



**KURUKSHETRA UNIVERSITY KURUKSHETRA**

**[Established by the State Legislature Act XII of 1956]**

**(‘A<sup>+</sup>’ Grade, NAAC Accredited)**

## **AQAR-2020-21**

**1.2.2 : Scheme of Examination for the programmes in  
the Department/Institute of**

**Bio-Chemistry**

**KURUKSHETRA UNIVERSITY, KURUKSHETRA**  
(‘A+’ Grade NAAC Accredited)

**DEPARTMENT OF BIOCHEMISTRY**  
**Curriculum for M. Sc. Biochemistry (Semester System)**  
**Under CBCS Scheme of Examination (w.e.f. 2020-2021) in phased manner**

**Semester – I**

Paper code	Title of Paper	Type of paper	Hours/ week	Credits	Internal Assessment	External Marks	Total Marks	Duration of Exam (Hrs)
BCH-101	Structure and Function of Biomolecules	Core	4	4	20	80	100	3
BCH-102	Cell Biology	Core	4	4	20	80	100	3
BCH-103	Proteins and Proteomics	Core	4	4	20	80	100	3
BCH-104	Bioenergetics and Metabolism -I	Core	4	4	20	80	100	3
BCH-105	Practical-1 (Based on papers BCH-101 and BCH-102)	Core	8	4	20	80	100	8
BCH-106	Practical-2 (Based on papers BCH-103 and BCH-104)	Core	8	4	20	80	100	8
<b>Total</b>				<b>24</b>			<b>600</b>	

**Semester –II**

Paper code	Title of Paper	Type of paper	Hours/ week	Credits	Internal Assessment	External Marks	Total Marks	Duration of Exam (Hrs)
BCH-201	Metabolism -II	Core	4	4	20	80	100	3
BCH-202	Clinical Biochemistry	Core	4	4	20	80	100	3
BCH-203	Enzymology	Core	4	4	20	80	100	3
BCH-204	Molecular Biology -I	Core	4	4	20	80	100	3
BCH-205	Seminar	Core	1	1	-	-	25	
BCH-206	Food Biochemistry	Open Elective	2	2	10	40	50	3
BCH-207	Practical-3 (Based on papers BCH-201 and BCH-202)	Core	8	4	20	80	100	8
BCH-208	Practical-4 (Based on papers BCH-203 and BCH-204)	Core	8	4	20	80	100	8
<b>Total</b>				<b>27</b>			<b>675</b>	

*Ranjana Gupta*  
**Chairperson**  
**Department of Biochemistry**  
**Kurukshetra University**  
**KURUKSHETRA-136119**

Semester -III								
Paper code	Title of Paper	Type of paper	Hours/ week	credits	Internal Assessment	External Marks	Total Marks	Duration of Exam (Hrs)
BCH-301	Molecular Biology -II	Core	4	4	20	80	100	3
BCH-302	Immunology	Core	4	4	20	80	100	3
BCH-303	Plant Biochemistry	Core	4	4	20	80	100	3
BCH-304A	Nutritional Biochemistry	Elective	4	4	20	80	100	3
BCH-304B	Human Physiology	Elective	4	4	20	80	100	3
BCH-305	Seminar	Core	1	1	-	-	25	3
BCH-306	Clinical Diagnostics in Health and Disease	Open Elective	2	2	10	40	50	3
BCH-306A*	Summer/industrial training	Project Report				50	50	
BCH-307	Practical-5 (Based on papers BCH-301 and BCH-302)	Core	8	4	20	80	100	8
BCH-308	Practical-6 (Based on papers BCH-303 and BCH-304A&B)	Core	8	4	20	80	100	8
<b>Total</b>				<b>27</b>			<b>675</b>	

\*The students entering in 3<sup>rd</sup> semester of their programs(PG) w.e.f. 2020-21 onwards will be allowed to opt for summer/Industrial training (with a recognized industry research laboratory/company) in lieu of open elective paper (BCH-306) for minimum 4 weeks duration and can be done only during summer vacation falling in the period intervening between 2<sup>nd</sup> and 3<sup>rd</sup> Semester.

Semester -IV								
Paper code	Title of Paper	Type of paper	Hours/ week	Credits	Internal Assessment	External Marks	Total Marks	Duration of Exam (Hrs)
BCH-401	Biostatistics and Bioinformatics	Core	4	4	20	80	100	3
BCH-402	Biotechniques	Core	4	4	20	80	100	3
BCH-403	Genetic Engineering	Core	4	4	20	80	100	3
BCH-404A	Basics of Microbiology	Elective	4	4	20	80	100	3
BCH-404B	Genetics & Evolution	Elective	4	4	20	80	100	3
BCH-405	Practical-7 (Based on papers BCH-401 and BCH-402)	Core	8	4	20	80	100	8
BCH-406	Practical-8 (Based on papers BCH-403 and BCH-404A&B)	Core	8	4	20	80	100	8
<b>Total</b>				<b>24</b>			<b>600</b>	
<b>Grand Total (Semester I-IV)</b>							<b>2550</b>	