

College Name:

Lesson Plan

Program - D. Pharm

Year – Second

Subject: Biochemistry & Clinical Pathology

Session – 2022- 2023

S. No.	Date	Day	Subject	L	T	P	Total
1.		D Day					
2.		D+1	Cell and its biochemical organization	1	0	0	1
3.		D+2	Carbohydrate: Definition, classification with examples	1	0	0	1
4.		D+3	Monosaccharides	1	0	0	1
5.		D+4	Disaccharides	1	0	0	1
6.		D+5	REVISION	0	1	0	1
7.		D+6	Polysaccharides	1	0	0	1
8.		D+7	Qualitative tests and the biological role of carbohydrates	1	0	0	1
9.		D+8	Protein: Definition and classification of proteins	1	0	0	1
10.		D+9	Amino acid: Definition and classification with example	1	0	0	1
11.		D+10	Tutorial (Problem solving session/ class test)	0	1	0	1
			TOTAL	8	2	0	10
12.		D+11	Structure of proteins & Amino acids	1	0	0	1
13.		D+12	Qualitative tests of proteins and amino acids	1	0	0	1
14.		D+13	Biological role of proteins and amino acids	1	0	0	1
15.		D+14	Diseases related to malnutrition of proteins.	1	0	0	1
16.		D+15	REVISION	0	1	0	1
17.		D+16	Lipids: Definition and classification with example	1	0	0	1
18.		D+17	Structure and properties of triglycerides (oils and fats)	1	0	0	1

19.		D+18	Structure and functions of cholesterol in the body	1	0	0	1
20.		D+19	Lipoproteins	1	0	0	1
21.		D+20	Tutorial (Problem solving session/ class test)	0	1	0	1
			TOTAL	8	2	0	10
22.		D+21	Qualitative tests and functions of lipids	1	0	0	
23.		D+22	Nucleic Acids	1	0	0	1
24.		D+23	Definition, purine and pyrimidine bases	1	0	0	1
25.		D+24	Components of nucleosides and nucleotides with examples	1	0	0	1
26.		D+25	REVISION	0	1	0	1
27.		D+26	Structure of DNA (Watson and Crick model) and their functions	1	0	0	1
28.		D+27	Structure of RNA and their functions	1	0	0	1
29.		D+28	Enzymes	1	0	0	1
30.		D+29	Definition, properties and IUB and MB classification	0	1	0	1
31.		D+30	Tutorial (Problem solving session/ class test)	1	0	0	
			TOTAL	8	2	0	10
32.		D+31	Factors affecting enzyme activity	1	0	0	1
33.		D+32	Mechanism of action of enzymes,	1	0	0	1
34.		D+33	Enzyme inhibitors	1	0	0	1
35.		D+34	Therapeutic and pharmaceutical importance of enzymes	1	0	0	1
36.		D+35	REVISION	0	1	0	1
37.		D+36	Vitamins	1	0	0	1
38.		D+37	Definition and classification with examples	1	0	0	1
39.		D+38	Sources, chemical nature, functions of Vitamins	1	0	0	1
40.		D+39	Coenzyme form	1	0	0	1
41.		D+40	Tutorial (Problem solving session/ class test)	0	1	0	1
			TOTAL	8	2	0	10
42.		D+41	Recommended dietary requirements of Vitamins	1	0	0	1
43.		D+42	Deficiency diseases of fat-and water-soluble vitamins	1	0	0	1

44.		D+43	Metabolism of Biomolecules	1	0	0	1
45.		D+44	Metabolism of Carbohydrates	1	0	0	1
46.		D+45	REVISION	0	1	0	1
47.		D+46	Diseases related to abnormal metabolism of Carbohydrates	1	0	0	1
48.		D+47	Metabolism of lipids	1	0	0	1
49.		D+48	Diseases related to abnormal metabolism of lipids such as Ketoacidosis, Fatty liver, Hypercholesterolemia	1	0	0	1
50.		D+49	Metabolism of Amino acids (Proteins)	1	0	0	1
51.		D+50	Tutorial (Problem solving session/ class test)	0	1	0	1
			TOTAL	8	2	0	10
52.		D+51	Diseases related to abnormal metabolism of amino acids,	1	0	0	1
53.		D+52	Disorders of ammonia metabolism, phenylketonuria, alkaptonuria.	1	0	0	1
54.		D+53	Jaundice disease.	1	0	0	1
55.		D+54	Biological oxidation: Electron transport chain and Oxidative phosphorylation	1	0	0	1
56.		D+55	REVISION	0	1	0	1
57.		D+56	Minerals	1	0	0	1
58.		D+57	Deficiency disease of minerals	1	0	0	1
59.		D+58	Water and Electrolytes	1	0	0	1
60.		D+59	Distribution, and functions of water in the body	1	0	0	1
61.		D+60	Tutorial (Problem solving session/ class test)	0	1	0	1
			TOTAL	8	2	0	10
62.		D+61	Water turnover and balance in human body	1	0	0	1
63.		D+62	The electrolyte composition of the body fluids, Dietary intake of electrolytes and Electrolyte balance	1	0	0	1
64.		D+63	Dehydration, causes of dehydration and oral rehydration therapy	1	0	0	1
65.		D+64	Introduction to Biotechnology	1	0	0	1
66.		D+65	REVISION	0	1	0	1
67.		D+66	Human body Organ Function Tests	1	0	0	1
68.		D+67	Kidney functions test	1	0	0	1
69.		D+68	Liver functions test	1	0	0	1

70.		D+69	Lipid profile tests and their clinical significance	1	0	0	1
71.		D+70	Tutorial (Problem solving session/ class test)	0	1	0	1
			TOTAL	8	2	0	10
72.		D+71	Pathology of Blood	1	0	0	
73.		D+72	Pathology of Urine	1	0	0	1
74.		D+73	Lymphocytes role in health and disease	1	0	0	1
75.		D+74	Platelets role in health and disease	1	0	0	1
76.		D+75	REVISION	0	1	0	1
77.		D+76	Introduction of Erythrocytes	1	0	0	1
78.		D+77	Erythrocytes – Abnormal cells and their significance	1	0	0	1
79.		D+78	Introduction of Urine	1	0	0	1
80.		D+79	Normal and Abnormal constituents of Urine and their Significance	0	1	0	1
81.		D+80	Tutorial (Problem solving session/ class test)	1	0	0	
82.			TOTAL	8	2	0	10
83.		D+81	REVISION	1	0	0	
84.		D+82	REVISION	1	0	0	1
85.		D+83	REVISION	1	0	0	1
86.		D+84	REVISION	1	0	0	1
87.		D+85	REVISION	0	1	0	1
88.		D+86	REVISION	1	0	0	1
89.		D+87	REVISION	1	0	0	1
90.		D+88	REVISION	1	0	0	1
91.		D+89	REVISION	0	1	0	1
92.		D+90	Tutorial (Problem solving session/ class test)	1	0	0	
93.			TOTAL	8	2	0	10
94.		D+91	REVISION	1	1	0	1
95.		D+92	REVISION	1	1	0	1
96.		D+93	REVISION	1	1	0	1
97.		D+94	REVISION	1	1	0	1

98.		D+95	REVISION	0	1	0	1
99.		D+96	REVISION	1	1	0	1
100.		D+97	REVISION	1	1	0	1
101.		D+98	REVISION	1	1	0	1
102.		D+99	REVISION	1	1	0	1
103.		D+100	Tutorial (Problem solving session/ class test)	1	0	0	
			TOTAL	8	2	0	10