

# SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY  
SCHOOL OF MECHANICAL ENGINEERING  
DEPARTMENT OF MECHANICAL ENGINEERING

## **SPR1307 – RESOURCE MANAGEMENT TECHNIQUES**

### **ASSIGNMENT – I**

**Total = 15 Marks**

#### **ANSWER ALL THE FOLLOWING (5X1 = 5 Marks)**

1. -----is a series of activities related to a project  
a) Network b) Transportation Model c) Assignment Model d) None of these
2. PERT emphasizes on  
a) Activity b) Time c) Cost d) Project
3. In a network diagram activity is denoted by -----  
a) Node b) Arrow c) Triangle d) Circle
4. PERT stand for  
a) Performance Evaluation Review Technique  
b) Programme Evaluation Research Technique  
c) Programme Evaluation Review Technique  
d) Programme Evaluation Resource Technique
5. -----is the time between the starting time of the first job and completion of the last job.  
a) No passing Rule b) Total Elapsed Time c) Idle time of machine d) Optimum sequence

#### **ANSWER ALL THE FOLLOWING (5x1 = 5 Marks)**

6. What is a sequencing problem?
7. What is meant by idle time on a machine?
8. What is the difference between CPM and PERT?
9. What is event in a network diagram?
10. What are the types of floats in a network?

#### **ANSWER THE FOLLOWING (5x1 = 5 Marks)**

11. Find the sequence that minimizes the total elapsed time required to complete the following tasks on the machine. Find the optimum sequence and idle time of each machine.

Job	A	B	C	D	E	F
Machine 1	8	3	7	2	5	1
Machine 2	3	4	5	2	1	6
Machine 3	8	7	6	9	10	9