

22546

24225

3 Hours / 70 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.  
(2) Answer each next main Question on a new page.  
(3) Illustrate your answers with neat sketches wherever necessary.  
(4) Figures to the right indicate full marks.  
(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

1. Attempt any FIVE of the following : 10
- a) State the need of traction treatment.
  - b) Give the four technical specifications of SWD machine.
  - c) State physiological effects of cold therapy on human body.
  - d) List any two coagulation electrodes.
  - e) Suggest application technique of ultrasound therapy for following
    - i) For regular body surface
    - ii) Injured body parts
  - f) Enlist the different types of current used in electrotherapy.
  - g) Define leakage current.

P.T.O.

- 2. Attempt any THREE of the following :** **12**
- a) Draw neat labelled diagram of Kromayer lamp and give effect of UV on human body.
  - b) Describe ultrasound therapy machine with neat diagram.
  - c) Describe application inductive techniques of SWD machine.
  - d) Explain precautions to be taken while handling electro surgery unit.
- 3. Attempt any THREE of the following :** **12**
- a) Explain the testing of proper grounding system with neat sketch for hospitals.
  - b) Differentiate between CPM and traction.
  - c) State any four medical applications of LASER.
  - d) Describe different methods of cutting and coagulation of ESU.
- 4. Attempt any THREE of the following :** **12**
- a) Draw neat diagram of ruby LASER and give its application.
  - b) Describe unipolar and bipolar modes of electrosurgical unit.
  - c) Draw proper labelled waveforms of cutting and coagulation method.
  - d) Describe microshock and macroshock.
  - e) Describe methods of accident prevention in hospital environment.

5. Attempt any TWO of the following :

12

- Suggest any six technical specifications for ultra sound therapy machine used for improved blood circulation.
- Identify the block diagram and missing blocks (A, B) of Fig. No. 1 and mention its functions.

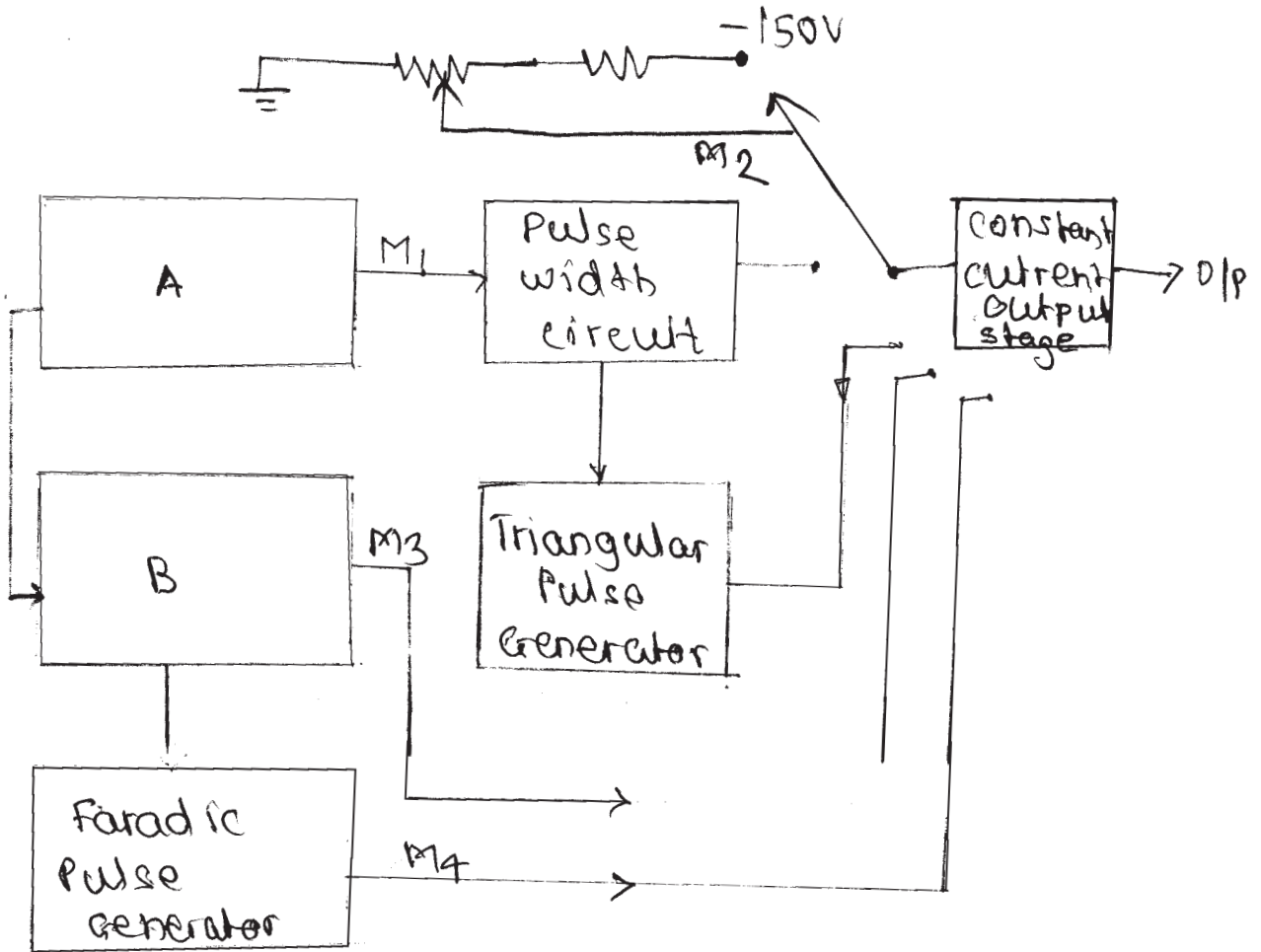


Fig. No. 1

- Differentiate between IR lamp and UV lamp.

6. Attempt any TWO of the following :

12

- a) Identify the block diagram and missing blocks (A, B) shown in Fig. No. 2. Mention the functions of these blocks.

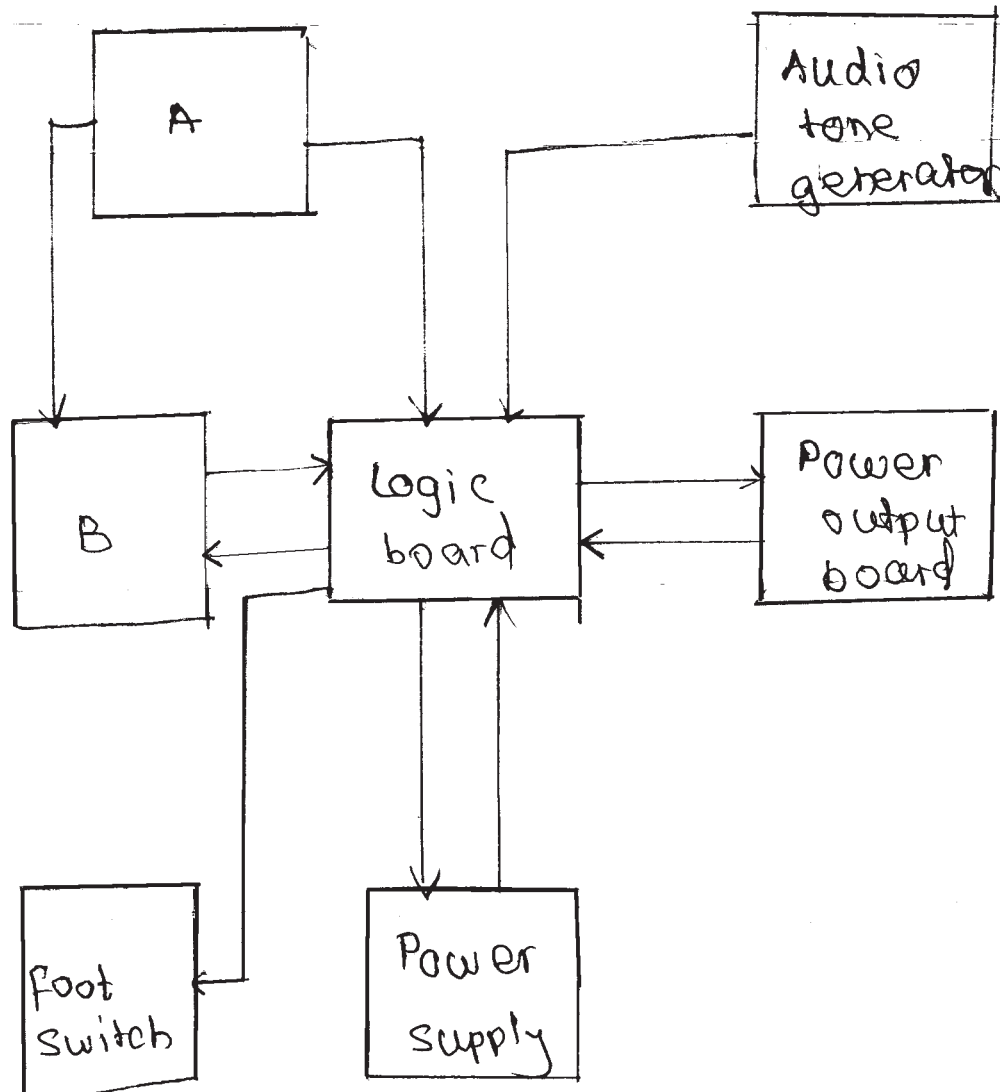


Fig. No. 2

- b) Prepare maintenance procedure for diathermy machine.  
c) Describe three contra indications of cold therapy on human body.