

M.Sc. Life Sciences Semester II Examination
March/April-2017
Paper No. VII Radiation Biology and Immunology
Subject Code No. 2948

Time: - 2.5 Hours

Total Marks:-70

Instructions: (1) Attempt all questions
(2) Each question carries equal marks

Q1. Describe β - and γ - radiations and their interaction with matter.

OR

Q1. Write notes on:

- (a) Pair production and Compton effect
- (b) Production of X-rays

Q2. Explain the effects of radiation on:

- (a) Digestive system and
- (b) Biomolecules (any three)

OR

Q2. Explain with appropriate figures the effect of radiation on haemopoietic organs.

Q3. (a) What is complement system? Discuss Lectin pathway of complement system.

- (b) Describe the uses of radiation in agriculture, medical sciences and in research

OR

Q3. Write on:

- (a) Hazards of radiation
- (b) Classical pathway of complement system

Q4. Write on:

- (a) Inflammation
- (b) Chemiluminescence

OR

Q4. Explain:

- (a) Antibody mediated effector function
- (b) Phagocytosis

Q5. Write briefly on:

- (a) RIST and RAST
- (b) RTS,S

OR

Q5. Discuss:

- (a) Advantages and disadvantages of edible vaccines
 - (b) Erythroblastosis fetalis
-