

## Year B. Physiotherapy Examination

## Bio-Medical Physics

Date : 20-06-2024, Thursday]

[Max. Marks : 80

Time : 3 Hours]

- Instructions :
- (1) Figure to the right indicate marks.
  - (2) Write legibly.
  - (3) Draw diagrams wherever necessary.
  - (4) Use separate answer books for each section.

## SECTION-I

- Q.1 Explain in detail about physical principle & production of LASER. 15
- OR
- Q.1 Define faradic current. Write its parameter, physiological effect & indication. 15
- Q.2 Write short notes (Any Three) 15
1. Types of semiconductor.
  2. Relationship between Cellular biophysics & EMF.
  3. Production of Ultra Violet Radiation.
  4. Biophysics & principles of cryotherapy.
- Q.3 Write short notes (Any Two) 10
1. Types of capacitor.
  2. Explain contrast bath.
  3. Explain interrupted direct current.

## SECTION-II

- Q. 4 Define lever. Explain the orders of lever with example in human body. 15
- OR
- Q. 4 Explain about physical principle & production of beat frequency in IFT. 15
- Q. 5 Write short notes (Any Three) 15
1. Define pulley and its uses in physiotherapy.
  2. Describe in detail about newton's laws of motion.
  3. Explain axis & planes with diagram.
  4. Basic principles of Whirl pool.
- Q. 6 Write short notes (Any Two) 10
1. Define force and its classification.
  2. Explain biophysics & principles of wax bath therapy.
  3. Explain COG & LOG.