

Total No. of Questions : 8]

SEAT No. :

P-6478

[Total No. of Pages : 2

[6181]-11

B.E. (Automobile Engineering)

AUTOMOTIVE TESTING AND CERTIFICATION

(2019 Pattern) (Semester - VII) (416481)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume Suitable data, if necessary.

Q1) a) Explain the test procedure of Pass by noise test and noise limits for various vehicle categories. [9]

b) Explain the following. [9]

- i) Split-mu track
- ii) External noise track
- iii) Steering pad

OR

Q2) a) Explain Turning circle diameter test with figures. [9]

b) Explain free acceleration test as per IS standard. [9]

Q3) a) Explain Indian Driving Cycle in detail. [8]

b) Explain procedure of two wheeler testing on chassis dynamometer for emissions. [9]

OR

Q4) a) What is meant by Real Drive Emission (RDE) Testing? How does RDE test work in practice? What are the different equipment's used for RDE Test? [8]

b) Explain Evaporative Emission Test as per IS standard. [9]

P.T.O.

- Q5)** a) Define and differentiate Sound Pressure, Sound Intensity & Sound Power levels and write the relationship between them. [8]
b) Explain Transmission noise and its measurement methods. [9]

OR

- Q6)** a) What are the different sources of noise and vibration in vehicle? Explain mechanism of noise generation? [8]
b) Explain Briefly [9]
i) Exhaust Noise
ii) Engine Noise
iii) Vehicle structure noise

- Q7)** a) Explain the procedure for Steering Impact test. [9]
b) What are the different types of tests performed on rear view mirrors? Explain any one. [9]

OR

- Q8)** a) Explain Demist and Defrost Test. [9]
b) Explain the procedure for Horn Testing. [9]

