

SUBJECT CODE : 110
FACULTY OF ENGINEERING AND TECHNOLOGY
F.E(ALL)Examination Nov/Dec 2015
Elements of Electronics & Comp. Engg.
(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, wherever necessary.

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| Q1. | Solve any five | 10 |
| | <ul style="list-style-type: none"> a) Define octal number system with example. b) Give the applications of following <ul style="list-style-type: none"> i) Diode ii) LED c) Enlist any two active and any two passive components d) Find the value of resistor if colour code is <ul style="list-style-type: none"> i) Red Red Brown Gold ii) Brown Green Red Silver e) Define rectifier. What is its need? f) What are the types IC voltage regulators? g) Write the truth tables of AND gate and OR gate. h) Perform the following operating
(11001) + (10001) | |
| Q.2 | <ul style="list-style-type: none"> a) With neat circuit diagram, explain V-I characteristics of P-N junction diode. b) What is resistance? Explain various types of resistors. | 08
07 |
| Q.3 | <ul style="list-style-type: none"> a) Compare half wave, full wave centre tapped and bridge rectifier b) Explain shunt capacitor type filter with input and output waveforms. | 08
07 |
| Q.4 | <ul style="list-style-type: none"> a) Perform the following operations <ul style="list-style-type: none"> i) $(77)_{10} = ()_2 = ()_8$ ii) $(256)_8 = ()_2 = ()_{10}$ b) What is universal gate? Construct the basic logic gates using NOR gate. | 08
07 |
| Q.5 | Write a short note on (any three) | 15 |
| | <ul style="list-style-type: none"> a) LCD b) FET c) SCR d) IC voltage regulator e) Boolean algebra | |