

COURSE STRUCTURE
POST GRADUATE AND RESEARCH DEPARTMENT OF PHYSICS
CBCS Syllabus - M.Sc., Physics (2018-19 onwards)

SEM	P	Title of the paper	S. Code	H/W	C	Marks		
						I	E	T
I	DSC1	Mathematical Physics - I	18PCPH11	6	4	25	75	100
	DSC2	Classical Mechanics	18PCPH12	6	4	25	75	100
	DSC3	Molecular and Resonance spectroscopy	18PCPH13	6	4	25	75	100
	DSE-1	A) Integrated Electronics	18PEPH1A	4	4	25	75	100
		B) Nanoscience	18PEPH1B					
	P-I	Practical I General Physics Experiments - I	18PCPH1P1	4	2	40	60	100/2
P-II	Practical II Advanced Electronics Experiments -I	18PCPH1P2	4	2	40	60	100/2	
II	DSC4	Mathematical Physics - II	18PCPH21	5	4	25	75	100
	DSC5	Quantum Mechanics-I	18PCPH22	5	4	25	75	100
	DSC6	Statistical Mechanics	18PCPH23	5	4	25	75	100
	DSE-2	A) Microprocessor & Microcontroller	18PEPH2A	4	4	25	75	100
		B) Numerical Methods	18PEPH2B					
	P-III	Practical III General Physics Experiments - II	18PCPH2P1	4	2	40	60	100/2
	P-IV	Practical - IV Advanced Electronics Experiments -II	18PCPH2P2	4	2	40	60	100/2
	IDC-1	Renewable Energy	18PIPH21	3	3	25	75	100
III	DSC7	Quantum Mechanics-II	18PCPH31	5	4	25	75	100
	DSC8	Electromagnetic theory	18PCPH32	5	4	25	75	100
	DSC9	Nuclear and Particle Physics	18PCPH33	5	4	25	75	100
	DSE-3	A) Nonlinear Dynamics	18PEPH3A	4	4	25	75	100
		B) Crystal growth & Thin films	18PEPH3B					
	P-V	Practical V Advanced Physics Experiments - I	18PCPH3P1	4	2	40	60	100/2
	P-VI	Practical VI Microprocessor Experiments	18PCPH3P2	4	2	40	60	100/2
IDC-2	Digital Electronics	18PIPH31	3	3	25	75	100	
IV	DSC10	Solid State Physics	18PCPH41	5	4	25	75	100
	DSC11	Research Methodology	18PCPH42	5	4	25	75	100
	DSC12	Project (P)	18PCPH43	8	8			100
	DSE4	A) Optoelectronics & Lasers	18PEPH4A	4	4	25	75	100
		B) Materials Science	18PEPH4B					
	P-VII	Practical-VII Advanced Physics Experiments - II	18PCPH4P1	4	2	40	60	100/2
	P-VIII	Practical-VIII Numerical methods and C++ Programming	18PCPH4P2	4	2	40	60	100/2
Total				120	90			2200

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Dsc - Discipline Specific core 2
DSE - Discipline Specific Elective
IDC - Inter Departmental course

SADAKATHULLAH APPA COLLEGE (AUTONOMOUS)

RESEARCH DEPARTMENT OF PHYSICS

M.Phil. Physics Syllabus

(Applicable for students admitted in June 2018 and onwards)

COURSE STRUCTURE

I SEMESTER			II SEMESTER		
COURSE	H/W	C	COURSE	H/W	C
Core 1	4	4	Project and Viva - Voce	12	12
Core 2	4	4			
Project Oriented Elective Course (Theory)	4	4			
TOTAL	12	12	TOTAL	12	12

DISTRIBUTION OF HOURS, CREDITS, NO. OF PAPERS, & MARKS

SUBJECT	HOURS	CREDITS	NO. OF PAPERS	MARKS
Core	8	8	2	200
Project Oriented Elective Course (Theory)	4	4	1	100
Project and Viva-Voce	12	12	1	100
TOTAL	24	24	4	400

TITLE OF THE PAPERS

M. PHIL. PHYSICS (2018 - 2021)

(The candidate should select any one of the Area Papers in the first semester related to their proposed topics of research)

SEM	P	TITLE OF THE PAPER	SUB. CODE	H/W	C	MARKS		
						I	E	T
I	DSC1	Research and Teaching Methodology	18MCPH11	4	4	25	75	100
	DSC2	Advanced Physics	18MCPH12	4	4	25	75	100
	DSE	A) Crystal Growth Methods and Characterization Techniques	18MEPH1A	4	4	25	75	100
		B) Nano Physics	18MEPH1B					
		C) Ultrasonic Studies	18MEPH1C					
	D) Nonlinear Dynamics	18MEPH1D						
II	D	Project and Viva-Voce	18MDPH21	-	12	--	100	100
TOTAL				12	24	75	325	400

