extra-6

VITHALBHAI PATEL & RAJRATNA P.T. PATEL SCIENCE COLLEGE
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S.Y. B.Sc. SEM: IV
SUB: INSTRUMENTATION (VOC.)
SUB CODE: US04CINV02

INTERNAL TEST

DATE: 15th March. 2016
TIME: 03:00 pm to 04:30 pm
TOTAL MARKS: 25

Q. 1 Choose the correct answer. [03]

(1) In _____ oscillator works on the principle of pezo-electric effect.
(A) Wein bridge
(B) L-C
(C) Phase shift
(D) None of above

(2) Normally in LASER _____ and in LED _____ emission occurs.
(A) Stimulation, spontaneous
(B) Spontaneous, Absorption
(C) Spontaneous, stimulation
(D) Stimulation, Absorption

(3) In _____ light propagate through total internal reflection.
(A) fiber optics
(B) Twisted pair
(C) Co-axial
(D) None of above

Q.2 Answer the following in short.(Attempt any two, each two marks) [04]

(1) What are Barkhausen's criteria?
(2) Enlist difference between LED and LASER.
(3) List different losses in fiber optics.

Q.3 Explain astable multivibrator with necessary circuit diagram and wave forms. [06]

OR

Q.3 Give classification of oscillator and explain Colpitt's oscillator in detail.. [06]

Q.4 List different types of laser lancing mediums and lasers. Explain Co_2 Lasers in detail [06]

OR

Q.4 List types of Led and explain surface emitting Led in detail with schematic diagram. [06]

Q.5 Describe PIN diode.. [06]

OR

Q. 5 Discuss fiber optics construction. [06]

-:All the best:-