

IDEAL COLLEGE OF ARTS AND SCIENCES
AUTONOMOUS & NAAC B
Dr. P.V.N RAJU VIDYAPRANGANAM
SAMALKOT ROAD, KAKINADA

LIST OF NEW COURSES

Academic Year - 2021 - 2022

S.No	Name of the New Courses	Department	Program
1	A Course in Conversation Skills	English	BA, B.Com, B.Sc.
2	స్పృజన భారతి	Telugu	BA, B.Com, B.Sc.
3	Differential Equations	Mathamatics	B.Sc (MCCs)
4	Solid Geometry	Mathamatics	B.Sc (MCCs)
5	Linear Algebra	Mathamatics	B.Sc (MCCs), MPC
6	Heat and Thermodynamics	Physics	MPC, MPCs
7	Electricity Magnesim & Electronics	Physics	MPC, MPCs
8	Modern Physics	Physics	MPC, MPCs
9	Database Management System	Computer Science	B.Sc.(M.P.CS)
10	Object Oriented Programming using Java	Computer Science	B.Sc.(M.P.CS)
11	Operating System	Computer Science	B.Sc.(M.P.CS)
12	Problem Solving in C	Computer Science	B.Sc.(M.P.CS)
13	Data Structures using C	Computer Science	B.Sc.(M.P.CS)
14	Organic Chemistry and Spectroscopy	Chemistry	B.Sc. (MPC, BZC)
15	Inorganic, Organic and Physical Chemistry	Chemistry	B.Sc. (MPC, BZC)
16	Inorganic and Physical Chemistry	Chemistry	B.Sc. (MPC, BZC)
17	Inorganic and Physical chemistry	Chemistry	B.Sc. (MCCS)
18	Organic and General chemistry	Chemistry	B.Sc. (MCCS)
19	Anatomy and embryology, Plant Ecology and biodiversity	Botany	B.Sc., B.Z.C
20	Plant Physiology and Metabolism	Botany	B.Sc., B.Z.C
21	Cell Biology, Genetics & Plant Breeding	Botany	B.Sc., B.Z.C

S.No	Name of the New Courses	Department	Program
22	Cell Biology, Genetics and Molecular Biology and Evolution	Zoology	B.Sc., B.Z.C
23	Animal Physiology, Cellular Metabolism and Embryology	Zoology	B.Sc., B.Z.C
24	Immunology and Animal Biotechnology	Zoology	B.Sc., B.Z.C
25	Modern Indian History and culture	History	B.A
26	History and culture of Modern Andhra Pradesh	History	B.A
27	History of Modern World	History	B.A
28	Development Economics	Economics	B.A
29	Economic Development in India and Andhra Pradesh	Economics	B.A
30	Statistical methods for Economics	Economics	B.A
31	Indian Government and Politics	Political Science	B.A
32	Indian Political Process	Political Science	B.A
33	Indian Political Thought	Political Science	B.A
34	Advanced Accounting	Commerce	B. Com
35	Business Statistics	Commerce	B. Com
36	Marketing	Commerce	B. Com
37	Corporate Accounting	Commerce	B. Com
38	Cost and Management Accounting	Commerce	B. Com
39	Income Tax	Commerce	B. Com
40	Business Law	Commerce	B. Com
41	Auditing	Commerce	B. Com
42	Goods and Service Tax	Commerce	B. Com
43	Fundamentals of Accounting (1A)	Commerce	B. Com (CA)
44	Business Organisation and Management (1B)	Commerce	B. Com (CA)
45	INFORMATION TECHNOLOGY	Commerce	B. Com (CA)
46	Finacial Accounting (2A)	Commerce	B. Com (CA)
47	Business Economics (2B)	Commerce	B. Com (CA)
48	E-COMMERCE AND WEB DESIGNING	Commerce	B. Com (CA)
49	Agronomy of Field crops	Agriculture	B.Voc
50	Manures, fertilizers and soil fertility management	Agriculture	B.Voc
51	Agriculture economics and farm management	Agriculture	B.Voc

S.No	Name of the New Courses	Department	Program
52	Pests of Field crops and their management	Agriculture	B.Voc
53	water management	Agriculture	B.Voc
54	principles of organic forming	Agriculture	B.Voc
55	farm power and machinery	Agriculture	B.Voc
56	Fundamentals of Organic Farming	Sustainable Agriculture	B.Voc
57	Landscape designing and gardening	Sustainable Agriculture	B.Voc
58	commercial Enterprises	Sustainable Agriculture	B.Voc
59	Pests of field crops and vegetable crops	Sustainable Agriculture	B.Voc
60	Major flower crop production in India	Sustainable Agriculture	B.Voc
61	Tropical and sub tropical fruit production	Sustainable Agriculture	B.Voc
62	Post harvest management of Horticulture	Sustainable Agriculture	B.Voc
63	Agronomy of Field crops	Sustainable Agriculture	B.Voc
64	Manures, fertilizers and soil fertility management	Sustainable Agriculture	B.Voc
65	Agriculture economics and farm management	Sustainable Agriculture	B.Voc
66	Pest of Field crops and their management	Sustainable Agriculture	B.Voc
67	water management	Sustainable Agriculture	B.Voc
68	principles of organic forming	Sustainable Agriculture	B.Voc
69	farm power and machinery	Sustainable Agriculture	B.Voc
70	Introduction to agronomy	Sustainable Agriculture	B.Voc
71	introduction to Soil science	Sustainable Agriculture	B.Voc
72	Principles of Plant Breeding	Sustainable Agriculture	B.Voc
73	Introduction to Entomology	Sustainable Agriculture	B.Voc
74	Introduction to plant pathology	Sustainable Agriculture	B.Voc
75	Principles of Crop Physiology	Sustainable Agriculture	B.Voc
76	Introduction to agronomy	Agriculture	B.Voc

S.No	Name of the New Courses	Department	Program
77	introduction to Soil science	Agriculture	B.Voc
78	Principles of Plant Breeding	Agriculture	B.Voc
79	Introduction to Entomology	Agriculture	B.Voc
80	Introduction to plant pathology	Agriculture	B.Voc
81	Principles of Crop Physiology	Agriculture	B.Voc
82	Chemistry(Inorganic, Organic and Physical Chemistry)	Industrial Aquaculture and fisheries	B.Voc
83	Zoology(Animal Bio - technology)	Industrial Aquaculture and fisheries	B.Voc
84	Fish Processing Technology and Quality Control	Industrial Aquaculture and fisheries	B.Voc
85	Aquatic Pollution	Industrial Aquaculture and fisheries	B.Voc
86	Fish Policy, Laws and Disaster Management	Industrial Aquaculture and fisheries	B.Voc
87	Environmental Chemistry	Industrial Aquaculture and fisheries	B.Voc
88	Zoology (Immunology)	Industrial Aquaculture and fisheries	B.Voc
89	Fisheries Economics and Marketing	Industrial Aquaculture and fisheries	B.Voc
90	Aquaculture Engineering	Industrial Aquaculture and fisheries	B.Voc
91	Fisheries Co-Operative and Marketing	Industrial Aquaculture and fisheries	B.Voc
92	Capture Fisheries	Industrial Aquaculture and fisheries	B.Voc
93	Fish Seed Production	Industrial Aquaculture and fisheries	B.Voc
94	Zoology - 4	Industrial Aquaculture and fisheries	B.Voc

S.No	Name of the New Courses	Department	Program
95	Zoology - 5	Industrial Aquaculture and fisheries	B.Voc
96	Fish Genetics and Aquaculture Bio - technology	Industrial Aquaculture and fisheries	B.Voc
97	Fish pathology and immunology	Industrial Aquaculture and fisheries	B.Voc
98	Ornamental fish culture	Industrial Aquaculture and fisheries	B.Voc
99	Larval nutrition and culture of fish food organisms	Industrial Aquaculture and fisheries	B.Voc
100	Biology of fishes	Industrial Aquaculture and fisheries	B.Voc
101	Fresh water aquaculture	Industrial Aquaculture and fisheries	B.Voc
102	Biology of fin Shell fishes	Industrial Aquaculture and fisheries	B.Voc
103	Fishing methods	Industrial Aquaculture and fisheries	B.Voc
104	Zoology	Commercial Aquaculture	B.Voc
105	Capture Fisheries	Commercial Aquaculture	B.Voc
106	Aquaculture Nutrition	Commercial Aquaculture	B.Voc
107	Fish Seed Production	Commercial Aquaculture	B.Voc
108	Physiology, Cellular Metabolism & Embryology (Zoology-4)	Commercial Aquaculture	B.Voc
109	Immunology & Animal Biotechnology (Zoology-5)	Commercial Aquaculture	B.Voc
110	Fish genetics and Aquaculture Biotechnology	Commercial Aquaculture	B.Voc
111	Fish Pathology and Immunology	Commercial Aquaculture	B.Voc
112	Ornamental Fish Culture	Commercial Aquaculture	B.Voc

S.No	Name of the New Courses	Department	Program
113	Larval Nutrition & Culture of Fish food Organisms	Commercial Aquaculture	B.Voc
114	Biology of Fishes	Commercial Aquaculture	B.Voc
115	Fresh water Aquaculture	Commercial Aquaculture	B.Voc
116	Biology of Shell Fish	Commercial Aquaculture	B.Voc
117	Fishing Methods	Commercial Aquaculture	B.Voc
118	Processing of milk and milk products	Food Technology	B.Sc
119	Processing of Cereals, Pulses and oil seeds	Food Technology	B.Sc
120	Food Science and Nutrition - 2	Food Technology	B.Sc
121	Food Business Management	Food Technology	B.Sc
122	Food safety and microbial standards	Food Technology	B.Sc
123	New Product development and sensory science	Food Technology	B.Sc
124	food engineering	Food Technology	B.Sc
125	Processing Technology of Fruits and Vegetables	Food Technology	B.Sc
126	Food Additives	Food Technology	B.Sc
127	Numerical Analysis	Softwate Development	B.Voc
128	Data Structures using C	Softwate Development	B.Voc
129	Introduction to Phython Programming	Softwate Development	B.Voc
130	Objected oriented Programming through Java	Softwate Development	B.Voc
131	Advanced Numerical Analysis	Softwate Development	B.Voc
132	Discrete Mathematical Structures	Softwate Development	B.Voc
133	Objected Oriented Software Engineering	Softwate Development	B.Voc
134	Operating System	Softwate Development	B.Voc
135	Web Programming	Softwate Development	B.Voc
136	Basics of Cloud Computing	Softwate Development	B.Voc
137	Organizational Behaviour	Digital Marketing	BBA

S.No	Name of the New Courses	Department	Program
138	Search Engine Optimization	Digital Marketing	BBA
139	Financial Management	Digital Marketing	BBA
140	Training and Development	Digital Marketing	BBA
141	Business Law	Digital Marketing	BBA
142	Micro. Small. Medium Management	Digital Marketing	BBA
143	International Business	Digital Marketing	BBA
144	Search Engine Marketing & Affiliate Marketing	Digital Marketing	BBA
145	Training and Development	Digital Marketing	BBA

A. ch. Sravanth

IQAC Coordinator

CO-ORDINATOR
IQAC
Ideal College of Arts & Sciences (A)
KAKINADA

T. Subbarama

Principal

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

**IDEAL COLLEGE OF ARTS AND SCIENCES (A)
ENGLISH COURSE STRUCTURE UNDER CBCS
2021-2022**

Year	Semester	Title	Max Marks	Credits
I	I	Skill Enrich-I English Praxis Course -I (A Course in Communication & Soft skills)	100	03
	II	Skill Enrich-II English Praxis Course -II (A Course in Reading and Writing skills)	100	03
II	III	Praxis Pro English Praxis Course -III (A Course in Conversational skills)	100	03

IDEAL COLLEGE OF ARTS AND SCIENCES(A)
TELUGU COURSE STRUCTURE UNDER CBCS
2021-2022

Year	Semester	Title	Max. Marks	Credits
I	I	Kavya Sudha	100	03
	II	Adunika Bharathi	100	03
II	III	Srujana Bharathi	100	03

IDEAL COLLEGE OF ARTS & SCIENCES: KAKINADA

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Dr. P.V.N.RAJU VIDYAPRANGANAM

B.A./B.Sc. Mathematics COURSE STRUCTURE 2021-22

Semester	Paper	Subject	Hr	Credit	IA	ES	Total
FIRST YEAR							
SEMESTER I	Paper-I	Differential Equations & Differential Equations Problem Solving	6	5	30	70	100
SEMESTER II	Paper-II	Solid Geometry & Solid Geometry Problem Solving Sessions	6	5	30	70	100
Community Service Project							
SECOND YEAR							
SEMESTER III	Paper-III	Abstract Algebra & Abstract Algebra Problem Solving	6	5	30	70	100
SEMESTER IV	Paper-IV	Real Analysis & Real Analysis Problem Solving Sessions	6	5	30	70	100
		Linear Algebra & Real Analysis Problem Solving Sessions	6	5	30	70	100
Short-term Internship							
THIRD YEAR							
SEMESTER V	Paper-V	Ring Theory & Vector Calculus & Ring Theory & Vector Calculus Problem	6	5	25	75	100
SEMESTER V	Paper-VI	Linear Algebra & Linear Algebra Problem Solving Sessions	6	5	25	75	100
SEMESTER VI	Paper-VII	Elective (any one)* A. Laplace-Transformations B. Numerical Analysis C. Number Theory D. Graph Theory	5	5	25	75	100
		Cluster Electives: *** VIII A. 1. Integral Transformations & Problem Solving Sessions	5	5	25	75	100
	Paper-VIII	2. Special Functions & Problem Solving Sessions	5	5	25	75	100
		3. Project	5	5	50	50	100
		VIII B. 1. Advanced Numerical Analysis & Problem Solving Sessions	5	5	25	75	100
		2. special Functions & Problem Solving Sessions	5	5	25	75	100
		3. Project	5	5	50	50	100
		VIII C. 1. Principles of Mechanics & Problem Solving Sessions	5	5	25	75	100
		2. Fluid Mechanics & Problem Solving Sessions	5	5	25	75	100
		3. Project	5	5	50	50	100
		VIII D. 1. Applied Graph Theory & Problem Solving Sessions	5	5	25	75	100
		2. Special Function & Problem Solving Sessions	5	5	25	75	100
3. Project	5	5	50	50	100		

*Candidate has to choose only one paper from VII(A) or VII(B) or VII(C) or VII(D)

* Candidates are advised to choose Cluster (A) if they have chosen VII (A) and Choose Cluster (B) if they have chosen VII(B) etc. However, a candidate may choose any cluster irrespective of what they have Chosen in paper VII.

IDEAL COLLEGE OF ARTS AND SCIENCES(A)
PHYSICS COURSE STRUCTURE UNDER CBCS
2021-2022

Year	Semester	Paper	Title	Marks	Credits	
I	I	I	Mechanics, waves and oscillations	100	04	
			Practical	50	01	
		Skill Development	Electrical Appliances	50	02	
	II	II	II	Waves optics	100	04
				Practical	50	01
		Skill Development	Solar Energy	50	02	
			Community Service Project	100	04	
II	III	III	Heat and Thermodynamics	100	03	
			Practical	50	02	
	IV	IV	Electricity magnetism & Electronics.	100	04	
			Practical	50	01	
		V	Modern Physics	100	04	
			Practical	50	01	
Practical	100	04				
III	V	V	Electricity magnetism & Electronics.	100	03	
			Practical	50	02	
		VI	Modern Physics	100	03	
			Practical	50	02	
	VI any one paper from A,B and C any one cluster from I, II, and III	VII A	Anylos and digital electronics	100	03	
		Practical	50	02		
		VII A1	Introduction to micro procesolsand micro controller	100	03	
		Practical	50	02		
		VII A2	Computational Methods and programming	100	03	
			Practical	50	02	
		VII A3	Electronic Instrumentation	100	03	
			Practical	50	02	
		VII B	Material Science	100	03	
			Practical	50	02	
		VII B1	Fundamentals of Nano Science	100	03	
			Practical	50	02	
		VII B2	Synthesis and charactrizion of nano Materials	100	03	
			Practical	50	02	
		VII B3	Applications of Nano Materials and Devices	100	03	
			Practical	50	02	
VII C	Renewable Energy	100	03			
	Practical	50	02			
VII C1	Solar thermal and photo voltaic aspects	100	03			
	Practical	50	02			
VII C2	Wind hydro energies	100	03			
	Practical	50	02			
VII C3	Energy Storage divices	100	03			
	Practical	50	02			

IDEAL COLLEGE OF ARTS & SCIENCES : KAKINADA

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Department of Computer Science

Structure of Computer Science Syllabus 2021-2022

Semester	Paper Code	Subject	Hrs./ Week	Credits	IA	ES	Total
I B.Sc. Computer Science Syllabus under CBCS w.e.f. 2020-2021 Batch							
I	C1	Problem Solving in C	4	3	30	70	100
	C1-P	Problem Solving in C Lab	2	2		50	50
II	C2	Data Structures using C	4	3	30	70	100
	C2-P	Data Structures using C Lab	2	2		50	50
		Community Service Project Work (2 months)		4			100
II B.Sc. Computer Science Syllabus under CBCS w.e.f. 2020-2021 Batch							
III	C3	Database Management System	4	3	30	70	100
	C3-P	Database Management System Lab	2	2		50	50
IV	C4	Object Oriented Programming using Java	4	3	30	70	100
	C4-P	Object Oriented Programming using Java Lab	2	2		50	50
	C5	Operating Systems	4	3	30	70	100
	C5-P	Operating Systems Lab using C/Java	2	2		50	50
		Short-term Internship (2 months)		4			100
III B.Sc. Computer Science Syllabus under CBCS w.e.f. 2015-2016 Batch							
V	5	Database Management System	4	3	25	75	100
	5-P	Database Management System Lab	2	2		50	50
	6	Software Engineering	4	3	25	75	100
	6-P	Software Engineering Lab	2	2		50	50
VI	7	<u>Elective-I</u> Computer Networks	3	3	25	75	100
	7-P	Computer Networks Lab	2	2		50	50
	8A	<u>Elective-II (Cluster-A)</u> 3. Foundations of Data Science	3	3	25	75	100
	8A-P	Foundations of Data Science Lab (through R)	2	2		50	50
	8B	4. Big Data Technology	3	3	25	75	100
	8B-p	Big Data Technology Lab (Hadoop)	2	2		50	50
	8C	Project Work	5	5	25	75	100

IDEAL COLLEGE OF ARTS AND SCIENCES(A)
CHEMISTRY COURSE STRUCTURE UNDER CBCS
2021-2022

Year	Semester	Paper	Title	Marks	Credits
I	I	I	Inorganic and Physical Chemistry	100	03
			Practical - I	50	02
	II	II	Organic and General chemistry	100	03
			Practical - II	50	02
			Community Service Project	100	04
	II	III	III	Organic chemistry and Spectroscopy	100
Practical - III				50	02
IV		IV	Inorganic, Organic and Physical chemistry	100	03
			Practical - IV	50	02
		V	Inorganic and Physical Chemistry	100	03
			Practical - V	50	02
			Short Term Internship	100	04
III		V	V	Inorganic, Organic and Physical chemistry	100
	Practical-V			50	02
	VI		Inorganic, Organic and Physical chemistry	100	03
			Practical -VI	50	02
	VI Any one Elective paper from VII A, B, C	VII A	Elective: Analytical Method in Chemistry	100	03
			Practical- VII A	50	02
		VII B	Elective: Environmental Chemistry	100	03
			Practical: VII B	50	02
		VII C	Elective : Green Chemistry	100	03
			Practical -VII C	50	02
	VIII A	VIII A	Cluster Elective 1:		
			VIII-A-1 : Polymer Chemistry	100	03
			VIII-A-2: Instrumental Methods of Analysis	100	03
			VIII-A-3: Analysis of Drugs, Foods, Dairy Products & Biochemical Analysis	100	03
Practical VIII-A-1			50	02	
Practical VIII-A-2			50	02	
Project Work			50	02	

Year	Semester	Paper	Title	Marks	Credits
	Any one Cluster from VIII A, B, C	VIII B	Cluster Elective 1I:		
			VIII - B-1 Fuel Chemistry and Batteries	100	03
			VIII - B-2 Inorganic materials of Industrial Importance	100	03
			VIII - B-3 Analysis of Industrial Products	100	03
			Practical VIII - B-1	50	02
			Practical VIII - B-2	50	02
			Project Work	50	02
		VIII C	Cluster Elective 1I:		
			VIII - C-1 Organic Spectroscopic Techniques	100	03
			VIII - C-2 Advanced Organic Reactions	100	03
			VIII - C-3 Pharmaceutical and Medicinal Chemistry	100	03
			Practical VIII - C-1	50	02
			Practical VIII - C-2	50	02
			Project Work	50	02

IDEAL COLLEGE OF ARTS AND SCIENCES(A)
BOTANY COURSE STRUCTURE UNDER CBCS
2021-2022

Year	Semester	Paper	Title	Hours/ Week	Max. Marks(SEE)	Marks in CIA	Credits
I	I	I	Fundamentals of Microbes and Non-Vascular Plants	04	70	30	03
			Fundamentals of Microbes and Non-Vascular Plants - Lab	03	Max.Marks-50 internal assessment at semester end		02
	II	II	Basics of Vascular Plants and Phytogeography	04	70	30	03
			Basics of Vascular Plants and Phytogeography - Lab	03	Max.Marks-50 External assessment at semester end		02
			Community Service Project	—	100		04
	II	III	III	Anatomy and Embryology of Angiosperms, Plant Ecology and Biodiversity	04	70	30
Anatomy and Embryology of Angiosperms, Plant Ecology and Biodiversity - Lab				03	Max.Marks-50 internal assessment at semester end		02
IV		IV	Plant Physiology and Metabolism	04	70	30	03
			Plant Physiology and Metabolism - Lab	03	Max.Marks-50 External assessment at semester end		02
			Cell Biology, Genetics and Plant Breeding	04	70	30	03
			Cell Biology, Genetics and Plant Breeding - Lab	03	Max.Marks-50 internal assessment at semester end		02
			Short Term Internship	—	100		04
			Cell Biology, Genetics and Plant Breeding	04	75	25	03

Year	Semester	Paper	Title	Hours/ Week	Max. Marks(SEE)	Marks in CIA	Credits
III	V	V	Cell Biology, Genetics and Plant Breeding - Lab	03	Max.Marks-50 internal assessment at semester end		02
		VI	Plant Ecology and Phytogeography	04	75	25	03
	Plant Ecology and Phytogeography - Lab		03	Max.Marks-50 internal		02	
	VII & VIII any one paper from A,B and C any one cluster from I, II, and III	VII (A) - Elective	Organic farming and sustainable agriculture	04	75	25	03
			Organic farming and sustainable agriculture - Lab	03	Max.Marks-50 External assessment at semester end		02
		VII (B) Elective	Nursery, Gardening and Floriculture	04	75	25	03
			Nursery, Gardening and Floriculture - Lab	03	Max.Marks-50 External		02
		VII (C) Elective	Plant Tissue culture and its Biotechnological applications	04	75	25	03
			Plant Tissue culture and its Biotechnological applications - Lab	03	Max.Marks-50 External assessment at semester end		02
		VIII (A1) Cluster	Plant Diversity and Human welfare	04	75	25	03
			Plant Diversity and Human welfare - Lab	03	Max.Marks-50 External		02
		VIII (A2) Cluster	Ethanobotany and medicinal botany	04	75	25	03
			Ethanobotany and medicinal botany - Lab	03	Max.Marks-50 External		02
		VIII (A3) Cluster	Pharmacognosy and phytochemistry	04	75	25	03
			Pharmacognosy and phytochemistry Lab	03	Max.Marks-50 External		02
		VIII (B1) Cluster	Biological Instrumentation and methadology	04	75	25	03
			Biological Instrumentation and methadology - Lab	03	Max.Marks-50 External assessment at semester end		02
	VIII (B2) Cluster	Mushroom cultivation and Technology	04	75	25	03	
		Mushroom cultivation and Technology - lab	03	Max.Marks-50 External		02	
	VIII (B3) Cluster	Internship/project work preferably either in an institution or Industry	-	100		03	

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KAKINADA.

ZOOLOGY COURSE STRUCTURE UNDER CBCS 2021-22

YEAR	SEMESTER	PAPER	TITLE	MARKS	CREDITS	
I	I	I	Animal Diversity – Biology of Non Chordates	100	03	
			Practical - I	50	02	
	II	II	Animal Diversity – Biology of chordates	100	03	
			Practical - II	50	02	
			Community Service Project	100	04	
II	III	III	Cell biology, Genetics, Molecular Biology & Evolution	100	03	
			Practical - III	50	02	
	IV	IV	Animal Physiology, Cellular metabolism and Embryology	100	03	
			Practical - IV	50	02	
	V	V	Immunology & Animal Biotechnology	100	03	
			Practical - V	50	02	
			Short Term Internship	100	04	
III	V	V	Animal Biotechnology	100	03	
			Practical - V	50	02	
		VI	Animal Husbandry	100	03	
			Practical - VI	50	02	
	Any one Paper from A, B and C	VII (A)	Immunology	100	03	
			Practical - VII (A)	50	02	
		VII (B)*	Cellular Metabolism and Molecular Biology	100	03	
			Practical - VII (B)	50	02	
	** Any one cluster from I, II and III	VII (C)*	Bioinformatics	100	03	
			Practical - VII (C)	50	02	
		Cluster VIII-A**	Cluster Electives –VIII-A : Medical Diagnostics			
			1. Clinical Biochemistry	100	03	
	2. Haematology		100	03		
	3. Clinical Microbiology		100	03		
Practical – VIII: 1	50		02			
Practical – VIII: 2	50	02				
Project Work	50	02				
VI	Cluster VIII-B**	Cluster Electives –VIII-B : Aquaculture				
		1. Principles of Aquaculture	100	03		

			2. Aquaculture Management	100	03
			3. Postharvest Technology	100	03
			Practical – VIII: 1	50	02
			Practical – VIII: 2	50	02
			Project Work	50	02
		Cluster VIII-C**	Cluster Electives – VIII-C : Sericulture		
			1. Gen. Sericulture, Mulberry cultivation and Management	100	03
			2. Biology of Mulberry Silkworm and Silkworm rearing Technology	100	03
			3. Silk Technology, Silk Marketing and Extension		
			Practical – VIII: 1	50	02
			Practical – VIII: 2	50	02
			Project Work	50	02

IDEAL COLLEGE OF ARTS AND SCIENCES(A)
HISTORY COURSE STRUCTURE UNDER CBCS
2021-2022

Year	Semester	Title	Max. Marks	Credits
I	I	ANCIENT INDIAN HISTORY & CULTURE	100	04
	II	Medieval Indian History & Culture	100	04
		Community Service Project	100	04
II	III	Modern Indian History	100	04
	IV	History and Culture of Andhra		
		History of Modern World (15th Cen - 1945)	100	04
		Short Term Internship	100	04
III	V	History of Modern World (1453 to 1821)	100	04
		History of Culture of Andhra Desha	100	04
	VI	History of Modern World	100	04
		Cultural Tourism	100	04
		Popular Movements in Andhra Desa	100	04
		Contemporary History of Andhra Pradesh	100	04

IDEAL COLLEGE OF ARTS AND SCIENCES

(A.P.Govt., Aided, Autonomous & NAAC B)
Dr.P.V.N.RAJU VIDYAPRANGANAM
Samalkot Road – Kakinada

DEPARTMENT OF ECONOMICS

B.A ECONOMICS COURSE STRUCTURE 2021-2022

YEAR	Paper / Course	Semester	Title of the Paper	Credits	Marks
First Year	Course - 1	Semester - I	Micro Economics Analysis	4	100
	Course - 2	Semester – II	Macro Economics Analysis	4	100
			Community Service Project	4	100
Second Year	Course - 3	Semester – III	Development Economics	4	100
	Course - 4	Semester – IV	Economic Development in India and Andhra Pradesh	4	100
			Short Term Internship	4	100
	Course - 5	Semester – IV	Statistical Methods for Economics	4	100
Third Year	Paper – V	Semester – V	Economic Development and Indian Economy	4	100
	Paper – VI	Semester – V	Indian and Andhra Pradesh Economy	4	100
	Paper – VII A	Semester – VI	Agricultural Economics	4	100
	Cluster Elective - (A) Agri Business			4	100
	Paper – VIII A-1	Semester – VI	Agri Business Environment in Andhra Pradesh	4	100
	Paper – VIII A-2	Semester – VI	Agricultural output marketing	4	100
	Paper – VIII A-3	Semester – VI	Project Work	4	100

**POLITICAL SCIENCE COURSE STRUCTURE UNDER CBCS
2021-2022**

Year	Semester	Title	Max. Marks	Credits
I	I	Introduction to Political Science	100	04
	II	Basic Organs of the Government	100	04
		Community Service Project	100	04
II	III	Indian Government and Politics	100	04
	IV	Indian Political Process		
		Western Political Thought	100	04
		Short Term Internship	100	04
III	V	E - Governance	100	04
	VI	Local Administration	100	04
		International Relations	100	04
		Indian Foreign Policy	100	04
		Contemporary Global Issues	100	04

IDEAL COLLEGE OF ARTS AND SCIENCES(A)
COMMERCE COURSE STRUCTURE UNDER CBCS
2021-2022

Year	Semester	Title	Max. Marks	Credits	
I	I	Fundamentals of Accounting	100	04	
		Business Organization and Management	100	04	
		Business Environment	100	04	
	II	II	Financial Accounting	100	04
			Business Economics	100	04
			Banking Theory & Practice	100	04
			Community Service Project	100	04
II	III	Advanced Accounting	100	04	
		Business Statistics	100	04	
		Marketing	100	04	
	IV	IV	Corporate Accounting	100	04
			Cost and Management Accounting	100	04
			Income Tax	100	04
			Business Laws	100	04
			Auditing	100	04
			Goods and service tax	100	04
			Short Term Internship	100	04
III	V	Business Leadership	50	02	
		Cost Accounting	100	04	
		Goods and service tax	100	04	
		Commercial Geography	100	04	
		Rural and farm credit	100	04	
		Central banking	100	04	
		Project work	100	04	
		VI	VI	Tally	100
	Marketing			100	04
	Auditing			100	04
	Management accounting			100	04
	Marketing financial service			100	04
	Financial Service			100	04
	Project work			100	04

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Bachelor of Vocation: Agriculture

Course structure and syllabi: w.e from 2020-21 Admitted Batch
Semester -III

S.No	Name of the Subject	Total Marks	Mid. Sem Exam	Sem. End Exam	Teaching Hours	Credits
1	English	100	30	70	4	3
2	Telugu	100	30	70	4	3
3	Analytical Skills (LSC-1)	50	---	50	2	2
4	Environmental Education (LSC-2)	50	---	50	2	2
5	Online Business (SD)	50	---			
6	Chemistry (Organic chemistry and spectroscopy)	100	30	70	4	4
7	Chemistry (Practical-III organic preparation and IR spectra analysis)	50	---	50	2	1
8	Agronomy of field crops	100	30	70	4	4
9	Agronomy of field crops Practical	50	--	50	2	1
10	Manures fertilizers and soil fertility management	100	30	70	4	1
11	Manures fertilizers and soil fertility management practical	50	---	50	2	1
12	Agricultural economics and farm management	100	30	70	4	4
13	On Job Training	50	---	50	2	1
		900	180	720	36	29

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Bachelor of Vocation: Agriculture

Course structure and syllabi: w.e from 2021-22 Admitted Batch

Semester -IV

S.No	Name of the Subject	Total Marks	Mid. Sem Exam	Sem. End Exam	Teaching Hours	Credits
1	English	100	30	70	4	3
2	Telugu	100	30	70	4	3
3	Chemistry (inorganic, organic and physical chemistry)	50	---	50	2	2
4	Chemistry (practical -IV organic qualitative analysis)	50	---	50	2	1
5	Chemistry (inorganic and physical chemistry)	100	30	70	4	4
6	Chemistry (practical -V course conductometric and potentiometric titrimetry)	50	---	50	2	1
7	Pest of field crops and their management	100	30	70	4	4
8	Pest of field crops and their management practical	50	---	50	2	1
9	Water management	100	30	70	4	1
10	Water management practical	50	---	50	2	1
11	Principles of Organic farming	100	30	70	4	4
12	Principles of Organic farming practical	50		50	2	1
13	Farm Power and Machinery	100	30	70	4	4
14	On Job Training	50	---	50	2	1
		900	180	720	36	29

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Bachelor of Vocation: Agriculture

Course structure and syllabi: w.e from 2021-22 Admitted Batch

Semester -I

S. No	Name of the Subject	Total Marks	Mid. Sem Exam	Sem.End Exam	Teaching Hours	Credits
1	English	100	30	70	4	3
2	Telugu	100	30	70	4	3
3	Basic computer application (LS)	50	-- -	50	2	2
4	Electrical appliances (SD)	50	---	50	2	2
5	Chemistry (Inorganic and Physical chemistry)	100	30	70	4	4
6	Chemistry (Practical- Analysis of salt mixture)	50	30	50	2	1
7	Introduction to Agronomy	100	30	70	4	4
8	Introduction to Agronomy Practical	50		70	2	1
9	Introduction to soil science	100	30	70	4	4
10	Introduction to soil science practical	50	---	50	2	1
11	Principles of plant breeding	100	30	70	4	4
12	On Job Training	50	---	50	2	1
		900	180	720	36	29

For
Prithvi B
N. Hanuoka

Y. K. Raju

IDEAL COLLEGE OF ARTS AND SCIENCES
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P.V.N. RAJU VIDYAPRANGANAM, KAKINADA

Bachelor of Vocation: Agriculture

Course structure and syllabi: w.e from 2021-22 Admitted Batch

Semester -II

S.No	Name of the Subject	Total Marks	Mid. Sem Exam	Sem.End Exam	Teaching Hours	Credits
1	English	100	30	70	4	3
2	Telugu	100	30	70	4	3
3	Information & Communication Technology (LSC)	50	---	50	2	2
4	Solar Energy (SD-1)	50	---	50	2	2
5	Advertising (SD-2)	50				
6	Chemistry(Organic and general chemistry)	100	30	70	4	4
7	Chemistry (Practical – II volumetric analysis)	50		50	2	1
8	Introduction to Entomology	100	30	70	4	4
9	Introduction to Entomology practical	50		50	2	1
10	Introduction to plant pathology	100	30	70	4	4
11	Introduction to plant pathology practical	50	---	50	2	1
12	Fundamentals of crop physiology	100	30	70	4	4
13	On Job Training	50	---	50	2	1
		900	180	720	36	30

B

Faith B

N. Hanita

Y. K. Raju

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P.V.N. RAJU VIDYAPRANGANAM, KAKINADA

Bachelor of Vocation: Sustainable Agriculture

Course structure and syllabi: w.e from 2021-22 Admitted Batch

Semester -IV

S.No	Name of the Subject	Total Marks	Mid. Sem Exam	Sem. End Exam	Teaching Hours	Credits
1	English	100	30	70	4	3
2	Telugu	100	30	70	4	3
3	Chemistry (inorganic, organic and physical chemistry)	50	---	50	2	2
4	Chemistry (practical -IV organic qualitative analysis)	50	---	50	2	1
5	Chemistry (inorganic and physical chemistry)	100	30	70	4	4
6	Chemistry (practical -V course conductometric and potentiometric titrimetry)	50	---	50	2	1
7	Pest of field crops and their management	100	30	70	4	4
8	Pest of field crops and their management practical	50	---	50	2	1
9	Water management	100	30	70	4	1
10	Water management practical	50	---	50	2	1
11	Principles of Organic farming	100	30	70	4	4
12	Principles of Organic farming practical	50		50	2	1
13	Farm Power and Machinery	100	30	70	4	4
14	On Job Training	50	---	50	2	1
		900	180	720	36	29

IDEAL COLLEGE OF ARTS AND SCIENCES

(A.P. GOVT., AIDED, AUTONOMOUS
& NAAC B) DR. P.V.N. RAJU
VIDYAPRANGANAM, KAKINADA

Bachelor of Vocation: Sustainable Agriculture
Semester -V (2021-22)

S.No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
General Education						
1.	Inorganic ,organic physical chemistry -1	100	25	75	4	3
2.	Lab Practical	50	0	50	2	2
3.	Inorganic ,organic physical chemistry-2	100	25	75	4	3
4.	Lab Practical	50	0	50	2	2
Skill Education						
1	Fundamentals of organic farming	100	25	75	4	4
2	Lab Practical	50	0	50	2	2
3	landscape designing and gardening	100	25	75	4	4
4	Lab Practical	50	0	50	2	2
5	Commercial enterprises	100	25	75	4	4
6	Project work	100	0	100	4	4
	Total	800			32	30

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IDEAL COLLEGE OF ARTS AND SCIENCES

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VIDYAPRANGANAM, KAKINADA

Bachelor of Vocation: Sustainable Agriculture Semester: VI

S.No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
General Education						
1.	Environmental chemistry	100	25	75	4	3
2.	Environmental chemistry lab	50	0	50	2	2
3.	Pests of field crops and vegetable crops	100	25	75	4	3
4.	Pests of field crops and vegetable crops lab	50	0	50	2	2
Skill Education						
1	Major flower crop production in india	100	25	75	4	4
2	Major flower crop production in india lab	50	0	50	2	2
3	Tropical and sub tropical fruit production	100	25	75	4	4
4	Tropical and sub tropical fruit production lab	50	0	50	2	2
5	Post Harvest Management of Horticultural crops	100	25	75	4	4
6	Project work-2	100	0	100	4	4
Total		800			30	30

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IDEAL COLLEGE OF ARTS AND SCIENCES
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P.V.N. RAJU VIDYAPRANGANAM, KAKINADA
Bachelor of Vocation: Sustainable Agriculture
Course structure and syllabi: w.e from 2020-21 Admitted Batch
Semester -III

S.No	Name of the Subject	Total Marks	Mid. Sem Exam	Sem. End Exam	Teaching Hours	Credits
1	English	100	30	70	4	3
2	Telugu	100	30	70	4	3
3	Analytical Skills (LSC-1)	50	---	50	2	2
4	Environmental Education (LSC-2)	50	---	50	2	2
5	Online Business (SD)	50	---			
6	Chemistry (Organic chemistry and spectroscopy)	100	30	70	4	4
7	Chemistry (Practical-III organic preparation and IR spectra analysis)	50	---	50	2	1
8	Agronomy of field crops	100	30	70	4	4
9	Agronomy of field crops Practical	50	--	50	2	1
10	Manures fertilizers and soil fertility management	100	30	70	4	1
11	Manures fertilizers and soil fertility management practical	50	---	50	2	1
12	Agricultural economics and farm management	100	30	70	4	4
13	On Job Training	50	---	50	2	1
		900	180	720	36	29

IDEAL COLLEGE OF ARTS AND SCIENCES
(A.P. GOVT., AIDED, AUTONOMOUS & NAAC B) DR.
P.V.N. RAJU VIDYAPRANGANAM, KAKINADA

Bachelor of Vocation: sustainable Agriculture

Course structure and syllabi: w.e from 2021-22 Admitted Batch

Semester -II

S.No	Name of the Subject	Total Marks	Mid. Sem Exam	Sem.End Exam	Teaching Hours	Credits
1	English	100	30	70	4	3
2	Telugu	100	30	70	4	3
3	Information & Communication Technology (LSC)	50	---	50	2	2
4	Solar Energy (SD-1)	50	---	50	2	2
5	Advertising (SD-2)	50				
6	Chemistry(Organic and general chemistry)	100	30	70	4	4
7	Chemistry (Practical – II volumetric analysis)	50		50	2	1
8	Introduction to Entomology	100	30	70	4	4
9	Introduction to Entomology practical	50		50	2	1
10	Introduction to plant pathology	100	30	70	4	4
11	Introduction to plant pathology practical	50	---	50	2	1
12	Fundamentals of crop physiology	100	30	70	4	4
13	On Job Training	50	---	50	2	1
		900	180	720	36	30

Ba

Talwar B

M. Hanida

V. Anusupam

IDEAL COLLEGES OF ARTS AND SCIENCES (ATONOMOUS)
 AFFILIATED TO ADIKAVI NANNYA UNIVERSITY
Bachelor of Vocation: INDUSTRIAL AQUACULTURE & FISHERIES
 Course structure and syllabi 2021-2022 Admitted Batch
 III Year; Semester V

S.No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
General Education						
1.	Inorganic, Organic and Physical chemistry-1	100	25	75	4	3
2.	Lab Practical	50	0	50	2	2
3.	Zoology (Animal-Biotechnology)	100	25	75	4	3
4.	Lab Practical	50	-	50	2	2
Skill Education						
1.	Fish Processing Technology and Quality Control	100	25	75	4	4
2.	Lab Practical	50	-	50	2	2
3.	Aquatic Pollution	100	25	75	4	4
4.	Lab	50	0	50	2	2
5.	Fisheries Policy, Law and Disaster Management	100	25	75	4	4
6.	Project-1	100	-	100	2	4
	Total	800			34	30

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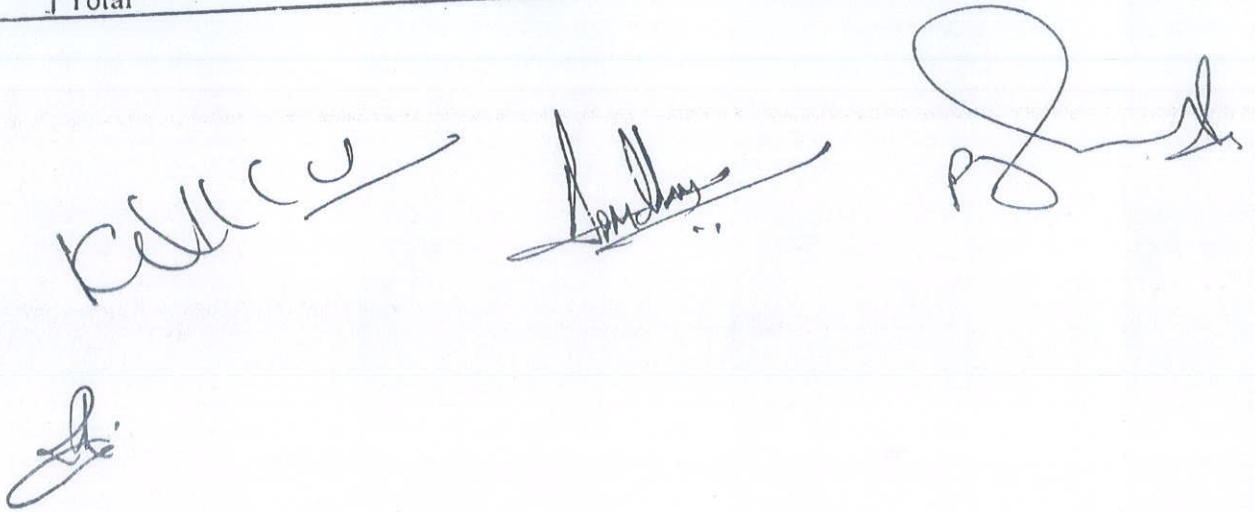
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IDEAL COLLEGES OF ARTS AND SCIENCES (ATONOMOUS)
 AFFILIATED TO ADIKAVI NANNYA UNIVERSITY
Bachelor of Vocation: INDUSTRIAL AQUACULTURE & FISHERIES
 Course structure and syllabi: 2021-2022 Admitted Batch
 III Year; Semester VI

S.No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
General Education						
1.	Environmental Chemistry	100	25	75	4	3
2.	Lab Practical	50	0	50	2	2
3.	Zoology (Immunology)	100	25	75	4	3
4.	Lab Practical	50	0	50	2	2
Skill Education						
1	Fisheries Economics and Marketing	100	25	75	4	4
2	Lab Practical	50	0	50	2	2
3	Aquaculture Engineering	100	25	75	4	4
4	Lab Practical	50	0	50	2	2
5	Fisheries Cooperatives and Marketing	100	25	75	4	4
6	Project Work-2	100	0	100	2	4
	Total	800			30	30



IDEAL COLLEGE OF ARTS AND SCIENCES
(AUTONOMOUS & NAAC B)
DR. P.V.N. RAJU VIDYAPRANGANAM, KAKINADA
Bachelor of Vocation: Industrial Aquaculture & Fisheries
Course Structure and Syllabus; 2021-2022
Admitted Batch II Year, Semester III

S.No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
General Education						
1	English	100	40	60	4	3
2	Second language-Telugu	100	40	60	4	3
3	Life Skill Course-1	50	-	50	2	2
4	Life Skill Course-2	50	-	50	2	2
5	Skill Development Course	50	-	50	2	2
Skill Education						
1	Zoology	100	40	60	4	4
	Lab Practical	50	-	50	2	1
2	Capture Fisheries	100	40	60	4	4
	Lab practical	50	-	50	2	1
3	Aquaculture Nutrition	100	40	60	4	4
	Lab Practical	50	-	50	2	1
4	Fish Seed Production	100	40	60	4	4
	OJT	50	-	50	2	1
	Total	1050			38	36

IDEAL COLLEGE OF ARTS AND SCIENCES
(AUTONOMOUS & NAAC B)
DR. P.V.N. RAJU VIDYAPRANGANAM, KAKINADA
Bachelor of Vocation: Industrial Aquaculture & Fisheries
Course Structure and Syllabus; 2021-2022
Admitted Batch II Year, Semester IV

S.No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
Skill Education						
1	Zoology-4	100	40	60	4	4
	Lab Practical	50	-	50	2	1
2	Zoology-5	100	40	60	4	4
	Lab Practical	50	-	50	2	1
3	Fish Genetics & Aquaculture Bio-Technology	100	40	60	4	4
	Lab Practical	50	-	50	2	1
4	Fish Pathology & Immunology	100	40	60	4	4
	Lab Practical	50	-	50	2	1
5	Ornamental Fish Culture	100	40	60	4	4
	Lab practical	50	-	50	2	1
6	Larval Nutrition & Culture of Fish Food Organisms	100	40	60	4	4
	OJT	50	-	50	2	1
7	Internship	100	-	-	-	4
	Total	1000			38	36

IDEAL COLLEGE OF ARTS AND SCIENCES
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Bachelor of Vocation: Industrial Aquaculture & Fisheries
Course Structure and Syllabus;2021-2022
Admitted Batch I Year, Semester I

S.No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
General Education						
1	English	100	30	70	4	3
2	Second language-Telugu	100	30	70	4	3
3	Life Skill Course	50	-	50	2	2
4	Skill Development Course	50	-	50	2	2
Skill Education						
1	Zoology	100	30	70	4	4
	Lab Practical	50	-	50	2	1
2	Biology of Fishes	100	30	70	4	4
	Lab practical	50	-	50	2	1
3	Principles of Aquaculture	100	30	70	4	4
	Lab Practical	50	-	50	2	1
4	Fresh Water Aquaculture	100	30	70	4	4
	OJT	50	-	50	2	1
	Total	900	-	-	36	30

IDEAL COLLEGE OF ARTS AND SCIENCES
(AUTONOMOUS & NAAC B)
DR. P.V.N. RAJU VIDYAPRANGANAM, KAKINADA
Bachelor of Vocation: Industrial Aquaculture & Fisheries
Course Structure and Syllabus; 2021-2022
Admitted Batch I Year, Semester II

S.No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
General Education						
1	English	100	40	60	4	3
2	Second language-Telugu	100	40	60	4	3
3	Life Skill Course-1	50	-	50	2	2
4	Life Skill Course-2	50	-	50	2	2
5	Skill Development Course	50	-	50	2	2
Skill Education						
1	Zoology	100	40	60	4	4
	Lab Practical	50	-	50	2	1
2	Biology of Fin Shell Fishes	100	40	60	4	4
	Lab practical	50	-	50	2	1
3	Brackish Water Aquaculture & Mari Culture	100	40	60	4	4
	Lab Practical	50	-	50	2	1
4	Fishing Methods	100	40	60	4	4
	OJT	50	-	50	2	1
5	Community Service Project	100	-	-	-	4
	Total	1050			38	36

IDEAL COLLEGE OF ARTS AND SCIENCES
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DR. P.V.N. RAJU VIDYAPRANGANAM, KAKINADA
Bachelor of Vocation: Commercial Aquaculture
Course structure and syllabus; 2021-2022
Admitted Batch II Year, Semester III

S.No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
General Education						
1	English	100	40	60	4	3
2	Second language-Telugu	100	40	60	4	3
3	Life Skill Course-1	50	-	50	2	2
4	Life Skill Course-2	50	-	50	2	2
5	Skill Development Course	50	-	50	2	2
Skill Education						
1	Zoology	100	40	60	4	4
	Lab Practical	50	-	50	2	1
2	Capture Fisheries	100	40	60	4	4
	Lab practical	50	-	50	2	1
3	Aquaculture Nutrition	100	40	60	4	4
	Lab Practical	50	-	50	2	1
4	Fish Seed Production	100	40	60	4	4
	OJT	50	-	50	2	1
	Total	1050			38	36

IDEAL COLLEGE OF ARTS AND SCIENCES
(AUTONOMOUS & NAAC B)
DR. P.V.N. RAJU VIDYAPRANGANAM, KAKINADA
Bachelor of Vocation: Commercial Aquaculture
Course structure and syllabus; 2021-2022
Admitted Batch II Year, Semester IV

S.No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
Skill Education						
1	Zoology-4	100	40	60	4	4
	Lab Practical	50	-	50	2	1
2	Zoology-5	100	40	60	4	4
	Lab Practical	50	-	50	2	1
3	Fish Genetics & Aquaculture Bio-Technology	100	40	60	4	4
	Lab Practical	50	-	50	2	1
4	Fish Pathology & Immunology	100	40	60	4	4
	Lab Practical	50	-	50	2	1
5	Ornamental Fish Culture	100	40	60	4	4
	Lab practical	50	-	50	2	1
6	Larval Nutrition & Culture of Fish Food Organisms	100	40	60	4	4
	OJT	50	-	50	2	1
7	Internship	100	-	-	-	4
	Total	1000			38	36

IDEAL COLLEGE OF ARTS AND SCIENCES
(AUTONOMOUS & NAAC B)
DR. P.V.N. RAJU VIDYAPRANGANAM, KAKINADA
Bachelor of Vocation: Commercial Aquaculture
Course structure and syllabus; 2021-2022
Admitted Batch I Year, Semester I

S.No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
General Education						
1	English	100	30	70	4	3
2	Second language-Telugu	100	30	70	4	3
3	Life Skill Course	50	-	50	2	2
4	Skill Development Course	50	-	50	2	2
Skill Education						
1	Zoology	100	30	70	4	4
	Lab Practical	50	-	50	2	1
2	Biology of Fishes	100	30	70	4	4
	Lab practical	50	-	50	2	1
3	Principles of Aquaculture	100	30	70	4	4
	Lab Practical	50	-	50	2	1
4	Fresh Water Aquaculture	100	30	70	4	4
	OJT	50	-	50	2	1
	Total	900	-	-	36	30

IDEAL COLLEGE OF ARTS AND SCIENCES
(AUTONOMOUS & NAAC B)
DR. P.V.N. RAJU VIDYAPRANGANAM, KAKINADA
Bachelor of Vocation: Commercial Aquaculture
Course structure and syllabus; 2021-2022
Admitted Batch I Year, Semester II

S.No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
General Education						
1	English	100	40	60	4	3
2	Second language-Telugu	100	40	60	4	3
3	Life Skill Course-1	50	-	50	2	2
4	Life Skill Course-2	50	-	50	2	2
5	Skill Development Course	50	-	50	2	2
Skill Education						
1	Zoology	100	40	60	4	4
	Lab Practical	50	-	50	2	1
2	Biology of Fin Shell Fishes	100	40	60	4	4
	Lab practical	50	-	50	2	1
3	Brackish Water Aquaculture & Mari Culture	100	40	60	4	4
	Lab Practical	50	-	50	2	1
4	Fishing Methods	100	40	60	4	4
	OJT	50	-	50	2	1
5	Community Service Project	100	-	-	-	4
	Total	1050			38	36

IDEAL COLLEGE OF ARTS AND SCIENCES

(Autonomous & NAAC-B)
DR.P.V.N RAJU VIDYAPRANGANAM
KAKINADA-533002

Department of Food Science & Technology
Course structure under CBCS (2021-22)
B.sc- Food technology

Year	Semester	Title	Max.Marks	Credits
I	I	Food Production Trends	100	04
		Chemistry	100	04
		Food Science & Nutrition I	100	04
	II	Food Science & Nutrition II	100	04
		Chemistry	100	04
		Basic Principles of Food Preservation	100	04
		Community service project	100	04
II	III	Processing of Milk & Milk Products	100	05
		Processing of cereals, pulses and oil seeds	100	04
		Food Science & Nutrition III	100	04
	IV	Food business management	100	04
		Food safety and microbial standards	100	04
		New product development and sensory science	100	04
		Food engineering	100	04
		Processing of fruits and vegetables	100	04
		Food additives	100	04
		SHORT TERM INTERNSHIP(2 months)	100	04

G. V. Rao

IDEAL COLLEGE OF ARTS AND SCIENCES

(A.P. GOVT., AIDED, AUTONOMOUS & NAAC-B)

DR. P.V.N. RAJU VIDYAPRANGANAM

KAKINADA - 533002.

Department of Computer Science

Course structure and syllabi: w. e. from 2020 -21 Admitted Batch.

B.Voc - Software Development (Second Year).

Semester - III

S.No	Course	Name of the Subject	Total Marks	Mid. Sem Exam	Sem. End Exam	Teaching Hours	Credits
1	First Language	English	100	30	70	4	3
2	Second Language	Telugu	100	30	70	4	3
3	Life Skill Course 1	Analytical Skills	50	---	50	2	2
4	Life Skill Course 2	Environmental Education	50	---	50	2	2
4	Skill Development Course	Online Business	50	---	50	2	2
5	Major 1	Numerical Analysis	100	30	70	4	4
6	Major 2	Data Structures Using C	100	30	70	4	4
7	Core 1	Introduction to Python Programming	100	30	70	4	4
8	Core 2	Object Oriented Programming Through JAVA	50	--	50	2	2
9	Major 1 Lab	Numerical Analysis & Programming Lab.	50	---	50	2	1
10	Major 2 Lab	DS Using C Lab	50	---	50	2	1
11	Core 1 Lab	Python Programming Lab.	50	---	50	2	1
12	Core 2 Lab* Institutional On Job Training	Java Programming Lab.	50	---	50	2	1
			900	150	750	36	30

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IDEAL COLLEGE OF ARTS AND SCIENCES

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DR. P.V.N. RAJU VIDYAPRANGANAM

KAKINADA - 533002.

Department of Computer Science

Course structure and syllabi: w. e. from 2020 -21 Admitted Batch.

B.Voc - Software Development (Second Year).

Semester - IV

S.No	Course	Name of the Subject	Total Marks	Mid. Sem Exam	Sem. End Exam	Teaching Hours	Credits
Major I							
1	Course 1	Advanced Numerical Analysis	100	30	70	4	4
2	Course 2	Discrete Mathematical Structures	100	30	70	4	4
3	Course 1 Lab	Advanced Numerical Analysis Lab	50	---	50	2	1
4	Course 2 Lab	Discrete Mathematical Structures Lab	50	---	50	2	1
Major II							
5	Course 1	Object Oriented Software Engineering	100	30	70	4	4
6	Course 2	Operating Systems	100	30	70	4	4
7	Course 1 Lab	Object Oriented Software Engineering Lab	50	---	50	2	1
8	Course 2 Lab	Operating Systems Lab.	50	---	50	2	1
Vocational Courses							
9	Course 1	Web Programming	100	30	70	4	4
10	Course 2	Basics of Cloud Computing	100	30	70	4	4
11	Course 1 Lab	Web Programming - Lab	50	---	50	2	1
12	Course 2 Lab	Cloud Computing Lab	50	---	50	2	1
13	Apprenticeship	----	100	---	---	---	4
			1000	180	720	36	34

P. Venk

D. Venk

IDEAL COLLEGE OF ARTS AND SCIENCES
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DR. P.V.N. RAJU VIDYAPRANGANAM
KAKINADA

BBA (Digital Marketing) COURSE STRUCTURE)

Semester – III

Sl. No.	Course	Name of the subject	Total Marks	Mid. Sem. Exam	Sem. End Exam	Teaching Hours	Cred
1.	First Language	General English	100	30	70	4	3
2.	Second Language	(Tel/Hindi/Urdu/Sans)	100	30	70	4	3
3.	Life Skill Course	Analytical Skills	50	---	50	2	2
4.	Life Skill Course	Environmental Education	50	---	50	2	2
5.	Skill Development Course	Online Business	50	---	50	2	2
6.	CORE 1	Organizational Behavior	100	30	70	5	4
7.	CORE 2	Search Engine Optimization	100	30	70	5	4
8.	CORE 3	Financial Management	100	30	70	5	4
Total			650	150	500	29	24

Semester – IV

Sl. No.	Course	Name of the subject	Total Marks	Mid. Sem. Exam	Sem. End Exam	Teaching Hours	Credi
1.	CORE 1	Training and Development	100	30	70	5	4
2.	CORE 2	Business Law	100	30	70	5	4
3.	CORE 3	Micro, Small, Medium Enterprises Management	100	30	70	5	4
4.	CORE 4	International Business	100	30	70	5	4
5.	CORE 5	Search Engine Marketing & Affiliate Marketing	100	30	70	5	4
6.	CORE 6	Cyber Law	100	30	70	5	4
7.	Internship	Corporate Internship	100				4
Total			700	180	420	30	28

M Parthi

A. Singh

K. Rao

N. Visal

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