Q.34 Classify the optical fiber.

Q.35 Explain any one type of LASER in brief.

Section-D

Note: Long answer Questions. Attempt any two Questions out of three Questions. (2x10=20)

Q.36 What are optical fibers and also explain construction & principle of transmission through fiber?

Q.37 What is LASER? List the various industrial application of LASER.

Q.38 Explain LED in detail.

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Roll No.....

6th Sem,

Branch : Instrumentation & Control

Subject : Opto electronic Devices & Their Applications

Time : 3 Hrs. **M.M. : 100**

SECTION-A

Note : Multiple choice questions. All questions are compulsory. (10x1=10)

Q.1 Which of the following is not a characteristics of LASER.

a) Monochromatic b) Coherent
c) Divergent d) Instance

Q.2 Optical pyrometer is used for

a) Measuring devices for temperature with contact
b) Measuring device of temperature with non-contact
c) Both
d) None

Q.3 Acceleration is equal to

a) Distance upon time
b) Velocity upon distance
c) Velocity upon time
d) None of above

Q.4 Which of the following material can be used to produce infrared LED

a) Si b) GaAs
c) CdS d) PbS

Q.5 LASER action is formed in _____ semi conductor.

a) Direct Band Gap b) Indirect Band Gap
c) Germanium d) Silicon

Q.6 The unit of flux density

a) Wb/m b) as/m
c) Tesla d) n/wb

Q.7 In a fiber optic, power transferred from one fiber to another detector must place with coupling efficiency.

a) Maximum b) Stable
c) Unpredictable d) Minimum

Q.8 A permanent joint formed between two different optical fibre in the filed known as

a) Fiber splice b) Fiber connector
c) Fiber attenuator d Fiber dispersion

Q.9 LED stand for

a) Light emitting diameter
b) Light emitting diode
c) Light exits diode
d) Laser emit diode

Q.10 A transistor has _____ PN junction.

a) 1 b) 2
C) 3 d) 4

Section B

Note: Objective type Questions. All Questions are compulsory. (10x1=10)

Q.11 Expend LED.

Q.12 Acceleration = ?

Q.13 Write full form of LASER.

Q.14 What are Splices?

Q.15 Write the full form of LASER.

Q.16 What are connecter?

Q.17 Expend LDR.

Q.18 What is the unit of distance?

Q.19 Write any name of type of LASER.

Q.20 Draw the symbol of LDR.

Section-C

Note: Short answer type Questions. Attempt any twelve Questions out of fifteen Questions. (12x5=60)

Q.21 What are optical pyrometer?

Q.22 Give at least five application of power LEDs.

Q.23 List five various characteristics of optical fibers.

Q.24 Explain Spectrophotometer.

Q.25 List various application of Infra-red thermometer.

Q.26 Differential between reflection & Refraction.

Q.27 Explain Avalanche Breakdown and Phenomena.

Q.28 What are the optical sources of their advantages?

Q.29 Write the various characteristics of fibres.

Q.30 Explain optical filter in brief.

Q.31 What are the characteristics of LED?

Q.32 Write a short note on light intensity meter.

Q.33 Draw & explain the symbol & characteristic of LDR.