



# VP&RPTP SCIENCE COLLEGE- VALLABH VIDYANAGAR

Internal test  
US03CPHY01

B.Sc. SEMESTER-3  
Date: 01 /10/2015  
Time: 03:00 pm to 04:30pm

PHYSICS  
Max marks: 25

## Q-1 CHOOSE CORRECT ANSWER FROM GIVEN OPTIONS:

[3]

- 1 The distance between two nodal points is always ..... to the distance between two principal points.
  - a. equal
  - b. unequal
  - c. double
  - d. half
- 2 Fresnal's biprism is based on splitting of .....
  - a. thickness
  - b. Amplitude
  - c. inclination
  - d. wave front
- 3 The .....component of wave is called p- component.
  - a. unequal
  - b. perpendicular
  - c. parallel
  - d. equal

## Q-2 Short questions (Any two)

[4]

- i. Define spherical aberration.
- ii. Give any two points to compare Rams den's eye piece and Huygen's eye piece.
- iii. State the Brewster's law.

Q-3. Explain the cardinal points in detail with reference to coaxial lens system. [6]

OR

Q- 3. Discuss the astigmatism with neat diagram. Explain how it is removed. [6]

Q- 4. Discuss the Newton's ring experiment. How does it is used to determine the wave length of monochromatic source? [6]

OR

Q- 4 Discuss Fraunhofer Diffraction at double slit. [6]

Q- 5. Discuss the polarization by refraction and scattering. [6]

OR

Q- 5. Give the construction and working of LCD. [6]

00000000