Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER- VI• EXAMINATION-SUMMER 2015

Subject Code: 161902 Date:04.05.2015 **Subject Name: Internal Combustion Engines** Time: 10:30 am to 01:00 pm **Total Marks: 70 Instructions:** 1. Attempt all questions. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. 0.1 Explain Valve Timing Diagram of 4 stroke petrol engines. 07 (a) **(b)** Differentiate actual cycle and fuel air cycle for SI and CI engines. 07 **Q.2** What are the criteria for the selection of I.C.Engine fuels? 07 (a) Explain hydrogen used as a fuel in IC Engines. **(b)** 07 OR Explain use of alcohol as a fuel in IC Engines. **(b)** 07 **Q.3** What is carburetor? Explain any one type of carburetor with neat sketch. (a) 07 Explain types of nozzles used in CI Engines. **(b)** 07 Explain simple jet type carburetor with neat sketch. **Q.3** (a) 07 Explain Fuel pump used in CI Engines. **(b)** 07 Explain battery ignition system with neat sketch. **Q.4** 07 (a) Explain factors affecting on delay period on CI Engines. **07 (b)** OR Explain Magneto Ignition system with neat sketch. 07 **Q.4** (a) Explain factors affecting on flame propagation in SI Engines. **(b)** 07 Explain Emission (Euro & Bharat stage) norms. **Q.5** 07 (a) Which company first used Wankel Engine? Explain working of it. **(b)** 07 OR Explain testing of IC engines as per Indian standard 10001. 07 Q.5 (a) Explain Stirling engine with neat sketch. **(b) 07**
