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END SEMESTER EXAMINATION-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.

Instructions :

1. All questions of PART-A are compulsory.
2. Answer all questions from PART-B.

PART - A

Marks - 25

1. Choose the correct answer from the options given
below the statement : $1 \times 10 = 10$
 - (i) Construction economy is a responsibility of
____.
 - (a) Engineers
 - (b) Contrators
 - (c) Both (a) and (b)
 - (d) Client

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(ii) Which of the following is a hauling equipment ?

- (a) Tractor
- (b) Bull dozer
- (c) Scraper
- (d) Cranes

(iii) The compaction process can be accomplished by — process.

- (a) Rolling
- (b) Tampering
- (c) Vibration
- (d) All of the mentioned

(iv) Air compressor is a device where air pressure is —.

- (a) Above atmospheric pressure
- (b) Below atmospheric pressure
- (c) Below absolute pressure
- (d) Above absolute pressure

(v) Which of the following is vulnerable to earthquake loading ?

- (a) Welded joints
- (b) Riveted joints
- (c) Bolted joints
- (d) All of the mentioned



(vi) — is the pressure relative to the atmospheric pressure

- (a) Atmospheric pressure
- (b) Gauge pressure
- (c) Absolute pressure
- (d) All of the mentioned

(vii) Which of the following equipment is necessary for major construction project ?

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

(viii) Which of the following equipment is used for transporting materials ?

- (a) Hauling equipment
- (b) Hoisting equipment
- (c) Excavating equipment
- (d) None of the above

(ix) Tenders are invited in ——— stage.

(a) Pre-tender

(b) Post-tender

(c) Before acquisition of land

(d) None of the above

(x) Which of the following is not a major equipment for erecting steel structures ?

(a) Cranes

(b) Hoists

(c) Truck

(d) Winches.

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

(b) Why delayed setting is necessary in concreting in cold weather ?

(c) What is quality control of concrete ?

(d) What is job layout ?

(e) Write the name of two equipments which are used in erecting steel structures.

(f) Mention two uses of air compressor.

(g) Which machine is used in compacting the surface of road ?

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(4)

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(h) What is hoisting equipment ?

(i) What is special equipment ?

PART - B

Marks - 45

3. (a) What is the cost involved in the construction project ?

(b) What is construction economy ? What are the duties of an engineer and a contractor with respect to construction economy ?

4. Why job layout is necessary ? Explain the various factors governing the job layout of a construction project.

5. What is a framed structure ? Explain how placing of concrete in cold and hot weather can be done.

6. What are the differences between standard and special equipments ?

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(5)

70(W)