SEAT No._____ No. of Printed Pages :2

[497] SARDAR PATEL UNIVERSITY

T.Y.B.sc. V SEMESTER EXAMINATION EMBER 2020

BIOCHEMISTRY:USO5CBCH21

TITLE: MOLECULAR BIOCHEMISTRY

Date: 24 /12/2020:Thursday Time:2 :00 PM TO 4:00 PM TOTAL MARKS: 70

Q.1 Select proper option from following MCQ. [10]

1) Where is gene present
   a) in DNA b) in RBC c) in protein d) in lipid
2) The word nucleic acid is given by _____.
   a) Altmen b) Mendel c) Miescher d) Beadle
3) _____ gene has no permanent location
   a) mobile b) homeotic c) pseudo d) oncogene
4) 5'-3' Exonulease activity is usually by DNA polymerase---------
   a) I b) II c) III d) IV
5) _____of protein help to synthesis primer
   a) DnaA b) DnaB c) DnaC d) DnaG
6) Replication is semiconservative was proved by _____
   a) meselson and stahl b) Watson and crick c) john cairn d) ross inman
7) In transcription RNA sequence is complementary to _____strand.
   a) template b) coding c) primer d) all of these
8) 7-methyle guanosine is also known as _____
   a) cap0 b) cap1 c) cap2 d) cap3
9) _____is termination code.
   a) UAA b) UAG c) UGA d) All of these
10) _____toxin present in caster bean
   a) ampicilin b) puromycin c)Tetracycline d) ricin

Q2. Fill in the blanks and true false [8]

1. There are _____nucleosome associated with minichromosome.
2. Replication occur in _____ phase of cell cycle.
3. _____group of splicing required spliciosome
4. _____is initiation codon

True or false

5. Mitochondria also contain DNA.
6. Dna A protein synthesise primer.
7. Group I introne is self splicing.
8. Traslocation is required in initiation.

Q3. Answer in short. (Any ten) **[20]**

1. Define gene.
2. Give reason: mitochondriya is semi autonomus organelles.
3. Define mobile gene.
4. Define Replication.
5. What is primosome?
6. Define replisome.
7. Explain :spliciosome.
8. What is role of polyadenylate polymerase?
9. What is role of kinase?
10. Define translation.
11. Define genetic code.
12. Write use of tRNA in translation.

Q4.: Long answer questions. (any four)(8 marks each) **[32]**

1. Explain: salient feature of viral genome.
2. Short note on: salient feature of euk. Genome.
3. Explain: initiation of replication.
4. Explain: termination of replication
5. Explain: initiation of transcription
6. Write short note on: generation of 5' cap in mRNA
7. Explain: initiation of translation.
8. Explain: inhibition of protein synthesis by antibiotics and toxins.

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