

**VITHALBHAI PATEL & RAJRATNA P.T. PATEL SCIENCE COLLEGE
VALLABH VIDHYANAGAR**

INTERNAL TEST

T.Y.B.Sc. Sem VI
Sub Code : US06CELE06
Sub. : Electronics

Date : 11th March, 2017
Time : 11:00 am to 12:30 pm
Total Marks : 25

- Q.1 Choose the correct answer (3)**
- (1) _____ mixing Principle is used in Color TV.
(a) Additive (b) Subtractive
(c) Black (d) None of the above
- (2) The refractive index of core is _____ then refractive index of cladding.
(a) more (b) less
(c) equal (d) very less
- (3) The spectral width of lesser diode is _____ the spectral width of LED.
(a) more than (b) less than
(c) equal to (d) none of these
- Q.2 Answer the following in short (Any two) (4)**
- (1) Explain additive color mixing in color TV.
(2) Draw a neat diagram showing construction of optical fiber.
(3) Explain avalanche multiplication process.
- Q.3 Draw the block schematic arrangement of color tv, camera and explain it. (6)**
OR
- Q.3 Draw the block diagram of PAL encoder and explain its working in detail. (6)**
- Q.4 Explain principle of fiber optic in detail. (6)**
OR
- Q.4 Explain in detail step index fiber. (6)**
- Q.5 Give an account of Laser. (6)**
OR
- Q.5 Draw the energy band diagram of biased and unbiased LED and explain the working principle of it, also draw typical biasing circuit. (6)**

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