

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Write a note on applications of endoscopy in current healthcare system?
- Q.24 Write applications of Solid LASER and compare it with Liquid LASER?
- Q.25 Write a note on principle of optical fiber and principle of laser?

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Roll No.

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4th Sem / Medical Electronics

Subject : (Laser and Fiber Optics In Medicine)

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Unit of frequency is:
- a) HO
 - b) Ohm
 - c) Hz
 - d) None of these
- Q.2 Layers of optical fibers are:
- a) Core
 - b) Cladding
 - c) Both
 - d) None of these
- Q.3 Led stands for
- a) Light Emitting Diode
 - b) Law Emit Diode
 - c) Layer Emit Diode
 - d) Last Emitting Diode

Q.4 Characteristics of laser diode are:

- a) Mono chromatic b) Well Directed
- c) Coherent d) All of these

Q.5 Laser can be used for:

- a) Diagnostic b) Therapeutic
- c) Both d) None of these

Q.6 Relation between time & frequency is :

- a) Direct b) Indirect
- c) None of these d) All of these

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Write range of visible light in EM Spectrum?

Q.8 Define TIR.

Q.9 Define role of buffer coating.

Q.10 Write thickness range of core?

Q.11 Write name of two mode of optical fiber?

Q.12 Define Endoscope.

(2)

223244B

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Explain basic optical law.

Q.14 Explain any four applications of optical fiber.

Q.15 Write a note on optical fiber connectors?

Q.16 Differentiate between Scattering and Bending losses.

Q.17 Write a note on various type of Endoscopy?

Q.18 Define laser and fiber optic standards.

Q.19 Write safety regulations of laser?

Q.20 Write any four applications of laser?

Q.21 Write any four characteristics of laser?

Q.22 Define laser and fiber optics standards.

(3)

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