

Seat
No.

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मुद्रा- 011

Life Cycle Costing of Infrastructures (1030)

P. Pages : 1

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answersheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Solve **any five** questions.
5. Assume suitable data if required.
6. Figures to right indicate full marks.
7. Use of pocket calculator is allowed.
8. use of probability table is allowed.

1. Define various approaches used in life cycle costing, necessity of life cycle costing especially for the infrastructure projects in India and the procedure for conducting (LCC). 20
2. Discuss the various measures taken by the Indian Government to promote infrastructure projects in the country to be developed in a speedy manner. 20
3. Discuss traditional methods and modern methods used for deciding investment options on infra projects which are better ? Why ? 20
4. Enlist the types of data and information necessary to perform a comprehensive risk assessment during the LCC approach for a road project. 20
5. Explain in detail following risk assessment methods. 20
 - i) Simulation
 - ii) Fuzzy logic analysis
 - iii) Probabilistic analysis
 - iv) Macro approach.
6. a) Explain cost breakdown structure and use of The WLC software associated with (LCC). 10
b) Discuss effects of inflation and uncertainty of prices on the NPV. 10
7. Explain the following. 20
 - i) Project cost - Influence diagram.
 - ii) B/C ratio.
 - iii) HVAC and their costs.
 - iv) Advantages of LCC.
 - v) Decision tree analysis.
