

V.P. & R.P.T.P SCIENCE COLLEGE  
INTERANAL EXAM  
T.Y.B.Sc (6<sup>th</sup> semester.) ELECTRONICS  
Time : 11.00 a.m. to 12.30 p.m.



SUB. CODE:-US06CELE06

(25 Marks)  
DATE:-17/03/2018

**Q-1 Choose correct answer [3]**

1. \_\_\_\_\_ mixing principle is used in colour TV.  
(A) additive (C) subtractive  
(B) multiplicatives (D) none of above
2. Attenuation is \_\_\_\_\_ in fiber optic cable.  
(A) highest (C) lowest  
(B) highers (D) none of above
3. Which of the following determines the efficiency of LED \_\_\_\_\_.  
(A) total internal reflection (C) quantum efficiency  
(B) internal absorptions (D) none of above

**Q-2 Short answer type question.(attempt any two) [4]**

1. Explain additive colour mixing principle in colour TV.
2. Draw the neat diagram showing construction of fiber optic cable
3. Explain Avalanche multiplication process.

**Q-3 Draw the block schematic arrangement of colour TV camera and explain its working. [6]**

OR

**Q-3 Draw the block diagram of PAL encoder and decoder and explain working of any one. [6]**

**Q-4 Explain principle of fiber optics in detail. [6]**

OR

**Q-4 Explain in detail step index fiber. [6]**

**Q-5 Give an account of PIN diode. [6]**

OR

**Q-5 Draw the energy bend diagram of biased and unbiased LED. and explain working principle of it ,also draw typical biasing circuits. [6]**

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