

Enrollment No.....



Faculty of Engineering
End Sem Examination Dec 2024

CE3EC09 Urban Planning & Sustainable Development
Programme: B.Tech. Branch/Specialisation: CE

Duration: 3 Hrs.**Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

| | | Marks | BL | PO | CO | PSO |
|-----|--|-------|----|----|----|-----|
| Q.1 | i. 1 hectare is equal to- | 1 | 1 | 1 | 1 | |
| | (a) 1.0 sq km (b) 0.1 sq km | | | | | |
| | (c) 0.01 sq km (d) 0.001 sq km | | | | | |
| | ii. Which of the following is NOT a purpose of urban planning? | 1 | 1 | 1 | 11 | |
| | (a) Promote public health | | | | | |
| | (b) Public safety | | | | | |
| | (c) Social welfare | | | | | |
| | (d) Maximizing benefits to a given social class | | | | | |
| | iii. Which of the following maintains strong economic ties based on dependency with nearby major city? | 1 | 1 | 1 | 11 | |
| | (a) Twin city (b) Satellite town | | | | | |
| | (c) Counter magnet (d) Independent new town | | | | | |
| | iv. Which of the following is not an accepted method for Municipal Solid Waste disposal? | 1 | 1 | 1 | 7 | |
| | (a) Sanitary land fill | | | | | |
| | (b) Open dump disposal | | | | | |
| | (c) Conversion of waste to compost | | | | | |
| | (d) Recycling | | | | | |
| | v. The land supply for urban expansion can be determine by- | 1 | 1 | 1 | 1 | |
| | (a) TLA- (PCA+BU) (b) PCA- (TLA+BU) | | | | | |
| | (c) BU- (PCA+TLA) (d) BU- (TLA-PCA) | | | | | |

| | | | | | |
|-------|---|---|---|---|---------|
| vi. | The Planning Commission was established in the year- | 1 | 1 | 1 | 11 |
| | (a) 1947 (b) 1948 | | | | |
| | (c) 1950 (d) 1965 | | | | |
| vii. | Sheep foot roller is used for compacting- | 1 | 1 | 1 | 5 |
| | (a) Granular soil (b) Non-plastic silts | | | | |
| | (c) Fine sands (d) Clayey soil | | | | |
| viii. | Scraper is used for- | 1 | 1 | 1 | 5 |
| | (a) Scraping of soils | | | | |
| | (b) Excavation only | | | | |
| | (c) Excavation, transporting and dumping of soil | | | | |
| | (d) None of these | | | | |
| ix. | Who presides over the National Development council? | 1 | 1 | 1 | 11 |
| | (a) Prime Minister (b) Home Minister | | | | |
| | (c) Vice- President (d) RBI Governor | | | | |
| x. | Architect of India's second five year plan is- | 1 | 1 | 1 | 11 |
| | (a) Harrod- Domar (b) Mahalanobis | | | | |
| | (c) Bramanandha (d) Chakravarti | | | | |
| Q.2 | i. What are the objectives of urban planning commission? | 2 | 2 | 2 | 11 2 |
| | ii. What are the stages in town planning? | 3 | 2 | 2 | 11 2 |
| | iii. What are the challenges and issues of urban planning practices in India? | 5 | 2 | 2 | 11 2 |
| OR | iv. Discuss planning of town. Explain in brief any two types planning of town. | 5 | 2 | 2 | 11 2 |
| Q.3 | i. What are the principles of zoning in town planning? | 2 | 2 | 2 | 6 2 |
| | ii. What is survey in urban planning? What are the different types of surveys? Explain any two. | 8 | 2 | 2 | 6, 11 2 |
| OR | iii. What is the function of urban planning agencies? Which agency is responsible for urban planning and development? | 8 | 2 | 2 | 11 2 |
| Q.4 | i. Explain in brief what are the objects of re-planning. | 3 | 2 | 2 | 11 2 |

| | | | | | | | |
|-----|------|--|---|---|---|----|---|
| | ii. | What are the differences between centralization and decentralization in government? Also explain its advantages. | 7 | 2 | 2 | 11 | 2 |
| OR | iii. | Explain in brief surface drainage and refuse of town. | 7 | 2 | 3 | 7 | 2 |
| Q.5 | i. | How many types of equipments or machinery is used for urban development? | 4 | 2 | 2 | 5 | 2 |
| | ii. | What is the excavating equipment? Explain in brief any two types of excavating equipment. | 6 | 2 | 2 | 5 | 2 |
| OR | iii. | Write short notes on- | 6 | 2 | 2 | 5 | 2 |
| | | (a) Drag line (b) Dozer | | | | | |
| | | (c) Power shovel | | | | | |
| Q.6 | i. | What is the process of preparation of master plan? | 5 | 2 | 2 | 11 | 2 |
| | ii. | What are the methods of sustainable development? | 5 | 2 | 3 | 7 | 2 |
| OR | iii. | What to consider when creating a development plan? What are the four element of a good development plan? | 5 | 2 | 3 | 11 | 2 |

Q1

- i) c.
- ii) d.
- iii) b.
- iv) b.
- v) a.
- vi) c.
- vii) d.
- viii) a.
- ix) a.
- x) b.

Q2. i) 0.5 marks for each point. ($0.5 \times 4 = 2$)

ii) -

iii) 8 points for full marks. ~~(6)~~ (5)

iv) 1 marks for part 1.
2 marks for each type of town planning } ($1 + 2 + 2 = 5$)

Q3

i) 0.5 marks for each point ($0.5 \times 4 = 2$)

ii) Part 1 → 1 marks.
Part 2 → 2 marks.
Part 3 → 5 marks } 8 marks

iii) Part 1 → 6 marks
Part 2 → 2 marks } 8 marks

Q4 i) 1 marks for each point. ($1 \times 3 = 3$ marks)

ii) Part 1 → 3.5 marks
Part 2 → 3.5 marks } 7 marks

iii) Surface drainage → 5 marks
Refuse of town → 2 marks } 7 marks

Q5 i) 1 mark for each type/subtype. ($1 \times 4 = 4$ marks)

ii) Part 1 \rightarrow 2 marks
Part 2 \rightarrow 4 marks } 6 marks

iii) 2 marks for each ($2 \times 3 = 6$ marks)

Q6 i) -

ii) 1 mark for each point ($1 \times 5 = 5$)

iii) Part 1 \rightarrow 2 marks
Part 2 \rightarrow 3 marks } 5 marks.