

College of Engineering Pune
Department of Mechanical Engineering

B. Tech Third Year 2013

End Sem Exam

Automobile Engineering

Instructions

Time 3 hrs

All Questions Are Compulsory.

Total Marks 60

Que.1 (a)	Explain with neat sketch battery ignition system.	6
Que.1 (b)	What are the various component of 12V lead acid battery? Indicate chemical reaction taking place during 1) Charging of battery 2) Discharging of battery	6
Que.2 (a)	Define and Explain 1) Camber angle 2) Caster angle 3) King pin inclination 4) Toe-in	8
Que.2 (b)	Explain worm and worm wheel steering gear.	4
Que.3 (a)	Describe briefly the following types of frames 1) Conventional frame 2) Semi integral	6
Que.3 (b)	Explain the various factors affecting the establishment of arc across the air gap at spark plug.	6
Que.4 (a)	What are the advantages of tubeless tyres?	4
Que.4 (b)	What do you mean by tyre marking? Explain briefly.	4
Que.4 (c)	List down the advantages of radial ply tyre over bias ply tyre.	4
Que.5 (a)	Explain the working of differential mechanism with neat sketch.	6
Que.5 (b)	Explain sliding mesh gear box with neat sketch.	6