B. Printing Engineering Examination, 2019
(4th Year, 2nd Semester)
INDUSTRIAL MANAGEMENT

Time: 3 hrs.   **Full marks: 100.**

(Attempt any five questions)

1.(a) What are te function of **materials management**? Explain any one of them.   **(8)**

(b) **Name different** methods of **purchasing** and explain" **Hand to mouth purchasing"**   with it **advantages** and **disadvantages.**   **(6)**

(c) Give a typical **organi sation structure** of a **material management.**   **(6)**

2. (a) Differentiate between **C.P.M** and **P.E.R.T.**   **(4)**

(b) An Engineering Project consists of **six activities.**The **three time estimate** in number of days for each activity are given below:

Activity	to	tm	tp
1 - 2	2	5	8
2 - 3	1	1	1
3 - 5	0	6	18
5 - 6	7	7	7
1 - 4	3	3	3
4 – 5	2	8	14

(i)Calculate the values of **expected time(te), standard deviation(σ_t),** Variance(V_t) for each activity;   **(3)**

(ii)**Draw the network diagram** and mark **te** on each activity;   **(3)**

(iii)Calculate **EST** and **LFT** and mark them on the network diagram;   **(3+3)**

(iv)Calculate **total slack** for each activity;   **(2)**

(v) **Identify the critical path and mark on the network diagram.**   **(2)**

3. (a) Describe the "**Importance of Maintenance**" briefly.   **(6)**

(b) State the **various functions** of maintenance.   **(6)**

(c) Explain how **preventive maintenance** is better than **corrective maintenance.**   **(8)**

4. (a) With the help of neat diagram explain the following terms:
    (i) order quantity;   (ii) lead time;
    (iii) **safety stock;**   (iv) **Re-order point.**   **(10)**

(b) A printing machine manufacturer buys and items in lots of **500units** which is
    a **three months** requirements. The cost per unit is **Rs.90** and the ordering cost
    is **Rs.180 per batch order.**The inventory carrying cost is estimated **20%** of the average inventory
investment. Calculate:

    (i)What is the **annual total cost** of existing inventory policy?   **(4)**

    (ii)How much money can be **saved** from **E.O.Q. purchased?**   **(6)**

5. (a) Name any four major areas of **Indian Industries.**   **(4)**

(b) Describe in brief: (i) **GATT**   (ii) **W.T.O.**   **(8)**

(c) Describe in brief " **Globalization of Indian Industries".**   **(8)**

6. (a) What is the importance of productivity? Mention various factors which
    affect productivity.   **(8)**

(b) How will you **measure productivity** in:
    (i) **manufacturing concerns;** (ii) **office work.**   **(4)**

(c) How the productivity can increase? What are the reasons for
    Low-productivity.   **(8)**

7. (a) Define **Marketing**. Name the various functions of Marketing. (2+4)

   (b) Explain the importance of Marketing in modern world. (7)

   (c) Explain the **role of Packaging in Marketing.** (7)

8.(a) Name the various **function** of **management. Describe** any one of them
     In brief. (10)

   (b) **Name the elements** of **planning** and define any four of them. (10)

9(a) State the objectives of: (i) **Short term forecasting;**

                              (ii)**Long term forecasting.** (3+3)

   (b) Describe " **Exponential Smoothing** " method of forecasting. (6)

   (c) The annual sales of a company are as given below:

Year	2015	2016	2017	2018	2019
Sales in Qty.	50,000	65,000	75,000	52,000	72,000

   By the method of **least square** find the **trend values for each of the five years.**
   Also estimate the production for the **next three years.** (8)

10.(a) Differentiate between **job production, batch production** and
       continuous production. (8)

   (b) The fixed cost for a year is **Rs.40,000.** The estimated sales are **Rs.1,00,000.**
       The variable cost per unit for the single product made is **Rs.2.** If each unit
       Sales at **Rs.10** and the number of units involved coincides with the expected
       Volume of the output, construct the break-even chart(on **graph paper**):
       (iii)   **Determine B.E.P;** (ii) **Determine the profit** at a turn over of **Rs.80,000;**
       (iii)Find the **margine of safety;** (iv) Measure the **angle of incidence.** (3X4)