

First B.P.Th. (2012) Examination, Summer 2018  
FUNDAMENTALS OF ELECTRO THERAPY

Total Duration : Section A + B = 3 Hours

Total Marks : 80

SECTION – A & SECTION – B

- Instructions :**
- 1) Use **blue/black** ball point pen **only**.
  - 2) **Do not** write anything on the **blank portion of the question paper**. If written anything, such type of act will be considered as an attempt to resort to unfair means.
  - 3) **All** questions are **compulsory**.
  - 4) The number to the **right** indicates **full** marks.
  - 5) Draw diagrams **wherever** necessary.
  - 6) **Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.**
  - 7) **Use a common answerbook for all Sections.**

SECTION – A (50 Marks)  
(SAQ)

1. Short answer question (any five out of six) : (5×3=15)
- a) Describe methods to reduce skin resistance.
  - b) Eddy currents.
  - c) Ohms law.
  - d) What is earthing ? Explain its importance.
  - e) Write construction of Whirl Pool bath.
  - f) Write three uses of rheostat in electrotherapy equipment.

P.T.O.



2. Short answer question (any five out of six) : (5×7=35)

- a) Define electric shock. Write in details about precautions and treatment following shock.
- b) Describe physiological effects of Cryotherapy with uses.
- c) Draw panel diagram and write testing of Electrical Muscle Stimulator.
- d) Describe production of Interferential (IF) current. Draw a neat labelled panel diagram of the IFT unit.
- e) Explain luminous and non-luminous IR generators.
- f) Describe laws governing radiation.

**SECTION – B (30 Marks)**  
**(LAQ)**

3. Long answer question (any one out of two) : (1×15=15)

- a) Describe contrast bath and explain its physiological and therapeutic effects. Write a note on technique of application. (10+5)
- b) Describe production of Short Wave Diathermy (SWD). Draw panel diagram of SWD and describe testing of SWD. (7+5+3)

4. Long answer question (any one out of two) : (1×15=15)

- a) Describe the construction of UVR lamp. Describe the production of UVR. Add a note on Tridymite formation. (5+7+3)
- b) Describe the construction, working and functions of transformer. (5+5+5)