

C 115

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2009.

THIRD SEMESTER

CIVIL ENGINEERING

CE 1204 — CONSTRUCTION TECHNIQUES, EQUIPMENT AND PRACTICES

(Regulation 2007)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Explain about expansion joint and where it is provided.
2. Mention the different types of stone masonry.
3. Explain about cofferdam and give its purposes.
4. Mention different techniques of box jacking.
5. Explain about the erection procedure of transmission towers.
6. What are the special forms of shells?
7. Define rehabilitation.
8. What are the causes for deterioration of masonry work?
9. What are the functions of earth movers?
10. Explain about dredging and its purposes.

PART B — (5 × 16 = 80 marks)

11. (a) With sketches, Explain about the fabrication and erection of steel truss. (16)  
Or  
(b) Explain in detail about the essential elements of slip forms and also the construction sequence. (16)

12. (a) Describe in detail about the piling techniques and its types. (16)

Or

- (b) Briefly explain about the dewatering techniques and its types. (16)

13. (a) Explain the construction procedure for pre-stressing in high rise structure. (16)

Or

- (b) With a flow chart and sketches explain the construction sequence of sky scraper in detail? (16)

14. (a) With a flow chart explain the assessment procedure for the repair and restoration. (16)

Or

- (b) Explain in detail about the causes for deterioration of buildings. (16)

15. (a) Describe in detail about the various types of earthwork equipment. (16)

Or

- (b) Briefly explain about the equipment used for material handling and erection of structures (16)

Reg. No. :

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**C 3135**

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2008.

Third Semester

(Regulation 2004)

Civil Engineering

CE 1203 — CONSTRUCTION TECHNIQUES, EQUIPMENT AND PRACTICES

(Common to B.E. (Part-Time) Second Semester Regulation 2005)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Mention the types of mortars used in stone masonry.
2. Define 'Thermal damping'.
3. What is meant by pipe jacking?
4. What is under-pinning?
5. Give the names of any two equipments necessary for erecting light weight components on tall structures.
6. What is meant by articulated structures?
7. What are the factors governing the durability of R.C. structures?
8. Mention any two methods of restoring damaged R.C. Columns.
9. Mention the names of any two equipments necessary for pile driving.
10. Define 'Trenching'.

PART B — (5 × 16 = 80 marks)

11. (a) Classify various types of stone masonry. Draw typical sketches to illustrate the same.

Or

- (b) Explain various methods of sound insulation through the wall of a hall.

12. (a) With the help of a neat sketch, explain the method of sinking a pneumatic caisson.

Or

- (b) What do you understand by Shoring? Describe in brief various types of shores.

13. (a) Compare the merits and demerits of various types of shells.

Or

- (b) Explain the process of erecting transmission towers with sketches.

14. (a) Discuss the factors causing building damage and deterioration.

Or

- (b) Explain the method of strengthening damaged R.C. slabs using fibre reinforced plastic sheets, with sketches.

15. (a) Discuss the various factors governing the selection of equipment for earthwork.

Or

- (b) Compare the merits and demerits of conventional method and modern method of erection of structures.

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Reg. No. : 

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**Question Paper Code : 21198**

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2013.

Third/Sixth Semester

Civil Engineering

CE 2203/CE 36/CE 1204 A/080100011/10111 CE 601 — CONSTRUCTION  
TECHNIQUES, EQUIPMENT AND PRACTICES

(Regulation 2008/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the methods of compacting concrete?
2. Mention any four Destructive methods of testing concrete.
3. Write short notes on construction joints.
4. What is meant by scaffolding?
5. What are the two types of anchoring system for the cable in case of suspension bridge?
6. Define shoring for deep excavation.
7. Write short notes on offshore platform.
8. What is the necessity of space decks?
9. List out the equipments used for dredging and trenching.
10. Write a sort note on material handling equipment.



8

PART B — (5 × 16 = 80 marks)

11. (a) Describe the dry process of cement manufacturing with neat diagram. (16)

Or

- (b) Briefly explain the various types of cement grades and their characteristics. (16)

12. (a) Briefly explain with neat sketches about  
 (i) Concrete hollow block masonry (6)  
 (ii) Domes (4)  
 (iii) Sequence of construction activities. (6)

Or

- (b) Briefly explain different types of stone masonry in building construction. (16)

13. (a) Discuss briefly different types of coffer dams with neat sketches. (16)

Or

- (b) Describe with neat sketch about the technique of pile driving. (16)

14. (a) Discuss the process of in-situ prestressing in high rise structures. (16)

Or

- (b) Describe the procedure involved in the erection of braced domes and space decks. (16)

15. (a) Explain the factors governing the selection of equipment for earthwork. (16)

Or

- (b) Mention various types of earthwork equipments and also give their uses. (16)

**D 4025**

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2007.

Third Semester

(Regulation - 2004)

Civil Engineering

CE 1203 — CONSTRUCTION TECHNIQUES, EQUIPMENTS AND PRACTICES

(Common to B.E. Part time Second Semester Regulation - 2005)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is a damp proof course?
2. Where is slip form used?
3. What is a caisson? When it is used?
4. Where are sheet piles provided?
5. What are off-shore platforms?
6. Sketch the super structure of bow string girder bridge.
7. Name two materials used for repairing hair-line cracks in a wall.
8. Define deterioration of a building.
9. What are the equipments used for compacting concrete in a beam?
10. Name the equipments used for dredging.

PART B — (5 × 16 = 80 marks)

11. (a) (i) Briefly explain the procedure for setting out the foundation of a building.  
(ii) Compare stone masonry and brick masonry.

Or

- (b) (i) How is a construction joint provided in a building finished at the roof level? Explain with necessary sketches.
  - (ii) Explain the method scaffolding adopted for plastering an exterior wall of a higher floor.
12. (a) Explain the box jacking technique for the construction of an under pass below a railway track.

Or

- (b) (i) Explain the steps involved in the construction of a cast-in-situ reinforced concrete pile.
  - (ii) How is the cable of a suspension bridge anchored?
13. (a) Describe the sequence of construction of a cooling tower.

Or

- (b) Explain how is in-situ post tensioning of a structure is done. What are the precautions to be taken while carrying out the process?
14. (a) (i) What are the various causes of deterioration of a building?
- (ii) Explain how good maintenance of a building increases its life?

Or

- (b) Explain how you will strengthen the main beam of a Madras Terrace Roof. Explain in detail.
15. (a) Describe the working of pile driving equipment with a simple sketch showing the operation.

Or

- (b) Briefly explain about the following equipments :
  - (i) Trenching equipment.
  - (ii) Tunneling equipment.