

- Q.17 Discuss the use of lifts and belt conveyors in the construction of multi-storeyed buildings (CO3)
- Q.18 Explain the prefabricated construction method and its benefits. (CO3)
- Q.19 Describe the working principle of a tower crane in construction. (CO4)
- Q.20 What is the role of dumper and tractors in construction? (CO4)
- Q.21 Explain the working and applications of trenching equipment in construction. (CO5)
- Q.22 Explain the working of a Tunnel Boring Machine (TBM).

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)
- Q.23 Discuss the five advantages and five uses of steel Fibre Reinforced concrete in advance construction techniques. (CO1)
- Q.24 Explain the role of advanced hoisting and conveying equipment in the construction of multi-storeyed buildings. (CO4)
- Q.25 Describe the types of excavation equipment used in large construction projects. (CO5)

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5th Sem / Civil Subject : Advanced Construction Technology

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Which of the following fibre is widely used for improving the tensile strength of concrete? (CO1)
- Polypropylene Fibre
 - Steel fibre
 - Carbon fibre
 - Glass fibre
- Q.2 The primary material used in the manufacturing of RPVC is: (CO1)
- Polyethylene
 - Polypropylene
 - Polyvinyl Chloride
 - Fibre Reinforced Plastic

- Q.3 Which method is commonly used for underwater concreting? (CO2)
- a) Shotcreting
 - b) Tremie method
 - c) Foam concrete
 - d) Roller compacted concrete
- Q.4 The equipment required for prefabricated construction includes: (CO3)
- a) Tractors
 - b) Tower Cranes
 - c) JCB
 - d) Dumpers
- Q.5 Crawlers cranes are used for: (CO4)
- a) Material handling
 - b) Soil compaction
 - c) Tunneling
 - d) Hoisting heavy loads
- Q.6 The role of a tunnel boring machine is in:
- a) Road construction
 - b) Excavation of trenches
 - c) Tunnel construction
 - d) Foundation piling

SECTION-B

- Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)
- Q.7 The use of glass fibre in concrete enhances its _____ properties. (CO1)
- Q.8 HDPE is mainly used in construction for _____. (CO1)
- Q.9 Define Ready-Mix Concrete (RMC) (CO2)
- Q.10 Geo-synthetics are used to strengthen _____. (CO3)
- Q.11 A _____ is essential for conveying materials in high-rise construction. (CO4)
- Q.12 Pile hammers are required for _____. (CO5)

SECTION-C

- Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)
- Q.13 Discuss the properties and uses of carbon fibres in construction. (CO1)
- Q.14 Explain the role of acoustics materials in modern construction. (CO1)
- Q.15 Describe any Five advantages of Ready-Mix concrete over conventional Concrete. (CO2)
- Q.16 What are the different types of vibrators used for concrete consolidation? (CO2)