10922

III Semester M.B.A. Degree Examination, May/June 2023
(CBCS Scheme)
MANAGEMENT
3.2 : Projects and Operations Management

Time : 3 Hours Max. Marks : 70

SECTION – A

Answer **any five** questions, **each** carries **5** marks. **(5×5=25)**

1. Explain the concept of project.
2. Give a brief introduction about scope management.
3. Define plant layout. What are the objectives of plant layout ?
4. What tasks must the project team perform before the project progresses ?
5. Give a brief account of WBS.
6. What factors affect the site location decision ?
7. Briefly explain FSN analysis.

SECTION – B

Answer **any three** questions, **each** carries **10** marks. **(10×3=30)**

8. Describe any two types of layouts for manufacturing operations.
9. Discuss the seven underlying principles of TQM.
10. If the annual demand for a product is 350,000 units, then the annual carrying cost rate is 25 percent of the cost of the unit, the product costs Rs. 14.75 per unit to purchase and each time the product is ordered the related ordering cost is Rs. 53/-.
    i) What is EOQ ?
    ii) What is the TSC at the EOQ ?
    iii) How much would the TSC increase if the order quantity must be 2,500 units because of a standard shipping-container size ?
11. Discuss the ten subsystems of project management.

P.T.O.

SECTION – C

Compulsory question. (15×1=15)

12. Case study :

A project has the following activities, precedence relationships, and time estimates in days :

Activity	Immediate Predecessor Activities	Optimistic Time (t_o)	Most Likely Time (t_m)	Pessimistic Time (t_p)
a	—	6	7	8
b	a	4	4	4
c	a	5	6	8
d	b	8	10	10
e	b	7	10	15
f	c	9	9	13
g	c	7	7	7
h	d	4	6	8
i	e, f	6	9	11
j	g	8	9	10
k	h, i, j	3	5	6

a) Compute the duration (expected time) and variances for each activity.

b) Draw a PERT network.

c) Compute the EF, LF and slack for each activity. Write the values on the PERT network.

d) Compute the ES and LS for all activities. Display the ES, EF, LF and slack values in a table.

e) What is the critical path ?

f) What is the probability that the project will take longer than 38 days ?
