

Total No. of printed pages = 6

END SEMESTER EXAMINATION – 2020

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 :

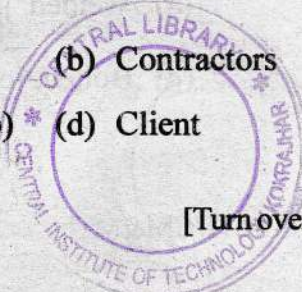
1. Questions of PART-A are compulsory.
2. Answer *all* questions from PART-B.

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) Contractors
 - (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) Which one of the following is not a part of the compaction process ?
- (a) Rolling (b) Tampering
(c) Vibration (d) Excavation
- (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 suitable for earthquake loading _____ ?
- (a) Welded joints (b) Riveted joints
(c) Bolted joints (d) (b) and (c)



(vi) _____ is the pressure relative to the atmospheric pressure.

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

(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 ? 2
- (b) Why delayed setting is necessary in concreting in cold weather ? 2
- (c) What is quality control of concrete ? 1
- (d) Write two governing factors for job layout of a construction project ? 2



- (e) Write the name of two equipments which are used in compaction of earth. 2
- (f) What is absolute pressure ? 2
- (g) Which machine is used in compacting the surface of road ? 1
- (h) What is hoisting equipment ? 1
- (i) What is standard equipment ? 2

PART – B

Marks – 45

3. (a) What is the need for construction economy ? 4
- (b) What is construction economy ? What are the duties of an engineer and a contractor with respect to construction economy ? 1+10=11
4. Why job layout is necessary ? Explain the various factors governing the job layout of a construction project. 3+7=10


Or

Explain how placing of concrete in cold and hot weather is done. 10

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(5)

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5. What is a framed structure ? Explain how placing of concrete in cold and hot weather can be done. 5+10=15
6. What are the differences between standard and special equipments ? 5

