I.T.S DENTAL COLLEGE, HOSPITAL & RESEARCH CENTRE

47, Knowledge Park-III, Greater Noida

BDS 1st year (2017 Batch)

Sent-up Internal Assessment Examination

Subject : Physiology / Biochemistry

Time : 3 hrs

Date :05.10.2018

MM:70

- All questions are compulsory
- Use separate sheet for Part A and Part B
- Draw a well labelled diagram wherever necessary

PART – A (Physiology) - M.M - 35

Q. 1 Enumerate the hormones secreted by Pituitary gland. Discuss the action of growth hormone and its applied aspect. [7]

Q. 2 Compare and contrast the following : [3X4=12]

a. Segmentation and Peristalsis
b. Major and Minor Thalassaemia
c. Hypoxic Hypoxia and Anaemic Hypoxia
d. Excitatory Post Synaptic Potential and Inhibitory Post Synoptic Potential

Q. 3 Write briefly on : [2X4=8]

a. Short term regulation of blood pressure
b. Gastro-intestinal Hormones

Q. 4 Write short notes on : [2X4=8]

a. Endocytosis
b. Myelination of nerves
c. Spermatogenesis
d. Auditory reflex

PART – B (Biochemistry) – M.M. - 35

Q. 1 What is the major catabolic pathway of glucose under anaerobic condition? Mention the pathway and indicate the key enzymes. [7]

Q. 2 Describe the sources, RDA, Biochemical function & deficiency manifestations of vitamin A. Draw the well labelled diagram of wald Visual cycle. [7]

Q. 3 Explain protein synthesis in a bacterial cell under following headings : [7]

a. Initiation b. Elongation c. Termination d. Post translation modification

Q. 4 Write short notes on any **07 :** [7X2=14]

a. Diagnostic significance of isoenzymes
b. Hormonal regulation of Blood glucose level
c. Factors affecting BMR
d. Hypothyroidism & Hyperthyroidism
e. Oncogenes
f. Immunoglobulin
g. Inborn errors of amino acid metabolism
h. Atherosclerosis

ITS DENTAL COLLEGE, HOSPITAL & RESEARCH CENTRE

47, KNOWLEDGE PARK III, GREATER NOIDA

First Internal Assessment Examination

BDS 1st year (2018 Batch)

Subject : Physiology/ Biochemistry

Time: 3 hrs

28/11/2018

(MM: 70)

- All questions are compulsory.
- Use separate sheet for Part A and Part B
- Draw a well labelled diagram wherever necessary

PART -A (Physiology)

Q1. Draw well labelled diagram of neuromuscular junction. Describe various events occur at the junction. (7)

Q2. Write briefly: (4x2=8)

a) Clotting mechanism.
b) Define Erythropoiesis and describe different stages of development in adult.

Q3. Compare and contrast: (3x4=12)

a) Adult Haemoglobin and Foetal Haemoglobin.
b) Myelinated Nerve and unmyelinated nerve.
c) Major and minor Thalassemia.
d) Humoral and cellular Immunity.

Q4. Write short notes on: (2x4=8)

a) All or none Law
b) Erythroblastosis Foetalis.
c) Jaundice.
d) Action Potential.

PART -B (Biochemistry)

Q1. Describe the reactions of TCA cycle. How many ATP molecules are generated per molecule of Acetyl Co A entering the cycle. (6)

Q2. What are amino acids? How are these classified? Give one example of each. (7)

Q3. Explain the steps of β – Oxidation of Palmitic acid (16C). Give its energetics also. (7)

Q4. Write Short Notes on (any 5): (3x5=15)

A. Significance of HMP shunt.
B. Enzyme Inhibition.
C. Ammonia toxicity.
D. Fatty Liver and Lipotropic factors.
E. Inborn errors of amino acid metabolism.
F. Isoenzymes and their therapeutic uses.