



PAS-003-027904

Seat No. _____

M. Sc. (ECI) (Sem. IX) (CBCS) Examination

October / November - 2018

Automobile & Automotive Electronics : Paper - 37
(New Course)

Faculty Code : 003

Subject Code : 027904

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) All questions carry equal marks.
(2) Figures on right hand side indicate marks.

1 Answer the following : (any seven) 14

- (1) Classify an automobile vehicle according to drive.
- (2) Briefly explain engine control and brake system.
- (3) Explain in brief the main parts of an automobile.
- (4) List out types of resistance a vehicle encounters during the motion.
- (5) What is a gear ratio?
- (6) Enlist the advantages and applications of single plate clutch.
- (7) Differentiate single plate and multi-plate clutch.
- (8) Classify an automobile vehicle according to suspension system and engine fitting.
- (9) Enlist disadvantages of rear engine rear wheel drive.
- (10) Define an automobile vehicle.

2 Answer the following : (any two)

- (1) Draw and explain the structure and working of a cone clutch. 7
- (2) Write a note on control system of an automobile vehicle. 7
- (3) Write about a working principle or function of clutch. 7

- 3** Answer the following :
- (1) Draw and explain hydraulic clutch. **5**
 - (2) Write a note on multi-plate type of clutch. **5**
 - (3) Draw only sketch of sliding mesh type gear of box. **4**

OR

- 3** Answer the following :
- (1) Differentiate coil spring and diaphragm spring clutch. **7**
 - (2) Draw and explain vacuum operated clutch. **7**
- 4** Answer the following :
- (1) Write a detailed note on the classification of clutch. **7**
 - (2) Enlist the advantages of an automatic transmission. **7**
- 5** Answer the following : (any two)
- (1) Differentiate torque converter and fluid coupling. **7**
 - (2) Sketch and explain working of overdrive. **7**
 - (3) Write a note on vehicle body design consideration. **7**
 - (4) Briefly explain Front engine front wheel drive. **7**
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