Sl.No.M19253 Course Code:2780111

VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM (Deemed to be University)

B. Sc (TRAUMA CARE MANAGEMENT) DEGREE EXAMINATION – March 2019

First Year

APPLIED BASIC SCIENCES - I ANATOMY, PHYSIOLOGY, BIOCHEMISTRY

Time: Three hours Maximum: 130 marks

(Use Separate Answer book for each section)

SECTION - A

ANATOMY

I. Write an essay on any **ONE** of the following:

 $(1 \times 20 = 20)$

- 1. Describe the shape, size, location, and coverings, external and internal features of heart. Add a note on its blood supply.
- 2. Enumerate the parts of male reproductive system. Describe the features of scrotum, testis, epididymis, vas deferens, seminal vesicle and ejaculatory duet.
- II. Write short notes on any **Two** of the following:

 $(2 \times 10 = 20)$

- 3. Describe the features of lower respiratory tract.
- 4. Detail note on conduction system of heart.
- 5. Functions of 12 pairs of cranial nerves.

SECTION - B PHYSIOLOGY

I. Write an essay on any **ONE** of the following:

 $(1 \times 20 = 20)$

- 1. Draw labelled diagram of nephron. Discuss the physiology of urine formation and functions of kidney.
- 2. Describe synthesis, storage, transport and function of thyroid.

(p.t.o)

II. Write short notes on any **Two** of the following:

 $(2 \times 10 = 20)$

- 3. Define erythropoiesis. Describe the stages and factors influencing erythropoiesis. Add a note on anaemia.
- 4. (i) Differentiate sympathetic and parasympathetic nervous system
 - (ii) Write functions of hypothalamus and medulla oblongata.
- 5. (i) Classify tissues. Write a note on nervous tissue.
 - (ii) Write a note on mitochondria.

SECTION - C BIOCHEMISTRY

I. Write an essay on any **ONE** of the following:

 $(1 \times 20 = 20)$

- 1. Define and classify enzymes. Explain the factors that affect the rate of enzyme catalyzed reactions.
- 2. Give an account of Tri Carboxylic Acid (TCA) cycle. Add a note on its regulation and energetic.

II. Write short notes on any **THREE** of the following:

 $(3 \times 10 = 30)$

- 3. Describe the process of Glycogen metabolism.
- 4. (i) Essential amino acids
 - (ii) Lipoproteins and types
- 5. (i) α oxidation of fatty acids.
 - (ii) Photophosphorylation.

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