

ANDHRA UNIVERSITY  
B.Sc. (CBCS) SEMESTER PATTERN  
DEGREE EXAMINATIONS : February/March 2023  
Admitted Batch 2015-2019

**SIXTH SEMESTER (SUPPLEMENTARY)  
TIME-TABLE**

Day ,Date & Hours	Subject	Max. Marks
Friday 10-02-2023 9AM TO 12 PM	<b><u>MATHEMATICS (Common for B.A &amp; B.Sc.,)</u></b>	
	Elective-VII(A) Laplace Transforms <span style="float: right;">BS-S3201/BA-S3201</span>	75
	Elective-VII(B) Numerical Analysis <span style="float: right;">BS-S3202/BA-S3202</span>	75
	Elective-VII(C) Number Theory & Elective Problem Solving Sessions <span style="float: right;">BS-S3203/BA-S3203</span>	75
	<b><u>BOTANY</u></b>	
	Theory (Elective -I) Paper VII(A) Optional <span style="float: right;">BS-S3234</span>	75
	Paper VII(A) Organic Farming and Sustainable agriculture	
	Theory (Elective-II) VII(B) optional <span style="float: right;">BS-S3235</span>	75
	Paper VII(B) T Nursery, Gardening and Floriculture	
	Theory (Elective-III) Paper VII (C) Optional <span style="float: right;">BS-S3236</span>	75
Paper VII(C) T Plant tissue culture and its Biotechnological applications		
Monday 13-02-2023 9AM TO 12 PM	<b><u>PHYSICS</u></b>	
	Elective Paper VII(A) Analog and Digital Electronics <span style="float: right;">BS-S3210</span>	75
	Elective Paper VII (B) Material Science <span style="float: right;">BS-S3211</span>	75
	Elective Paper VII (C) Renewal Energy <span style="float: right;">BS-S3212</span>	75
	<b><u>ZOOLOGY</u></b>	
	Elective Paper VII(A) 1 Immunology <span style="float: right;">BS-S3242</span>	75
	Elective Paper VII(B) Cellular Metabolism and Molecular Biology <span style="float: right;">BS-S3243</span>	75
Elective Paper VII(C) Bioinformatics <span style="float: right;">BS-S3244</span>	75	
Tuesday 14-02-2023 9AM TO 12 PM	<b><u>COMPUTER SCIENCE</u></b>	
	Paper VII Elective A Operating Systems <span style="float: right;">BS-S3254</span>	75
	Paper VII Elective B Computer Networks <span style="float: right;">BS-S3255</span>	75
	Paper VII Elective C Web Technologies <span style="float: right;">BS-S3256</span>	75
	<b><u>BIO-CHEMISTRY</u></b>	
	Elective Theory Paper VII (A) Microbiology and Molecular Biology <span style="float: right;">BS-S3275</span>	75
	Elective Theory Paper VII (B) Biochemistry of Cell <span style="float: right;">BS-S3276</span>	75
	Elective Theory Paper VII (C) Biochemical Correlations in Diseases <span style="float: right;">BS-S3277</span>	75
	<b><u>Nutrition</u></b>	
Paper VII (A) Food Microbiology Hygiene & Sanitation <span style="float: right;">BS-S3340</span>	75	

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<b>Wednesday 15-02-2023</b> <b>9AM TO 12 PM</b>	<b><u>CHEMISTRY</u></b>		
	Elective Paper VII(A) Analytical Methods in Chemistry	BS-S3222	75
	Elective Paper VII(B) Environmental Chemistry	BS-S3223	75
	Elective Paper VII(C) Green Chemistry	BS-S3224	75
	<b><u>HUMAN GENETICS</u></b>		
	Elective Theory VII-A Basics of Human Biology	BS-S3321	75
Elective Theory VII-B Human Genome Project and Genomes	BS-S3322	75	
Elective Theory VII-C Molecular Techniques in Genetic Engineering	BS-S3323	75	
<b><u>ECONOMICS</u></b>		<b>(See B.A. Time-Table</b>	
Elective Theory VII-A Agricultural Economics	BS-S3343/BA-S3226	75	
Elective Theory VII - F Public Finance			
<b>Thursday 16-02-2023</b> <b>9AM TO 12 PM</b>	<b><u>FISHERIES</u></b>		
	Elective Paper VII-A Postharvest Technology	BS-S3336	75
	<b><u>BIO-TECHNOLOGY</u></b>		
	Elective Paper: VII(A) Plant and Animal Biotechnology	BS-S3287	75
	Elective Paper: VII (B) Environmental Biotechnology	BS-S3288	75
	Elective Paper: VII(C) Industrial Biotechnology (Elective Theory)	BS-S3289	75
	<b><u>AGRICULTURE</u></b>		
	Paper VII: Elective –A Extension	BS-S3317	75
	<b><u>ELECTRONICS</u></b>		
	Paper VII(A) Electronic Instrumentation(Elective)	BS-S3263	75
	Paper VII(B) Microcontroller and Interface (Elective)	BS-S3264	75
Paper VII(C) Modern Communication Systems (Elective)	BS-S3265	75	
<b><u>Horticulture</u></b>			
Paper VII Plantation Crops and Weed Management	BS-S3333	75	
<b>Friday 17-02-2023</b> <b>9AM TO 12 PM</b>	<b><u>MICROBIOLOGY</u></b>		
	Elective Paper VII(A) Food and Industrial Microbiology	BS-S3299	75
	Elective Paper VII(B) Microbial Biotechnology	BS-S3300	75
	Elective Paper VII(C) Microbial Quality Control Instrumentation and biotechniques	BS-S3301	75
	<b><u>STATISTICS</u></b>		
	(Common with B.A. & B.Sc.) with math combination		
	Elective Paper – VII(A) Applied Statistics	BS-S3311/BA-S3311	75
Elective Paper – VII(B) Demography and Vital Statistics	BS-S3312/BA-S3312	75	

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Monday 20-02-2023  
9AM TO 12 PM

Paper VIII

CLUSTER ELECTIVES-1(A-1, B1 & C1)

MATHEMATICS (Common for B.A & B.Sc)

Cluster Elective VIII-A-1 Integral Transforms	BS-S3204/BA-S3204	75
Cluster Elective VIII-B-1 Principles of Mechanics	BS-S3206/BA-S3206	75
Cluster Elective VIII-C-1 Graph Theory	BS-S3208/BA-S3208	75

PHYSICS

Cluster Elective Paper VIII-A-1-Introduction to Microprocessors & Microcontrollers	BS-S3213	75
Cluster Elective Paper VIII-B-1 Fundamentals of Nanoscience	BS-S3216	75
Cluster Elective Paper VIII-C-1 Solar Thermal and Photovoltaic Aspects	BS-S3219	75

CHEMISTRY

Cluster Electives – I Paper VIII-A-1 Polymer Chemistry	BS-S3225	75
Paper VIII-B-1 Fuel Chemistry & Batteries	BS-S3228	75
Paper VIII-C-1 Organic Spectroscopic Techniques	BS-S3231	75

BOTANY

VIII-A-1 Theory Plant diversity and human welfare	BS-S3237	75
VIII -B-1 Biological Instrumentation and Methodology	BS-S3240	75

ZOOLOGY

Cluster Elective Paper VIII A-1 Clinical Biochemistry	BS-S3245	75
Cluster Elective Paper VIII B-1 Principles of Aquaculture	BS-S3248	75
Cluster Elective Paper VIII C-1 General Sericulture Mulberry Cultivation and Management	BS-S3251	75

COMPUTER SCIENCE

Paper VIII Elective A 1 Foundations of Date Science	BS-S3257	75
Paper VIII Elective B-I Distributed Systems	BS-S3259	75
Paper VIII Elective –C-1 PHP-MySQL , Wordpress	BS-S3261	

ELECTRONICS

Paper VIII-A-1-Electronics Circuits and PCB Designing	BS-S3266	75
Paper VIII-B-1-Embedded Systems	BS-S3269	75
Paper VIII -C-1 Digital Signal Processing	BS-S3272	75

BIO-CHEMISTRY

Cluster Theory VIII-(A-1) Molecular biology	BS-S3278	75
Cluster Theory VIII-(B-1) Cell Biology-1	BS-S3281	75
Cluster Theory VIII-(C-1) Diagnostic Biochemistry	BS-S3284	75

Monday 20-02-2023  
9 AM TO 12 PM

BIO-TECHNOLOGY

Cluster Elective –I VIII-A (1) Nutritional Biotechnology	BS-S3290	75
Cluster Elective –II VIII-B-1-(1) Tissue culture	BS-S3293	75
Cluster Electives –III VIII-C-1- Cell Biology	BS-S3296	75

MICROBIOLOGY

Cluster Elective VIII-A (1) Industrial Microbiology	BS-S3302	75
Cluster Elective VIII –B (1) r DNA Technology	BS-S3305	75
Cluster Elective VIII – C (1) Biostatistics and Bioinformatics	BS-S3308	

STATISTICS

VIII (A1) Optimization Techniques	BS-S3313/BA-S3313	75
VIII-B (1) Advanced Experimental Design	BS-S3315/BA-S3315	75

AGRICULTURE

(Cluster A-1) Paper VIII ( Forestry and Organic Farming) Forestry – I		
	BS-S3318	75

HUMAN GENETICS

Cluster Theory VIII-A(1) Molecular Pathology in Human Diseases	BS-S3324	75
Cluster Theory VIII-B(1) Molecular Genetics	BS-S3327	75
Cluster Theory VIII-C(1) Clinical Genetics & Genetic Counseling	BS-S3330	75

FISHERIES

Cluster Elective Paper VIII A 1 Fishery Economics and Extension	BS-S3337	75
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NUTRITION

Cluster Elective Paper VIII A 1 Applied Life Sciences	BS-S3341	75
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Horticulture

Paper VIII A-1 Medicinal and Aromatic Crops (Elective)	BS-S3334	75
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Tuesday 21-02-2023  
9AM TO 12 PM

Paper VIII

CLUSTER ELECTIVES-2 (A2,B2 & C2)

MATHEMATICS (Common for B.A & B.Sc)

Cluster Elective VIII-A-2 Advanced Numerical Analysis	BS-S3205/BA-S3205	75
Cluster Elective VIII-B- 2 Fluid Mechanics	BS-S3207/BA-S3207	75
Cluster Elective VIII-C-2 Applied Graph Theory	BS-S3209/BA-S3209	75

PHYSICS

Cluster Elective Paper VIII-A-2 Computational Physics and Programming		
Cluster Elective Paper VIII-B-2 Synthesis and Characterization of Nanomaterials	BS-S3214	75
Cluster Elective Paper VIII-C-2 Wind, Hydro and Ocean Energies	BS-S3217 BS-S3220	75 75

CHEMISTRY

Paper VIII-A-2 Instrumental Methods of Analysis	BS-S3226	75
Paper VIII-B-2 Inorganic Materials of Industrial Importance	BS-S3229	75
Paper VIII-C-2 Advanced Organic Reactions	BS-S3232	75

BOTANY

VIII-A-2 Theory Ethno botany and medicinal Botany	BS-S3238	75
VIII -B-2 Mushroom culture and Technology	BS-S3241	75

ZOOLOGY

Cluster Elective Paper VIII A-2 Haematology	BS-S3246	75
Cluster Elective Paper VIII B-2 Aquaculture Management	BS-S3249	75
Cluster Elective Paper VIII C-2 Biology of Mulberry silk worm and Silk worm Rearing Technology	BS-S3252	75

COMPUTER SCIENCE

Paper VIII Elective A 2 Big Date Technology	BS-S3258	75
Paper VIII Elective B-2 Cloud Computing	BS-S3260	75
Paper VIII Elective-C-2 VIII Advanced Java Script: JQUERY/AJAX/JSON/ Angular JS	BS-S3262	75

ELECTRONICS

Paper VIII-A-2- Bio Medical Instrumentation	BS-S3267	75
Paper VIII-B-2-Basic VLSI Design	BS-S3270	75
Paper VIII -C-2- Transmission Lines, Antenna and Wave Propagation	BS-S3273	75

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Tuesday 21-02-2023  
9AM TO 12 PM

<u>BIO-CHEMISTRY</u>		
Cluster Theory VIII-(A-2) R DNT Technology	BS-S3279	75
Cluster Theory VIII-(B-2) Cell Biology-2	BS-S3282	75
Cluster Theory VIII-(C-2) Clinical Biochemistry	BS-S3285	75
<u>BIO-TECHNOLOGY</u>		
Cluster Elective -I VIII-A(2) Food Biotechnology	BS-S3291	75
Cluster Elective -II VIII-B (2) Industrial Biotechnology	BS-S3294	75
Cluster Elective - III VIII-C (2) Gene Biotechnology	BS-S3297	75
<u>MICROBIOLOGY</u>		
Cluster Elective VIII- A(2)Food Microbiology	BS-S3303	75
Cluster Elective VIII -B (2) Microbes in Sustainable Agriculture	BS-S3306	75
Cluster Elective VIII -C (2) Bio safety and Intellectual property Right	BS-S3309	75
<u>STATISTICS</u>		
VIII A(2) Operations Research	BS-S3314/BA-S3314	
VIII-B (2) Actuarial Statistics	BS-S3316/BA-S3316	75
<u>AGRICULTURE</u>		
Cluster A-2- Paper VIII (Forestry and organic Farming) Forestry - I	BS-S3319	75
<u>HUMAN GENETICS</u>		
Cluster Theory VIII-A(2) Cytogenetics	BS-S3325	75
Cluster Theory VIII-B(2) Human Biochemical Genetics	BS-S3328	75
Cluster Theory VIII-C(2) Laboratory Diagnosis in Genetics	BS-S3331	75
<u>FISHERIES</u>		
Cluster Elective Paper VIII A 2 Fish Genetics and Seed Production	BS-S3338	75
<u>NUTRITION</u>		
Cluster Elective Paper VIII A 2 Diet Therapy	BS-S3342	75
<u>Horticulture</u>		
Paper VIII A-2 Horticulture, Farm Finance and Marketing (Elective)	BS-S3335	75

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Wednesday 22-02-2023  
9AM TO 12 PM

Paper VIII  
CLUSTER ELECTIVES-3 (A-3, B-3 & C3)

PHYSICS

Cluster Elective Paper VIII-A-3 Electronic Instrumentation	BS-S3215	75
Cluster Elective Paper VIII-B-3 Applications of Nanomaterials and Devices	BS-S3218	75
Cluster Elective Paper VIII-C-3 Energy Storage Devices	BS-S3221	75

CHEMISTRY

Paper VIII-A-3 Analysis of Drugs, Foods, Dairy Products & Bio-chemical Analysis	BS-S3227	75
Paper VIII-B-3 Analysis of Applied Industrial Products	BS-S3230	75
Paper VIII-C-3 Pharmaceutical and Medicinal Chemistry	BS-S3233	75

BOTANY

VIII-A3 Theory Pharmacognosy and Phytochemistry	BS-S3239	75
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ZOOLOGY

Cluster Elective Paper VIII A-3 Clinical Microbiology	BS-S3247	75
Cluster Elective Paper VIII B-3 Postharvest Technology	BS-S3250	75
Cluster Elective Paper VIII C-3 Silk Technology Silk Marketing and Extension	BS-S3253	75

ELECTRONICS

Paper VIII-A-3- Consumer Electronics	BS-S3268	75
Paper VIII-B-3-Computer Net Works	BS-S3271	75
Paper VIII-C-3- Mobile Application Programming	BS-S3274	75

BIO-CHEMISTRY

Cluster Theory VIII-(A-3) Microbiology	BS-S3280	75
Cluster Theory VIII-(B-3) Membrane Biology	BS-S3283	75
Cluster Theory VIII-(C-3) Bio-Chemical Genetics	BS-S3286	75

BIO-TECHNOLOGY

Cluster Elective -I VIII -A (3) Metabolisms	BS-S3292	75
Cluster Elective-II VIII-B (3) Environmental Biotechnology	BS-S3295	75
Cluster Elective-III VIII-c(3) Biostatistics and Bioinformatics	BS-S3298	75

MICROBIOLOGY

Cluster Elective VIII -A(3)Management of Human Microbial Diseases	BS-S3304	75
Cluster Elective VIII - B (3) Bio-fertilizers and Bio- pesticides	BS-S3307	75
Cluster Elective VIII-C (3) Drug design and Discovery	BS-S3310	75

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<b>Wednesday 22-02-2023</b> <b>9AM TO 12 PM</b>	<b><u>AGRICULTURE</u></b>	
	(Cluster A-3) Paper VIII (Forestry and Organic Farming)	
	Organic Farming & Sustainable Agriculture	BS-S3320 75
	<b><u>HUMAN GENETICS</u></b>	
	Cluster Theory VIII-A(3) Genetics and Society	BS-S3326 75
	Cluster Theory VIII-B(3) Human Population Genetics	BS-S3329 75
	Cluster Theory VIII-C(3) Developmental & Behavioral Genetics	BS-S3332 75
<b><u>FISHERIES</u></b>		
Cluster Elective paper VIII A 3 Fish Nutrition and Feed Technology	BS-S3339 75	

(By order)

C.A.O., AU, VSP  
Dt: 09-01-2023

  
(T. CHITTI BABU)  
CONTROLLER OF EXAMINATIONS




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ANDHRA UNIVERSITY  
B.Sc. – FOOD TECHNOLOGY  
DEGREE EXAMINATIONS (CBCS) SEMESTER PATTERN : February/March,2023  
Admitted Batch 2015-2019

**SIXTH SEMESTER (SUPPLEMENTARY)  
TIME-TABLE**

Day ,Date & Hours	Subject	Max. Marks
Friday 10-02-2023 9AM TO 12 PM	DSC-1 Paper-7 Part: II Research Methodology Time: 3 hours BS-S3357	75
Monday 13-02-2023 9AM TO 12 PM	DSC-1 Paper-7 Part: II Food Processing Equipment -2 Time: 3 hours BS-S3358	75
Tuesday 14-02-2023 9AM TO 12 PM	DSC-1 Paper-7 Part: II Food Packaging -2 Time: 3 hours BS-S3359	75
Wednesday 15-02-2023 9AM TO 12 PM	CLUSTER -1 (Paper-8) A-1 : Food quality and Certification B-1 : Post harvest Technology C-1 : Functional Foods and Nutraceuticals Time: 3 hours BS-S3360 BS-S3363 BS-S3366	75 75 75
Thursday 16-02-2023 9AM TO 12 PM	CLUSTER -2 (Paper-8) A-2 : Instrumentation for Food Analysis B-2 : Food Science Technology C-2 : Food Product Development & Evaluation Time: 3 hours BS-S3361 BS-S3364 BS-S3367	75 75 75
Friday 17-02-2023 9AM TO 12 PM	CLUSTER -3 (Paper-8) A-3 : Food Safety and Hygeine -1 B-3 : Banking Technology/## C-3 : Sensory Evaluation ## Time: 3 hours BS-S3362 BS-S3365 BS-S3368	75 75 75

C.A.O., AU, VSP  
Dt: 09-01-2023

  
(T. CHITTI BABU)  
CONTROLLER OF EXAMINATIONS

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ANDHRA UNIVERSITY  
B.Sc. – FOOD SCIENCE AND NUTRITION  
Admitted Batch 2015-2019

DEGREE EXAMINATIONS (CBCS) SEMESTER PATTERN : February/March, 2023

**SIXTH SEMESTER (SUPPLEMENTARY)  
TIME-TABLE**

Day ,Date & Hours	Subject	Max. Marks
Friday 10-02-2023 9AM TO 12 PM	DSC-1 Paper-7 Part: II Food Production Time: 3 hours BS-S3345	75
Monday 13-02-2023 9AM TO 12 PM	DSC-1 Paper-7 Part: II Functional Foods and Nutraceuticals Time: 3 hours BS-S3346	75
Tuesday 14-02-2023 9AM TO 12 PM	DSC-1 Paper-7 Part: II Nutrition and Critical Care Time: 3 hours BS-S3347	75
Wednesday 15-02-2023 9AM TO 12 PM	CLUSTER -1 (Paper-8) A-1 : Food Packaging B-1 : Food Service Management C-1 : Sensory Evaluation Time: 3 hours BS-S3348 BS-S3351 BS-S3354	75 75 75
Thursday 16-02-2023 9AM TO 12 PM	CLUSTER -2 (Paper-8) A-2 : Food trade and business Management B-2 : Food Production and Patisserie C-2 : Food Product Development Time: 3 hours BS-S3349 BS-S3352 BS-S3355	75 75 75
Friday 17-02-2023 9AM TO 12 PM	CLUSTER -3 (Paper-8) A-3 : Food quality and certification B-3 : Food Commodities and Preparation C-3 : Food Service Facilities Planning Time: 3 hours BS-S3350 BS-S3353 BS-S3356	75 75 75

C.A.O., AU, VSP  
Dt: 09-01-2023

  
(T. CHITTI BABU)  
CONTROLLER OF EXAMINATIONS