

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018**

SPECIAL PURPOSE VEHICLES

[Time : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

I Answer *all* questions in one or two sentences. Each question carries 2 marks.

1. State orchard type tractors.
2. List the application of PTO shafts.
3. List two main classification of scrapers.
4. Mention any two difference between two wheel and three wheel Roller.
5. Name any two types of cargo carriers.

(5×2 = 10)

PART — B

(Maximum marks : 30)

II Answer any *five* of the following questions. Each question carries 6 marks.

1. Describe the main parts of the steering system of tractors.
2. State the six functions of a sprayer.
3. Explain important features of bottom dump truck.
4. Sketch and mark the parts of vibrating steel drum roller.
5. Sketch any two dumping arrangements.
6. Give three reasons for the popularity of crawler mounted type excavator.
7. List any six special purpose automobile carrying equipment for definite operations.

(5×6 = 30)

PART — C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

UNIT — I

- III (a) Explain two types of PTO units used in tractors with neat sketches. 8
 (b) Define tractors and list the application of tractors. 7

OR

- IV (a) Sketch and mark the parts of power transmission in wheeled tractor. 8
 (b) Explain the draft and depth control mechanism in tractor. 7

UNIT — II

- V (a) With the help of a sketch explain components of a bull dozer. 8
 (b) List 7 type of earth moving equipments. 7

OR

- VI (a) Sketch and explain a scraper. 8
 (b) Explain any four types of loader buckets application. 7

UNIT — III

- VII (a) Sketch and explain three wheeled smooth roller. 8
 (b) Sketch and explain tyre mounted mobile crane. 7

OR

- VIII (a) Write short notes on cranes and application of cranes. 8
 (b) Sketch and explain the working of vibrating steel drum roller. 7

UNIT — IV

- IX (a) Sketch and explain fire engine. 8
 (b) Explain 7 features of ICU ambulance. 7

OR

- X (a) Explain the constructional details of an articulated vehicle. 8
 (b) Explain constructional details of an oil tanker. 7
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