 7 8 8 Discuss the construction, administration and mechanism of action of DNA vaccines. Section C 9 Explain the following  $(2 \times 10)$ 20 Antigenicity i. ii. Active and passive immunity Immunoglobulins iii. MHC iv. AIDS Hypersensitivity vi. Autoimmunity vii.

viii. Immunomodulation

Edible vaccine

ix.

Hybridoma technology