

**BACHELOR OF TECHNOLOGY (C.B.C.S.) (2014 COURSE)**  
**B.Tech.Sem - VII MECHANICAL : WINTER- 2022**  
**SUBJECT : INDUSTRIAL ENGINEERING & MANAGEMENT**

Day : Thursday

Time : 02:30 PM-05:30 PM

Date : 15-12-2022

W-13462-2022

Max. Marks : 60

**N.B.:**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Use of non-programmable **CALCULATOR** is allowed.
- 4) Draw neat and labeled diagram **WHEREVER** necessary.
- 5) Assume suitable data if necessary.

**Q.1** What are the different approaches of management? **[10]**

**OR**

**Q.1** Is management an art or science? Defend your answer. **[10]**

**Q.2** Differentiate between partnership and individual proprietorship. **[10]**

**OR**

**Q.2** Describe the organizational structure in industry. **[10]**

**Q.3** What are the similarities and differences between selling and marketing? **[10]**

**OR**

**Q.3** What is break-even analysis? How does it affect profitability in business? **[10]**

**Q.4** Describe the various process chart symbols used in method study. **[10]**

**OR**

**Q.4** Describe two handed process chart with suitable examples. **[10]**

**Q.5** What do you understand by PMTS and MTM? **[10]**

**OR**

**Q.5** The observed times and performance rating for 5 elements of a job are given in table. Calculate the standard time, assuming rest and personal allowances as 15% and contingency allowance of 2% of basic time. **[10]**

Element No.	1	2	3	4	5
Observed time (minutes)	0.2	0.08	0.5	0.12	0.1
Performance rating (%)	85	80	90	85	80

**Q.6** Describe the importance of industrial safety. **[10]**

**OR**

**Q.6** How is physical work measured? State the different techniques used for it. **[10]**

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