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**END SEMESTER EXAMINATION / RETEST - 2019**

Semester : 6th

Subject Code : CT-611

**CONSTRUCTION METHODS  
AND MACHINERY**

Full Marks - 70

Time - Three hours

The figures in the margin indicate **full marks**  
for the questions.

**Instruction :**

- Answer *all* the questions from PART - A and PART - B .

PART - A

Marks - 25

1. Choose the correct answer from the options given below the statement :  $1 \times 10 = 10$ 
  - (i) To achieve construction economy latest information of new construction technology should be acquired by \_\_\_\_\_.
    - (a) Engineers
    - (b) Contractors
    - (c) Both (a) and (b)
    - (d) Client

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- (ii) Which of the following is a hoisting equipment \_\_\_\_\_ ?
- (a) Dredger
  - (b) Bull dozer
  - (c) Scraper
  - (d) Cranes
- (iii) \_\_\_\_\_ is not a compacting equipment.
- (a) Steel roller
  - (b) Vibration roller
  - (c) Scraper
  - (d) All of the mentioned above
- (iv) Air compressor is used in \_\_\_\_\_.
- (a) Drilling
  - (b) Loosening earth
  - (c) Pumps
  - (d) All of these
- (v) \_\_\_\_\_ is the pressure relative to the atmospheric pressure.
- (a) Atmospheric pressure
  - (b) Gauge pressure
  - (c) Absolute pressure
  - (d) All of the mentioned above



- (vi) Which of the following is useful for earthquake loading \_\_\_\_\_ ?
- (a) Welded joints
  - (b) Riveted joints
  - (c) Bolted joints
  - (d) All of the mentioned above
- (vii) Which of the following is not a major equipment for erecting steel structures ?
- (a) Cranes
  - (b) Hoists
  - (c) Truck
  - (d) Winches
- (viii) Which of the following equipment is used for excavating river bed ?
- (a) Hauling equipment
  - (b) Hoisting equipment
  - (c) Excavating equipment
  - (d) Dredger

(ix) Execution of construction work is done in \_\_\_\_\_ stage.

- (a) pre-tender
- (b) post-tender
- (c) before acquisition of land
- (d) None of the above

(x) Which of the following equipment is not necessary for major construction project ?

- (a) Special equipment
- (b) Standard equipment
- (c) All of the above
- (d) None of the above

2. (a) Why temperature of concrete ingredients should be controlled while doing concreting in cold weather ?

- (b) Why watering of form work is necessary in concreting in hot weather ?
- (c) Why quality control of concrete should be maintained ?

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(4)

50(B)



(d) Why job layout is necessary ?

(e) Write the name of two equipments which are used in compacting earth.

(f) Write two uses of compressed air.

(g) Which machine is used in scraping surfaces of road ?

(h) What is hauling equipment ?

(i) What is standard equipment ?

PART - B

Marks - 45

3. (a) What are the costs involved in construction project ?

(b) What is construction economy ? What are the various stages of construction project ?

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(5)

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1+10=11

4. Draw a diagram of job lay out for a construction project showing necessary components. Explain the various factors governing the job layout of a construction project.  $3+7=10$

Or

Explain how quality of concrete can be controlled in a construction project. 10

5. Write down the five disadvantages of high rise building. What are the precautions to be taken during construction of multistoried building ?  $5+10=15$
6. Write down the five advantages of framed structures. 5

