

61056

Seat No. _____

Second Year B. Sc. Examination

April / May – 2003

Heavy Vehicles & Automobiles

Time : 3 Hours]

[Total Marks : 70

- Instructions :** (1) All questions are **compulsory**.
(2) Figures to the **right** indicate **full** marks of the question.
(3) Draw neat sketch wherever it **necessary**.
(4) Assume suitable additional data, if **required**.

- 1** (a) State the difference between Diesel Engine and Petrol Engine. **8**
(b) State comparison of wet and dry linear of cylinder with neat sketch. **6**

OR

- 1** (a) Why two compression ring and single oil ring on piston ? **5**
(b) What is knocking and supercharging ? **5**
(c) What are the functions of piston ? **4**
- 2** (a) Explain the construction and working of fuel pump. **8**
(b) Explain the diesel engine fuel system. **6**

OR

- 2** (a) Explain the different types of combustion chambers with neat sketch and application. **8**
(b) Explain the step by step procedure of cleaning of the filter. **6**

- 3** (a) Explain in details the sliding mesh gear box. **8**
(b) Write a short note on automobile power transmission system. **6**

OR

- 3** (a) List out the main component of the automobile electric system. **8**
(b) Draw the wiring diagram of ignition circuit system. **6**
- 4** (a) What are the stages of types of inflation and causes of tyre wear ? **8**
(b) Explain the front axle with neat sketch. **6**

OR

- 4** (a) What is the steering system and explain it's important part with linkage diagram ? **8**
(b) What is wheel alignment and factors of wheel alignment ? **6**
- 5** (a) Explain uses and limitation of foam. **8**
(b) Write short notes : **6**
(i) Different types of foam systems
(ii) Synthetic foam concentrates.

OR

- 5** (a) Explain the types of casing utilized in centrifugal pump. **8**
(b) Difference between centrifugal pump and reciprocating pump. **6**
