Total No. of Questions :6]

SEAT No. :

P5160

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B.E./Insem.-565
B.E.(Electrical) (Semester - I)
POWER QUALITY
(2012 Pattern) (Elective - I)

Time : 1 Hour] *[Max. Marks :30*

Instructions to the candidates:

1) ***Solve Q1 or Q2, Q3 or Q4, Q5 or Q6.***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***Figures to the right indicate full marks.***
4) ***Use of calculator is allowed.***
5) ***Assume suitable data, if necessary.***

Q1) a) Define power quality with reference to each stakeholder. **[4]**

b) Categorize different power quality issues as per IEEE 1159 standard. **[6]**

OR

Q2) a) Discuss in brief symptoms of poor power quality. **[5]**

b) Discuss power quality issues due to improper grounding. **[5]**

Q3) a) Differentiate between voltage sag and interruption. **[5]**

b) What is ITIC curve? Explain its use in power quality. **[5]**

OR

Q4) a) Write a short note on the area of vulnerability. **[6]**

b) Explain voltage sag characteristics - Magnitude, point on wave initiation. **[4]**

Q5) a) What is transient? Classify transients. **[6]**

b) Discuss various causes of voltage flicker. **[4]**

OR

Q6) a) Briefly, explain the devices for overvoltage protection. **[6]**

b) Write a note on computer tools used for transient analysis. **[4]**