

5136 (N)

B.D.S. Supply. &amp; Main Examination, Feb.-2022

## Human Physiology &amp; Biochemistry

(BDS-02(N))

Time : Three Hours ] [Maximum Marks: 35+35=70

Note : (i) Attempt all questions. From Part A &amp; B .

(ii) Illustrate your answers with suitable diagram wherever necessary. Use separate copy for Part A &amp; Part B.

## Part - A

## (Physiology)

1. Define Neuromuscular Junction. Discuss the mechanism of Neuromuscular Transmission. Add a note on Myasthenia Gravis.  $1+4+2=7$

2. Define Erythropoiesis. Discuss the stages and factors affecting Erythropoiesis.  $1+6=7$

3. Describe in brief about-  $2.5 \times 2 = 5$

(a) Role of Surfactant

(b) Hormones of thyroid gland

4. Differentiate between following:  $2.5 \times 4 = 10$

(a) Action Potential and Graded Potential

(b) Rods and Cones

(c) Simple and facilitated diffusion

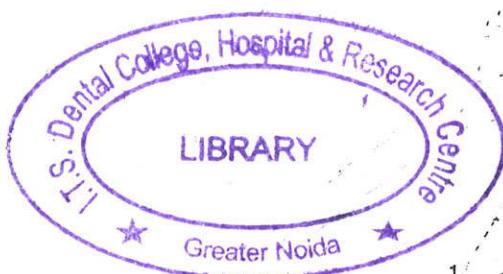
(d) Hypoxic Hypoxia & Anaemic hypoxia

5. Write short notes on any three -  $2 \times 3 = 6$

(a) Functions of Platelets

(b) Gastric Emptying

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(c) Functions of Liver

(d) Glomerular filtration Rate

**Part - B**

**Bio-Chemistry**

- 1.. Describe the metabolic pathway of glycolysis and its regulation. 10
2. Describe in brief dietary requirement, sources, functions and deficiency symptoms of vitamin B<sub>12</sub>. 8
3. Write in brief about: 3×3=9
  - (a) Basal Metabolic rate
  - (b) Gout
  - (c) Coenzymes
4. Write short notes on: 2×4=8
  - (a) Iron deficiency anemia
  - (b) Phenyl ketonuria
  - (c) t-RNA
  - (d) Atherosclerosis.

