

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

B.H.M.S. DEGREE EXAMINATION – August 2021

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) What is meant by Haemostasis? Enumerate coagulation factors and explain in detail the process of coagulation of blood.
- 2) Explain the following regional circulations mentioning their own significance and factors influencing them
 - i) Cerebral
 - ii) Splanchnic
 - and iii) Skeletal muscle circulation.
- 3) Define respiratory centre and explain in detail regulation of respiration.

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

- 4) Donnan membrane equilibrium.
- 5) Heart sounds.
- 6) Glomerular filtration.
- 7) Cardiac output.
- 8) Hypoxia.
- 9) T.Lymphocytes.
- 10) Renin angeotensin II mechanism.
- 11) Stages of erythropoiesis and maturation factors required.
- 12) Leads of E.C.G.
- 13) Transport of Oxygen.
- 14) Explain structure and functions of the skin.
- 15) Explain the regulation of body temperature.

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

- 16) Mitochondria.
- 17) Macrophages.
- 18) Cyanosis.
- 19) Tonsils.
- 20) Sebum.
- 21) Pulmonary surfactant.
- 22) Purkinje fibers.
- 23) E.C.F.
- 24) Baro receptors.
- 25) Carbonic anhydrase.