

BHARATHIARUNIVERSITY::COIMBATORE641046

B.ScPHYSICSCurriculum(AffiliatedColleges)

(For the students admitted during the academic year 2023-24)

Scheme of Examination

Part	Course Code	Title of the Course	Credits	Hours/week		Maximum Marks		
				Theory	Practical	CIA	CEE	Total
FIRST SEMESTER								
I	11T	Language-I	4	6	-	25	75	100
II	12E	English-I	4	6	-	25	75	100
III	13A	Core I – Mechanics, Properties of Matter and sound	4	6	-	25	75	100
III	-	Core Practical I	-	-	3	-	-	-
III	1AA	Allied Mathematics I* (or)	4	7	-	25	75	100
	1AH	Allied Chemistry I**	3	4	-	20	55	75
III	-	Allied Chemistry Practical**	-	-	3	-	-	-
IV	1FA	Environmental Studies #	2	2	-	-	50	50
Total			18					450
SECOND SEMESTER								
I	21T	Language-II	4	6	-	25	75	100
II	22E	English-II	2	4	-	25	25	50
II	2NM [§]	Effective English: Language Proficiency for Employability http://kb.naanmudhalvan.in/Bharathiar_University_(BU)	2	2	-	25	25	50
III	23A	Core II – Heat and Thermodynamics	4	6		25	75	100
III	23P	Core Practical II	4	-	3	25	75	100
III	2AA	Allied Mathematics II* (or)	4	7	-	25	75	100
III	2AH	Allied Chemistry II**	3	4	-	20	55	75
III	2PH	Allied Chemistry Practical**	2	-	3	20	30	50
IV	2FB	Value Education - Human Rights #	2	2	-	-	50	50
Total			22					550
THIRD SEMESTER								
I	31T	Language-III	4	6	-	25	75	100
II	32E	English-III	4	6	-	25	75	100
III	33A	Core III – Optics	4	4	-	25	75	100
III	-	Core Practical III	-	-	2	-	-	-
III	3AA	Allied Mathematics I* (or)	4	7	-	25	75	100
III	3AH	Allied Chemistry I**	3	4	-	20	55	75
III	-	Allied Chemistry Practical**	-	-	3	-	-	-
IV	3ZA	Skill Based Subject – Instrumentation I	3	3	-	20	55	75
IV	3FC	Tamil @ / Advanced Tamil # (OR) Non-major elective - I (Yoga for Human Excellence) # / Women's Rights #	2	2	-	-	50	50

			Total	20				500
FOURTH SEMESTER								
I	41T	Language-IV	4	6	-	25	75	100
II	42E	English-IV	4	6	-	25	75	100
III	43A	CoreIV–AtomicPhysics andSpectroscopy	4	4	-	25	75	100
III	43P	CorePractical II	3	-	2	20	55	75
III	4AAor 4AH	AlliedMathematicsII*(or) AlliedChemistryII**	4 3	7 4		25 20	75 55	100 75
III	4PH	AlliedChemistryPractical**	2	-	3	20	30	50
IV	4ZB	Skillbasedsubject-Instrumentation-II	2	3	-	20	30	50
IV	4NM ⁵	OfficeFundamentals:DigitalSkillsfor Employability http://kb.naanmudhalvan.in/Bharathiar University (BU)	2	-	2	25	25	50
IV	4FE	Tamil@/AdvancedTamil#(or) Non-MajorElective-II(General Awareness #)	2	-	-	-	50	50
Total			26					650
FIFTH SEMESTER								
III	53A	CoreV–MathematicalPhysics	4	4	-	25	75	100
III	53B	CoreVI–Electronics	4	4	-	25	75	100
III	53C	CoreVII–SolidState Physics	4	4	-	25	75	100
III	53D	CoreVIII–ElectricityandMagnetism	4	4	-	25	75	100
III	-	CorePracticalIII -Electronics			2	-	-	-
III	-	CorePracticalIV-Digitaland Microprocessor			2	-	-	-
III	5EA	Elective– I	4	4	-	25	75	100
III	-	PracticalIV-CandC++			3	-	-	-
IV	5ZC	SkillbasedSubject-InstrumentationIII	3	3	-	20	55	75
Total			23					575
SIXTH SEMESTER								
III	63A	CoreIX–QuantumMechanicsand Relativity	4	6	-	25	75	100
III	63B	CoreX-Nuclear Physics	4	6	-	25	75	100
III	63P	CorePracticalIII-Electronics	3	-	2	20	55	75
III	63Q	CorePracticalIV-Digitaland Microprocessor	3	-	2	20	55	75
III	6EA	Elective– II	4	4	-	25	75	100
III	6EB	Elective– III	4	4	-	25	75	100
III	63R	PracticalIV-CandC++	3	-	2	20	55	75
IV	6ZP	Skill based Subject Practical–Instrumentation	2	-	2	20	30	50

IV	6NM ⁵	AdvancedPlatformTechnology-(Physics, Electronics, Mathematics, Statistics, Data Science) - Govt(auto) & Govt (Non-Auto) Data Analytics with Advanced Tools - (Physics,Electronics,Mathematics,Statistics, Data Science) - Aided (Non-auto) & SF(Non-Auto) http://kb.naanmudhalvan.in/Bharathiar_University_(BU)	2	-	2	25	25	50
V	67A	ExtensionActivities@	2	-	-	-	-	50
Total			31					775
GrandTotal			140					3500

2NM⁵.4NM⁵,&6NM⁵-NAANMUDALVANCOURSES

*For subjects without practical

**For subjects with practical

@No University Examinations. Only Continuous Internal Assessment (CIA) #No Continuous Internal Assessment (CIA). Only University Examinations

LIST OF ELECTIVE PAPERS (Colleges can choose any one of the papers from each section as electives)		
Elective-I	A	Principles of Programming Concepts and C Programming
	B	Energy Physics
	C	Agricultural Physics
Elective-II	A	Digital and Microprocessor
	B	Optical Fibers and Fiber Optic Communication Systems
	C	Bio-Physics
Elective-III	A	Object Oriented Programming with C++
	B	GeoPhysics
	C	Industry Automation & Its Applications (Industry 4.0)

LIST OF VALUE-ADDED COURSES (OPTIONAL)

(Only Internal and no external exam - 100 Marks)

- OPTOELECTRONICS
- NON-DESTRUCTIVE TESTING
- BIOMEDICAL INSTRUMENTATION
- MODERN DISPLAY DEVICES AND STORAGE MATERIALS