

The following shall be the courses of the studies under CBCS pattern

M.Sc – I (Physics) C B C S PATTERN (2018-19)

S E M E S T E R – I (Duration – 6 Months)

Sr. No	Course Title	Teaching Scheme						Examination scheme													
		Theory			Practical			Theory						Internal			Total		Practical (CPPR)		
		No. of lectures	Hours	Credits	No. of Lectures	Hours	Credits	Max.	Min.	Hours	Max.	Min.	Hours	Max.	Min.	Max.	Min.	Max.	Min.	Hours	
1	CP-1100A	4	4	4	16	16	8	80	32	3	20	8	1	100	40	200	80	16			
2	CP-1101A	4	4	4				80	32	3	20	8	1	100	40						
3	CP-1102A	4	4	4				80	32	3	20	8	1	100	40						
4	CP-1103A	4	4	4				80	32	3	20	8	1	100	40						
Total		16	16	16	16	16	8	320			80	-		400	-	200		16			
Semester-II(duration 6 months)																					
6	CP-1106B	4	4	4	16	16	8	80	32	3	20	8	1	100	40	200	80	16			
7	CP-1107B	4	4	4				80	32	3	20	8	1	100	40						
8	CP-1108B	4	4	4				80	32	3	20	8	1	100	40						
9	CP-1109B	4	4	4				80	32	3	20	8	1	100	40						
Total		16	16	16	16	16	8	320			80	-		400	-	200		16			
Grand Total		32	32	32	32	16	16	640			160			800		400					

• Student contact hours per week : 32 Hours (Min.)	• Total Marks for M.Sc.-I : 1200
• Theory Lectures : 60 Minutes Each	• Total Credits for M.Sc.-I (Semester I & II) : 48
<ul style="list-style-type: none"> • CP-Core Paper • CPPR-Core Paper Practical • Course list as per enclosed Annexure. 	
<ul style="list-style-type: none"> • Practical Examination is Semester wise. 	
<ul style="list-style-type: none"> • <i>Separate passing is mandatory for Theory, Internal and Practical.</i> 	

The following shall be the courses of the studies under CBCS pattern

M.Sc – II (Physics) C B C S PATTERN (2019-20)

S E M E S T E R – III (Duration – 6 Months)

Sr .N o	Course Title	Teaching Scheme						Examination scheme													
		Theory			Practical			Theory						Internal			Total		Practical (CPPR)		
		No.of lectur es	Hours	Credits	No. of Lectures	Hours	Credits	Max.	Min.	Hours	Max.	Min.	Hours	Max.	Min.	Max.	Min.	Max.	Min.	Hours	
1	CP-1112C	4	4	4	16	16	8	80	32	3	20	8	1	100	40	200	80	16			
2	CBP-1113C	4	4	4				80	32	3	20	8	1	100	40						
3	CP-1116C	4	4	4				80	32	3	20	8	1	100	40						
4	CP-1117C	4	4	4				80	32	3	20	8	1	100	40						
	Total	16	16	16	16	16	8	320			80	-		400	-	200		16			
Semester-IV(duration 6 months)																					
6	CP-1120D	4	4	4	16	16	8	80	32	3	20	8	1	100	40	200	80	16			
7	CBP-1123D	4	4	4				80	32	3	20	8	1	100	40						
8	CP-1124D	4	4	4				80	32	3	20	8	1	100	40						
9	CP-1125D	4	4	4				80	32	3	20	8	1	100	40						
		16	16	16	16	16	8	320			80	-		400	-	200		16			
	Total	32	32	32	16	16	16	640			160			800		400					

<ul style="list-style-type: none"> • Student contact hours per week : 16 Hours (Min.) 	<ul style="list-style-type: none"> • Total Marks for M.Sc.-II : 1200
<ul style="list-style-type: none"> • Theory Lectures : 60 Minutes Each 	<ul style="list-style-type: none"> • Total Credits for M.Sc.-II (Semester III & IIV) : 48
<ul style="list-style-type: none"> • CP-Core Paper CBP-Choice Base Paper • Course list as per enclosed Annexure. 	
<ul style="list-style-type: none"> • Practical Examination is semester wise • CPPR-Core Paper Practical. 	<ul style="list-style-type: none"> • <u>Total Credits for M.Sc. Course : 96</u>
<ul style="list-style-type: none"> • <i>Separate passing is mandatory for Theory, Internal and practical.</i> 	<ul style="list-style-type: none"> • <u>Total Marks for M.Sc. Course : 2400</u>

Annexure

M.Sc. (Physics) (Part-I)
CORE PAPER (COMPULSORY)

M.Sc. (Physics) Part -I Semester-I (Total Credits = 24)		
Paper Code	Paper Title	Credits
CP-1100A	Mathematical methods of Physics	4
CP-1101A	Classical Mechanics	4
CP-1102A	Quantum Mechanics I	4
CP-1103A	Condensed Matter Physics	4
CPPR-1104A(Practical Lab-I)	Laboratory/ Practical Course-I	4
CPPR-1105A (Practical Lab-II)	Seminar +Tutorials on practical Course-I	4
M.Sc. (Physics) Part -I Semester-II (Total Credits = 24)		
Paper Code	Paper Title	Credits
CP-1106B	Quantum Mechanics-II	4
CP-1107B	Statistical Mechanics	4
CP-1108AB	Electrodynamics	4
CP-1109B	Atomic & Molecular Physics	4
CPPR-1110B(Practical Lab-III)	Laboratory/ Practical Course-II	4
CPPR-1111B(Practical Lab-IV)	Seminar +Tutorials on practical Course-II	4

M.Sc. (Physics) (Part-II)
CORE PAPER (COMPULSORY)

M.Sc. (Physics) Part -II Semester-III (Total Credits = 24)		
Paper Code	Paper Title	Credits
CP-1112C	Nuclear and Particle Physics (Compulsory)	4
CHOICE BASE PAPER (ANY ONE PAPER)		
CBP-1113C	Data Analysis and Statistical Software (2 credits)+ Tutorials/LAB work (2-credits)	4
CBP-1114C	Numerical Computing Using MATLAB (2-credits) +Tutorials/LAB work (2-credits)	4
CBP-1115C	Computational Programming using Mathematica (2- credits)+Tutorials/LAB work (2-credits)	4
Core Paper(Compulsory Papers)		
CP-1116C	Solid State Physics- I	4
CP-1117C	Solid State Physics-II,(Semiconductor Physics)	4
CPPR-1118C(Practical Lab-V)	Solid State Physics Lab-I	4
CPPR-1119C(Practical Lab-VI)	Project +Tutorial Lab-II	4

M.Sc. (Physics) (Part-II)
CORE PAPER (COMPULSORY)

M.Sc. (Physics) Part -II Semester-IV (Total Credits = 24)		
Paper Code	Paper Title	Credits
CP-1120D	EXPERIMENTAL TECHNIQUES	4
CHOICE BASE PAPER (ANY ONE PAPER)		
CBP-1121D	COMPUTATIONAL METHODS AND PROGRAMMING	4
CBP-1122D	MATLAB Programming and applications (2-credits) +Tutorials/LAB work (2-credits)	4
CBP-1123D	Electronic Devices	4
Core Paper(Compulsory Papers)		
CP-1124D	Solid State Physics- II	4
CP-1125D	Solid State Physics-II,(Semiconductor Physics)	4
CPPR 1126D(Practical Lab-V)	Laboratory/ Practical Course-III	4
CPPR127D(Practical Lab-VI)	Project + Tutorial Lab-IV	4

