

C.U.SHAH UNIVERSITY

Summer Examination-2016

Subject Name: Automotive Maintenance and Safety

Subject Code: 4TE05AMS1

Branch: B.Tech (Auto)

Semester: 5

Date: 27/04/2016

Time: 2:30 To 5:30

Marks : 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
-

Q-1 Attempt the following questions: (14)

- a) What do you mean by maintenance? (1)
- b) Describe types of maintenance (1)
- c) Explain service rating of vehicles in kilometer (1)
- d) What is Preventive (scheduled) maintenance? (1)
- e) Explain Function of clutch. (1)
- f) Explain Function of cooling system. (1)
- g) Function of seat belt in vehicle. (1)
- h) What do you mean by non-Standard tools? (1)
- i) What is breakdown (unscheduled) maintenance? (1)
- j) What is the principal of braking system? (1)
- k) Define the term overhauling (1)
- l) What is bleeding? (1)
- m) Explain requirement of suspension system (1)
- n) Explain function of propeller shaft (1)

Attempt any four questions from Q-2 to Q-8

Q-2 Attempt all questions (07)

- a) Explain in detail (07)
1. Cylinder boring 2. cylinder honing 3. Valve grinder.
- b) What is Garage? Explain types of garage. (07)

Q-3 Attempt all questions (07)

- a) Explain with neat sketch wheel alignment. (07)
- b) Give comparison of preventive maintenance and schedule maintenance (07)

Q-4 Attempt all questions (07)

- a) What is tiltable steering wheel and how it works. (07)
- b) Explain splash type lubricating system with neat sketch. (07)



- Q-5** **Attempt all questions**
- a) Draw and explain Anti-lock braking system with neat sketch (07)
- b) List types of steering system used in automobile and also explain any one in brief. (07)
-
- Q-6** **Attempt all questions**
- a) Differentiate between standard tools & non-Standard tools (07)
- b) Prepare a garage layout for three vehicle and explain working of it (07)
-
- Q-7** **Attempt all questions**
- a) Differentiate between Garage and Service Station. (07)
- b) What is bleeding? Explain the bleeding of hydraulic brake and why it is required (07)
-
- Q-8** **Attempt all questions**
- a) Explain Bumper design for safety what are the key factors for design of bumper. (07)
- b) Explain why servicing of suspension system is required and procedure for the same (07)

