

**VINAYAKA MISSION'S RESEARCH FOUNDATION  
(DEEMED TO BE UNIVERSITY), SALEM**

**B.H.M.S. DEGREE EXAMINATION – October 2018  
First Year**

**PHYSIOLOGY INCLUDING BIOCHEMISTRY – PAPER I**

Time: Three hours

Maximum: 100 marks

I. Write long essays on any **TWO** of the following: (2 x 15 = 30)

- 1) Define Arterial Blood pressure. Explain measurement of Blood Pressure. Add a note on long term (Renal) regulation of Blood Pressure.
- 2) What is normal body Temperature? Explain heat balance and regulation of body Temperature. Add a note on fever.
- 3) Define Erythropoiesis. Describe the changes which takes place in each stage and factors necessary for erythropoiesis.

II. Write short essays on any **TEN** of the following: (10 x 5 = 50)

- 4) Cardiac output
- 5) Juxta Glomerular apparatus
- 6) Refractory period in skeletal and cardiac muscle.
- 7) Hemolytic diseases of newborn / Erythroblastosis foetals
- 8) Mountain sickness
- 9) Hypoxia
- 10) Acid-Base Buffer system
- 11) Renal circulation and its peculiarities
- 12) Periodic Breathing
- 13) Cell Mediated Immunity
- 14) Homoeostasis
- 15) Surfactant

III. Write short notes of the following: (**Answer ALL**): (10 x 2 = 20)

- 16) Stokes – Adams syndrome
- 17) Vital capacity
- 18) Anion gap
- 19) Pheromones
- 20) Neuromuscular blockers
- 21) Tissue Macrophages
- 22) Roles of Kidney in maintaining acid base balance
- 23) Transfusion Reactions
- 24) Acclimitisation
- 25) Bain Bridge reflex.

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