

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

BDS DEGREE EXAMINATION – August 2019

First Year

GENERAL HUMAN PHYSIOLOGY

SECTION A

Time: Twenty Minutes

Maximum: 20 marks

Register Number :

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Signature of the candidate

Signature of the Invigilator

Instructions to the candidates

1. Write your Register Number and sign at the place specified on the first page of this Question Booklet.
2. Do not open this question booklet until Invigilator announces the commencement of the examination.
3. Answer ALL the Twenty questions. They carry equal marks. No negative marking for wrong answers.
4. Answers should be marked legibly in the SHEET provided in capital letters.
5. THE QUESTION BOOKLET SHOULD NOT BE TAKEN OUT OF THE EXAMINATION HALL.
6. Questions should not be copied and taken out of the Examination Hall. Any one found violating this rule shall not be permitted to write the examination and shall be sent out of the Hall.
7. At the end of 20 minutes, when the Invigilator announces 'STOP WRITING' you must stop writing immediately. If the candidate tries to attempt to answer the questions after the prescribed time, their answer script becomes invalid.
8. Hand over the questions booklet containing answer sheet to the invigilator when you finish answering or immediately after 20 minutes.

GENERAL HUMAN PHYSIOLOGY
SECTION-A (20X1=20 MARKS)
(Multiple choice questions)

Time: Twenty Minutes

Maximum: 20 marks

Select the most appropriate answer and answer in the answer sheet attached:

1. Calcium reabsorption from the nephron is influenced by all except.
 - A. Parathyroid hormone
 - B. Calcitriol
 - C. Thiazide diuretic
 - D. Cortisol

2. In the testis steroid hormone is secreted by.
 - A. Sertoli cells
 - B. Seminiferous tubules
 - C. Leydig cells
 - D. Bulbo urethral gland

3. The main source of progesterone during pregnancy is.
 - A. Ovary
 - B. Placenta
 - C. Adrenal cortex
 - D. Corpus luteum

4. One gram of Hb contains
 - A. 2.0 mg of iron
 - B. 3.33 mg of iron
 - C. 1.00 mg of iron
 - D. 1.34 mg of iron

5. In a normal ECG, QRS complex represents
 - A. Ventricular repolarisation
 - B. Atrial repolarisation
 - C. Atrial depolarization
 - D. Ventricular depolarization

6. The cell that acts as a first line of defence in acute infections is
 - A. Lymphocytes
 - B. Basophil
 - C. Monocyte
 - D. Neutrophil

(p.t.o.)

7. The normal ECF value of a 70 kg person
- A. 10 L
 - B. 14 L
 - C. 28 L
 - D. 2 L
8. The transport in the respiratory alveoli is
- A. Filtration
 - B. Diffusion
 - C. Osmosis
 - D. Exocytosis
9. The renal threshold for glucose is
- A. 180 mg/dL
 - B. 120 mg/dL
 - C. 100 mg/dL
 - D. 80 mg/dL
10. A decrease in the urine output is called.
- A. Dysuria
 - B. Oliguria
 - C. Nocturia
 - D. Polyuria
11. Syncytial nature of the cardiac muscle is due to.
- A. Tight junction.
 - B. Desmosomes.
 - C. Gap junction
 - D. Pacia adherence.
12. Sarcomeres are present in.
- A. Skeletal and cardiac muscle
 - B. Smooth muscle
 - C. Neuron
 - D. Nephron
13. Hcl is secreted in humans by.
- A. Chief cells of stomach
 - B. ECL cells
 - C. Parietal cells of stomach
 - D. G cells

14. Mass peristalsis is seen in.
- A. Liver
 - B. Colon
 - C. Small intestine
 - D. Stomach
15. The following are the functions of hypothalamus except.
- A. Food intake.
 - B. Regulation of posture and equilibrium.
 - C. Body temperature
 - D. Sleep and wakefulness cycle
16. Cerebrospinal fluid is produced by.
- A. Ependyma
 - B. Choroid plexus
 - C. Arachnoid granulations
 - D. Blood brain barrier
17. One of the following is not measured by spirometry.
- A. Vital capacity
 - B. Tidal volume
 - C. Residual volume
 - D. Maximum ventilator volume
18. Percentage of CO₂ transported in the blood as carbamino compounds is.
- A. 70%
 - B. 5%
 - C. 20%
 - D. 10%
19. The center for olfaction is
- A. Area 17
 - B. Area 42
 - C. Area 28
 - D. Area 20
20. Audible frequency range of human ear is
- A. 20- 500 Hz
 - B. 20 – 20000 Hz
 - C. 500 – 7000 Hz
 - D. 20 – 2000 Hz

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BDS DEGREE EXAMINATION – August 2019

First Year

GENERAL HUMAN PHYSIOLOGY

Time : Three hours

Maximum : 70 marks

Answer ALL Questions

Answer Section A in the Answer Sheet attached to it 20 marks – 20 minutes to be handed over to the invigilator immediately after 20 minutes

Answer Section B & C in the same answer book

Time : 2 hours 40 minutes

SECTION – B & C

Maximum : 50 marks

SECTION – B

I. Write an Essay on : (1 x 10 = 10)

1. Define cardiac output. Explain any one method by which cardiac output is determined. Explain the factors that regulate cardiac output.

II. Write short notes on : (3 x 5 = 15)

2. Cushing's syndrome.
3. Blood grouping.
4. Juxtaglomerular apparatus.

SECTION – C

III. Write an Essay on: (1 x 10 = 10)

5. Explain how oxygen is transported in blood. Add a note on Hb-O₂ dissociation curve.

IV. Write short notes on : (3 x 5 = 15)

6. CSF.
7. Explain the process of muscle contraction.
8. Movements of small intestine.
