SATHYABAMA

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

SPR1307 – RESOURCE MANAGEMENT TECHNIQUES

ASSIGNMENT – II **Total = 15 Marks**

ANSWER ALL THE FOLLOWING (5X1 = 5 Marks)

1. The time between two successive requests arriving called the
   a) Inter arrival Time b) Arrival Time c) Poisson Distribution d) All the above
2. Group replacement policy is most suitable for
   a) Trucks b) Infant machines c) Street Light Bulbs d) New cars
3. The following is not discussed in group replacement policy
   a) Failure probability b) Cost of Individual Replacement c) Loss due to failure d) Present worth factor series
4. The replacement policy that is imposed on an item irrespective of its failure is
   a) Individual Replacement b) Group Replacement c) Repair Spare Replacement d) Successive Replacement
5. In replacement analysis the maintenance cost is a function of
   a) Time b) Resale Value c) Initial Investment d) All the above

ANSWER ALL THE FOLLOWING (5x1 = 5 Marks)

1. Define a queue
2. What is salvage value?
3. What is present worth factor
4. Describe briefly some of its replacement policies
5. What is meant by running cost?

ANSWER THE FOLLOWING (5x1 = 5 Marks)

11) I) Machine A Cost is Rs.9000 and annual operating cost is Rs. 200 for the first year and then increases by Rs.2000 every year. Determine the best replacement policy for Machine A.
II) Machine B cost Rs.10000. Annual operating cost is Rs 400 for first year and then increased by Rs.800 every year. Determine the best replacement policy for Machine B.
III) Finally which machine should be replaced either machine A or machine B