Roll No. .....
3000 10/20/50/-

N-708

June - July 2019

Bachelor of Computer Application (BCA) Examination

Second Semester

BCA-203 : PHYSICS – II

Time 3 Hours] [Max. Marks 40
[Min. Marks 13

Note : Attempt all the five questions. Solve any two parts from each question. All questions carry equal marks.

1. (a) Write down the properties of plane wave propagation.
   (b) In ionaspheric wave propagation explain the concept of critical frequency and skip distance.
   (c) What down the characteristics rt coaxial cable transmission and also explain the reflection coefficient.

2. (a) Explain constructive and destructive interference phenomenon.
   (b) Explain the interference of light in thin films.
   (c) Explain the concept and diagramatically arrangement of Michelson's interferemetor.

3. (a) Write short note on Rectilinear Propagation of light.
   (b) Explain the concept of plane diffraction grating.
   (c) Find out the expression for resolving power of a grating.

4. (a) What do you meant by polarization ? Why it is not observed in longitudinal waves.
   (b) Write down the conditions of the Quarter and Half Wave Plates.
   (c) Explain the Fresnel's theory of optical rotation.

5. (a) What is doppler's effect of light ? Write down its applications.
   (b) Write down the concepts of spatial and temporal Coherence.
   (c) Explain the terms : Stimulated Emission and Population Inversion.