No. of Printed Pages: 1+2

SARDAR PATEL UNIVERSITY FIRST YEAR B. PHYAIOTHERAPY EXAMINATION

Subject: Human Physiology Friday, 3rd January 2014 Time: 10.30 am to 01.30 pm Total Marks: 80

Instruction:

- 1. Section I is MCQ and is to be attempted on a separate MCQ paper within 20 minutes.
- 2. Write the answers for section II and III in separate answer books.
- 3. Draw figures or diagrams where necessary.
- 4. Figures in bracket indicate total mark allotted to each question.

Section -I (20)

Q: 1 MCQ: Read the instruction on the MCQ paper and attempt the MCQ's.

Section –II (30)

Q: 2 Answer the following questions (Any Three)

 $(3\times 5=15)$

- a) What is fatigue? Discuss in detail factors affecting fatigue. Explain how to delay of fatigue.
- b) Briefly explain the "Cross-Bridge Cycle Theory" for skeletal muscle contraction.
- c) Describe in detail Oxygen Transport.
- d) Define Blood pressure with its normal range. Describe in detail factors affecting Blood pressure. (2+3)

Q: 3 Short Notes:

(All are compulsory)

 $(5 \times 3 = 15)$

- a) Homeostasis
- b) Neuromuscular Junction
- c) ABO Blood group
- d) Vital Capacity
- e) Gastric Juice

Section –III (30)

Q: 4. Answer the following questions. (Any Three)

 $(3 \times 5 = 15)$

- a) Differentiate upper motor neuron and lower motor neuron paralysis.
- b) Describe in detail properties of synapse.
- c) Describe in detail functions of Hypothalamus
- d) Enlist the hormones secreted from Pituitary gland. Describe in detail functions of Growth Hormone. (2+3)

O: 5 Short Notes

(All are compulsory)

 $(5 \times 3 = 15)$

- a) Cortisol
- b) Micturition
- c) Menstrual Cycle
- d) Vision
- e) EMG