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**Question Paper Code : 41461**

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2018  
Eighth Semester  
Mechanical Engineering  
MG 6863 – ENGINEERING ECONOMICS  
(Regulations 2013)

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions.

**PART – A**

**(10×2=20 Marks)**

1. What is engineering efficiency and economic efficiency ?
2. Differentiate marginal cost and total cost.
3. State the meaning for the term time value of money.
4. Identify any two value engineering procedures.
5. Write the formula to calculate rate of return.
6. What is the formula used to calculate present value ?
7. List any two types of maintenance costs.
8. Compare recovery and return.
9. Mention a note on straight line method of depreciation.
10. Sketch the procedure to adjust inflation.

**PART – B**

**(5×16=80 Marks)**

11. a) What is Law of demand and supply ? Draw a demand and supply curve and explain its determinants.

(OR)

- b) Enumerate briefly the various cost concepts. Establish the cost-output relationship in the short-run with suitable diagram.



12. a) As an engineer how will you calculate single payment compound amount factor? Illustrate your answer with examples.

(OR)

- b) Explain the various types of values in value engineering with examples.

13. a) Summarize the different types of rate of return methods in engineering decision making.

(OR)

- b) Draw revenue dominated cash flow and costs dominated cash flow of your own choice and explain its uses.

14. a) Discuss economic service life of an asset and main causes of breakdown.

(OR)

- b) Illustrate annual equivalent total cost with suitable examples and state its limitations.

15. a) Elucidate the different methods of calculating depreciation.

(OR)

- b) On 1st Jan. 2009, a company purchased a machine costing Rs. 5,00,000. Its estimated working life is 20 years at the end of which it will fetch Rs. 20,000. Additions are made on 1 January, 2010 and 1 July, 2011 to the value of Rs. 80,000 (scrap value Rs. 4,000) and Rs. 40,000 (Scrap value Rs. 2,000) respectively. The life of both the new machines is 20 years. Show machine a/c for first four years.
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