

- Q.13 Why are universal joints necessary in a vehicle?
- Q.14 What are the advantages of synchromesh transmission?
- Q.15 What is a torque converter? How does it work?
- Q.16 Why a slip joint necessary to be used with propeller shaft?
- Q.17 Why is the tyre tread? Why is retreading done?
- Q.18 What do you understand by tubeless tyre? Write its advantages.

### **SECTION-C**

**Note:** Long answer questions. Attempt any one questions out of two questions. (1x10=10)

- Q.19 Explain the constructional features and working of a multi plate clutch.
- Q.20 With the help of a neat sketch, describe the construction and working of an overdrive.

No. of Printed Pages : 4  
Roll No. ....

188644

**DVOC (Level 4 GV 07)**  
**Trade Automobile Servicing**  
**Subject : Name Motor Vehicle Technology**

Time : 2 Hrs. M.M. : 50

### **SECTION-A**

**Note:** Very short questions. Attempt all ten questions. (10x1=10)

- Q.1 In a four wheel drive the number of gear boxes is
- 1
  - 2
  - 4
  - One gear box with more gears
- Q.2 Which one of the following is mounted between the engine and gear box?
- Propeller shaft
  - Differential gear
  - Reduction gear
  - Clutch
- Q.3 Connecting rod is attached to the piston by the
- Rod cap
  - Piston pin
  - Cap bolt
  - Lower cap
- Q.4 The component of torque converter that allows multiplication of torque is the

(60)

(4)

188644

(1)

188644

- a) Turbine              b) Impeller  
  c) Pump              d) Stator
- Q.5 Tread distortion is least on  
  a) Radial ply tyres    b) Cross ply tyres  
  c) Gross ply belted tyres  
  d) None of these
- Q.6 In which of the gearbox sun and planet gear set is used?  
  a) Constant-mesh gearbox  
  b) Sliding mesh gearbox  
  c) Synchromesh gearbox  
  d) Epicyclical gearbox
- Q.7 Where is the overdrive located?  
  a) Between transmission and engine  
  b) Between transmission and rear axle  
  c) Between transmission and propeller shaft  
  d) Between transmission and differential
- Q.8 Where is the differential located?  
  a) Between transmission and rear axle  
  b) Between engine and transmission  
  c) Between two propeller shaft  
  d) Between steering wheel and steering column
- Q.9 The axle shaft of a semi floating rear axle is subjected to  
  a) Axial thrust only  
  b) Axial thrust and bending stress.  
  c) Torsional stress only  
  d) Bending, torsional stresses and end thrust
- Q.10 What does the 'ply rating' refer to ?  
  a) Aspect ratio  
  b) Rated strength  
  c) Recommended inflation pressure  
  d) The actual number of plies

## SECTION-B

**Note:** Short answer type questions. Attempt any six questions out of eight questions. (6x5=30)

- Q.11 Write a short note on "Rear engine-rear wheel drive.
- Q.12 What are the functions of the clutch.