Reg. No.:												

Question Paper Code: 21926

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2015.

Eighth Semester

Mechanical Engineering

MG 2451/ GE 1451/ MG 81/ 080120038/ 10177 GE 009 — ENGINEERING ECONOMICS AND COST ANALYSIS

(Common to Production Engineering, Automobile Engineering, Material Science and Engineering)

(Regulations 2008/2010)

(Common to PTMG 2451/10177 GE 009 – Engineering Economics and Cost Analysis for B.E. (Part-Time)/ Seventh Semester – Mechanical Engineering – Regulations – 2009/2010)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. Give the law of demand.
- 2. What is economic efficiency?
- 3. Define Value Engineering.
- 4. Explain the concept of Discounting.
- 5. What are the methods of cash flow?
- 6. What is annual equivalent method of comparing alternatives?
- 7. List out the types of replacement problem.
- 8. Define prevention maintenance (PM).
- 9. Write short notes on : Depreciation.
- 10. Differentiate Straight line method of depreciation and declining balance method of depreciation.

PART B — $(5 \times 16 = 80 \text{ marks})$

11. (a) Analyze the various types of elasticity of demand and their usefulness.

Or

- (b) What is a Material? What factors would you consider while selecting a material?
- 12. (a) State and explain the functions and aims of value engineering. (16)

Or

- (b) What is time value of money? How is it useful in taking investment related decision? (16)
- 13. (a) Discuss with example, present worth method and future worth method of comparison of alternatives.

Or

- (b) What is Rate of Return method? Explain with suitable example.
- 14. (a) Identify the replacement problem and suggest your idea to eradicate it.

Or

- (b) What are the factors involved in determination of economic life of an asset?
- 15. (a) Robert & Co. purchased a Machinery on 1st April 2002 for Rs. 75,000. After having used it for three years it was sold for Rs. 35,000. Depreciation is to be provided every year at the rate of 10% per annum on declining balance method. Accounts are closed on 31st March every year. Find out the profit or loss on sale of machinery.

Or

(b) Explain various methods of depreciation.

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