Gurudas College Department of Biochemistry Internal Assessment – 2020 Semester-V Hons. <u>Paper CC 11 (SET 3)</u>

**Total Marks-10** 

Choose the correct option:

1. The least level of chromosome organization is

- a) 30nm fibre
- b) solenoid
- c) nucleosome
- d) none of the above

2. Which is the most processive of prokaryotic DNA polymerases?

- a) pol I
- b) pol II
- c) pol III
- d) klenow fragment
- 3. What constitutes Primosome?
- a) Dna a, Dna b, Dna c, Dna G
- b) Dna b, Dna G
- c) Dna c, Dna b
- d) Dna a, Dna c

4. A DNA sequence is read by an RNA polymerase that produces complementary antiparallel RNA strand known as

- a) Hexa transcript
- b) secondary transcript
- c) primary transcript
- d) tertiary transcript

5. In an experiment you mutate the consensus sequence at the -10 box. You observe the rate of transcription reduces. Now you make complementary mutation to the sigma factor. What will you observe?

a) Further decrease in transcription rate

b) Increase in transcription rate

c) Original transcription rate

d) Increase in rate of random transcription

6. The IS elements can be identified by the presence of \_\_\_\_\_

- a) Antibiotic resistance gene
- b) Endonuclease cleavage site
- c) 50 bp inverted repeat
- d) Integrase site

7. A nonsense mutation is one that:

- a) Changes an amino acid from one to another
- b) Deletes segments of RNA

c) Adds an additional codon to an RNA transcript

d) Creates a premature stop codon

8. In nucleotide excision repair mechanism which of the following proteins first recognises DNA lesion?

- a) UvrA
- b) UvrB
- c) UvrC
- d) UvrD

9. The sequence of the structural genes in the lac operon is

- a) lacA-lacZ-lacY
- b) lacZ-lacY-lacA
- c) lacZ-lacA-lacY
- d) lacA-lacY-lacZ

10. Mendel took \_\_\_\_\_\_ contrasting characteristics of pea plants.

- a) eight
- b) seven
- c) six
- d) five