

policies to promote the use of clean fuels, including electric vehicles (EVs), and tightening emission norms to meet its carbon reduction targets. "The aim is to gradually shift to fuels, which are import substitutes, cost effective, indigenous and pollution free," transport minister Nitin Gadkari said, adding that this includes biofuels, ethanol blends as well as hybrid EVs and hydrogen fuel cells. Carry out a detailed project feasibility analysis of the alternatives fuel industry in Indian context.

5. Write short notes on any 3 of the following:
- (a) Survey Forecasting as a Demand Forecasting Techniques
 - (b) Shadow Prices
 - (c) PERT Technique
 - (d) Project Life Cycle (5 × 3=15)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 6444

Unique Paper Code : 61017938

Name of the Paper : Project Appraisal and Implementation

Name of the Course : **Bachelor of Management Studies (BMS), 2022 (LOCF)**

Semester : V

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt **all five** Questions.

1. In India, half of all infrastructure projects, and new ventures are delayed, and one in four runs over their estimated budget. Prime Minister Narendra Modi believes technology is the solution to these perennial and notorious bottlenecks. Under a 100-trillion-rupee (\$1.2 trillion) mega project called PM Gati Shakti --

Hindi for strength of speed -- Modi's administration is creating a digital platform that combines 16 ministries. The portal will offer investors and companies a one-stop solution for design of projects, seamless approvals and easier estimation of costs. Critically evaluate the future prospect and potential of success of this initiative while examining the major causes of delay in launch and implementation of new ventures in India.

2. The management team of a blue-chip company are currently evaluating the financial feasibility of two mutually exclusive projects, namely, APEX and OMEGA. The cash flow estimates of these projects over the next 7 years are provided below. The firm uses a discount rate of 10 per cent.

Year	Cash Flows (INR)	
	Project APEX	Project OMEGA
0	(8,50,000)	(5,50,000)
1	1,00,000	1,20,000
2	1,30,000	1,20,000
3	1,60,000	1,20,000
4	1,90,000	1,20,000
5	2,20,000	1,20,000
6	2,50,000	1,20,000
7	2,80,000	1,20,000

- (a) Calculate the payback period, net present value, profitability index, and internal rate of return of each project.
- (b) Show the rankings of the projects by each of the four methods.
3. Compare and contrast Sensitivity and Scenario analysis as techniques of Project evaluation. Wish-craft Foundation seeks to start its new unit to manufacture luxury gift items. The estimated Fixed Cost of the entire set up is Rs. 60,00,000. The firm expects to sell 1,20,000 units at a price of Rs. 2000 per unit. The firm plans to spend Rs. 160/unit on Raw material. The estimated expenditure on publicity is Rs. 200/unit and labour are Rs 1400/unit. Calculate the profits of the firm and perform Sensitivity analysis with 5% and 10% changes. Inform the firm about the most sensitive variable and the appropriate measures it must take to safeguard its profits.
4. India is the third-largest user of transport automobiles in the world but 70% of its transport energy need is fulfilled by importing fossil fuels. India is framing