

B.Tech. SEM -VII Electronics 2014 Course (CBCS) : SUMMER - 2019
SUBJECT: ELECTRONIC SYSTEM DESIGN

Day: Monday
Date: 13/05/2019

S-2019-2821

Time: 02.30 PM TO 05.30 PM
Max. Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat diagram **WHEREVER** necessary.
- 4) Assume suitable data, if necessary.

Q.1 Discuss the important selection parameters for Digital to Analog Converter (DAC) in detail. **(10)**

OR

Q.1 Discuss the main design considerations for,
i) Precision OPAMP.
ii) High Speed OPAMP. **(10)**

Q.2 Discuss the different technologies of Touch Screen. Also state advantages and disadvantages of each. **(10)**

OR

Q.2 Consider case study for the mini project you design. Justify the following, **(10)**
i) Selection of Microcontroller.
ii) Selection of Digital input/output and Analog input/output.

Q.3 Explain following International Standards in detail, **(10)**
i) IEEE Standard.
ii) FCC Standard.

OR

Q.3 State and explain different methods of Program Flow representation. **(10)**

Q.4 State and explain the main features of DSO and DPO with neat block diagram. **(10)**

OR

Q.4 Describe the operation of Logic Analyzer using neat block diagram. **(10)**

Q.5 State the need of cooling in an Electronic System. Also explain cooling choices and heat sink selection. **(10)**

OR

Q.5 State the need for environmental testing with Temperature, Humidity, Vibrations and Shock Tests. **(10)**

Q.6 What is Grounding? Explain different Grounding methods with neat block diagram. **(10)**

OR

Q.6 What is Shielding? Describe the following, **(10)**
i) Level of Shielding.
ii) Significance of Shielding.
iii) Function of Shielding.
iv) Shielding Effectiveness.
v) Types of Shielding