Total No. of Printed Pages:1

SUBJECT CODE NO: H - 192
FACULTY OF ENGINEERING AND TECHNOLOGY
F. E. (All) (CGPA)
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. Solve any two questions from remaining questions.
iii. Assume suitable data whatever necessary.

Q.1 Solve any five 10

a) Enlist types of capacitor.
b) Draw symbol for or SCR & TRIAC
c) Enlist types of filters.
d) Convert the following $(141)_8 = (\ )_2$
e) Explain necessarily of rectifier.
f) Draw the truth table of basic logic gates
g) Draw V –I characteristics of PN junction Diode.
h) Write colour code for the following.
   i. 22Ω , $\pm 20\%$
   ii. 42Ω, $\pm 5\ \%$

Q.2 a) What are the types of filters? Explain π filters used in rectifier. 08
b) Explain three terminal voltage regulator using IC 78XX. 07

Q.3 a) Explain construction, working & principal of JFET device. 07
b) Explain any one type of resistor in detail. 08

Q.4 a) Implement NOT, OR & AND gates by using NOR gate. 07
b) State & prove DE – MORGANS theorem using truth table. 08

Q.5 Write short note on (any three) 15

a) DIAC
b) Half wave rectifier
c) SCR
d) Block diagram of voltage regulator
e) Hexadecimal & Octal number system.