Reg.No. _____

Karunya UNIVERSITY

(Karunya Institute of Technology & Sciences)
(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

End Semester Examination – Nov/Dec – 2016

Code : 14BT2011
Sub. Name : Molecular Biology

Semester : 2016-17 ODD
Duration : 3hrs
Max. marks : 100

ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)

Q. No.	Sub Div.	Questions	Course Outcome	Marks
1.	a.	Describe Warren Blender experiment to prove that the DNA is the genetic material.?	CO1	**20**
		(OR)		
2.	a.	Explain the process of conjugation for the transfer of Hfr, F+ and F` plasmids	CO1	**20**
3.	a.	Detail the process of DNA replication in *E.coli* with neat illustrations.	CO1	**20**
		(OR)		
4.	a.	Explain the events that are taking place in the replication fork?	CO1	**20**
5.	a.	Why the eukaryotic genome organization is complex? Give its picture	CO1	**10**
	b.	Comment on the replication mechanism of the eukaryotic telomere DNA.	CO1	**10**
		(OR)		
6.	a.	Describe the process of transcription in E.coli. with neat diagram.	CO2	**15**
	b.	Write the role and characteristics of enhancer in eukaryotes	CO2	**5**
7.	a.	Describe the post transcriptional processing of rRNA in prokaryotes	CO2	**5**
	b.	Why eukaryotic transcription is complex? Detail the process of transcription in eukaryotes for the synthesis of mRNA	CO2	**15**
		(OR)		
8.	a.	Explain the different steps involved in protein synthesis in E.coli with a neat diagram	CO3	**20**
		Compulsory:		
9.	a.	Explain the mechanisms of Lac operons and Trp operons with neat diagrams?	CO3	**20**

ALL THE BEST