SUBJECT CODE NO:- P-295
FACULTY OF ENGINEERING AND TECHNOLOGY
F. E. (All) (CGPA) Examination May/June 2017
Basic Electronics Engineering
(Revised)

[Time: Two Hours]   **[Max.Marks:40]**

Please check whether you have got the right question paper.

N.B   i) Q.No.1 is compulsory.
                 ii) Attempt any two questions from reaming questions.
                 iii) Assume suitable data if required.

Q.1   Solve any five   10
         a)   Find the color code for the following:-
              1) 4.4 k Ω   2) 200 k Ω with ± 5 % tolarance.
         b)   How depletion layer is formed?
         c)   Draw the symbols for PN Junction diode SCR, TRIC, DZAC.
         d)   What are the different types of capacitors?
         e)   State the need for voltage regulation.
         f)   What is the difference between Zener diode & normal PN junction diode?
         g)   Draw the symbol and truth table for NAND gate and 'AND' gate.

Q.2   a)   What are the different types of MOSFET? Explain any one in detail.   08
         b)   Explain construction working principles of SCR device.   07

Q.3   a)   Why there is need of filter? Explain any one filter with its input and output wave form. 08
         b)   Explain any one fixed IC Voltage regulator with its suitable example.   07

Q.4   a)   Describe hexadecimal, octal number system with suitable example.   08
         b)   Explain AND, OR, and NOT gate with their truth table.   07

Q.5   Write a short note on following (any three)   15
         a)   JFET device
         b)   MOSFET construction
         c)   Regulated DC power supply
         d)   Universal gates
         e)   Applications of rectifiers.

2017

B8E73B6AF8A2491F94676299C94081AE