



Bankura University

B.Sc. .... (Programme)

CBCS w.e.f. 2017-18

# **CBCS SYLLABUS**

**FOR**

**THREE YEARS UNDER-GRADUATE COURSE**

**IN**

**CHEMISTRY (PROGRAMME)**

*(w.e.f. 2017)*



**BANKURA UNIVERSITY**

**BANKURA**

**WEST BENGAL**

**PIN 722155**

**MODEL STRUCTURE IN CHEMISTRY (PROGRAMME)****SEMESTER – I**

Course Code	Course Title	Credit	Marks			No. of Hours/Week			
			I.A.	ESE		Total	Lec.	Tu.	Pr.
UGP/CHEM/101/C-1A	Fundamentals of Organic Chemistry and Aliphatic Hydrocarbons; Atomic Structure, Chemical Periodicity, Acids and Bases, Redox Reactions, (T1 & P1)	6	10	Th	Pr	50	4	X	4
				25	15				
UGP/102/ C-2A	Discipline-2	6	10	40	50				
UGP/103/ C-3A	Discipline-3	6	10	40	50				
UG/ 104/ AECC-ENV	Environmental Studies	4	10	40	50				
<b>Total in Semester – I</b>		<b>22</b>	<b>40</b>	<b>160</b>	<b>200</b>				

**SEMESTER – II**

Course Code	Course Title	Credit	Marks			No. of Hours/Week			
			I.A.	ESE		Total	Lec.	Tu.	Pr.
UGP/CHEM./201/C-1B	Bonding & Molecular Structure, Comparative Studies of p-Block Elements; States of Matter and Chemical Kinetics (T2 & P2)	6	10	Th	Pr	50	4	X	4
				25	15				
UGP/202/ C-2B	Discipline – 2	6	10	40	50				
UGP/ 203/C- 3B	Discipline – 3	6	10	40	50				
UG/204/ AECC-E/MIL	English/MIL	2	10	40	50				
<b>Total in Semester – II</b>		<b>20</b>	<b>40</b>	<b>160</b>	<b>200</b>				

**SEMESTER – III**

Course Code	Course Title	Credit	Marks			No. of Hours/Week			
			I.A.	ESE		Total	Lec.	Tu.	Pr.
UGP/CHEM./ 301/C-1C	<b>Organic Chemistry –II; Chemical Energetics, Chemical Equilibrium &amp; Conductance (T3 &amp; P3)</b>	6	10	Th 25	Pr 15	50	4	X	4
UGP/302/C-2C	Discipline – 2	6	10	40		50			
UGP/ 303/ C-3C	Discipline – 3	6	10	40		50			
UGP/S.C/304/ SEC-1	<b>Basic Analytical Chemistry (T1)</b>	2	10	Th 25	Pr 15	50	1		2
<b>Total in Semester – III</b>		20	40	160		200			

**SEMESTER – IV**

Course Code	Course Title	Credit	Marks			No. of Hours/Week			
			I.A.	ESE		Total	Lec.	Tu.	Pr.
UGP/CHEM./401/C-1D	<b>Functional Group Organic Chemistry; Inorganic Chemistry: Coordination Chemistry and Transition Metal Chemistry (T4 &amp; P4)</b>	6	10	Th 25	Pr 15	50	4	X	4
UGP/ 402/ C-2D	Discipline-2	6	10	40		50			
UGP/ 403/ C-3D	Discipline-3	6	10	40		50			
UGP/S.C./404/ SEC-2	<b>Pharmaceutical Chemistry (T2)</b>	2	10	Th 25	Pr 15	50	1	X	2
<b>Total in Semester – IV</b>		20	40	160		200			

**SEMESTER – V**

Course Code	Course Title	Credit	Marks			No. of Hours/Week			
			I.A.	ESE		Total	Lec.	Tu.	Pr.
UGP/CHEM./501/DSE-1A	Green Chemistry (T1 & P1)	6	10	Th 25	Pr 15	50	4	X	4
UGP/ 502/DSE-2A	Discipline – 2	6	10	40		50			
UGP/ 503/DSE-3A	Discipline – 3	6	10	40		50			
UGP/S.C./504/SEC-3	IT Skill for Chemists (T3)	2	10	Th 25	Pr 15	50	1	X	2
<b>Total in Semester – V</b>		<b>20</b>	<b>40</b>	<b>160</b>		<b>200</b>			

**SEMESTER – VI**

Course Code	Course Title	Credit	Marks			No. of Hours/Week			
			I.A.	ESE		Total	Lec.	Tu.	Pr.
UGP/CHEM./601/DSE-1B	Polymer Chemistry (T2 & P2)	6	10	Th 25	Pr 15	50	4	X	4
UGP/ 602/DSE-2B	Discipline – 2	6	10	40		50			
UGP/ 603/DSE-3B	Discipline – 3	6	10	40		50			
UGP/S.C./ 604/SEC-4	Analytical Chemical Biochemistry (T4)	2	10	Th 25	Pr 15	50	1	X	2
<b>Total in Semester – VI</b>		<b>20</b>	<b>40</b>	<b>160</b>		<b>200</b>			

UGP= Under Graduate programme/Pass, S.C.= Subject Code C= Core Course, E/H/MIL= English/ Hindi/ Modern Indian Language, H/MIL/E= Hindi/ Modern Indian Language/ English, AECC-E= Ability Enhancement Compulsory Course-English, AECC-ENV= Ability Enhancement Compulsory Course-Environmental Science, SEC= Skill Enhancement Course, GE= Generic Elective, DSE= Discipline Specific Elective IA= Internal Assessment, ESE= End-Semester Examination, Lec.= Lecture, Tu.= Tutorial, and Pr.=Practical