



PQ-0201852

Seat No. _____

First Year B. Physiotherapy Examination

July - 2018

Human Physiology & Biochemistry

Time : 3 Hours]

[Total Marks : 80

- Instructions :** (1) Answer each section in separate answer book.
(2) Draw diagrams wherever necessary.
(3) Figures to the right indicate marks of that question.

SECTION - I (Human Physiology) (Marks - 55)

- 1** Discuss any **two** : **20**
- (a) Describe Neuromuscular junction in detail. Write short note on Lambert-Eaton syndrome.
 - (b) Define Erythropoiesis. Describe stages and factors affecting Erythropoiesis.
 - (c) Describe synthesis, secretion, transport and mechanism of action of Thyroid hormones.
- 2** Write short notes on : (any **four**) **20**
- (a) Juxta glomerular Apparatus
 - (b) Lung compliance
 - (c) Muscle spindle
 - (d) Heart sound
 - (e) Corticospinal tract.
- 3** Write answer in short : (any **five**) **15**
- (a) What is peristalsis ?
 - (b) What are the phases of cardiac cycle ?
 - (c) What is Bell Magendie Law ?
 - (d) What is Hypermetropia ?
 - (e) What is Law of projection ?
 - (f) What are the phases of Spermatogenesis ?

SECTION – II (Biochemistry) (Marks - 25)

- 4** Attempt any **one** out of two : **1×10=10**
- (1) Write the members of electron transport chain in order of redox potentials and show the steps where ATP is synthesized.
 - (2) Describe different types of RNA.
- 5** Attempt any **one** out of two : **1×5=5**
- (1) Describe the structure of DNA.
 - (2) Write short note on Vitamin B₁₂.
- 6** Answer briefly : (any **five** out of six) **5×2=10**
- (1) How Vitamin D is activated ?
 - (2) What is "mucosal block" with reference to iron metabolism ?
 - (3) Enumerate different techniques available for estimation of proteins.
 - (4) Write the use of southern blotting.
 - (5) What is isoenzyme ?
 - (6) What is central dogma of molecular biology ?
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