081	(P	(Pages : 2)		Name
				Reg. No
THIRD SEMESTER B.Sc. (MICROBIOLOGY) DEGREE EXAMINATION NOVEMBER 2012				
(CCSS)				
Core Course				
	MB 3B 04—MICROBIOLOGY	М	OLECULAR MIC	CROBIOLOGY
Time : Three Hours		Maximu		Maximum: 30 Weightage
		Part A	A	
Choose the correct answer from the following, weightage for each answer is $\frac{1}{4}$.				
Which among the following is the genetic code for methionine?				
(a).	AUG.	(b)	UUU.	
(c)	CUG.	(d)	AAA.	
The bacterium used in Griffith experiment was:				
(a)	Mycobacterium tuberculosis.	(b)	Staphylococcus	aureus.
(c)	Streptococcus pneumoniae.	(d)	Pseudomonas ae	eruginosa.
In Trp	operon, tryptophan act as:			
(a) A	Activator.	(b)	Corepressor.	
(c) I	Both (a) and (b).	(d)	None of the above	ve.
At which stage of mitosis, the chromosomes become shorter, thicker and miyrate towards the opposition poles of the ieu.				
(a) .	Anaphase.	(b)	Prophase.	
(c) I	Metaphase.	(d)	Telophase.	
he blan	ks of the following, weightage for	each a	answer is ¼.	
The RNA polymerase present in prokaryotic cells consist of subunits.				
The lowest level of chromosome organisation is called as				
In lac operon, lactose act as				
The process by which homologous chromosomes become joined to one another during the zygotene stage is called				
in sing	le word of the following, weightag	e for e	each answer is $\frac{1}{4}$.	
The width of DNA double helix is				
Enzymes which can change the supercoiled state of DNA are called as				
	HIRD Three Is Which (a) (c) The ba (a) (c) In Trp (a) (c) At which poles of (a) (c) The Blant The RN The low In lac of The prostage is in sing The wice	HIRD SEMESTER B.Sc. (MICRO NOVE Con MB 3B 04—MICROBIOLOGY Three Hours Choose the correct answer from the Mich among the following is the genetic (a) AUG. (c) CUG. The bacterium used in Griffith experiment (a) Mycobacterium tuberculosis. (c) Streptococcus pneumoniae. In Trp operon, tryptophan act as: (a) Activator. (c) Both (a) and (b). At which stage of mitosis, the chromosomes poles of the ieu. (a) Anaphase. (c) Metaphase. the blanks of the following, weightage for The RNA polymerase present in prokaryo The lowest level of chromosome organisat In lac operon, lactose act as The process by which homologous chromostage is called in single word of the following, weightage The width of DNA double helix is	HIRD SEMESTER B.Sc. (MICROBIO NOVEMBE (CCSS) Core Core MB 3B 04—MICROBIOLOGY—MO Three Hours Part A Choose the correct answer from the follow Which among the following is the genetic code of the land of the process of the ieu. (a) AUG. (b) (b) (c) CUG. (d) The bacterium used in Griffith experiment was (a) Mycobacterium tuberculosis. (b) (c) Streptococcus pneumoniae. (d) In Trp operon, tryptophan act as: (a) Activator. (b) (c) Both (a) and (b). (d) At which stage of mitosis, the chromosomes becompoles of the ieu. (a) Anaphase. (b) (c) Metaphase. (d) the blanks of the following, weightage for each and the composition of the lowest level of chromosome organisation is and coperon, lactose act as The process by which homologous chromosomes stage is called . in single word of the following, weightage for a composition of the collowing, weightage for a composition of the collowing, weightage for a composition of the following, weightage for a collowing in single word of the following, weightage for a collowing in single word of the following, weightage for a collowing in single word of the following, weightage for a collowing in single word of the following, weightage for a collowing in single word of the following, weightage for a collowing in single word of the following, weightage for a collowing in single word of the following, weightage for a collowing in single word of the following in single word	HIRD SEMESTER B.Sc. (MICROBIOLOGY) DEGENOVEMBER 2012 (CCSS) Core Course MB 3B 04—MICROBIOLOGY—MOLECULAR MICE Three Hours Part A Choose the correct answer from the following, weightage for Which among the following is the genetic code for methionine? (a) AUG. (b) UUU. (c) CUG. (d) AAA. The bacterium used in Griffith experiment was: (a) Mycobacterium tuberculosis. (b) Staphylococcus (c) Streptococcus pneumoniae. (d) Pseudomonas au In Trp operon, tryptophan act as: (a) Activator. (b) Corepressor. (c) Both (a) and (b). (d) None of the abo At which stage of mitosis, the chromosomes become shorter, thicker poles of the ieu. (a) Anaphase. (b) Prophase. (b) Prophase. (c) Metaphase. (d) Telophase. The lowest level of chromosome organisation is called as In lac operon, lactose act as The process by which homologous chromosomes become joined to stage is called in single word of the following, weightage for each answer is ½. The width of DNA double helix is

Turn over

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- 11. Three types of RNA polymerases function in **eukaryotes**. Which one is responsible for **mRNA** synthesis?
- 12. The five distinct classes of **histones** can be distinguished more easily by their content of __

(12 x = 3 weightage)

Part B

Explain all the following nine questions, weightage for each answer is 1.

- 13. Nucleotides.
- 14. Law of dominance.
- 15. Telophase.
- 16. Function of mRNA.
- 17. **Pribnow** box.
- 18. Spliceosome.
- 19. Rho factor.
- 20. z-RNA.
- 21. Amino acyl t-RNA.

 $(9 \times 1 = 9 \text{ weightage})$

Part C

Write short essay on any five questions, from the following. Weightage for each answer is 2.

- 22. Promoter.
- 23. D loop replication.
- 24. Nucleoid.
- 25. Mitosis.
- 26. RNA polymerases.
- 27. Histones.
- 28. r-RNA.

 $(5 \times 2 = 10 \text{ weightage})$

Part D

Write essay on any two questions from: the following.

Weightage for each answer is 4.

- 29. Explain Lac operon.
- 30. Describe DNA replication in Eukaryotes.
- 31. Describe the structure of DNA.

 $(2 \times 4 = 8 \text{ weightage})$