63115

First B.P.T.H. (2012) Examination, Summer 2017
FUNDAMENTALS OF ELECTRO THERAPY

Total Duration : Section A + B = 3 Hours

Total Marks : 80

SECTION – A and 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 SAQ **(50 Marks)**

1. Short answer question (**any five** out of six) : **(5×3=15)**
   a) State Ohms Law.
   b) Define capacitance and state its unit.
   c) State Cosine law.
   d) State construction of triode valves.
   e) Define Resting membrane potential.
   f) Write the production of luminous Infra-red Radiation lamp.

2. Short answer question (**any five** out of six) : **(5×7=35)**
   a) State the importance of earthing. Add a note on earth shock.
   b) State the factors affecting skin resistance. Describe methods to reduce skin resistance.
   c) Differentiate between Faradic current and Galvanic current.
   d) Enlist the functions of Transformers. Describe the types of Transformers.
   e) Describe methods of applications of Paraffin Wax Bath.
   f) Describe construction and working of High Pressure Mercury Vapor Burner lamp.

P.T.O.

SECTION – B LAQ **(30 Marks)**

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

   a) Define specific heat. Describe therapeutic effects of Cryotherapy. Describe various methods of applications of Cryotherapy. **(2+6+7)**

   b) Describe various methods of heat transfer. Describe physiological effects of Hydrocolator pack. Describe the construction of Hydrocolator pack. **(3+7+5)**

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

   a) Describe the production of Ultra Sound. Draw a panel diagram of Ultra Sound. **(10+5)**

   b) State the therapeutic frequency and wave length of short wave diathermy. Describe the production of Short Wave Diathermy. Draw panel diagram of Short Wave Diathermy. **(2+8+5)**