

Question Paper Code : 12091

M.E./M.Tech. DEGREE EXAMINATIONS, JANUARY 2022.

First Semester

Construction Engineering and Management

CN 4103 – CONSTRUCTION EQUIPMENT AND MANAGEMENT

(Regulations 2021)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. How can planning of equipment be done?
2. What is cost control in equipment planning?
3. Define Motor Grader.
4. Name the different types of compactor.
5. Classify dredger.
6. List the factors involved while driving pile hammer.
7. Name the types of crushers.
8. How does asphalt paver function?
9. List the components of forklift.
10. Write a note on industrial truck.

PART B — (5 × 13 = 65 marks)

11. (a) Explain the selection procedure for the construction equipments.

Or

- (b) (i) Explain briefly the methods of calculating depreciation. (7)
- (ii) Discuss the methods of safety management. (6)

12. (a) Explain the construction, operation and advantages of scrapers with neat sketch.

Or

- (b) Discuss in detail the types, applications and operations of loaders with neat sketches.

13. (a) Write in detail the different types of drilling machines used in the construction project.

Or

- (b) Define grouting. Explain the grouting techniques with neat sketches.

14. (a) Explain the construction and working operations of Asphalt power.

Or

- (b) Explain the various types of pumps used in construction industry with neat sketches.

15. (a) Briefly explain belt conveyor, screw conveyor and elevation conveyors with neat sketches.

Or

- (b) Discuss any three hoisting equipments with neat sketch.

PART C — (1 × 15 = 15 marks)

16. (a) As a construction manager, illustrate the significance of maintenance management involved in the construction industry with particular reference to heavy equipments.

Or

- (b) Starting from the selection of a pile driver, explain all the procedure and precautions involved in pile driving for construction.