

ANDHRA UNIVERSITY

**B.Sc. (CBCS) Degree Examinations :March/April, 2023
Skill Enhancement Courses, Semesters From-2022-2023
(REVISED SYLLABUS- w.e.f. 2020-2021)**

(REVISED TIME TABLE) , FIFTH semester REGULAR

| Date and Day | Time | Subject | Paper Code | Max Marks |
|---|--------------|--|--------------|--|
| 24 th March, 2023 (Friday) | 2 PM TO 5 PM | Part-II: MATHEMATICS (Common with B.A & B.Sc.) | | |
| | | Paper :6A Numerical Methods | BS-S7119 | 75 |
| | | Paper: 6B Multiple Integrals and Applications Vector Calculus | BS-S7120 | 75 |
| | | Paper : 6C Partial Differential Equations and Fourier Series | BS-S7121 | 75 |
| | | Part-II: BOTANY | | |
| | | Paper : 6A Plant Propagation | BS-S7143 | 75 |
| | | Paper : 6B Vegetable Crops-cultivation Practices | BS-S7144 | 75 |
| | | Paper : 6C Plant Tissue Culture | BS-S7145 | 75 |
| | | Paper : 6D Gardening and Landscaping | BS-S7146 | 75 |
| | | 25 th March, 2023 (Saturday) | 2 PM TO 5 PM | Part-II: MATHEMATICS (Common with B.A & B.Sc.) |
| Paper : 7A Mathematical Special Functions | BS-S7122 | | | 75 |
| Paper -: 7B Integral Transforms with Applications | BS-S7123 | | | 75 |
| Paper: 7C Number Theory | BS-S7124 | | | 75 |
| Part-II: BOTANY | | | | |
| Paper: 7A Seed technology | BS-S7147 | | | 75 |
| Paper : 7B Vegetable Crops-post Harvest Practices | BS-S7148 | | | 75 |
| Paper : 7C Mushroom Cultivation | BS-S7149 | | | 75 |
| Paper : 7D Agro forestry | BS-S7150 | | | 75 |
| 27 th March, 2023 (Monday) | 2 PM TO 5 PM | | | Part-II: PHYSICS (for Maths combination) |
| | | Paper :6A Optical instruments and optometry | BS-S71128 | 75 |
| | | Paper: 6B Low temperature physics & Refrigeration | BS-S71129 | 75 |
| | | Paper : 6C Applications of Electricity & Electronics | BS-S71130 | 75 |
| | | Part II: ZOOLOGY | | |
| | | Paper:6A Sustainable Aquaculture Management | BS-S7125 | 75 |
| | | Paper:6B Live stock management-I (Biology of Dairy Animals) | BS-S7126 | 75 |
| | | Paper:6C Poultry Management –I (Poultry Farming) | BS-S7127 | 75 |
| | | Paper:6D Seri culture –I | BS-S7128 | 75 |
| | | Part-II: HUMAN GENETICS | | |
| | | Paper : HGT A1 Clinical Genetics & Genetic Counseling | BS-S71134 | 75 |
| | | Paper : HGT B1 Human Genome project And Genomes | BS-S71135 | 75 |
| | | Paper: HGT CI Developmental & Behavioral Genetics | BS-S71136 | 75 |

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| Date and Day | Time | Subject | Paper Code | Max Marks |
|---|--------------|--|--------------|---------------------------|
| 28 th March, 2023 (Tuesday) | 2 PM TO 5 PM | Part-II: PHYSICS (for maths combination) | | |
| | | Paper : 7A Optical imaging and photography | BS-S71131 | 75 |
| | | Paper : 7B Solar Energy and Applications | BS-S71132 | 75 |
| | | Paper : 7C Electronic Instrumentation | BS-S71133 | 75 |
| | | Part-II: ZOOLOGY | | |
| | | Paper : 7A Post harvest technology of fish and Fisheries | BS-S7129 | 75 |
| | | Paper : 7B Live stock management II (Dairy production and management) | BS-S7130 | 75 |
| | | Paper : 7C Poultry Management – II (Poultry production and management) | BS-S7131 | 75 |
| | | Paper : 7D Seri Culture – II | BS-S7132 | 75 |
| | | Part-II: HUMAN GENETICS | | |
| | | Paper : HGT A2 Laboratory Diagnosis in Genetics | BS-S71137 | 75 |
| | | Paper : HGT B2 Molecular Techniques in Genetic Engineering | BS-S71138 | 75 |
| | | Paper : HGT C2 Molecular Pathology in Human Diseases | BS-S71139 | 75 |
| | | 29 th March, 2023 (Wednesday) | 2 PM TO 5 PM | Part II: CHEMISTRY |
| Paper: 6A Synthetic Organic Chemistry | BS-S7133 | | | 75 |
| Paper 6B Analytical Methods in Chemistry | BS-S7134 | | | 75 |
| Paper :6C Industrial Chemistry –I | BS-S7135 | | | 75 |
| Paper :6D Environmental Chemistry | BS-S7136 | | | 75 |
| Paper :6E Analytical Methods in Chemistry | BS-S7137 | | | 75 |
| 31 st March, 2023 (Friday) | 2 PM TO 5 PM | Part-II: CHEMISTRY | | |
| | | Paper : 7A Analysis of organic compounds | BS-S7138 | 75 |
| | | Paper : 7B Analytical Methods in Chemistry –I | BS-S7139 | 75 |
| | | Paper : 7C Industrial Chemistry-2 | BS-S7140 | 75 |
| | | Paper : 7D Green Chemistry and Nanotechnology | BS-S7141 | 75 |
| Paper : 7E Cosmetics and Pharmaceutical Chemistry | BS-S7142 | 75 | | |

| Date and Day | Time | Subject | Paper Code | Max Marks |
|--|--------------|---|------------|-----------|
| 01 st April, 2023 (Saturday) | 2 PM TO 5 PM | Part-II: COMPUTER SCIENCE | | |
| | | Paper :6A Web interface designing Technologies | BS-S71114 | 75 |
| | | Paper :6B Internet of things | BS-S71115 | 75 |
| | | Paper :6C Data Science | BS-S71116 | 75 |
| | | Part-II: BIO-CHEMISTRY | | |
| | | Paper : 6A Clinical Bio-Chemistry | BS-S7107 | 75 |
| | | Paper : 6B Food Technology | BS-S7108 | 75 |
| | | Paper : 6C Genetic Engineering | BS-S7109 | 75 |
| | | Part-II: NUTRITION | | |
| | | Paper : 6A Advanced diet therapy | BS-S7157 | 75 |
| | | Paper : 6B Nutrition & Fitness | BS-S7158 | 75 |
| | | Paper : 6C Food Processing & Preservation | BS-S7159 | 75 |
| | | Paper : 6D Food Product Development | BS-S7160 | 75 |
| | | Part II : AQUACULTURE | | |
| | | Paper : 6A Soil and water quality Management | BS-S7177 | 75 |
| | | Paper : 6B Techniques for Aqua Lab | BS-S7178 | 75 |
| | | Paper : 6C Aquaculture Economics | BS-S7179 | 75 |
| | | Part-II: ECONOMICS | | |
| | | Paper :6A Web interface designing Technologies | BA-S7155 | 75 |
| | | Paper : 6B Urban entrepreneurship and MSMEs | BA-S7156 | 75 |
| Paper : 6C Insurance services | BA-S7157 | 75 | | |
| Paper : 6D Inferential statistics and software | BA-S7158 | 75 | | |
| 03 rd April, 2023 (Monday) | 2 PM TO 5 PM | Part-II: COMPUTER SCIENCE | | |
| | | Paper : 7A Web applications development Using PHP & MYSQL | BS-S71117 | 75 |
| | | Paper : 7B application development using Python | BS-S71118 | 75 |
| | | Paper : 7C Python for Data Science | BS-S71119 | 75 |
| | | Part-II: BIO-CHEMISTRY | | |
| | | Paper : 7A Hematological and immunological Techniques | BS-S7110 | 75 |
| | | Paper : 7B Food Microbiology | BS-S7111 | 75 |
| | | Paper : 7C Bioinformatics | BS-S7112 | 75 |
| | | Part-II: NUTRITION | | |
| | | Paper : 7A Human Physiology | BS-S7161 | 75 |
| | | Paper : 7B Nutrition health communication | BS-S7162 | 75 |
| | | Paper : 7C Food Labeling & Packaging | BS-S7163 | 75 |
| | | Paper : 7D Entrepreneurship Management | BS-S7164 | 75 |

| Date and Day | Time | Subject | Paper Code | Max Marks | | |
|--|--------------|--|--------------|--|----------|----|
| 03 rd April, 2023 (Monday) | 2 PM TO 5 PM | Part II : AQUACULTURE | | | | |
| | | Paper : 7A Ornamental Fish Culture | BS-S7180 | 75 | | |
| | | Paper : 7B Fish Processing Technology | BS-S7181 | 75 | | |
| | | 7C Fish Microbiology and quality Assurance | BS-S7182 | 75 | | |
| | | Part-II: ECONOMICS | | | | |
| | | Paper : 7A Farmer Producer Organizations | BA-S7159 | 75 | | |
| | | Paper : 7B Retail and Digital marketing | BA-S7160 | 75 | | |
| | | Paper : 7C Banking and Financial Services | BA-S7161 | 75 | | |
| | | Paper : 7D Project Designing and Report Writing | BA-S7162 | 75 | | |
| | | 04 th April, 2023 (Tuesday) | 2 PM TO 5 PM | Part-II: MICROBIOLOGY | | |
| Paper : 6A Food and dairy microbiology | BS-S7101 | | | 75 | | |
| Paper : 6B Clinical and diagnostic microbiology | BS-S7102 | | | 75 | | |
| Paper : 6C Pharmaceutical microbiology | BS-S7103 | | | 75 | | |
| Part-II: STATISTICS (Common with B.A. & B.Sc.) for Maths combination) | | | | | | |
| Paper : 6A Operations Research – I | BS-S71108 | | | 75 | | |
| Paper : 6B Statical process and Quality control | BS-S71109 | | | 75 | | |
| Paper : 6C Econometrics | BS-S71110 | | | 75 | | |
| Part II: INTERNET OF THINGS | | | | | | |
| Paper : 6A Machine Learning for IoT | BS-S71156 | | | 75 | | |
| Paper : 6B Java Programming for IoT | BS-S71157 | | | 75 | | |
| Paper : 6C Web of Things | BS-S71158 | | | 75 | | |
| Part II: ANALYTICAL CHEMISTRY | | | | | | |
| Paper : 6A Instrumental methods of Analysis | BS-S71150 | | | 75 | | |
| Paper : 6B Analytical techniques | BS-S71151 | | | 75 | | |
| Paper : 6C Separation methods, corrosion, Laboratory | BS-S71152 | | | 75 | | |
| 06 th April, 2023 (Thursday) | 2 PM TO 5 PM | | | Part-II: MICROBIOLOGY | | |
| | | | | Paper :7A Environmental and agriculture Microbiology | BS-S7104 | 75 |
| | | Paper : 7B Molecular biotechnology, Biostatistics And bioinformatics | BS-S7105 | 75 | | |
| | | Paper :7C Biosafety and IPR | BS-S7106 | 75 | | |
| | | Part-II: STATISTICS | | | | |
| | | Paper :7A Operations Research –II | BS-S71111 | 75 | | |
| | | Paper : 7B Computational Techniques and R Programming | BS-S71112 | 75 | | |
| | | Paper : 7C Regression Analysis | BS-S71113 | 75 | | |
| | | Part II: INTERNET OF THINGS | | | | |
| | | Paper : 7A Computer Vision | BS-S71159 | 75 | | |
| | | Paper : 7B Big Data and Analytics | BS-S71160 | 75 | | |
| | | Paper : 7C Security in Iot | BS-S71161 | 75 | | |
| | | Part II: ANALYTICAL CHEMISTRY | | | | |
| | | Paper : 7A Electro Analytical techniques | BS-S71153 | 75 | | |
| | | Paper : 7B Sampling methods and Data Analysis | BS-S71154 | 75 | | |
| | | Paper : 7C Applied Analysis | BS-S71155 | 75 | | |

| Date and Day | Time | Subject | Paper Code | Max Marks |
|---|--------------|--|------------|-----------|
| 10 th April, 2023 (Monday) | 2 PM TO 5 PM | Part-II: FISHERIES | | |
| | | Paper : 6A Fish Processing Technology | BS-S7165 | 75 |
| | | Paper : 6B Aquatic pollution and coastal Zone Management | BS-S7166 | 75 |
| | | Paper : 6C Fisheries Extension Education | BS-S7167 | 75 |
| | | Part-II: BIO-TECHNOLOGY | | |
| | | Paper : 6A Techniques in nursery Development | BS-S7113 | 75 |
| | | Paper : 6B Organic Farming | BS-S7114 | 75 |
| | | Paper : 6C Apiculture | BS-S7115 | 75 |
| | | Part-II: AGRICULTURE | | |
| | | Paper : 6A Extension | BS-S71162 | 75 |
| | | Part-II: ELECTRONICS | | |
| | | Paper : 6A Industrial Electronics | BS-S7151 | 75 |
| | | Paper : 6B Embedded Systems design | BS-S7152 | 75 |
| | | Paper : 6C VLSI Design | BS-S7153 | 75 |
| | | Part-II HORTICULTURE | | |
| | | Paper : 6A Ornamental Horticulture | BS-S71120 | 75 |
| | | Paper : 6B Precision Farming and Protected Cultivation | BS-S71121 | 75 |
| | | Paper : 6C Water Management in Horticulture Crops | BS-S71122 | 75 |
| | | Paper : 6D Dryland Horticulture | BS-S71123 | 75 |
| | | Part II: DATA SCIENCE | | |
| | | Paper : 6A Data Analytics with tableau | BS-S7171 | 75 |
| | | Paper : 6B Supervised ML with python | BS-S7172 | 75 |
| | | Paper : 6C NLP with python | BS-S7173 | 75 |
| 11 th April, 2023 (Tuesday) | 2 PM TO 5 PM | Part-II: FISHERIES | | |
| | | Paper :7A Fish seed production technology | BS-S7168 | 75 |
| | | Paper : 7B Ornamental Fisheries | BS-S7169 | 75 |
| | | Paper : 7C Microbiology of Fish and fishery Products | BS-S7170 | 75 |
| | | Part-II: BIO-TECHNOLOGY | | |
| | | Paper : 7A Hydroponics | BS-S7116 | 75 |
| | | Paper : 7B Bio fertilizers and Biopesticies Production | BS-S7117 | 75 |
| | | Paper : 7C Pearl Culture | BS-S7118 | 75 |
| | | Part-II: AGRICULTURE | | |
| | | Paper : 7A Social Forestry and Organic Farming | BS-S71163 | 75 |
| | | Part-II: ELECTRONICS | | |
| | | Paper : 7A Electronic Instrumentation | BS-S7154 | 75 |
| | | Paper : 7B Consumer Electronics | BS-S7155 | 75 |
| | | Paper : 7C Data communication and Networking | BS-S7156 | 75 |
| | | Part-II HORTICULTURE | | |
| | | Paper : 7A Commercial Floriculture | BS-S71124 | 75 |
| | | Paper : 7B Post-harvest Management of Horticulture Crops | BS-S71125 | 75 |
| | | Paper : 7C Soil Fertility and Nutrient Management | BS-S71126 | 75 |
| | | Paper : 7D Plantation Crops | BS-S71127 | 75 |
| | | Part II: DATA SCIENCE | | |
| | | Paper : 7A AI concepts and techniques With python | BS-S7174 | 75 |
| | | Paper :7B Unsupervised ML with python | BS-S7175 | 75 |
| | | Paper : 7C Deep learning neural networks With python | BS-S7176 | |

| Date and Day | Time | Subject | Paper Code | Max Marks |
|---|--------------|---|------------|-----------|
| 12 th April, 2023 (Wednesday) | 2 PM TO 5 PM | Part II: GEOGRAPHY (Common with B.A. & B.Sc) | | |
| | | Paper: 6A Economic Geography | BS-S71140 | 75 |
| | | Paper: 6B Environmental Geography | BS-S71141 | 75 |
| | | Paper: 6C Tourism Geography | BS-S71142 | 75 |
| | | Paper: 6D Agricultural Geography | BS-S71143 | 75 |
| | | Part II: COMPUTER APPLICATION FOR SCIENCE | | |
| | | Paper: 6A Big Data Analytics Using R | BC-S7119 | 75 |
| | | Paper : 6B Mobile application development | BC-S7120 | 75 |
| | | Paper: 6C E- Commerce application Development | BC-S7121 | 75 |
| | | Paper: 6D Multimedia Tools and Applications | BC-S7122 | 75 |
| | | Paper: 6E Biological databases and Applications | BS-S71148 | 75 |
| 13 th April, 2023 (Thursday) | 2 PM TO 5 PM | Part II: GEOGRAPHY (Common with B.A. & B.Sc) | | |
| | | Paper:7A Industrial Geography | BS-S71144 | 75 |
| | | Paper:7B Disaster Management | BS-S71145 | 75 |
| | | Paper:7C Resource Geography | BS-S71146 | 75 |
| | | Paper:7D Remote sensing & GIS | BS-S71147 | 75 |
| | | Part II: COMPUTER APPLICATION FOR SCIENCE | | |
| | | Paper: 7A Data Science using python | BC-S7123 | 75 |
| | | Paper: 7B Cyber security and malware Analysis | BC-S7124 | 75 |
| | | Paper: 7C Real time governance System (RTGS) | BC-S7125 | 75 |
| | | Paper: 7D Digital imaging | BC-S7126 | 75 |
| | | Paper: 7E Essentials of Bioinformatics | BS-S71149 | 75 |

(BY ORDER)

C.A.O., AU,
Visakhapatnam
Dt:09-03-2023


(T.CHITTI BABU)
CONTROLLER OF EXAMINATIONS