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Sardar Patel University
M. Sc. (III Semester) Examination (CBCS)
Saturday, 1st December, 2012
2.30 to 5.30 p.m.
Zoology
PS03CZOO02 – Immunology

Q.1 Select the correct answer for the following: (08 marks)

A) C reactive protein is:
   a) Complement protein
   b) cytokine
   c) Acute phase protein
   d) Growth factor

B) Effector function of antibody molecule is dependent on:
   a) Fc
   b) Fab
   c) CH1 domain
   d) Hinge region

C) Which of the following enzyme is essential for somatic hypermutation?
   a) NADH oxidase
   b) Catalase
   c) Activation induced cytidine deaminase (AID)
   d) Pepsin

D) TLR5 recognize what as target?
   a) Flagallin
   b) dsRNA
   c) Virus
   d) Bacterial DNA

E) Which one of the following is not antigen presenting cell?
   a) B cell
   b) Tc- cell
   c) Dendritic cell
   d) Macrophage

F) Which of the following is playing major role in transplantation rejection?
   a) CD8+ cells
   b) CD4+ cells
   c) Immunoglobulins
   d) Complement

G) Igα/Igβ chains are present in:
   a) TCR
   b) MHC
   c) BCR
   d) None of the above

H) Two or more cytokines that mediate similar function are said to be:
   a) Autocrine
   b) Paracrine
   c) Redundant
   d) Pleotrophic

Q.2 Answer any seven from the following: (14 marks)

a) What is psoriasin and its role?
b) What is the role of MBL?
c) What is ADCC?
d) What is the role of NADPH phagosome oxidase?
e) What is one turn-two turn rule?
f) Name the scientist who received Nobel Prize for work on anaphylaxis.
g) What is allelic exclusion?
h) What is the characteristic of chemokine receptors?
i) Contact dermatitis is which type of hypersensitivity response? Why?

Q.3 A. Explain structure and function of thymus. (06marks)

B. Write a note on inflammation. (06marks)

OR

B. Explain how endogenous antigens are processed.

Q.4 A. Explain classical pathway of complement activation. (06marks)

B. Explain how structure of IgG was determined. (06marks)

OR

B. Explain steps involved in allograft rejection.

Q.5 A. Explain two organ specific autoimmune diseases. (06marks)

B. Explain the steps involved in variable region DNA rearrangement (06marks)

OR

B. Explain erythroblastosis fetalis.

Q.6 A. Discuss the cell adhesions molecules involved in leucocyte migration. (06marks)

B. Explain precipitation reactions. (06marks)

OR

B. Write on ELISA.

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