## UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 2nd Semester Examination, 2021

## CC4-PHYSICS

### WAVES AND OPTICS

Full Marks: 40

### ASSIGNMENT

*The figures in the margin indicate full marks.*

**[*For each question, the candidates will be graded according to
the quality of the presentation of the topic* (**8 marks**) *and originality of language* (**2 marks**).
*Maximum word limit of each topic is* **400**]**

**Write short notes on any *four* of the following topics**            10×4 = 40

1.    Lissajous's figures with equal and unequal frequencies.

2.    Wavefront and Huygens principle.

3.    Phase velocity and group velocity.

4.    Newton's ring: determination of unknown wavelength of monochromatic light.

5.    Fraunhofer diffraction at a double slit.

6.    Michelson's interferometer.

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