

BE (Civil) - 2019 Scheme

Time: 3 Hours

Marks: 80

12/23
39 = 3

Note:

- i) Q.1 is compulsory
- ii) Attempt any three out of remaining five Questions.
- iii) Figures to right indicates full marks.
- iv) Assume Suitable data if required.

- Q.1** Attempt any four
- a. Explain in general which External factors are to be considered for SWOT analysis by a private company for a Public private partnership project as (BOT type) for a proposed Metro Rail project in India. 05
 - b. What are the phases in a project development cycle for major infrastructure projects? 05
 - c. Explain uncertainties involved in demand forecasting. 05
 - d. Write a short note on: 05
 - a. Benefit-cost ratio
 - b. Internal rate of return
 - e. Explain the roles and responsibilities of a manager for a project. 05

- Q.2**
- i) A firm planning to manufacture fairness facial cream for males in India tried to estimate its potential sales of 100 ml bottle of cream with following data.
 Adolescent and Adult male population in the country: 100 million.
 Proportion of Adolescent and Adult male population not fair in colour: 70 percent.
 Proportion of Adolescent and Adult male population not fair and using fairness cream: 50 percent.
 A 100 ml bottle of cream last for half month when applied once in a day on face only by one person.
 Proportion of the fairness facial cream market the firm could capture is 20 percent.
 Calculate the Potential Annual Sale the firm could capture for 100 ml fairness facial cream bottle? 10
 - ii) The data of a pencil production company is given below. If the manager decides to spend Rs 53 million in the year 2020 what will be the prediction for sale in the year 2020.

Year	Investment in production in billions	Sales in billions
2016		70
2017	40	82
2018	42	78
2019	45	88

- b. What are the facets of project analysis? Explain in short the stepwise procedure for each facets. 10

43646

BE (Civil) - Sem VII - Scheme

30/12/23

- Q.3 a. What are various methods of determining the profitability of a project? **05**
 b. Explain any three types of organization structures. **05**
 c. Explain in detail the essential components of Technical Appraisal required for an expressway project. **10**
- Q.4 a. By Net Present Value Analysis and Profitability Index Value, find out whether investment on Machine A is better or on Machine B. The discounting rate is to be taken as 12 percent. **10**

Machine Type	Machine A (Rs.)	Machine B (Rs.)
Cost of machine	3,00,000.00	3,00,000.00
Cash inflows		
1st year	50,000.00	75,000.00
2nd	70,000.00	1,00,000.00
3rd	1,50,000.00	1,60,000.00
4th	1,50,000.00	1,40,000.00
5th	1,20,000.00	1,30,000.00
6th	2,10,000.00	2,40,000.00

You are required to suggest which machine should be preferred based on

- a. NPV Method
 b. Profitability Index

- b. Enlist and explain how money can be raised in International market for national projects **10**

- Q.5 a. Role of Public Private partnership (PPP) projects in development of country **05**
 b. How do you evaluate secondary information in India. **05**
 c. Illustrate the contents of project report and state its significance **10**

- Q.6 a. Explain in brief any two methodologies for assessments of entrepreneurs. **05**
 b. What are the sources of financing? Explain in detail. **05**
 c. Explain in short i) B.O.O ii) B.O.O.T **10**
