1205E241   Candidate's Seat No : _____

BSc Sem 5 Examination
CC - 302
Bio Chemistry (O&N)

Time : 2-00 Hours]   May 2022   [Max. Marks : 50

BIC302 (MOLECULAR BIOLOGY)
BSc SEMESTER V (**Answer any THREE**)

Q1(a)	Discuss the experiment of Griffith &state its importance	(07)
Q1(b)	Explain: Watson and Crick model of DNA	(07)
Q2(a)	Discuss: Thermal denaturation of DNA	(07)
Q2(b)	Explain: Elongation process in replication	(07)
Q3(a)	Write a note on E.Coli RNA polymerase	(07)
Q3(b)	Describe termination of Translation	(07)
Q4(a)	Define an Operon and give a detail account of Lac Operon	(07)
Q4(b)	Explain with examples: Post translational modifications	(07)
Q5(a)	Discuss in detail 5BU as mutagenic agent	(07)
Q5(b)	Explain: Photo reactivation mechanism of DNA repair	(07)
Q6(a)	Discuss: Effect of UV radiation on DNA	(07)
Q6(b)	Explain: HNO_2 as mutagenic agents	(07)
Q7(a)	State f]seven applications of genetic engineering and explain any one	(07)
Q7(b)	Explain: Southern Hybridization technique	(07)
Q8(a)	Define vector and discuss properties of a vector	(07)
Q8(b)	Discuss : Restriction Enzymes and Explain in details with suitable example	(07)
Q9	**ANSWER ANY EIGHT FROM THE FOLLOWINGS**	**(08)**
1	Who gave concept of base equivalence in DNA	
2	What is the role of SSB in Replication	(01)
3	At what wavelength Nucleic acid absorb in UV region	(01)
4	What is Hyperchromacity?	(01)
5	Which are termination codons ?	(01)
6	What is a promoter?	(01)
7	What is 7MG and where it is added	(01)
8	What are Introns?	(01)
9	Name one intercalating agent	(01)
10	Who Discovered mobile genetic elements?	(01)
11	State two biohazards of genetic engineering	(01)
12	Name the markers used in selection of cloned cells	(01)
13	Give an advantage of using λ phage as vector	(01)
14	Name the scientists who deciphered the genetic codes	(01)
15	What is the effect of tetracycline on translation ?	(01)
16	Why we use phenol in isolation of Genomic DNA	(01)