

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

47, Knowledge Park-III, Greater Noida

First Internal Assessment Examination

BDS 1st year (2016 Batch)

Subject : Physiology / Biochemistry

Time : 3 hrs

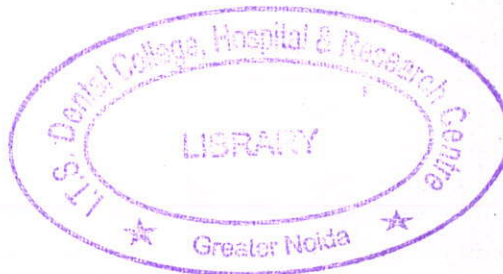
Date : 04.02.2017

M.M: 70

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

PART – A (Physiology)

- Q. 1 Discuss the composition, functions and regulation of salivary reaction. [5]
- Q. 2 Write briefly on : [2X4=8]
- a. Myocardial action potential and Pace Maker potential.
 - b. Intrinsic and Extrinsic mechanism of coagulation
- Q. 3 Compare and contrast the following : [4X3=12]
- a. Cellular Immunity and Humoral immunity
 - b. Secretin and CCK-PKZ
 - c. Red muscle and white muscle
 - d. Diffusion and Active transport
- Q. 4 Write short notes on : [2X5=10]
- a. Molar unit
 - b. Action potential in a Neuron
 - c. Peristalsis
 - d. Mechanism of reaction of Hcl in stomach
 - e. Blood groups



PART – B (Biochemistry)

- Q. 1 Draw TCA Cycle .What are the normal values of blood Glucose? What is blood sugar level regulated in our body? [6]
- Q. 2 Describe structural organization of protein & add short notes on any three biological Important peptides. [6]
- Q. 3 How haem is degraded? Classify jaundice & its evaluation. Describe is brief liver function test. [6]
- Q. 4 How Sources, Functions RDA & deficiency manifestation of Vit-A. Draw well labelled diagram of wald's visual cycle. [5]

Write Short Notes on:-

[6X2=12]

- a. Role of lipoproteins in health & disease.
- b. Essential fatty acids
- c. Glucose tolerance test
- d. Von-Gierke's Disease
- e. Beri-beri
- f. Rickets v/s osteomalacia

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Second Internal Assessment Examination

BDS 1st year (2016 Batch)

Subject : Physiology / Biochemistry

Time : 3 hrs

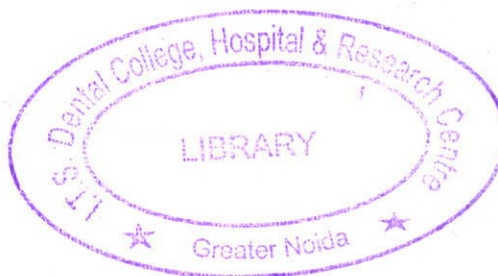
Date : 29.05.2017

M.M: 70

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

PART – A (Physiology)

- Q. 1 Discuss the Neural and chemical regulations of Respiration. [8]
- Q. 2 Write briefly on : [4X2=8]
1. Discuss the measurement and regulation of cardiac output.
 2. Describe the actions of growth hormones and its related disorders.
- Q. 3 Compare and contrast the following – [3X3=9]
- a. Cretinism and Myxoedema
 - b. Bohr's effect and Haldane's effect
 - c. Baroreceptors and chemoreceptor
- Q. 4 Write short notes on : [2X5=10]
- a. Tetany
 - b. Hypovolumic shock
 - c. Rh factor
 - d. Enzymes of Pancreatic juice
 - e. Motor unit



PART – B (Biochemistry)

- Q. 1 What is β - Oxidation? Enumerate steps involved in β – Oxidation of Palmitic acid (16c) Give energetic. [6]
- Q. 2 What is IUB classification of Enzymes. Add a short note on diagnostic. Importance of Enzymes. [6]
- Q. 3 Enumerate the factors influencing the absorption of calcium. Give in detail how Blood calcium levels are regulated. [6]
- Q. 4 Elucidate cyclic process of Urea Synthesis. Discuss clinical significance of Urea in Blood & metabolic disorders of Urea cycle. [5]
- Q. 5 Write short note – [6X2=12]
- a. Gout
 - b. Fluorides
 - c. Phenyl ketonuria
 - d. Jaundice
 - e. Hypothyroidism
 - f. Competitive v/s non-competitive inhibition

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47, Knowledge Park-III, Greater Noida

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Internal Assessment Examination

BDS 1st year (2016 Batch)

Subject : Physiology / Biochemistry

Time : 3 hrs

Date : 09.10.2017

M.M: 70

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

PART – A (Physiology)

- Q. 1 Enumerate the hormones of anterior pituitary. Discuss the actions and disorders of growth hormones. [7]
- Q. 2 Discuss the composition, functions and regulation of Secretion of Saliva. [7]
- Q. 3 Compare and contrast the following : [2.5X4=10]
- a. Universal donor and universal recipient
 - b. Superficial pain and deep pain
 - c. Hypoxic Hypoxia and anaemic Hypoxia
 - d. Myopia and Hypermetropia
- Q. 4 Discuss in brief : [2.5X2=5]
- a. Short term regulation of Blood pressure
 - b. Ovarian changes in Menstrual cycle
- Q.5 Write short notes on any three : [2X3=6]
- a. Sensory pathways
 - b. Juxtaglomerular apparatus
 - c. Herring Breuer's reflex
 - d. Smooth muscles



PART – B (Biochemistry)

- Q. 1 Describe the sources, normal requirements, biochemical functions & deficiency manifestations of Vitamins 'A'. Also discuss Wald's visual cycle. [5]
- Q. 2 Explain the steps of β oxidation of palmitic acid (C16) giving energetic. [5]
- Q. 3 Describe the process of DNA replication. Name two inhibitions of replication. [5]
- Q. 4 Write short notes on the following : [8X2.5=20]
- a. Significance of HMP shunt pathway
 - b. Secondary structure of proteins
 - c. Enzymes profile in MI
 - d. Phospholipids
 - e. Hypothyroidism
 - f. Factors affecting absorption of calcium
 - g. Free radicals
 - h. Types of jaundice & biochemical changes in blood & urine in different type of jaundice

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47, Knowledge Park-III, Greater Noida

First Internal Assessment Examination

BDS 1st year (2017 Batch)

Subject : Physiology / Biochemistry

Time : 3 hrs

Date : 18.12.2017

M.M: 70

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

PART – A (Physiology)

- Q. 1 Discuss the composition, Mechanism of Secretion and regulation of gastric juice. [7]
What are the function of HCl.
- Q. 2 Compare and contrast the following : [3X4=12]
a. Segmentation and peristalsis.
b. Liver Bile and Gall Bladder Bile
c. Single unit and Multi unit muscle fibres
d. Adult and foetal Haemoglobin
- Q. 3 Write briefly on : [4X2=8]
a. Neuro - Muscular Junction
b. Plasma Proteins
- Q. 4 Write a short note on any four(4) : [2X4=8]
c. Endocytosis
d. Myelination of Nerves
e. Features of obstructive jaundice
f. Gastro – Intestinal hormones
g. Rh Blood Group

PART – B (Biochemistry)

- Q. 1 What is IUB Classification of enzymes ? Add a short note on diagnostic & Therapeutic applications of enzymes. [6]
- Q. 2 Enumerate the steps in urea cycle. Add a short note on toxicity of Ammonia. [6]
- Q. 3 Give a normal blood glucose levels in fasting condition & after a meal. What are the mechanism by which normal sugar level in maintained ? [6]
- Q. 4 Describe structural organization of protein & add short notes on essential & non essential amino acids. [5]
- Q. 5 Write Short Notes on any four(4):- [3X4=12]
a. Glycogen storage Disease
b. Significance of HMP shunt Pathway
c. Phenylketonuria
d. Collagen
e. Cori's Cycle
f. Competitive inhibition V/S Non- Competitive Inhibition