

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 : 15ME3005
Sub. Name : Computer Integrate Manufacturing Systems

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.	Explain the components of a manufacturing system in detail.	i	10
	b.	Discuss briefly the parameters which play an important role in designing manufacturing system	i	10
(OR)				
2.	a.	What are the reasons for automation, discuss briefly	i	10
	b.	Eloborate the automation migration strategy.	i	10
3.	a.	Discuss various non-contact non-optical inspection methods used in manufacturing industries.	ii	10
	b.	How RFID works? Describe the difference between RFID and Bar code.	ii	10
(OR)				
4.	a.	There are three basic functions of machine vision, discuss them with neat diagram in detail.	ii	12
	b.	List few non-contact type inspection methods.	ii	8
5.	a.	What is meant by shop floor control and discuss three phases in a shop floor control systems.	ii	12
	b.	Discuss briefly the manual or clerical data input techniques.	ii	8
(OR)				
6.	a.	Describe in detail about automated storage systems.	ii	12
	b.	Compare between AS/RS and carousel storage system.	ii	8

[P.T.O.]

7.	a.	Define Process planning.	iii	5
	b.	List the many decisions and details usually included within the scope of process planning.	iii	10
	c.	Discuss a typical sequence of processes required in a part fabrication.	iii	5
(OR)				
8.	a.	Describe various general principles and guidelines in DFM/A.	iii	14
	b.	Draw the flow chart of advanced manufacturing planning cycle.	iii	6
		<u>Compulsory:</u>		
9.	a.	What do you mean by rapid prototyping. Discuss various techniques.	ii	10
	b.	Distinguish between Expert system and Artificial Intelligence.	iii	10

ALL THE BEST
