OSMANIA UNIVERSITY, HYDERABAD

B.A/B.Sc. Mathematics Course Structure

(Common Core Syllabus for All Universities of Telangana State for the Students Admitted from the Academic Year 2019-20 Batch onwards)

Paper	Semester	Subject	Hours/ per week	Hours/per week		Max. Marks	Credits
				Theory	*Tutorials		
DSC - I	I	Differential & Integral Calculus	6	5	1	100	5
DSC - II	II	Differential Equations	6	5	1	100	5
DSC - III	III	Real Analysis	6	5	1	100	5
DSC - IV	IV	Algebra	6	5	1	100	5
DSC - V	V	Linear Algebra	6	5	1	100	5
DSE – VI(A)	VI	(A) Numerical Analysis	6	5	1	100	5
DSE – VI(B)	VI	(B) Integral Transforms	6	5	1	100	5
DSE – VI(C)	VI	(C) Analytical Solid Geometry	6	5	1	100	5
SEC-I	III	Theory of Equations	2	2	-	50	2
SEC-II	III	Logic & Sets	2	2	-	50	2
SEC-III	IV	Number Theory	2	2	-	50	2
SEC-IV	IV	Vector Calculus	2	2	-	50	2
Generic Elective	V-A or V-B	Basic Mathematics or Mathematics for Economics & Finance	4	4	-	100	4
Project/ Optional	VI**	Mathematical Modelling	4	4	-	100	4

*Tutorials: Problems solving session for each 20 student's one batch.

The students are required to opt either the optional paper **Mathematical Modelling or **Project**.

B.Sc. PHYSICS SYLLABUS UNDER CBCS SCHEME
SCHEME OF INSTRUCTION
(Revised and effective from academic year 2019-2020)

Semester	Paper | Theory and Practical |	Instructions Hrs/week	Marks	Credits
I	Paper – I : Mechanics & Oscillations	4	100	4
	Practicals – I : Mechanics & Oscillations	3	50	1
II	Paper – II: Thermal Physics	4	100	4
	Practicals – II : Thermal Physics	3	50	1
III	Paper – III : Electromagnetic Theory	4	100	4
	Practicals – III : Electromagnetic Theory	3	50	1
IV	Paper – IV : Waves & Optics	4	100	4
	Practicals – IV :Waves & Optics	3	50	1
V	Paper –V : A. Modern Physics B. Computational Physics	4	100	4
	Practicals – V: A. Modern Physics B. Computational Physics	3	50	1
VI	Paper – VI : A. Electronics B. Applied Optics	4	100	4
	Practicals VI: A. Electronics B. Applied Optics	3	50	1

Total credits: 30

Skill Enhancement Courses
1. Experimental methods and Errors analysis
2. Electrical circuits and Networking
3. Basic Instrumentation
4. Biomedical Instrumentation
5. Digital Electronics

Generic Elective:
1. Renewable Energy & Energy Harvesting

Project work /Optional (Nano science)

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OSMANIA UNIVERSITY
FACULTY OF SCIENCE
B.Sc (Computer Applications)
CBCS Pattern with Effect from the Academic Year 2019-2020

Code	Course Title	Course Type	HpW	Credits
	SEMESTER – I			
BS106	Programming in C	DSC–3A	4T+3P=7	4 + 1 =5
	SEMESTER – II			
BS206	Programming in C++	DSC–3B	4T+3P=7	4 + 1 =5
	AECC			
BS107	Fundamentals of Computers	AECC	2T	2
	SEMESTER –III			
BS301	Python – 1	SEC–1	2T	2
BS302	Sci Lab – 1	SEC–2	2T	2
BS306	Relational Data Base Management Systems	DSC–3C	4T+3P=7	4 + 1 =5
	SEMESTER –IV			
BS401	Python – 2	SEC–3	2T	2
BS402	Sci Lab – 2	SEC–4	2T	2
BS406	Multi Media Systems	DSC–3D	4T+3P=7	4 + 1 =5
	SEMESTER – V			
BS501	Information Technologies	GE	4T	4
BS505	Programming in Java	DSE–3E	4T+3P=7	4 + 1 =5
	SEMESTER – VI			
BS605	Web Technologies	DSE–3F	4T+3P=7	4 + 1 =5
	Project/Optional			
BS601	Information Security and Cyber Laws	PO	3T+3P=6	3 + 1 =4
			Total Number of Credits	48

Prof.G.Kamala
Chairperson Board of Studies in Computer Science, OU

CHAIRMAN
Board of Studies in Computer Science
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