TED (15) –5054			Reg. No	
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(REVISION — 2015)			Signature	• • •
DIPLOMA	EXAMINATION	IN	ENGINEERING/TECHNOLOGY/	
MANAGE	MENT/COMMEDO	TAT	DPACTICE OCTORED 2019	

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.

 $(5 \times 2 = 10)$ 

## 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 popularly of crawler mounted type excavator.
  - 7. List any six special purpose automobile carrying equipment for definite operations.

 $(5 \times 6 = 30)$ 

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## 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.		
	(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		
/III	(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	
		O <sub>R</sub>		
X	(a)	Explain the constructional details of an articulated vehicle.	8	
	(b)	Explain constructional details of an oil tanker.	7	