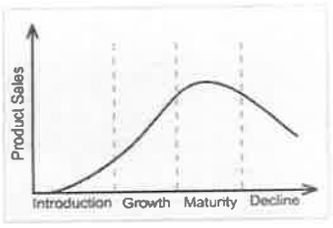
(1) Q.P. Code : 32458

Solution to set II

Q. 1. Answer any two of the following **(15 Marks)**

a. Product life cycle with example (7 ½ marks)



b. Functions : material planning and procurement, selection of production process, work study, plant layout, plant location, production planning and control, inventory management, inspection, etc. (7 ½ marks)

c. Factors influencing product design : performance, reliability, simplicity, safety in use, aesthetics, reparability, colour, features, …etc(7 ½ marks)

Q. 2. Answer any two of the following **(15 Marks)**

a. Explain plant layout (1 ½ marks)

Types of plant layout : Line, Functional, Static/fixed, Cellular, Combined (6 marks)

b. Intermittent production systems (types) : Project, Job and Batch(7 ½ marks)

c. Objectives of maintenance : to maintain – quality of product, equipment, reduce accidents, minimize frequency of breakdowns, safety at work, extend useful life of assets, prevent wastages, etc.(7 ½ marks)

Q. 3. Answer any two of the following **(15 Marks)**

a. Importance of inventory management : low cost purchases, good relations with good suppliers, new product development decisions, make or buy decisions, standardization of inputs, forecasts, favorable reciprocal relations, record keeping…etc .(7 ½ marks)

b. Inventory control techniques : ABC analysis, VED analysis, FSN analysis, GOLF analysis, etc.(7 ½ marks)

c. Objectives of purchase department : low cost purchases, good relations with good suppliers, new product development decisions, make or buy decisions, favorable reciprocal relations, record keeping, to develop policies and procedures, etc.(7 ½ marks)

Q. 4. Answer any two of the following **(15 Marks)**

a. Merits of FIFO : complicated, old materials are used, deterioration of materials are reduced, comparison of job becomes difficult (4 marks)

demerits :cost reflects old cost of materials, Poor quality, working capital is conserved, profits are depressed, (3 ½ marks)

b. Statistical control techniques :control charts, sampling inspection plan (7 ½ marks)

c. Generation of waste: wrong use of raw materials, faulty tool, faulty process planning, etc. (7 ½ marks)

Q.5. Write short notes (any three) (5 marks each) **(15 Marks)**

Just in time, Value engineering, Kaizen, EOQ, Breakdown maintenance