KADI SERVA VISWAVIDYALAYA

LDRP Institute of Technology & Research, Gandhinagar.

BE (Sem-IV) (Electrical)

Mid Semester Examination Feb – 2015

Electrical Power-I

Date: 04/03/15

Time: 12.00pm to 01.30pm Marks: 30

Instructions:

1. Figure to right indicate full marks.

2. Attempt all questions.

(a) Explain the working of nuclear power station with all details of equipments Q-1. connected to it. (b) Give details of major generating station in Gujarat state & also give their 5 capacity. Draw schematic arrangement of TPS & explain different equipments used in 10 Q-2. thermal power Station. Gives advantage and disadvantage of TPS. OR (a) Explain the working of hydro power station with function of different 5 Q-2. components. (b) Discuss the factor to be considered for selection of site of TPS. 5 Q-3 (a) which are the different turbines used in hydro power plant and explain any 5 (b) Explain gas power plant with schematic arrangement. Gives advantage of 5 that. OR Q-3 (a) A power station consumers 0.7kg of coal to generate one unit of electrical 5 energy. If calorific value of fuel is 7425kcal per kg. find the thermal efficiency of station. Assume turbine efficiency is 95% & generator efficiency is 96%. 5 (b) Give the relative comparison of hydro, thermal & nuclear power plants.