

Enrollment No: _____

Exam Seat No: _____

C. U. SHAH UNIVERSITY

Winter Examination-2022

Subject Name : Electrical Power System

Subject Code : 4TE05EPS1

Branch: B.Tech (Electrical)

Semester: 5

Date: 24/11/2022

Time: 02:30 To 05:30

Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1 Attempt the following questions: (14)

- a) What is connected load?
 - (a) Installed electrical load in the premises of the consumer.
 - (b) Maximum load a consumer draws.
 - (c) Load drawn by a consumer at any instant.
 - (d) None of the above
- b) Utilisation factor is defined as the ratio of
 - (a) Average demand to the rated capacity of the plant.
 - (b) Maximum demand on the power plant to the rated capacity of the power plant.
 - (c) Rated capacity of the power plant to the maximum demand.
 - (d) None of these
- c) The diesel plants are mainly used _____.
 - (a) as peak load plants .(b) as base load plants.
 - (c) as standby power plants.(d) both peak and stand by plants.
- d) What is the shape of the load duration curve?
 - (a) Rectangular shape (b) Triangular shape
 - (c) Parabolic shape (d) Free hand sketch
- e) In transmission lines the cross-arms are made of
 - (i) Copper (ii) wood (iii) R.C.C. (iv) steel
- f) What is the load factor of a power plant?
 - (a) Greater than unity (b) Less than unity
 - (c) Always more than unity (d) Normally more than unity
- g) Pin type insulators are generally not used for voltages
 - (a) 1 kv (b) 11 kv (c) 22 kv (d) 33 kv
- h) The voltage of the single phase supply to residential consumers is
 - (a) 110 V (b) 210 V (c) 230 V (d) 400 V
- i) Aluminum has a specific gravity of
 - (a) 1.5 (b) 2.7 (c) 4.2 (d) 7.8
- j) Distribution lines in India generally use
 - (a) wooden poles (b) R.C.C. poles ° (c) steel towers (d) none of the above



