Eighth Semester B.Tech. Degree Examination, May 2017
(2013 Scheme)
13.802 ECONOMICS AND MANAGEMENT OF PROCESS INDUSTRIES

Time: 3 Hours   Max. Marks: 100

PART - A
Answer **all** questions. Each question carries **2** marks

1. Define Hoskold's formula.

2. How many years will it take for an initial investment of Rs 10000 to grow to Rs 67275, if it is invested at 10% compounded annually.

3. Discuss double declining balance method of calculating depreciation.

4. Discuss capital recovery factor.

5. What is Nelson refinery construction index.

6. Discuss about William $6/10^{th}$ rule of cost estimation.

7. What is inflation, what are the causes of inflation

8. Describe the significance of breakeven point.

9. Explain net present worth. How can it be used for analysing profitability.

10. Explain economic production charts.

Part B
Answer **one full** question from each Module

Module 1

11. (a) An asset costing Rs 20000 has an estimated useful life of 5 years and salvage value of Rs 4500. Calculate the depreciation for first, second and third year of its useful life using double declining balance method.   (12 marks)

    (b) How much must be deposited in a 10% saving account at the end of each year in order to accumulate Rs 150000 at the end of 10 years   (8 marks)

OR

12. (a) Explain different methods of depreciation.   (10 marks)

    (b) Discuss any two methods of cost comparison of assets with unequal duration.
                                                                                    (10 marks)

Module II

13. (a) Discuss different cost indices used in cost estimation.   (15 marks)

    (b) Discuss the effect of inflation on investment.   (5 marks)

OR

14. Discuss the components of fixed cost and their estimation.   (20 marks)

Module III

15. What are break even and minimum cost analysis? Discuss the use of economic production charts for analysis.   (20 marks)

OR

16. Discuss on the various ratios used for comparing the balance sheet and profit and loss account.

Module IV

17. (a) A project X costs Rs 16000 and is expected to generate cash inflows of Rs 8000, 7000, 6000 at the end of each year for next 3 years. Find internal rate of return.
         (12 mark)

    (b) What are the limitations of Net present worth for profitability analysis. (8 marks)

OR

18. Discuss in detail about the different mathematical methods for profitability evaluation.   (20 marks)