Reg. No.

B.TECH. DEGREE EXAMINATION, NOVEMBER 2014

Seventh Semester

Branch : Automobile Engineering/Mechanical Engineering
AU 010 705/ME 010 705—INDUSTRIAL ENGINEERING (AU, ME)

(New Scheme—2010 Admission onwards—Regular/Supplementary)

Time: Three Hours

Maximum: 100 Marks

Part A

Answer all questions.
Each question carries 3 marks.

- 1. Define Total Productivity.
- 2. What are the types of layout?
- 3. What is Public Buying?
- 4. What is a SIMO chart?
- 5. Differentiate between Sampling inspection and 100 % inspection.

 $(5 \times 3 = 15 \text{ marks})$

Part B

Answer all questions.

Each question carries 5 marks.

- 6. What are the objectives of Value Engineering?
- 7. Discuss the advantages of Group Technology Layout.
- 8. Distinguish between P and Q system of inventory.
- 9. Define "Therblig" write the names of different therbligs.
- 10. Discuss the benefits of bench marking.

 $(5 \times 5 = 25 \text{ marks})$

Part C

Answer all questions.
Each question carries 12 marks.

11. Discuss briefly the functions of Industrial Engineering and the role it can play in raising industrial productivity.

Or

12. "Value Engineering in a powerful cost reduction tool." Justify.

Turn over

13. Discuss the role of material handling system in improving the productivity of a company.

Or

- 14. Write short note on JIT and cellular manufacturing system.
- 15. List and explain the criteria and steps of vendor evaluation.

Or

- 16. Derive the EOQ formula for the purchase model without shortage.
- 17. What is "Method Study"? What are its objectives? How will you determine the areas that require method study application in an industry?

Or

- 18. Explain various Job Evaluation technique. How Job Evaluation used in preparing wage structure?
- 19. Define TQM. Enlist the priority areas along with essential steps of implementing TQM in an organization.

Or

20. What is ISO? Explain how to implement ISO system.

 $(5 \times 12 = 60 \text{ marks})$

