# ABES

## ABES Engineering College, Ghaziabad

#### **Department of Applied Sciences & Humanities**

Session: 2023-24 Semester: II Section: Common to All

Course Code: BAS201 Course Name: Engineering Physics

### **Assignment 3 (WAVE OPTICS)**

#### **Date of Assignment:**

Date of submission:

- 1 a) What do you understand by coherent sources? (2022-23)(K2, CO3)
  - b) What will happen to Newton's rings if monochromatic light is replaced by white light.(K1,CO3)
- 2. a) Why two independent light sources cannot produce interference pattern? (2020-21, 2021-22, 2022-23)(K2,CO3)
  - b) Why the center of Newton's ring in reflected system is dark?. (2021-22)(K2,CO3)
- 3. a) Explain the necessity of extended sources. (2018-19) (K1,C03)
  - b) What are Newton's rings? (2017-18) (K1,C03)
- 4. a) What are the changes that are caused in the diffraction pattern if the number of slits are made large? (2022-23)(K2,CO3)
  - b) Explain Rayleigh's criterion of resolution. (2021-22) (K1, CO3)
- 5. a) What is dispersive power of plane transmission grating. (2019-20)(K1,CO3)
- b) What happens if the slit is smaller than wavelength in diffraction pattern? 2023-24(K2, CO3)