

- Q.28 What are stimulator. Explain Magnetic stimulator.
- Q.29 What are Laser. Explain Characteristic of Laser.
- Q.30 Explain Role of Biomedical Engg. In CSSD.
- Q.31 What are Microwave Diathermy. Explain Production of Microwave.
- Q.32 What are laser. Describe different type of laser.
- Q.33 Explain Physiological Function of kidney.
- Q.34 What are neonatal therapy. Explain Neonatal Intensive Care Unit.
- Q.35 What are short wave diathermy. Explain block diagram of shortwave diathermy machine.

Section-D

Note: Long answer type questions. Attempt any two questions out of three Questions. (2x10=20)

- Q.36 Draw and Explain principle of surgical diathermy machine with block diagram.
- Q.37 What are laser therapy. Explain the basic operation principle of laser.
- Q.38 Describe Autoclave. Explain its working principle & application in detail.

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Roll No.

183255

5th Sem., Branch : Med. Eltx. Subject : Therapeutic Medical Instrument (TMI)

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice Questions. All Questions are compulsory. (10x1=10)

- Q.1 Microwave frequency range are extended from
- 3 MHZ to 30 MHZ
 - 30 MHZ to 300 MHZ
 - 500 MHZ to 30000 MHZ
 - None of above
- Q.2 Full form of LASER
- Light amplification by stimulated emission of radiation
 - Light absorbent and stimulated emission of radiation
 - Light absorbing solar energy radiation
 - Light amplification singular emission of radiation
- Q.3 Dialysis commonly refers to
- Hemodialysis
 - Chemo dialysis
 - Liver dialysis
 - Pancreatic dialysis
- Q.4 Removal and killing of all organism are known as
- Destruction
 - Sterilization
 - Pasterurization
 - None of these

- Q.5 Which of the following is a unique property of LASER
 a) Directional b) Speed
 c) Coherence d) Wavelength
- Q.6 Pasteurization is
 a) A few spring bacterial get killed by pasteurization
 b) Milk is heated to 70*c & held for 30 minutes
 c) Milk is rapidly cooled to 0*c.
 d) It is done for checking milk born infection
- Q.7 Ultrasound are applied for obtaining image
 a) Liver b) Spleen
 c) Both A & B d) None of these
- Q.8 Short wave diathermy which may have frequency
 a) 27.12 MHZ b) 26.12 MHZ
 c) 25.12 MHZ d) 24.12 MHZ
- Q.9 Autoclaves are used in the medical applications to perform_____.
 a) Vulcanization b) Heating
 c) Sterilization d) Cleaning
- Q.10 The functional Unit of kidney
 a) Neuroglia b) Neurons
 c) Nephrons d) None of these

Section-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Expand TENS.

- Q.12 Define Electric Stimulator.
- Q.13 What are Medical Instruments.
- Q.14 Define fulguration.
- Q.15 What are dialyzer.
- Q.16 Name instruments which are used in Surgical Diathermy.
- Q.17 What re Electron Transition.
- Q.18 Expand CSSD.
- Q.19 What are Autoclave.
- Q.20 Full form of SWD.

Section-C

Note: Short answer type Questions. Attempt any twelve questions out of fifteen Questions. (12x5=60)

- Q.21 Define therapeutic instrument. Explain ECG Waveform.
- Q.22 Explain Central Sterile Supply Department.
- Q.23 Explain Shortware Diathermy technique.
- Q.24 What are laser. Explain its working principle.
- Q.25 Define Shortwave diathermy. Explain the Production of heat within the body.
- Q.26 What are dialyzer. Explain parallel flow dialyzer.
- Q.27 What are cardiac pacemaker. Explain type of cardiac pacemaker.