Mid-Term Examination (19.10.2021) Subject: Energy Technology (PCC-CS 103) B.E. (Chemical)- 3rd Semester

Max. Marks: 25 Time allowed: 1 hr

- 1.a) How do the moisture content and carbon content vary with the rank of coal, Explain?
 - b) Describe the 'Float and Sink' test used for analysis of a coal sample.

(3,3)

- 2.a) Discuss the significance of various parameters in Proximate Analysis.
 - b) Discuss the effect of coal and process variables on coke properties.

(5, 4)

- 3.a) Discuss the working principle of a 'Liquid flat-plate solar collector' and a 'Cylindrical parabolic concentrating collector' with the help of neat schematic diagram.
 - b) Discuss the working principle of a solar photovoltaic system.

(6, 4)