

**DEPARTMENT OF BIOCHEMISTRY**

**LESSON PLAN OF 1<sup>st</sup> SEMESTER**

Batch 2018-19

Wednesday - 8.30am-9.25am

Friday - 10.20am-11.15am

Saturday (1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>) - 9.25am-10.20am

Saturday (2<sup>nd</sup>, 4<sup>th</sup>) - 8.30am-9.25am

<b>Date</b>	<b>Time</b>	<b>Topic</b>	<b>Learning Objective</b>	<b>Teacher</b>
01/08/18	Wednesday - 8.30am- 9.25am	<b>CHEMISTRY OF CARBOHYDRATES</b>	Lecture –I Introduction, Functions of carbohydrates Classification Carbohydrates	Dr. S. A. Shinde
03/08/18	Friday - 10.20am- 11.15am		Lecture – II Structure and Physical Properties of Monosaccharides	Dr. S. A. Shinde
04/08/18	Saturday 9.25am- 10.20am		Lecture – III Chemical Properties of Monosaccharides Biological Importance of sugar derivative Disaccharides , Oligosaccharides	Dr. S. A. Shinde
08/08/18	Wednesday - 8.30am- 9.25am		Lecture – IV Homopolysaccharides: Examples and Their Importance	Dr. A.D. Deshmukh
10/08/18	Friday - 10.20am- 11.15am		Lecture-V Heteropolysaccharides :Examples and Their Importance	Dr. A.D. Deshmukh
11/08/18	Saturday 8.30am- 9.25am	<b>CHEMISTRY OF PROTEINS</b>	Lecture I Biomedical Importance of Proteins, Various Classification of amino acids	Dr. Thorat
17/08/18	Friday - 10.20am- 11.15am	.	Lecture – II Physical & chemical Properties of amino acids	Dr. Thorat
18/08/18	Saturday 9.25am- 10.20am		Lecture – III Peptide bond formation, Biologically important peptides, Various classifications of proteins.	Dr. Thorat
24/08/18	Friday - 10.20am- 11.15am		Lecture - IV Structural organization of protein – Primary ,Secondary, Tertiary & Quaternary	Dr. Abhijit Pratap

25/08/18	Saturday 8.30am- 9.25am		Lecture – V Denaturation, Properties of Proteins, Plasma Proteins	Dr. Abhijit Pratap
29/08/18	Wednesday - 8.30am- 9.25am		Lecture – VI Functions of Plasma Proteins, Acute phase proteins & Immunoglobulins	Dr. Abhijit Pratap
31/08/18	Friday - 10.20am- 11.15am	<b>TISSUE PROTEINS IN HEALTH AND DISEASE</b>	Lecture-I Collagen and Muscle Proteins, fibronectin, laminin	Dr. R. D. Naoley
01/09/18	Saturday 9.25am- 10.20am		Lecture-II Elastin, Lens protein, Keratin, prion proteins	Dr. R. D. Naoley
05/09/18	Wednesday - 8.30am- 9.25am	<b>CHEMISTRY OF LIPIDS</b>	Lecture – I Biomedical importance & Classification of lipids	Dr. Abhijit
07/09/18	Friday - 10.20am- 11.15am		Lecture – II Chemistry of triacyl glycerol and Phospholipids General Importance of fatty acids	Dr. Abhijit
08/09/18	Saturday 8.30am- 9.25am		Lecture – III Chemistry of Chemical composition of Lipoproteins, Biological importance/ Classification of Prostaglandins	Dr. Abhijit
12/09/18	Wednesday - 8.30am- 9.25am		Lecture – IV Chemistry, Biological importance of Cholesterol and other steroids	Dr. Abhijit
14/09/18	Friday - 10.20am- 11.15am	<b>ENZYMES</b>	Lecture I General nature of enzymes – Definition, Function, Properties , Specification & Classification, coenzymes	Dr. More
15/09/18	Saturday 9.25am- 10.20am		Lecture II Factor affecting enzymes activity, Mechanism of action of enzyme	Dr. More
19/09/18	Wednesday - 8.30am- 9.25am		Lecture III Enzymes Inhibition	Dr. Phalak
21/09/18	Friday - 10.20am- 11.15am		Lecture IV Isoenzymes - Définition, Separation techniques, examples with clinical significance	Dr. Phalak

22/09/18	Saturday 8.30am -9.25am		Lecture V Clinical enzymology	Dr. Phalak
26/09/18	Wednesday - 8.30am- 9.25am	<b>BIOLOGICAL OXIDATION</b>	Lecture I General Concept of oxidation and reduction , Role of enzymes And coenzymes , High energy Compounds	Dr. S. A. Shinde
28/09/18	Friday - 10.20am- 11.15am		Lecture II ETC : Enzyme complexes inhibitors, energetics, Substrate level phosphorylation	Dr. S. A. Shinde
29/09/18	Saturday 9.25am- 10.20am		Lecture III Oxidative phosphorylation ,Role of Uncouplers And Shuttle System	Dr. S. A. Shinde
03/10/18	Wednesday - 8.30am- 9.25am	<b>CARBOHYDRATE METABOLISM</b>	Lecture I Introduction , Digestion and Absorption, Glycolysis	Dr. A.D. Deshmukh
05/10/18 to 10/10/18		<b>DIWALI VACATION</b>		
12/10/18	Friday - 10.20am- 11.15am		Lecture II Glycolysis, Rapaport Leubering Cycle,	Dr. A.D. Deshmukh
13/10/18	Saturday 9.25am- 10.20am		Lecture III Citric acid Cycle	Dr. A.D. Deshmukh
17/10/18 to 19/10/18		<b>1st CONTINUOUS ASSESEMENT</b>		
20/10/18	Saturday 9.25am- 10.20am		Lecture IV HMP Shunt, Glycogenesis Metabolism	Dr. A.D. Deshmukh
24/10/18	Wednesday - 8.30am- 9.25am		Lecture V Glycogen metabolism & Glycogen Storage Disorders	Dr. M. A. Tilak
26/10/18	Friday - 10.20am- 11.15am		Lecture VI Gluconeogenesis,	Dr. M. A. Tilak
27/10/18	Saturday 9.25am- 10.20am		Lecture VII Galactose Metabolism, Galactosemia, Uronic Acid Pathway	Dr. M. A. Tilak

31/10/18	Wednesday - 8.30am- 9.25am		Lecture VIII Blood Glucose level Regulation	Dr. M. A. Tilak
02/11/18 to 05/11/18	Friday - 10.20am- 11.15am	<b>2nd CONTINUOUS ASSESSMENT</b>		
10/11/18	Saturday 8.30am- 9.25am	<b>LIPID METABOLISM</b>	Lecture I Introduction, Digestion and Absorption of Lipids	Dr. Abhijit
14/11/18	Wednesday - 8.30am- 9.25am		Lecture II Oxidation of fatty acids	Dr. Abhijit
16/11/18	Friday - 10.20am- 11.15am		Lecture III Fatty acid Biosynthesis	Dr. Abhijit
17/11/18	Saturday 9.25am- 10.20am		Lecture IV Adipose tissue metabolism	Dr .V.V. Dhat
21/11/18	Saturday 8.30am- 9.25am		Lecture V Ketosis, fatty liver and Lipotropic factors	Dr .V.V. Dhat
23/11/18	Wednesday - 8.30am- 9.25am		Lecture VI Cholesterol biosynthesis, transport and atherosclerosis	Dr .V.V. Dhat
24/11/18	Friday - 10.20am- 11.15am	<b>PROTEIN METABOLISM</b>	Lecture I Introduction ,Digestion and absorption	Dr. S. A. Shinde
28/11/18	Saturday 9.25am- 10.20am		Lecture II Nitrogen Balance , Amino Acid Pool And Protein turnover, Catabolism of amino acids Transamination , Deamination	Dr. S. A. Shinde
30/11/18	Wednesday - 8.30am- 9.25am		Lecture III Formation and Fates of Ammonia	Dr. S. A. Shinde
01/12/18	Friday - 10.20am- 11.15am		Lecture IV Metabolism of Glycine – General and special functions, Biosynthesis,	Dr. S. A. Shinde

			catabolism and inborn error of Metabolism	
05/12/18	Wednesday - 8.30am- 9.25am		Lecture V Metabolism of Phenylalanine and Tyrosine	Dr. U.K. More
07/12/18	Friday - 10.20am- 11.15am		Lecture VI Metabolism of Tryptophan - General and special functions, Biosynthesis, Catabolism and inborn error of metabolism	Dr. U.K. More
08/12/18	Saturday 9.25am- 10.20am		Lecture VII Metabolism of Methionine and Cysteine- General and special functions, Biosynthesis, Catabolism and inborn error of metabolism	Dr. U.K. More
12/12/18	Wednesday - 8.30am- 9.25am		Free Radicals and Antioxidants	Dr. R. D. Naoley
13/12/18 onwards			Terminal Exam	