## **SECTION-C**

**Note:**Long answer type questions. Attempt any three questions. 3x10=30

- Q.3 Explain construction & working of hydraulic power steering system.
- Q.4 Explain the construction & working of fluid coupling in detail.
- Q.5 Draw the layout of conventional chassis with complete nomenclature. Explain function of major parts.
- Q.6 Explain the construction & working of sliding mesh gear box in detail.
- Q.7 Write short notes on:
  - a) Hotchkiss drive
  - b) Rear axle-Fully floating

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4<sup>th</sup> Sem. / Auto Engg.

Subject: Chassis Body & Transmission - I

Time: 3 Hrs. M.M.: 100

## **SECTION-A**

**Note:** Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

- Q.1 a) What is traction?
  - b) What is trailing link?
  - c) What is the necessity of 'bleeding' of the brake fluid in the braking system?
  - d) What is toe in?
  - e) What is slip joint?
  - f) What is a dead axle?
  - g) Name any two types of rear axles.
  - h) What is camber?
  - i) What is function of cross members?

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- j) What is function of shock absorber?
- k) What is propeller shaft?
- I) Define wheel base.
- m) What is function of drag link?
- n) What do you understand by overdrive?
- o) What is clutch pedal free play?
- p) What is prime function of clutch?
- q) What are self energizing brakes?
- r) Write two clutch plate lining materials that are used.

## **SECTION-B**

**Note:**Short answer type questions. Attempt any ten parts 10x4=40

- Q.2 i) Describe working of semi-centrifugal clutch.
  - ii) What are the different types of universal joints? Explain any one of them?
  - iii) Explain the functions of front axle.
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- iv) Explain the working of hydraulic power assisted clutch.
- v) Explain significance of kingpin inclination.
- vi) Differentiate between over steering & under steering in brief.
- vii) State the four requirements of a good automobile body.
- viii) With the help of a neat sketch explain the 'Conventional frame' used in a vehicle.
- ix) Differentiate between single plate & multiplate clutch in brief.
- x) Distinguish between frameless and conventional frame type vehicle body
- xi) Write four requirements of good braking system.
- xii) Explain working of fluid coupling.
- xiii) What are disadvantages of rear wheel drive?
- xiv) Explain the principle of differential.
- xv) Write four common faults with remedies in transmission system.
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