

## ***B. Tech Degree VI Semester Examination in Marine Engineering July 2010***

### **MRE 601 MANAGEMENT SCIENCE**

Time : 3 Hours

Maximum Marks : 100

- I. a. What is the purpose of long term planning? How is it done? (10)  
b. What is SWOT analysis? How is it used? (10)

**OR**

- II. a. What are the different types of organizational structures? Explain. (10)  
b. Distinguish between Authority and Responsibility. (10)

- III. a. What are the differences between products and services? Explain with examples (10)  
b. Explain with example the functioning of Job shop, Lot/Batch production and Mass production systems. (10)

**OR**

- IV. a. Draw the network diagram and identify the critical path for the following project:

Activity	Duration (days)	Immediate Predecessors
A	2	--
B	3	--
C	5	A
D	8	B, C
E	1	A
F	4	D
G	7	E, F
H	3	D
I	5	G, H

In how many days will the project get completed? (10)

- b. What is ABC analysis? How is it done and what is its use? (10)

- V. a. The annual demand for a product is 1,00,000 units. Its unit price is Rs.100/-. The cost of making an order and receiving it is Rs.450/-. If carrying cost is 25% of the price. Determine the EOQ. (10)

- b. What is method study? How is it done and what is its use? (10)

**OR**

- VI. a. What is ISO 9000 series of standards? Why do organizations want it? (10)

- b. What is Preventive and condition based maintenance and how is it used to reduce occurrence of breakdowns? (10)

**(P.T.O)**

- VII. a. What are the sources of capital and what are the costs associated with each? (10)  
b. A project requires an investment of Rs.25 Lakhs. If the annual profit for first year is Rs.8 Lakhs and it increases year on year by 10%. What is the payback period for the project? (Ignore interest on capital). (10)
- OR**
- VIII. a. Distinguish between a Profit & Loss Account and a balance sheet. (10)  
b. The variable cost for producing a product is Rs.55/- per unit. Its sale price is Rs.80/- per unit. If the fixed costs are Rs.1 Lakh per month. Find the break even quantity per year to be produced. (10)
- IX. a. What are the different types of trainings given to Employees and why? (10)  
b. What is Management by Objectives? Explain. (10)
- OR**
- X. a. Explain Maslow's need hierarchy theory. (10)  
b. What is performance appraisal? What are the methods used for it? (10)