

Q.1		Answer the Following Questions (Any Six)	42 Marks
1	WHAT ARE MALIGNANT AND BENIGN NEOPLASMS? EXPLAIN THEIR CHARACTERISTICS IN DETAIL		
2	WRITE A NOTE ON CARCINOGEN CLASSIFICATION SYSTEM OF THE NATIONAL TOXICOLOGY PROGRAM.		
3	WRITE A NOTE ON IARC AND EPA CLASSIFICATION OF CARCINOGENS		
4	WHAT ARE DNA DAMAGING AGENTS? CLASSIFY THEM WITH SUITABLE EXAMPLES		
5	EXPLAIN THE PROCESS OF DEVELOPMENT OF CHEMICAL CARCINOGENESIS.		
6	EXPLAIN INITIATION PROMOTION MODEL FOR CARCINOGENESIS		
7	WRITE IN BRIEF ABOUT MUTATIONAL ACTIVATION OF PROTO ONCOGENES WITH SPECIAL REFERENCE TO <i>RAS</i>		
8	WRITE A BRIEF NOTE ON TUMOR SUPPRESSOR GENES AND DISCUSS ABOUT P53 TUMOR SUPPRESSOR GENE		
9	EXPLAIN PHYSICAL AND CHEMICAL TYPES OF INDUSTRIAL HAZARDS		
10	POINT OUT SOME EFFECTS OF TOXIC CHEMICALS ON ENZYME.		
Q.2		Answer the Following Short Questions (Any Eight)	8 Marks
1	IRON CONTAINING ENZYMES ARE REPLACED BY WHICH GAS?		
2	WHICH POISON IS ALSO CALLED VEGETABLE ACID POISON?		
3	DEFINE INDUSTRIAL HAZARD.		
4	NAME THREE TYPES OF PHYSICAL HAZARDS.		
5	NAME AN PIONEER OF INDUSTRIAL TOXICOLOGY.		
6	DEFINE NONSENSE MUTATIONS		
7	WHAT IS THE MAJOR LIMITATION OF AMES TEST?		
8	HOW WAS THE FIRST PROOF OF CHEMICAL CARCINOGENESIS OBTAINED?		
9	N-METHYL-N-NITROSOUREA FALLS UNDER WHICH CATEGORY OF CARCINOGEN?		
10	EPIGENETIC AGENTS ARE RESPONSIBLE FOR MUTAGENESIS? TRUE OR FALSE?		