

**V.S.M. COLLEGE (AUTONOMOUS)**

**RAMACHANDRAPURAM**

**NAAC Re-accredited with 'B' Grade at 2.69 CGPA**

**(Affiliated to Adikavi Nannaya University, Rajamahendravaram)**



**BSC MPC**

**COURSE STRUCTURE**

**(W.e.f. admitted batch 2020 –2021)**



**V. S. M. COLLEGE (A):: RAMACHANDRAPURAM**  
**NAAC Re-accredited with 'B' Grade at 2.69 CGPA**  
**DEPARTMENT OF MATHEMATICS&STATISTICS**

**B.Sc. MATHEMATICS COURSE STRUCTURE**

Semester	Paper	Title	Paper Code	Hrs	Credits	CIA	SEE	Total
<b>First Year</b>								
I	I	Differential Equations	2012101	6	5	40	60	100
II	II	Solid Geometry	2022102	6	5	40	60	100

**B.Sc. STATISTICS COURSE STRUCTURE**

Semester	Paper	Title	Paper Code	Hrs	Credits	CIA	SEE	Total
<b>First Year</b>								
I	I	Descriptive Statistics	2012801	4	4	40	60	100
I	I	Descriptive Statistics-LAB	2012801P	2	1	-	50	50
II	II	Probability Theory & Distributions	2022802	4	4	40	60	100
II	II	Probability Theory & Distributions-LAB	2022802P	2	1	-	50	50

**BCA MATHEMATICS & STATISTICS COURSE STRUCTURE**

Semester	Paper	Title	Paper Code	Hrs	Credits	CIA	SEE	Total
<b>First Year</b>								
I	I	Numerical & Statistical Methods	2015101	4	4	40	60	100
I	I	Numerical & Statistical Methods Lab	2015101P	2	1	0	50	50



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**DEPARTMENT OF MATHEMATICS**

**B.Sc. Mathematics COURSE STRUCTURE**

Semester	Paper	Title	Paper Code	Hrs. per week	Credits	CIA	SEE	Total
<b>Second Year</b>								
III	III	Abstract Algebra	1632103	6	5	25	75	100
IV	IV	Real Analysis	1642104	6	5	25	75	100
<b>Third Year</b>								
V	V	Ring Theory & Vector calculus	1652105	5	5	25	75	100
	VI	Linear Algebra	1652106	5	5	25	75	100
<b>ELECTIVES :(any one)</b>								
VII		VII-(A) Laplace Transforms	1662107	5	5	25	75	100
		VII-(B) Numerical Analysis	1662108					
		VII-(C) Number Theory	1662109					
		VII-(D) Graph Theory	1662110					
<b>CLUSTER ELECTIVES</b>								
VI	VIII A	1: Integral Transforms	1662111	5	5	25	75	100
		2: Special Functions	1662112	5	5	25	75	100
		3: Project work	1662113	5	5	25	75	100
	VIII B	1: Advanced Numerical Analysis	1662114	5	5	25	75	100
		2: Special Functions	1662115	5	5	25	75	100
		3: Project work	1662116	5	5	25	75	100
	VIII C	1: Principles of Mechanics	1662117	5	5	25	75	100
		2: Fluid Mechanics	1662118	5	5	25	75	100
		3: Project work	1662119	5	5	25	75	100
	VIII D	1: Applied Graph Theory	1662120	5	5	25	75	100
		2: Special Functions	1662121	5	5	25	75	100
		3: Project work	1662122	5	5	25	75	100

# VSM COLLEGE(A):: RAMACHANDRAPURAM

BOARD OF STUDIES MEETING 2020-21

DEPARTMENT OF PHYSICS

## COURSE STRUCTURE

Semester	Paper	Subject	Paper Code	Hrs	Credits	IA	ES	Total
<b>FIRST YEAR</b>								
I	I	Mechanics, Waves and Oscillations	2012201	4	4	40	60	100
		Mechanics, Waves and Oscillations lab	2012201P	2	1	0	50	50
II	II	Wave Optics	2022202	4	4	40	60	100
		Wave Optics lab	2022202P	2	1	0	50	50

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BOARD OF STUDIES MEETING 2020-21

DEPARTMENT OF PHYSICS

## COURSE STRUCTURE

Semester	Paper	Subject	Paper Code	Hrs	Credits	IA	ES	Total
<b>SECOND YEAR</b>								
III	III	Wave optics	1632203	4	3	25	75	100
		Wave optics lab	1632203P	2	2	0	50	50
IV	IV	Thermo Dynamics And Radiation Physics	1642204	4	3	25	75	100
		Thermo Dynamics And Radiation Physics lab	1642204 P	2	2	0	50	50
<b>THIRD YEAR</b>								
V	V	Electricity, Magnetism & Electronics	1652205	3	3	25	75	100
		Electricity, Magnetism & Electronics Lab	1652205 P	2	2	0	50	50
V	VI	Modern Physics	1652206	3	3	25	75	100
		Modern Physics lab	1652206 P	2	2	0	50	50
VI	ELECTIVE VIIA	Analog and Digital Electronics	1662207	3	3	25	75	100
	ELECTIVE VIIA	Analog and Digital Electronics lab	1662207 P	2	2	0	50	50
		Introduction to Microprocessors and Microcontrollers	1662208	3	3	25	75	100
	CLUSTER VIIA <sub>1</sub>	Introduction to Microprocessors and Microcontrollers lab	1662208 P	2	2	0	50	50
	SEME CLUSTER	Computational Methods and Programming	1662209	3	3	25	75	100

STER -VI	VIIIA <sub>2</sub>	Computational Methods and Programming lab	1662209 P	2	2	0	50	50	
	CLUSTER VIIIA <sub>3</sub>	Electronic Instrumentation	1662210	3	3	25	75	100	
		Project	1662210 P	2	2	0	50	50	
	(OR)								
	ELECTIVE VII B	Materials Science	1662211	3	3	25	75	100	
		Materials Science lab	1662211 P	2	2	0	50	50	
	CLUSTER VIIIB <sub>1</sub>	Fundamentals of Nanoscience	1662212	3	3	25	75	100	
		Fundamentals of Nanoscience lab	1662212 P	2	2	0	50	50	
	CLUSTER VIIIB <sub>2</sub>	Synthesis and Characterization of Nanomaterials	1662213	3	3	25	75	100	
		Synthesis and Characterization of Nanomaterials lab	1662213 P	2	2	0	50	50	
CLUSTER VIIIB <sub>3</sub>	Applications of Nanomaterials and Devices	1662214	3	3	25	75	100		
	Project	1662214 P	2	2	0	50	50		
(OR)									
ELECTIVE VII C	Renewable Energy	1662215	3	3	25	75	100		
	Renewable Energy lab	1662215 P	2	2	0	50	50		
CLUSTER VIIC <sub>1</sub>	Solar Thermal and Photovoltaic Aspects	1662216	3	3	25	75	100		
	Solar Thermal and Photovoltaic Aspects	1662216 P	2	2	0	50	50		

SEME STER -VI		lab						
	CLUSTER VIIC <sub>2</sub>	Wind, Hydro and Ocean Energies	1662217	3	3	25	75	100
		Wind, Hydro and Ocean Energies lab	1662217 P	2	2	0	50	50
	CLUSTER VIIC <sub>3</sub>	Energy Storage Devices	1662218	3	3	25	75	100
		Project	1662218 P	2	2	0	50	50

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**B.Sc. PROGRAMME - COURSE STRUCTURE IN CHEMISTRY**  
**UNDER CBCS 2020 – 21**

Semester number	Paper & Title of the paper	Paper code	Instruction hours/week	No. of Credits	Duration of the examination (hours)	Assessment		Total Marks
						(CIA) Internal	(SEE) External	
I	Paper - I: Inorganic and physical Chemistry	2012301	4	4	3	40	60	100
I	Practical - I: Analysis of Salt Mixture lab	2012301P	2	1	3	-	50	50
II	Paper - II: Organic and General Chemistry	2022302	4	4	3	40	60	100
II	Practical - II: Volumetric Analysis lab	2022302P	2	1	3	-	50	50



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**UNDER CBCS 2020 – 21**

Semester number	Paper & Title of the paper	Paper code	Instruction hours/week	No. of Credits	Duration of the examination (hours)	Assessment		Total Marks
						(CIA) Internal	(SEE) External	
III	Paper - III: Inorganic and Organic Chemistry-2	1632303	4	3	3	25	75	100
III	Practical - III: Titrimetric analysis and Organic Functional Group Reactions lab	1632303P	2	2	3	-	50	50
IV	Paper - IV: Spectroscopy and Physical Chemistry	1642304	4	3	3	25	75	100
IV	Practical - IV: Physical Chemistry and IR Spectral Analysis lab	1642304P	2	2	3	-	50	50
V	Paper - V: Inorganic, Organic and Physical Chemistry-1	1652305	3	3	3	25	75	100
V	Practical - V: Organic Chemistry lab	1652305P	2	2	3	-	50	50
V	Paper - VI: Inorganic, Organic and Physical Chemistry-2	1652306	3	3	3	25	75	100
V	Practical - VI: Physical Chemistry lab	1652306P	2	2	3	-	50	50
VI	Paper - VII: Elective-A Analytical Methods in Chemistry	1662307	3	3	3	25	75	100
VI	Practical – VII A Analytical Methods in Chemistry lab	1662307P	2	2	3	-	50	50
VI	Paper - VII: Elective-B Environmental Chemistry	1662308	3	3	3	25	75	100
VI	Practical – VII B Water Analysis lab	1662308P	2	2	3	-	50	50

VI	Paper - VII: Elective-C Green Chemistry	1662309	3	3	3	25	75	100
VI	Practical – VII C Green Chemistry lab	1662309P	2	2	3	-	50	50
VI	Cluster-A A-1 Polymer Chemistry	1662310	3	3	3	25	75	100
VI	Practical – VIII A-1 Organic Preparations lab	1662310P	2	2	3	-	50	50
VI	Cluster-A A-2 Instrumental Methods of Analysis	1662311	3	3	3	25	75	100
VI	Practical – VIII A-2 Instrumental Methods of Analysis lab	1662311P	2	2	3	-	50	50
VI	Cluster-A A-3 Analysis of Drugs, Foods, Dairy Products & Bio-chemical Analysis	1662312	3	3	3	25	75	100
VI	Project	1662312P	2	2	3	-	50	50
VI	Cluster-B B-1 Fuel Chemistry and Batteries	1662313	3	3	3	25	75	100
VI	Practical – VIII B-1 Organic Preparations lab	1662313P	2	2	3	-	50	50
VI	Cluster-B B-2 Inorganic Materials of Industrial Importance	1662314	3	3	3	25	75	100
VI	Practical – VIII B-2 Instrumental Methods of Analysis lab	1662314P	2	2	3	-	50	50
VI	Cluster-B B-3 Analysis of Applied Industrial Products	1662315	3	3	3	25	75	100
VI	Project	1662315P	2	2	3	-	50	50
VI	Cluster-C C-1 Organic Spectroscopic Techniques	1662316	3	3	3	25	75	100
VI	Practical – VIII C-1 Organic Preparations lab	1662316P	2	2	3	-	50	50
VI	Cluster-C C-2 Advanced Organic Reactions	1662317	3	3	3	25	75	100
VI	Practical – VIII C-2 Instrumental Methods of Analysis lab	1662317P	2	2	3	-	50	50
VI	Cluster-C C-3 Pharmaceutical & Medicinal Chemistry	1662318	3	3	3	25	75	100
VI	Project	1662318P	2	2	3	-	50	50



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Ramachandrapuram - 533255, East Godavari Dist. AP  
Department of Telugu

## B.Sc.,B.Com.,BBA, COURSE STRUCTURE 2020-21

Semester	Paper Code	Subject	Hours	Credits	Internal	External	Total
I	2010101	తెలుగు ప్రాచీన తెలుగు కవిత్వం సంధి, సమాసము , ఛందస్సు, అలంకారాలు	4	3	40	60	100

  
CHAIRPERSON  
BOARD OF STUDIES

# VSM COLLEGE (AUTONOMOUS)

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Ramachandrapuram - 533255, East Godavari Dist. AP  
Department of Telugu

## B.Sc.,B.Com.,BBA, COURSE STRUCTURE 2020-21

Semester	Paper Code	Subject	Hours	Credits	Internal	External	Total
II	2020101	తెలుగు ఆధునిక తెలుగు సాహిత్యం	4	3	40	60	100

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Department of Telugu

## B.Sc.,B.Com.,BBA, COURSE STRUCTURE 2020-21

Semester	Paper Code	Subject	Hours	Credits	Internal	External	Total
III	2030101	జనరల్ తెలుగు సృజనాత్మక రచన	4	3	40	60	100

**V.S. M COLLEGE (AUTONOMOUS)**  
**RAMACHANDRAPURAM**  
 BCA/ BBA/ B.SC/ B.COM PROGRAMME  
 COURSE STRUCTURE IN ENGLISH UNDER CBCS 2020 - 2021

I - YEAR DEGREE

SEM	Paper	Paper code	Title	Instruction Hrs/ Week	Credits	Exam Hours	Marks	TOTAL
							(Internal/ External)	
I	Paper-I	2010104	General English	4	3	3	40/60	100
II	Paper-II	2010202	General English	4	3	3	40/60	100

**V.S.M COLLEGE (AUTONOMOUS)**  
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B.SC/ B.COM/ BBA/BCA/ PROGRAMME  
COURSE STRUCTURE IN ENGLISH UNDER CBCS 2020-2021

**II - Year, III Semester**

SEM	Paper	Paper code	Title	Instruction Hrs/ Week	Credits	Exam Hours	Marks	TOTAL
							(Internal/ External)	
3	Paper-III	1630104	General English	4	3	3	25/75	100



V.S.M. COLLEGE (AUTONOMOUS)

RAMACHANDRAPURAM-E.G.Dist.

DEPARTMENT OF SANSKRIT

1 & 2 DEGREE (B.Sc., BBA.,BCA & B.Com.)

I,II&III Semesters

Part –I (ii) Second Language

SANSKRIT

BSc,BBA,BCA & BCOM PROGRAMME – COURSE STRUCTURE IN SANSKRIT UNDER  
CBCS 2021-2022

SEM	MODULE	PAPER CODE	INSTRUCTION HOURS/WEEK	CREDITS	EXAM HOURS	INTERNAL & EXTERNAL MARKS		TOTAL
1	Module – 1 Poetry, Prose & Grammar Sanskrit – I	2010102	4	3	3	40	60	100
2	Module – 2 Poetry, Prose & Grammar Sanskrit – I	2020102	4	3	3	40	60	100
3	Module -3 Drama, Upanishad & Grammar Sanskrit – I	2030102	4	3	3	40	60	100

  
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BOARD OF STUDIES

**V.S. M COLLEGE (AUTONOMOUS)**  
**RAMACHANDRAPURAM**  
**BBA/ B.SC/ B.COM PROGRAMME**  
**COURSE STRUCTURE IN ENGLISH UNDER CBCS 2020-2021**  
**II- YEAR DEGREE**  
**Communication and Soft Skills**

SEM	Paper	Paper Code	Subject	Instruction Hrs/ Week	Credits	Exam Hours	Marks	TOTAL
							( External)	
3	Paper-II	1630206	CSS-3	2	2	2	50	50
4	Paper-III	1640207	CSS-4	2	2	2	50	50

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COURSE STRUCTURE UNDER CBCS 2020-2021  
**BUSINESS COMMUNICATION (BC)**  
**SEMESTER-II**

SEM	Paper	Paper Code	Subject	Instruction Hrs/ Week	Credits	Exam Hours	Marks	TOTAL
							( External)	
II		2020302	BC	2	2	2	50	50



**VSM COLLEGE(A) :: RAMACHANDRAPURAM  
BOARD OF STUDIES MEETING 2020-21  
DEPARTMENT OF COMPUTER SCIENCE**

**COURSE STRUCTURE**

S.No	Life Skill Course	Paper No	Paper Code	Sem	Hrs/Week	Total Hrs	Credits	Marks
1	Basic Computer Applications	LS-1	2010201	I	2	30	2	50
2	Information and Communication Technology	LS-4	2020201	II	2	30	2	50



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**DEPARTMENT OF BOTANY**

## **SKILL DEVELOPMENT COURSE STRUCTURE**

**(All Degree(UG) Programmes)**

<b>Semester</b>	<b>Subject</b>	<b>Paper Code</b>	<b>Hrs.</b>	<b>Credits</b>	<b>CIA</b>	<b>SEE</b>	<b>Total</b>
<b>FIRST YEAR</b>							
I	Plant Nursery	2010304	2	2	--	50	50
II	Fruit And Vegetable Preservation	2020306	2	2	-	50	50



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DEPARTMENT OF ZOOLOGY

**SKILL DEVELOPMENT COURSE STRUCTURE**  
**(All Degree(UG) Programmes)**

<i>Semester</i>	<i>Subject</i>	<i>Paper Code</i>	<i>Hrs.</i>	<i>Credits</i>	<i>CIA</i>	<i>SEE</i>	<i>Total</i>
<b><u>First Year</u></b>							
<i>III</i>	<b>POULTRY FARMING</b>	<b>2030304</b>	2	2	--	50	50



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**DEPARTMENT OF ZOOLOGY**

**SKILL DEVELOPMENT COURSE**  
**STRUCTURE**

**(All Degree(UG) Programmes)**

<i>Semester</i>	<i>Subject</i>	<i>Paper Code</i>	<i>Hrs.</i>	<i>Credits</i>	<i>CIA</i>	<i>SEE</i>	<i>Total</i>
<b><u>First</u></b> <b><u>Year</u></b>							
<i>I</i>	<i>Dairy Technology</i>	<i>2020307</i>	<i>2</i>	<i>2</i>	<i>--</i>	<i>50</i>	<i>50</i>