

ANNEXURE M. Sc. Physics

Equivalence of Syllabus / papers between CBS & CBCS syllabus for desirous students (CBS Pattern students (introduced in the Year 2012-2013) in CBCS Pattern (introduced in the year 2015-16 at M.Sc Semester I and II and in the year 2016-17, at M.Sc. Semester –III and Semester IV

If the candidate has failed in any of the papers mentioned below (As described in Point no. 22 'b', 'c', 'd', and 'e')						Then, the candidate shall appear and clear the paper shown in the respective row as equivalent paper						
M.Sc. Physics CBS Pattern : Semester -I						M.Sc. Physics Choice Based Credit System (CBCS)						
S. No.	Code No.	Paper	Name of Paper	Total Marks	Credits	Equivalence To	Sem	Code No.	Paper	Name of Paper	Total Marks	Credits
01		Paper I	Mathematical Physics	100	4		I	1T1	1	Mathematical Physics	80+ 20	4
02		Paper II	Classical Mechanics	100	4		II	2T3	7	Classical Mechanics	80+20	4
03		Paper III	Solid State Physics I	100	4		III	3T2	10	Solid State Physics and Spectroscopy	80+20	4
04		Paper IV	Electrodynamics I	100	4		I	1T4	4	Electrodynamics I	80+20	4
05		Practical-I	Practical I (Sem I)	80+ 20	4		1	1P1		Practical I	100	4
06	:	Practical-II	Practical II (Sem I)	80+20	4		1	1P2		Practical II	100	4
07		Seminar-I	Seminar (Sem I)	25	1		1	1S1		Seminar-I (Sem I)	25	1
M.Sc. Physics: CBS Pattern : Semester -II						M.Sc. Physics Choice Based Credit System (CBCS)						
S. No.	Code No.	Paper	Name of Paper	Total Marks	Credits	Equivalence To	Sem	Code No.	Paper	Name of Paper	Total Marks	Credits
01		Paper V	Quantum Mechanics I	100	4		2	2T1	5	Quantum Mechanics I	80+20	4
02		Paper VI	Numerical Methods	100	4	1	1T2	2	Complex Analysis and Numerical methods	80+20	4	

03		Paper VII	Statistical Physics	100	4	2	2T2	6	Statistical Physics	80+20	4	
04		Paper VIII	Electrodynamics II	100	4	2	2T4	8	Electrodynamics II	80+20	4	
05		Practical-III	Practical I (Sem II)	80+20	4	2	2P1		Practical 3	100	4	
06		Practical-IV	Practical II (Sem II)	80+20	4	2	2P2		Practical 4	100	4	
07		Seminar-II	Seminar (Sem II)	25	1	2	2S1		Seminar-II (Sem II)	25	1	
M.Sc. Physics: CBS Pattern : Semester -III						M.Sc. Physics Choice Based Credit System (CBCS)						
S. No.	Code No.	Paper	Name of Paper	Total Marks	Credits	Equivalence To	Sem	Code No.	Paper	Name of Paper	Total Marks	Credits
01		Paper IX	Quantum Mechanics II	100	4		3	3T1	9	Quantum Mechanics II	80+20	4
02		Paper X	Nuclear and Particle Physics I	100	4		1	1T3	3	Electronics* (There is no overlap between these two subjects.)	80+20	4
03		Paper XI	Materials Science I	100	4		3	3T3	11	Materials Science I	80+20	4
04		Paper XI	Atomic and Molecular Physics (Spectroscopy I)	100	4		3	3T3	11	Atomic and Molecular Physics I	80+20	4
05		Paper XI	Applied Electronics I	100	4		3	3T3	11	Applied Electronics I	80+20	4
06		Paper XI	X-Rays I	100	4		3	3T3	11	X-Rays I	80+20	4
07		Paper XI	Nanoscience and Nanotechnology I	100	4		3	3T3	11	Nanoscience and Nanotechnology I	80+20	4
08		Paper XII	X-rays	100	4		3	3T4	12 S1.2	Nanoscience and Nanotechnology	80+20	4
09		Paper XII	Materials Science	100	4		3	3T4	12 S1.2	Nanoscience and Nanotechnology	80+20	4

10		Paper XII	Numerical Methods and Programming	100	4	3	3T4	12 S1.2	Nanoscience and Nanotechnology	80+20	4	
11		Paper XII	Spectroscopy Elective I	100	4	3	3T4	12 S1.2	Nanoscience and Nanotechnology	80+20	4	
12		Paper XII	Lasers, Fibre Optics and Applications Elective I	100	4	3	3T4	12 S1.2	Nanoscience and Nanotechnology	80+20	4	
13		Paper XII	Digital Electronics and Microprocessors	100	4	3	3T4	12 S1.4	Digital Electronics and Microprocessors	80+20	4	
14		Practical V	Practical 1 (Sem III)	80+20	4	3	3P1		Practical 5	100	4	
15		Practical VI	Practical II (Sem III)	80+20	4	3	3P2		Practical 6	100	4	
16		Seminar-III	Seminar (Sem III)	25	1	3	3S1		Seminar-III (Sem III)	25	1	
M.Sc. Physics CBS Pattern : Semester -IV						M.Sc. Physics Choice Based Credit System (CBCS)						
S. No.	Code No.	Paper	Name of Paper	Total Marks	Credits	Equivalence To	Sem	Code No.	Paper	Name of Paper	Total Marks	Credits
01		Paper XIII	Solid State Physics II	100	4		4	4T2	14	Solid State Physics	80+20	4
02		Paper XIV	Nuclear And Particle Physics II	100	4		4	4T1	13	Nuclear and Particle Physics	80+20	4
03		Paper XV	Materials Science II	100	4		4	4T3	15	Materials Science II	80+20	4
04		Paper XV	Atomic and Molecular Physics (Spectroscopy II)	100	4		4	4T3	15	Atomic and Molecular Physics II	80+20	4
05		Paper XV	Applied Electronics II	100	4		4	4T3	15	Applied Electronics II	80+20	4
06		Paper XV	X-rays II	100	4		4	4T3	15	X-Rays II	80+20	4
07		Paper XV	Nanoscience and Nanotechnology II	100	4		4	4T3	15	Nanoscience and Nanotechnology II	80+20	4

08		Paper XVI	Nanoscience	100	4	4	4T4	16 S2.2	Experimental Techniques in Physics	80+20	4
09		Paper XVI	Nonlinear Dynamics with applications to Physics and other sciences	100	4	4	4T4	16 S2.2	Experimental Techniques in Physics	80+20	4
10		Paper XVI	Condensed Matter Physics	100	4	4	4T4	16 S2.2	Experimental Techniques in Physics	80+20	4
11		Paper XVI	Electroacoustics	100	4	4	4T4	16 S2.4	Electroacoustics	80+20	4
12		Paper XVI	Spectroscopy Elective II	100	4	4	4T4	16 S2.4	Experimental Techniques in Physics	80+20	4
13		Paper XVI	Lasers, Fibre optics and Applications elective II	100	4	4	4T4	16 S2.4	Experimental Techniques in Physics	80+20	4
14		Practical VII	Practical I(Sem IV)	80+20	4	4	4P1		Practical 7 (Sem IV)	100	4
15		Project	Project	80+20	4	4	4PROJ1		Project	100	4
16		Seminar IV	Seminar (Sem IV)	25		4	4S1		Seminar-IV (Sem IV)	25	1