

- Q.27 Explain the working of mechanical breaking system. (CO3)
- Q.28 Write down the principle of vacuum brakes. (CO4)
- Q.29 Explain anti-lock devices. (CO5)
- Q.30 Write down the requirements of power brakes.(CO4)
- Q.31 Explain master cylinder with its constructional details. (CO3)
- Q.32 What do you mean by wheel balancing? (CO2)
- Q.33 Explain radial-ply tyres. (CO3)
- Q.34 Explain the purpose & classification of tyres. (CO2)
- Q.35 Write down the advantages of independent suspension system. (CO1)

#### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain the principle, construction & working of telescopic shock absorber. (CO1)
- Q.37 Define wheel balancing. Also explain static & dynamic balancing in brief. (CO2)
- Q.38 Write down the important points of safe driving. (CO5)

(**Note:** Course outcome/CO is for office use only)

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### 5th Sem / Automobile Engineering Subject:- Chassis, Body & Transmission - 11

Time : 3Hrs.

M.M. : 100

#### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Two general types of tyres are- (CO2)
- tube type & tubeless
  - Solid & tubeless
  - air & pneumatic
  - Split rim & drop centre
- Q.2 The advantage of a tubeless tyre over tube type tyre is - (CO2)
- slow air leakage
  - better fuel efficiency
  - less chances of running flat
  - All of the above
- Q.3 In a single dry plate clutch, torsional vibrations are absorbed by- (CO1)
- Coil springs
  - Cushion springs
  - central hub
  - clutch pedal
- Q.4 An overinflated tyre will wear the tread most near

the- (CO2)

- a) edges                      b) corners
- c) centre                    d) none of the above

Q.5 In the air brake system, the valve which regulates the line air pressure is \_\_\_\_\_ (CO4)

- a) brake valve              b) delivery valve
- c) thermostat valve      d) un loader valve

Q.6 In tubeless tyres- (CO2)

- a) air is filled in a tube inside the tyre
- b) Air is filled in between rim & tyre
- c) no air is required
- d) liquid is filled in place of air

Q.7 Seat belts used in cars are generally- (CO5)

- a) two point type          b) three point type
- c) four point type        d) six point type

Q.8 The metal used for body building of automobiles is generally - (CO3)

- a) cast iron                  b) steel
- c) copper                    d) Aluminium

Q.9 In a diesel engine, the fuel gets ignited by- (CO1)

- a) fuel injector            b) electric spark
- c) heater plug             d) heat of compressed air

Q.10 The pascal law is applied in \_\_\_\_\_ brakes. (disc/ hydraulic/ mechanical) (CO3)

## SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Define sprung weight. (CO1)

Q.12 Write down the material used for spring. (CO1)

Q.13 What are the types of wheels? (Co2)

Q.14 What do you mean by tyre wear? (CO2)

Q.15 Define bleeding of brakes. (CO4)

Q.16 Write down the material used for brake shoe. (CO3)

Q.17 Define power brakes. (CO4)

Q.18 What do you mean by automotive safety? (CO5)

Q.19 Explain inflation pressure. (CO3)

Q.20 What is pneumatic suspension system? (CO1)

## SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Explain different functions of suspension system. (CO1)

Q.22 Explain different types of rims. (CO2)

Q.23 Write down the principle of shock absorber. (CO1)

Q.24 Explain Tyre rotation.

Q.25 Layout of vacuum brake.

Q.26 What are the factors affecting excessive tyre wear? (CO2)