

Roll No



**PRESIDENCY UNIVERSITY
BENGALURU**

**SCHOOL OF ENGINEERING
END TERM EXAMINATION - JUN 2023**

Semester : Semester IV - 2021

Course Code : CIV2036

Course Name : Sem IV - CIV2036 - Introduction To Infrastructure Systems and Planning

Program : CII&CIV

Date : 12-JUN-2023

Time : 9.30AM -12.30PM

Max Marks : 100

Weightage : 50%

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

PART A

ANSWER ALL THE QUESTIONS

(4 X 5 = 20M)

1. Infrastructure planning is the process of determining the most appropriate development, design, and construction of infrastructure projects in order to meet the needs of a community or society. Describe the necessity of planning in infrastructure development.
(CO2) [Knowledge]
2. The availability of good quality infrastructure raises productivity levels in the economy and brings down costs of the enterprises. Briefly explain how does various infrastructure facilities help in boosting the economy of a region.
(CO1) [Knowledge]
3. Central Government has launched various schemes for the electrification of every household for attaining the goal of providing access to electricity to all households in the country. Discuss the programmes launched in India to improve the power sector.
(CO1) [Knowledge]
4. A rate of return (RoR) is the net gain or loss of an investment over a specified time period, expressed as a percentage of the investment's initial cost. List any 2 advantages and disadvantages of calculating rate of return on investments.
(CO3) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS

(5 X 10 = 50M)

5. Privatization occurs when a government-owned business, operation, or property becomes owned by a private, non-government party. Privatization may also describe a transition that takes a company from being publicly traded to becoming privately held. Discuss in detail the various steps of privatisation process.
- (CO1) [Comprehension]
6. Capital budgeting refers to the process of deciding how to allocate the firm's scarce capital resources (land, labor, and capital) to its various investment alternatives. Describe the various steps involved in capital budgeting.
- (CO3) [Comprehension]
7. Infrastructure planning is the process of determining the most appropriate development, design, and construction of infrastructure projects in order to meet the needs of a community or society. Elaborate on problem diagnosis and goal articulation stages of infrastructure planning.
- (CO2) [Comprehension]
8. The term cost of capital is used by analysts and investors, but it is always an evaluation of whether a projected decision can be justified by its cost. Investors may also use the term to refer to an evaluation of an investment's potential return in relation to its cost and its risks. Define cost of capital. Also explain various components and classification of cost of capital.
- (CO3) [Comprehension]
9. Screening refers to elimination of project ideas which are not promising. Discuss the set of criteria to evaluate the project ideas.
- (CO2) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS

(2 X 15 = 30M)

10. Project time management includes two high-level groups of processes for planning and scheduling project activities and tasks necessary for timely completion of the project. Explain the role of a project manager for a successful project implementation.
- (CO2) [Application]
11. Shift in infrastructure provision in the early part because of communist ideology, wars, depression, changing social sentiments led to public sector overseeing infrastructure. Towards the 1970, Private sector was again involved in infrastructure, especially in the developing world. Fall of Communism ushers rapid rise in private participation. Explain with the help of a flow chart the cyclic process of Nationalization - Privatization.
- (CO1) [Application]