Sample Question Paper
Scheme – I

Programme Name: Mechanical Engineering
Programme Code: ME
Semester: Sixth
Course Title: Automobile Engineering
Marks: 70

Time: 3 Hrs.

Instructions:

(1) All questions are compulsory.
(2) Illustrate your answers with neat sketches wherever necessary.
(3) Figures to the right indicate full marks.
(4) Preferably, write the answers in sequential order.

Q.1) Attempt any FIVE of the following. (10 Marks)

a) Name any four major components of automobile.
b) State working principle of clutch.
c) Define Toe In and Toe out
d) Enlist any four requirements of suspension system in automobile.
e) List the main components of battery.
f) Define HGV and LGV.
g) State function of universal joint.

Q.2) Attempt any THREE of the following. (12 Marks)

a) State the various types of automobile bodies.
b) Explain the working of coil spring type single plate clutch with neat sketch.
c) Describe working of Drum Brake with neat sketch.
d) State advantages of independent suspension system.

Q.3) Attempt any THREE of the following. (12 Marks)

a) Draw a neat sketch of front engine front wheel type vehicle layout and label it.
b) Explain the working of recirculating ball type gearbox with neat sketch.
c) Explain working of Telescopic shock absorber with neat sketch.
d) Explain working of alternator with neat sketch.

Q.4) Attempt any Three of the following. (12 Marks)

a) State four advantages and disadvantages of LPG as a fuel.
b) Explain construction and working of Lead acid Battery with neat sketch.
c) Describe collapsible steering column with neat sketch.
d) State importance of wire harness and cable colour coding used in automobile lighting system.
e) Draw a neat sketch of Traffic sign – STOP and NO PARKING.

Q.5) Attempt any TWO of the following. (12 Marks)
a) Explain the construction and working of synchromesh gear box with neat sketch.
b) Draw a neat layout of ABS and explain its working.
c) State any six probable causes of tyre wear and give its remedies.

Q.6) Attempt any TWO of the following. (12 Marks)
a) Draw neat sketch of Overdrive and explain its construction and working.
b) Compare Battery and Magneto Ignition system (six points).
c) Draw labelled layout of a modern service station use in automobile workshop.
Sample Test Paper I

Scheme – I

Programme Name : Mechanical Engineering
Programme Code : ME
Semester : Sixth
Course : Automobile Engineering
Marks : 20

Time: 1 hour

Instructions: All questions are compulsory

1. Illustrate your answers with neat sketches wherever necessary
2. Figures to the right indicate full marks
3. Preferably, write the answers in sequential order

Q.1 Attempt any FOUR. (8 Marks)

a. Define automobile .
b. State function of clutch .
c. Define term steering ratio.
d. List types of propeller shaft.
e. Name two types of Steering gear boxes used in automobile.
f. Define Drag and Lift .

Q.2 Attempt any Three (12 Marks)

a. List the advantages and disadvantages of Four wheel drive.
b. Explain with neat sketch working of single plate diaphragm clutch.
c. State any four requirement of braking system.
d. Describe working of fully floating rear axle .
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Programme Code : ME  
Semester : Sixth  
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Marks : 20  

Instructions: All questions are compulsory

1. Illustrate your answers with neat sketches wherever necessary
2. Figures to the right indicate full marks
3. Preferably, write the answers in sequential order

Q.1 Attempt any FOUR. (8 Marks)

a. State function of rigid suspension system.
b. List four basic electrical – electronics components used in automobiles.
c. Define Transport term: 1) Driver 2) Passenger
d. State different types of Rims.
e. Define rating of battery and battery capacity.
f. List any four records to be kept in service station.

Q.2 Attempt any Three. (12 Marks)

a. Explain with neat sketch the working of wishbone type suspension.
b. Explain working of Bendix drive used in starting system with neat sketch .
c. Describe duties and responsibilities of RTO.
d. Draw neat sketch of Fuel gauge .