

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Supplementary Semester Examination – Summer 2022

Course: B. Tech.

Branch : Mech Engg

Semester :VII

Subject Code & Name: Industrial Engineering & Management BTMEC704B

Max Marks: 60

Date: 24/08/2022

Duration: 3.45 Hrs.

Instructions to the Students:

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

(Level/CO) Marks

Q. 1 Answer Any Two of the following questions

- A) Define Management. What are the basic steps in scientific management as suggested by F. W. Taylor? **CO1 6**
- B) Explain “Unity of Command” as the ‘principle of management’ suggested by Henry Fayol. **CO1 6**
- C) Explain Porter’s five competitive forces by considering an example of Toothpaste Manufacturing Company. **CO2 6**

Q.2 Attempt Any One of the following.

- A) Explain Porter’s five competitive forces by considering an example of Toothpaste Manufacturing Company. **CO1 12**
- B) Define ‘authority’ & explain the four levels of authority. **CO3 12**

Q. 3 Write short notes on Any Two of the following.

- A) Facility Layout **CO2 6**
- B) Capacity Planning **CO2 6**
- C) Product design process. **CO2 6**

Q.4 Solve Any one of the following.

- A) If surface finishing of part involves following steps, prepare flow process chart (material type) **CO4 12**
- i) Parts were brought from store 20m away from machine (1 min)
 - ii) Waiting for operator to be free from present work (20 min)
 - iii) Part loaded on the machine (3 min)
 - iv) One surface was machined (3 min)
 - v) Part was unloaded from machine (1 min)
 - vi) Activities from step ii to step v were repeated till the component was machined on all four sides.
 - vii) Do the inspection of part 25m away from machine
 - viii) Check the accuracy of surface finishing (5 min)
 - ix) Place the parts in rack for further use (1 min).
- B) **Study the following case study and answer the questions following it.** **CO4 12**

Jeevak Pharmaceutical Co. Ltd.

Jeevak Pharmaceutical Co. Ltd. was started as a Private Limited

Company by three technocrats having specialized training in pharmacy and chemistry at Jalgaon to manufacture and market pharmaceutical formulations – branded tablets, capsules, ointments, oral liquids some five years back. With expansion in sales, the company went public after first three years of operations and is now a company with turnover of Rs. 25 crores, a field-force of 250 representatives, some 300 workers, and a dealer network of 60 authorized stockiest all over the country. The company is poised for further growth by entering bulk drug production consisting of anti – TB and anti-diarrhea drugs. The company has adopted product management type of staff function in its marketing set up.

Questions

- i] How would you appreciate the decision of the company to introduce ‘product management type’ of structure?
- ii] Suggest the suitable type of organization chart for this company which has gone into substantial diversification.

Q. 5 Solve Any Two of the following.

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| A) Explain ergonomically correct “work place layout”. | CO2 | 6 |
| B) Explain Producibility & Manufacturability in concurrent engineering. | CO2 | 6 |
| C) Explain Therblings | CO2 | 6 |

***** End *****