**GOVERNMENT POLYTECHNIC CHHAPRA**

(40 Important questions )

Automobile Transmission system 3rd sem Auto.

1. Explain various automobile layouts with sketches.
2. Draw schematic diagram of a rear wheel drive vehicle.
3. State the advantages of four wheel drive over two wheel drive vehicle.
4. List the main components of an automobile? Describe in brief.
5. Write the functions of a chassis frame.
6. Describe the various loads acting on the chassis frame.
7. Compare the integral frame with the ladder frame construction.
8. Discuss various frame sections with their merits.
9. Explain the working of a single plate clutch with the help of simple diagram.
10. Discuss the advantages of diaphragm clutch over coil spring cldiagra.
11. Explain the constructional features of multi plate clutch.
12. Describe briefly the constructional feature of clutch plate.
13. Differentiate between dry and wet clutch.
14. Explain the working of centrifugal clutch.
15. Compare single plate clutch and multi plate clutch.
16. What are the two common types of linkages used to operate the clutch?
17. State and explain the working principle of fluid coupling with diagram.
18. List the different types of gear boxes used in automobile.
19. Explain the working of four speed sliding mesh gear box with power flow diagram.
20. Describe with a proportionate sketch the working of constant mesh gear box.
21. State the advantages of synchromesh gear box over the constant mesh gear box.
22. Discuss the construction and working of the torque converter.
23. Draw a labelled diagram of gear shifting mechanism mounted on transmission cover.
24. Explain transfer case? Where it is uncover
25. Write in brief how the lubrication of gear box is done.
26. Explain with sketch the construction of propeller shaft.
27. Differentiate between the Hotchkiss and Torque tube drive.
28. State the purpose of front and rear universal joints.
29. Slip joint is necessary with a propeller shaft transmission, Give reason.
30. State the advantages of hollow propeller shaft over solid one.
31. Describe the various constant velocity joints with their applications.
32. Explain the divided propeller shaft with the help of labelled diagram.
33. Why the differential is necessary in vehicle.
34. What are the main gears used in the differential?
35. Explain with sketch the working principle of the following: (a) Bevel gear differential (b) Spur gear differential.
36. State the concept of differential lock.
37. Explain the working of double reduction differential.
38. Describe different types of rear axles with their advantages and limitations.
39. Write an explanation on types of rear axle casing.
40. Why the differential is necessary in vehicle.