## MANONMANIAM SUNDARANAR UNIVERSITY TIRUNELVELI

## UG COURSES – AFFILIATED COLLEGES B.Sc. Bio Chemistry

(Choice Based Credit System)

(with effect from the academic year 2016-2017 onwards

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core - 9	JMBC61	Molecular Biology
2	Core – 10	JMBC62	Endocrine Biochemistry
3	Core – 11	JMBC63	Plant Biochemistry
4	Elective – 3 (Select any one)	JMBC6A	Biotechnology
	(Select any one)	JMBC6B	Genomics and Proteomics
		JMBC6C	Drug Biochemistry
5	Practical – V & VI	JMBCP3	Hematology and Microbiology
6	Practical – V& VI	JMBCP4	Enzymes and Kinetics
7	Practical – 8	JMBCP5	Clinical Biochemistry

### **B.Sc. BIOTECHNOLOGY**

(Choice Based Credit System) (with effect from the academic year 2016-2017 onwards)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core - 9	JMBT61	Animal Biotechnology
2	Core - 10	JMBT62	Stem Cell Technology
3	Core - 11	JMBT63	Bioprocess Technology
4	Elective – 3	JMBT6A	Basic Bioinformatics
	(Select any one)	JMBT6B	Biosafety and Bioethics
		JMBT6C	Applied Biotechnology
5	Practical – 5	JMBTP5	Genetic Engineering
6	Practical – 6	JMBTP6	Plant Biotechnology
7	Practical – 7	JMBTP7	Bioinformatics
8	Practical – 8	JMBTP8	Animal biotechnology
9	Practical – 9	JMBTP9	Stem Cell Technology
10	Practical - 10	JMBTP10	Bioprocess Technology

#### **B.Sc. Bio Informatics**

(Choice Based Credit System) (with effect from the academic year 2016-2017 onwards)

Sl.	Subject Status	Sub.Code	Subject Title
No			
1	Core - 9	JMBF61	Genomics & Proteomics
2	Core - 10	JMBF62	Molecular
			Modeling & Drug Designing
3	Core - 11	JMBF63	Operating System & Web
			Programming
4	Elective – 3 (Select any one)	JMBF6A	System Biology
		JMBF6B	Open Source Bioinformatics
5	Practical – 5	JMBFP3	Lab in Structural Biology,
			Molecular Modeling & drug
			design
6	Practical – 6	JMBFP4	Lab in Genetics and Genomics
			& Proteomics
7	Practical - 7	JMBFP5	Lab in Operating System and
			Web Programming

# B.Sc. Plant Biology & Plant Biotechnology (Choice Based Credit System)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core - 9	JMPB61	Plant Physiology
2	Core – 10	JMPB62	Genetics, Evolution & Biostatistics
3	Core - 11	JMPB63	Plant Ecology & Phytogeography
4	Elective - 3	JMPB6A	Marine Biotechnology
		JMPB6B	Environmental Biotechnology
5	Practical -5	JMPBP3	Morphology Taxonomy of Angiosperms & Economic Botany, Elective I & II
6	Practical -6	JMPBP4	Biochemistry, Bioinformatics Plant Ecology and Phytogeography
7	Practical - 7	JMPBP5	Plant Physiology, Genetics, Evolution and Biostatistics and
			Elective - I

### **B.Sc. Chemistry**

(Choice Based Credit System) (with effect from the academic year 2016-2017 onwards)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core - 9	JMCH61	Inorganic Chemistry - III
2	Core - 10	JMCH62	Organic Chemistry - IV
3	Core - 11	JMCH63	Physical Chemistry – IV
4	Elective - 3	JMCH6A	Green Chemistry
		ЈМСН6В	Nano Chemistry
5	Practical - 5	JMCHP3	Gravimetric Estimation & Inorganic preparation
6	Practical - 6	JMCHP4	Organic Analysis & Organic preparation
7	Practical - 7	JMCHP5	Physical Chemistry experiments

### **B.Sc.**, Computer Science

(Choice Based Credit System) (with effect from the academic year 2016-2017 onwards)

Sl.	Subject Status	Sub.Code	Subject Title
No			
1	Core - 9	JMCS61	Operating System
2	Core - 10	JMCS62	Relational Database
			Management System
3	Core - 11	JMCS63	Computer Graphics and
			Visualization
4	Core - 12	JMCS64	Data Mining
	Major Practical –V	JMCSP5	Dot NET
5	Major Practical -VI	JMCSP6	RDBMS with Oracle Lab
6	Major Elective - III	JMCS6A	Big Data Analytics
	(Select any one)		
		JMCS6B	Artificial Neural Network
		JMCS6C	Internet of Things

#### B.C.A

# Choice Based Credit System) (with effect from the academic year 2016-2017 onwards)

Sl.	Subject Status	Sub.Code	Subject Title
No			
1	Core - 9	JMCA61	Operating System
2	Core - 10	JMCA62	Computer Networks
3	Core - 11	JMCA63	Graphics & Multimedia
4	Core - 12	JMCA64	Software Texting
5	Major Practical – 5	JMCAP5	RDBMS
6	Major Practical - 6	JMCAP6	Graphics & Multimedia Law
7	Major Elective - III (Select any one)	JMCA6A	Web Services
	(	JMCA6B	Software Project Management
		JMCA6C	Mobile Communication

### **B.Sc. Costume Design and Fashion Design**

(Choice Based Credit System)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core - 9	JMCF61	Clothing Care
2	Core – 10	JMCF62	Technical Textile
3	Core - 11	JMCF63	Quality Control in Apparel Production
4	Core - 12	JMCF64	Organization of Garment Unit
5	Major Practical -5	JMCFP5	Construction of Men's Wear
6	Major Practical -6	JMCFP6	Textile Testing and Care
7	Major Elective -III	JMCF6A	Home Textiles

### **B.Sc. Computer Science and Information Technology**

### (Choice Based Credit System)

### (with effect from the academic year 2016-2017 onwards)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core - 9	JMCT61	Data Communications and Networking
2	Core - 10	JMCT62	Multimedia Technology
3	Core - 11	JMCT63	Wireless Application Protocol
4	Core - 12	JMCT64	Net Programming
5	Major Practical – V	JMCTP5	Relational Database Management System Lab
6	Major Practical -VI	JMCTP6	Net Programming Lab
7	Major Elective - III (Select any one )	JMCT6A	Web Services
		ЈМСТ6В	Software Project Management
		JMCT6C	Mobile Communication

## **B.Sc. Electronics** (Choice Based Credit System)

Sl.	Subject Status	Sub.Code	Subject Title
No			
1	Core - 9	JMEL61	Power Electronics
2	Core – 10	JMEL62	Semiconductor Fabrication
			Technology
3	Core - 11	JMEL63	Robotics
4	Core - 12	JMEL64	Mobile Communication
5	Major Practical -5	JMELP5	Microprocessors and
			Microcontrollers Lab
6	Major Practical -6	JMELP6	Power Electronics and System
			Design Lab
7	Major Elective -III	JMEL6A	Hardware Development
		JMEL6B	Embedded System & RTO'S

## **B.Sc. Electronics and Communication** (Choice Based Credit System)

### (with effect from the academic year 2016-2017 onwards)

Sl.	Subject Status	Sub.Code	Subject Title
No			
1	Core - 9	JMES61	Antennas
2	Core – 10	JMES62	Optical Fibre Communication
3	Core - 11	JMES63	Advanced Communication
			System
4	Core - 12	JMES64	Mobile Communication
	Major Practical -5	JMESP5	Microprocessors and
			Microcontrollers Lab
5	Major Practical -6	JMESP6	Communication and System
			Design Lab
6	Major Elective -III	JMES6A	Hardware Development
		JMES6B	Embedded System & RTO'S

### **B.Sc. Fashion Designing and Apparel Making**

(Choice Based Credit System)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core- 9	JMFD61	Textile Testing and Quality
			Control
2	Core-10	JMFD62	Apparel Export and Trade
			Documentation
3	Core-11	JMFD63	Clothing Care and Wardrobe
			Planning
4	Core-12	JMFD64	Apparel Production and Quality
			Management
5	Major Practical- V	JMFDP5	Construction of Men's Wear
6	Major Practical- VI	JMFDP6	Textile Testing and Quality
			Control
7	Elective -III	JMFD6A	Fashion Portfolio

## **B.Sc. Fashion Technology** (Choice Based Credit System)

### (With effect from the academic year 2016-2017 onwards)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core-9	JMFT61	Home Textiles
2	Core-10	JMFT62	Quality Control in Apparel Production
3	Core-11	JMFT63	Fashion Marketing
5	Core-12	JMFT64	Textile Finishing
6	Major Practical-V	JMFTP5	Construction of Women's Wear
7	Major Practical-VI	JMFTP6	Construction of Men's Wear
8	Major Elective -III	JMFT6A	Draping Technology

# B.Sc. Food Science & Nutrition (Choice Based Credit System)

(For those who joined the course from the academic year 2016-2017 onwards)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core - 9	JMFN61	Nutrition Through Lifecycle
2	Core - 10	JMFN62	Dietetics
3	Core - 11	JMFN63	Food Chemistry
4	Elective – 3 (Select any one)	JMFN6A	Textiles and Clothing
	(Select dify one)	JMFN6B	Principles of Interior Decoration –II
5	Practical – 5	JMFNP3	Nutrition Through Lifecycle
6	Practical – 6	JMFNP4	Dietetics
7	Practical - 7	JMFNP5	Food Chemistry

## **B.Sc.** Geology

(Choice Based Credit System)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core - 9	JMGE61	Economic Geology
2	Core – 10	JMGE62	Hydrogeology
3	Core - 11	JMGE63	Applied Geology – I (Geophysics, Geochemistry, Engineering Geology, Mining Geology and Ore dressing)
4	Elective – 3 Any one	JMGE6A	Geology of Tamil Nadu
	Any one	JMGE6B	Applied Geology – II (Natural Hazards, Remote Sensing and Geographic Information System)
		JMGE6C	Medical Geology
5	Major Practical -		Economic Geology and Hydrogeology,
6	Major Practical -		Applied Geology (Geophysics, Geochemistry, Engineering Geology, Mining Geology and Ore Dressing and Elective Courses) and Marine Geology.
7	Major Practical –		Geological mapping (One week mapping camp). Geological tour more than two weeks. Viva voce on Geological mapping and Geological tour Reports submission Specimen collection and short field trips.
	Core Practical III (EXAM ANNUAL)	JMGEP3	IGNEOUS PETROLOGY, SEDIMENTARY AND METAMORPHIC PETROLOGY, ELECTIVE 1 & ELECTIVE II
	Core Practical IV	JMGEP4	ECONOMIC GEOLOGY, HYDROGEOLOGY, APPLIED GEOLOGY I, ELECTIVE-3
	Core Practical V	JMGEP5	GEOLOGICAL MAPPING(ONE WEEK MAPPING CAMP). GEOLOGICAL TOUR NOT MORE THAN TWO WEEKS DAYS. VIVA VOCE ON GEOLOGICAL MAPPING AND GEOLOGICAL TOUR REPORTS. SUBMISSION SPECIMEN COLLECTION AND SHORT FIELD TRIPS.

## **B.Sc. Hotel Management and Catering Science** (Choice Based Credit System)

(with effect from the academic year 2016-2017 onwards

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core - 9	JMHM61	Human Resource Management Hospitality Industry
2	Major Practical	JMHMP3	Food Production & Patisserie
3	Project	JMHM6P	Internship training and viva voice Project (Four Month)

### **B.Sc. Information Technology**

### (Choice Based Credit System)

Sl.	Subject Status	Sub.Code	Subject Title
No			
1	Core - 9	JMIT61	Data Communications and
			Networking
2	Core - 10	JMIT62	Multimedia Technology
3	Core - 11	JMIT63	Wireless Application Protocol
4	Core - 12	JMIT64	Net Programming
5	Major Practical – V	JMITP5	Relational Database
			Management System Lab
6	Major Practical -VI	JMITP6	Net Programming Lab
7	Major Elective - III	JMIT6A	Web Services
	(Select any one)		
	(22222222)	JMIT6B	Software Project Management
		JMIT6C	Mobile Communication

# B.Sc. INFORMATION SCIENCE AND MANAGEMENT (Choice Based Credit System)

(with effect from the academic year 2016-2017 onwards)

Sl.	Subject Status	Sub.Code	Subject Title
No 1	Core - 9	JMIS61	Data Communications and Networking
2	Core - 10	JMIS62	Multimedia Technology
3	Core - 11	JMIS63	Wireless Application Protocol
4	Core - 12	JMIS64	Net Programming
5	Major Practical – 5	JMISP5	Relational Database Management System Lab
6	Major Practical -6	JMISP6	Net Programming Lab
7	Major Elective - III (Select any one)	JMIS6A	Web Services
	(Solot ally one)	JMIS6B	Software Project Management
		JMIS6C	Mobile Communication

### **B.Sc. Mathematics**

(Choice Based Credit System) (with effect from the academic year 2016-2017 onwards)

Sl.	Subject Status	Sub.Code	Subject Title
No			
1	Core - 9	JMMA61	Abstract
			algebra –II
2	Core - 10	JMMA62	Complex Analysis
3	Core – 11	JMMA63	Number Theory
4	Core - 12	JMMA64	Graph Theory
5	Major Elective-III	JMMA6A	Fuzzy Mathematics – I
		JMMA6B	Astronomy – II
		JMMA6C	Mathematics Modelling

### **B.Sc.Microbiology**

(Choice Based Credit System)

(with effect from the academic year 2016-2017 onwards)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core - 9	JMMI61	Food Microbiology
2	Core - 10	JMMI62	Clinical Microbiology
3	Core - 11	JMMI63	Microbial Microbiology
4	Elective - 3	JMMI6A	Marine Microbiology
5	Practical – 5	JMMIP3	Environmental and Agricultural Microbiology
6	Practical - 6	JMMIP4	Food and industrial Microbiology
7	Practical - 7	JMMIP5	Clinical Microbiology and Biotechnology

# B.Sc. Nutrition & Dietetics (Choice Based Credit System)

(For those who joined the course from the academic year 2016-2017 onwards)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core - 9	JMND61	Dietetics – II
2	Core - 10	JMND62	Bakery & Confectionery – II
3	Core - 11	JMND63	Clinical Biochemistry
4	Elective – 3 (Select any one)	JMND6A	Family Resource Management –II
		JMND6B	Food Packaging
5	Practical – 8	JMNDP3	Dietetics
6	Practical – 9	JMNDP4	Bakery & Confectionery – II
7	Practical -10	JMNDP5	Clinical Biochemistry

### **B.Sc. Physics**

(Choice Based Credit System) (with effect from the academic year 2016-2017 onwards)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core - 9	JMPH61	Digital Electronics
2	Core - 10	JMPH62	Atomic And Nuclear Physics
3	Core - 11	JMPH63	Quantum Mechanics
4	Elective – 3 (select any one)	ЈМРН6А	Medical Physics
	(Sciect any one)	ЈМРН6В	Energy Physics
5	Practical - 5	ЈМРНР3	Non Electronics
6	Practical - 6	JMPHP4	Electronics
7	Practical - 7	JMPHP5	Computer Programming with C ++

### **B.Sc. Physical Education**

(Choice Based Credit System)

Sl.	Subject Status	Sub.Code	Subject Title
No			
1	Core - 9	JMPE61	Test Measurement and Evaluation
2	Core - 10	JMPE62	Principles of Sports Training
3	Core - 11	JMPE63	Sports Physiotherapy
4	Elective - 3	JMPE6A	Sports Journalism and Mass Communication
5	Practical – 5	JMPEP3	Major Game (Basket Ball, Foot ball,
			Hockey Cricket, Volley ball) Anyone
			Game (Carry Over Practical)
6	Practical - 6	JMPEP4	Track and Field Events(Carry Over
			Practical)
7	Practical - 7	JMPEP5	Physiotherapy (Carry Over Practical )

### **B.Sc. Software Engineering**

(Choice Based Credit System) (with effect from the academic year 2016-2017 onwards)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core - 9	JMSE61	Operating System
2	Core - 10	JMSE62	Relational Database Management System
3	Core - 11	JMSE63	Computer Graphics and Visualization
4	Core - 12	JMSE64	Data Mining
5	Practical	JMSEP5	Dot NET
6	Practical -1	JMSEP6	RDBMS with Oracle Lab
7	Major Elective - III (Select any one)	JMSE6A	Big Data Analytics
	(3.2.2.2.3.3.3.2.2.)	JMSE6B	Artificial Neural Network
		JMSE6C	Internet of Things

#### **B.Sc. Statistics**

(Choice Based Credit System)

Sl. No	Subject Status	Sub.Code	Subject Title
1	Core	JMSS61	Statistical Inference – II
2	Core	JMSS62	Design of Experiments
3	Core	JMSS63	Operations Research
4	EM (Elective)	JMSS6A	Discrete Mathematics
	EM (Elective)	JMSS6B	RDBMS with oracle
5	Core (Practical)	JMSSP3	Statistical Practical – III ***
6	Core (Practical)	JMSSP4	Statistical Practical – IV ****

### **B.Sc. Visual Communication**

(Choice Based Credit System) (with effect from the academic year 2016-2017 onwards)

Sl.	Subject Status	Sub.Code	Subject Title
No			
1	Core - 9	JMVC61	Basics of Media Research
2	Core - 10	JMVC62	Communication Theories
3	Core - 11	JMVC63	Media Management
4	Elective - 3	JMVC6A	Graphic & Animation / Web Designing
5	Practical - 5	JMVCP5	Audio Editing
6	Practical - 6	JMVCP6	Video Editing
7	Practical – 7	JMVCP7	Film Appreciation
8	Practical - 8	JMVCP8	Multimedia
9	Practical - 9	JMVCP9	Television Commercial Production
10	Practical - 10	JMVCP10	Documentary Production

## B.Sc. Zoology

Sl.	Subject Status	Sub.Code	Subject Title
No			
1	Core - 9	JMZO61	Evolution
2	Core - 10	JMZO62	Immunology and Microbiology
3	Core - 11	JMZO63	Biostatistics, Computer
			applications & Bioinformatics
4	Elective – 3	JMZO6A	Aquaculture
	(Selective any one)	JMZO6B	Medical Laboratory Technology
		JMZO6C	Marine Biology
5	Practical -1	JMZOP3	Practical III
6	Practical - 2	JMZOP4	Practical IV
7	Practical - 3	JMZOP5	Practical V

## **B.Sc. Mathematics with Computer Application**

(Choice Based Credit System) (with effect from the academic year 2016-2017 onwards)

Sl.	Subject Status	Sub.Code	Subject Title
No			
1	Core - 9	JMMC61	Abstract
			algebra –II
2	Core - 10	JMMC62	Complex Analysis
3	Core – 11	JMMC63	Number Theory
4	Core - 12	JMMC64	Graph Theory
5	Major Elective-III	JMMC6A	Data Mining
		JMMC6B	Computer Graphics and
			Visualization
		JMMC6C	Web Technology