SANT GADGE BABA AMRAVATI UNIVERSITY GAZETTE

Official Publication of Sant Gadge Baba Amravati University

PART- TWO

(Extra Ordinary)
Tuesday, the 9th September, 2025

NOTIFICATION

No.: 158 /2025 Date: 09/09/2025

Subject: Scheme of Equivalence and Absorption.

(I) It is notified for general information of all concerned that the authorities of the University have decided to provide the Scheme of Equivalence and Absorption for the failure students of old course of the Post-graduate Subjects of Semester-I & IV of (M.Sc.) (Bio-Chemistry, Microbiology, Mathematics, Botany, Electronics, Physics, Environmental Science and Chemistry of Semester & CBCS pattern into NEP-2020 Scheme to be implemented from the Academic Session 2025-2026 onwards which is attached herewith.

(II) It is notified for general information of all concerned that the authorities of the University have decided regarding the Post-graduate Subjects of M.Sc. (Biotechnology and Geology) as under:
"As no Old Course student of M.Sc. (Biotechnology and Geology) Semester &CBCS pattern is remain failure, no need to provide the Scheme of Equivalence & Absorption for the above said Old Course failure students.

Annexture:A

BIOCHEMISTRY
Semester-I

Sr. No.	Name of subject and code in CBCS (New)	Name of subject and code in which to be absorbed in NEP-2020 pattern	Remarks
1.	PAPER-I [DSC, 1BCM1C] Biomolecules.	PAPER [RM]: RESEARCH METHODOLOGY AND IPR	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper
2.	PAPER-II [DSC, 1BCM2C] Analytical Techniques	PAPER-I [DSC, 1BCM1] GENERAL BIOCHEMISTRY	
3.	PAPER-II [AEC, 1BCM2A] Analytical Techniques	PAPER-II [DSC, 1BCM2] ADVANCED ENZYMOLOGY	
4.	PAPER-III [DSC, 1BCM3C] Advanced Enzymology	PAPER-III [DSC, 1BCM3] NUTRITIONAL BIOCHEMISTRY	
5.	PAPER-IV [DSC, 1BCM4C] Bioenergetics and Biological Oxidation	PAPER-IV [DSE1, 1BCM4] BIOENERGETICS AND BIOLOGICAL OXIDATION/ [DSE21BCM4] Metabolism And Its Regulation / Mooc	

Semester-II

Sr. No.	Name of subject and code in CBCS (New)	Name of subject and code in which to be absorbed in NEP-2020 pattern	Remarks
1.	PAPER-V [DSC, 2BCM1C] Clinical Biochemistry	PAPER-V [DSC, 2BCM1] CLINICAL BIOCHEMISTRY	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper
2.	PAPER-V AEC [AEC, 2BCM1A] Clinical Biochemistry	PAPER-VI [DSC, 2BCM2] ENDOCRINOLOGY	
3.	PAPER-VI [DSC, 2BCM2C] Endocrinology and Neurochemistry	PAPER-VII [DSC, 2BCM3] ANALYTICAL BIOCHEMISTRY	
4.	PAPER-VII [DSC, 2BCM3C] Cell Biology	PAPER-VIII [DSE1, 2BCM4] CELL BIOLOGY/ [DSE2, 2BCM4] ANIMAL CELL BIOTECHNOLOGY/ MOOC	
5.	PAPER-VIII [DSE, 2BCM4 E] Bioinformatics, Biostatistics and Research Methodology		

Semester-III

Sr. No.	Name of subject and code in CBCS (New)	Name of subject and code in which to be absorbed in NEP-2020 pattern	Remarks
1.	PAPER-IX [DSC, 3BCM1C] Immunochemistry	PAPER- IX [DSC, 3BCM1] RECOMBINANT DNA TECHNOLOGY	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper
2.	PAPER-IX [AEC, 3BCM1A] Immunochemistry	PAPER-X [DSC, 3BCM2] ADVANCED MOLECULAR BIOLOGY	
3.	PAPER-X [DSC, 3BCM2C] Advanced molecular biology	PAPER-XI [DSC, 3BCM3] IMMUNOCHEMISTRY	
4.	PAPER-XI [DSC, 3BCM3C] Human Physiology	PAPER-XII [DSE1, 3BCM4] HUMAN PHYSIOLOGY/ [DSE2, 3BCM4] BIOINFORMATICS AND BIOSTATISTICS / MOOC	
5.	PAPER-XII [DSE, 3BCM4C] Industrial Biochemistry		

Semester-IV

Sr. No.	Name of subject and code in CBCS (New)	Name of subject and code in which to be absorbed in NEP-2020 pattern	Remarks
1.	PAPER-XIII [DSC, 4BCM1C] Cell Physiology	PAPER- XIII [DSC, 4BCM1] INDUSTRIAL BIOCHEMISTRY	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper
2.	PAPER-XIV [DSC, 4BCM2C] Genetics	PAPER-XIV [DSC, 4BCM2] CELL PHYSIOLOGY	
3.	PAPER-XIV-AEC [AEC, 4BCM2A] Genetics	PAPER-XV [DSC, 4BCM3] PLANT BIOCHEMISTRY	
4.	PAPER-XV [DSC, 4BCM3C] Recombinant DNA Technology	PAPER-XVI [DSE1, 4BCM4] GENETICS / [DSE2, 4BCM4] CLINICAL VIROLOGY / MOOC	
5.	PAPER-XVI [DSE, 4BCM4E] Plant Biochemistry		

MICROBIOLOGY
Semester-I

Sr. No.	Name of subject and code in CBCS (New)	Name of subject and code in which to be absorbed in NEP-2020 pattern	Remarks
6.	PAPER-I [DSC 1MCB1C] MICROBIAL TECHNIQUES.	PAPER-[RM] Research Methodology And IPR In Microbiology	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper
7.	PAPER-I [AEC1MCB1-A] MICROBIAL TECHNIQUES	PAPER-I [DSC I ,1MCB 1] Microbial And Analytical Techniques	
8.	PAPER-II [DSC 1MCB2] MICROBIAL ENZYMOLOGY	PAPER -II [DSC II ,1MCB 2]Microbial Enzymology & Enzyme Technology	
9.	PAPER-III [DSE, 1MCB3] MICROBIAL PHYSIOLOGY AND PHOTOSYNTHESIS	PAPER III [DSC III ,1MCB 3]Environmental Microbiology	
10.	PAPER-IV [DSC, 1MCB4] ENVIRONMENTAL MICROBIOLOGY	PAPER -IV [1MCB 4] DSE1- General And Clinical Biochemistry DSE2- Microbial Metabolism /MOOC	
11.	PRACTICAL-I [LAB-1] SOIL MICROBIOLOGY	PRACTICAL - I[LAB-I] ANALYTICAL TECHNIQUES AND ENZYMOLOGY	
12.	PRACTICAL-II [LAB-2] ANALYTICAL BIOCHEMISTRYAND INSTRUMENTATION	PRACTICAL -II[LAB-II] ENVIRONMENTAL MICROBIOLOGY, METABOLISM AND CLINICAL BIOCHEMISTRY	

Semester-II

Sr. No.	Name of subject and code in CBCS (New)	Name of subject and code in which to be absorbed in NEP-2020 pattern	Remarks
1.	PAPER-V [DSC, 2MCB1] BIOSTATISTICS, BIOINFORMATCS AND COMPUTER APPLICATIONS.	PAPER-V [DSC I ,2MCB1] Microbial Diversity And Molecular Taxonomy	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper
2.	PAPER-VI [DSC, 2MCB2-C] ENZYME TECHNOLOGY	PAPER-VI- [DSC II , 2MCB2] Pharmaceutical Microbiology	
3.	PAPER-VI [AEC, 2MCB2-A] ENZYME TECHNOLOGY	PAPER-VII [DSC III , 2MCB3] Applied Microbiology For Agriculture And Environment	
4.	PAPER-VII [DSC, 2MCB3] MICROBIAL METABOLISM	PAPER-VIII [DSE 1, 2MCB4] Microbial Physiology And Photosynthesis [DSE1I , 2MCB4]Plant Pathology/MOOC	
5.	PAPER-VIII [DSC, 2MCB4] ENVIRONMENTAL MICROBIOLOGYAND EXTREMOPHILES and/ or 2GIC-X	PRACTICAL-III [LAB-III] MICROBIAL DIVERSITY AND PHARMACEUTICAL MICROBIOLOGY	

6.	PRACTICAL-III [LAB-3] ENVIRONMENTAL MICROBIOLOGYAND BIODIVERSITY	PRACTICAL-IV [LAB-IV] MICROBIAL PHYSIOLOGY, PLANT PATHOLOGY AND APPLIED MICROBIOLOGY	
7.	PRACTICAL-IV [LAB-4] MICROBIAL ENZYMOLOGY, BIOSTATISTICS AND COMPUTER APPLICATION		

Semester-III

Sr. No.	Name of subject and code in CBCS (New)	Name of subject and code in which to be absorbed in NEP-2020 pattern	Remarks
1.	PAPER-IX [DSC, 3MCB1-C] MOLECULAR BIOLOGY	PAPER-IX [DSC-I , 3MCB1] Advances In Biotechnology And Nanotechnology	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper
2.	PAPER-I-AEC [AEC, 3MCB1-A] MOLECULAR BIOLOGY	PAPER-X [DSC II., 3MCB2] Food And Fermentation Technology	
3.	PAPER-X -DSC [DSC, 3MCB2] GENERAL VIROLOGY	PAPER-XI [DSC-III., 3MCB3] Clinical Microbiology	
4.	PAPER-XI [DSE, 3MCB3] FERMENTATION TECHNOLOGY	PAPER-XII[DSE I., 3MCB4] VIROLOGY DSE II. FUNGAL AND ALGAL BIOLOGY /MOOC	
5.	PAPER-XII [DSC, 3MCB4] IMMUNOLOGY	**3MCB3 -** Virology/ Fungal And Algal Biology	
6.	PRACTICAL-V [LAB-V] FERMENTATION TECHNOLOGY	PRACTICAL-V [LAB-V] ADVANCES IN APPLIED MICROBIOLOGY	
7.	PRACTICAL-V [LAB-VI] IMMUNOLOGY AND MEDICAL MICROBIOLOGY	PRACTICAL-VI [LAB-VI] CLINICAL MICROBIOLOGY AND VIROLOGY	
8.		RPP-1- Research Project Phase-1	

Semester-IV

Sr. No.	Name of subject and code in CBCS (New)	Name of subject and code in which to be absorbed in NEP-2020 pattern	Remarks
1.	PAPER-XIII [DSC, 4MCB1-C] BIOTECHNOLOGY.	PAPER-XIII [DSC I, 4MCB1] Molecular Biology And Microbial Genetics	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper
2.	PAPER-XIV - AEC [DSC, 4MCB1-A] BIOTECHNOLOGY	PAPER-XIV [DSCII , 4MCB2] Immunology And Haematology	
3.	PAPER-XIV- DSC [AEC, 4MCB2] CLINICAL VIROLOGY	PAPER-XV [DSC III, 4MCB3] Microbial Technology	

4.	PAPER-XV [DSC, 4MCB3] MICROBIAL TECHNOLOGY	PAPER-XVI- [DSE I , 4MCB4] DSE I Ethics And Biosafety In Microbiology And Biotechnology DSE II –Biostatistics And Bioinformatics/MOOC	
5.	PAPER-XVI [DSC, 4MCB4] MEDICAL MICROBIOLOGY and/ or 2GIC-X	PRACTICAL-VII [LAB-VII] MICROBIAL GENETICS, IMMUNOLOGY AND HEAMATOLOGY	
6.	PRACTICAL-VII [LAB-VII] APPLIED MICROBIOLOGY AND BIOTECHNOLOGY RECOMBINANT DNA TECHNOLOGY	PRACTICAL-VIII [LAB-VIII] BIOSAFETY, BIOSTATISTICS , BIOINFORMATICS AND MICROBIAL TECHNOLOGY	
7.	PROJECT [PROJECT]	RPP-2- Research Project Phase-II	

Mathematics

Sr. No.	Class	CBCS (New) Pattern/ Subjectand Code	Equivalent New Subject&Code(NEP)	Absorption Scheme
1	Semester-I	DSC-I:RealAnalysis	DSC-I:RealAnalysis (Semester-I)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
2	Semester-I	DSC-II:Advanced AbstractAlgebra	DSC-II:Advanced AbstractAlgebra (Semester-I)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
3	Semester-I	DSC-III:Complex Analysis	DSC-III:Complex Analysis (Semester-I)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
4	Semester-I	DSC-IV:Topology-I (Semester-I) + DSC-IV:Topology-II (Semester-II)	DSC-V:Topology (Semester-II)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
5	Semester-I **(Any One)**	DSE-V: Differential Geometry(Optional) (Semester-I)	DSE-I: Differential Geometry(Optional) (Semester-I)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
6		DSE-V:Advanced DiscreteMathematics- I (Optional) (Semester-I)	DSE-I:AdvancedDiscrete Mathematics-I (Optional) (Semester-I)	60+40=100Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
7	Semester-II	DSC-I:Measure& IntegrationTheory (Semester-II)	DSE-II:Measure& Integration Theory (Semester-II)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.

8	Semester-II	DSC-II:Advanced Linear Algebra & Field Theory (Semester-II)	DSC-IV:AdvancedLinear Algebra & Field Theory (Semester-II)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
9	Semester-II	DSC-III:Integral Equations (Semester-II)	DSC-VI:Integral Equations (Semester-II)	60+40=100InternalMarks should be awarded based on the percentage of Marks obtained in the theory paper.
10	Semester-II **(Any One)**	DSE-V:Riemannian Geometry(Optional) (Semester-II)	DSE-II: Riemannian Geometry(Optional) (Semester-II)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
11		DSE-V:Advanced DiscreteMathematics-II (Optional) (Semester-II)	DSE-II:Advanced DiscreteMathematics-II (Optional) (Semester-II)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
12	Semester-III	DSC-I:Functional Analysis-I (Semester-III)	DSC-VII:Functional Analysis-I (Semester-II)	60+40=100InternalMarks should be awarded based on the percentage of Marks obtained in the theory paper.
13	Semester-III	DSC-II:Advanced Mechanics (Semester-III)	DSC-XI;Advanced Mechanics (Semester-IV)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
14	Semester-III	DSC-III:Operational Research (Semester-III)	DSC-VIII:Operational Research (Semester-III)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
15	Semester-III **(AnyTwo)**	DSE-IV/V: Fluid Dynamics-I(Optional) (Semester-III)+ DSE-IV/V:Fluid Dynamics-II(Optional) (Semester-IV)	DSE-III:FluidDynamics (Optional) (Semester-III)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper
16		DSE-IV/V: General Relativity(Optional) (Semester-III)	DSE-III: General Relativity(Optional) (Semester-III)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
17		DSE-IV/V:Difference Equation-I (Optional) (Semester-III)	DSE-III: Difference Equation-I(Optional) (Semester-III)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
18	Semester-IV	DSC-I:Functional Analysis-II (Semester-IV)	DSE-IV:Functional Analysis-II (Semester-IV)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
19	Semester-IV	DSC-II: Partial DifferentialEquation (Semester-IV)	DSC-IX: Partial Differential Equation (Semester-IV)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.

20	Semester-IV	DSC-III:Numerical Analysis (Semester-IV)	DSC-X:Numerical Analysis (Semester-IV)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
21	Semester-IV **(Any One)**	DSE-IV/V:Relativistic Cosmology (Optional) (Semester-IV)	DSE-IV: Relativistic Cosmology(Optional) (Semester-IV)	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
22		DSE-IV/V:Difference Equations-II(Optional) (Semester-IV)	DSE-IV:Difference Equations-II (Optional) (Semester-IV	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.

Botany
Semester I

Sr. No.	Name of Subject and Code in CBCS (New) (2022–23)	Name of Subject and Code in which to be absorbed in NEP (2024–25)	Remarks
1	BOT-101 DSC-I Cell and Molecular Biology	DSC-I.1-BOT-101 Cell and Molecular Biology	Direct equivalence
2	BOT-102 AEC-I Molecular Techniques	BOT-01 Research Methodology and IPR	AEC absorbed into NEP core
3	BOT-103 DSC-II Evolution and Diversity of Algae and Fungi	DSC-II.1-BOT-102 Evolution, Diversity & Commercial Application of Microbes, Algae, Fungi & Plant Pathology	Expanded scope in NEP
4	BOT-104 DSC-III Economic Botany and Resource Utilization	DSC-III.1-BOT-103 Plant Development, Economic Botany & Resource Utilization	Clubbed with Plant Development
5	BOT-105 DSC-IV Plant Development	DSC-III.1-BOT-103 Plant Development, Economic Botany & Resource Utilization	Merged with DSC-III

Semester II

Sr. No.	Name of Subject and Code in CBCS (New) (2022–23)	Name of Subject and Code in which to be absorbed in NEP (2024–25)	Remarks
1	BOT-201 DSC-V Plant Physiology	DSC-I.2-BOT-201 Biochemistry & Plant Physiology	Expanded with Biochemistry
2	BOT-202 AEC-II Modern Techniques	BOT-02 Technological Advancements in Botanical Research (Semester III)	Expanded
3	BOT-203 DSC-VI Evolution and Diversity of Bryophytes and Pteridophytes	DSC-II.2-BOT-202 Evolution & Diversity of Bryophytes &Pteridophytes	Direct equivalence
4	BOT-204 DSC-VII Genetics and Plant Breeding	DSC-III.2-BOT-203 Genetics & Plant Breeding	Direct equivalence
5	BOT-205 DSC-VIII Plant Biochemistry and Pharmacognosy	DSC-I.2-BOT-201 Biochemistry & Plant Physiology	Restructured

Semester III

Sr. No.	Name of Subject and Code in CBCS (New) (2023–24)	Name of Subject and Code in which to be absorbed in NEP (2024–25)	Remarks
1	BOT-301 DSC-IX Systematics and Taxonomy of Angiosperms	BOT-301 DSC-II.3 Systematics and Taxonomy of Angiosperms	Direct equivalence
2	BOT-302 DSC-X Paleobotany, Evolution & Diversity of Gymnosperms	BOT-300 DSC-I.3 Paleobotany, Evolution of Gymnosperms & Origin of Angiosperms	Expanded scope with Origin of Angiosperms

3	**DSE-I (BOTE-I Elective Options):** A) Angiosperm Taxonomy, Phytochemistry &Pharmacognosy; B) Molecular Systematics of Plants; C) Plant Tissue Culture; D) Advanced Plant Physiology; E) Basic & Applied Mycology; F) Molecular Biology, Biotechnology & Plant Breeding	**Corresponding Elective Papers in Semester III:** DSE-III-BOT-304-A Angiosperm Taxonomy, Phytochemistry and Pharmacognosy–III DSE-III-BOT-304-B Molecular Systematics of Plants–III DSE-III-BOT-304-C Plant Tissue Culture–III DSE-III-BOT-304-D Advanced Plant Physiology–III DSE-III-BOT-304-E Basic and Applied Mycology–III DSE-III-BOT-304-F Molecular Biology, Biotechnology & Plant Breeding–III	Absorbed into DSE-III
4	**DSE-I (BOTE-I Elective Options):** A) Angiosperm Taxonomy, Phytochemistry&Pharmacognosy; B) Molecular Systematics of Plants; C) Plant Tissue Culture; D) Advanced Plant Physiology; E) Basic & Applied Mycology; F) Molecular Biology, Biotechnology & Plant Breeding	**Corresponding Elective Papers in Semester IV:** DSE-IV-BOT-405-A Angiosperm Taxonomy, Phytochemistry and Pharmacognosy–IV DSE-IV-BOT-405-B Molecular Systematics of Plants–IV DSE-IV-BOT-405-C Plant Tissue Culture–IV DSE-IV-BOT-405-D Advanced Plant Physiology–IV DSE-IV-BOT-405-E Basic and Applied Mycology–IV DSE-IV-BOT-405-F Molecular Biology, Biotechnology & Plant Breeding–IV	Absorbed into DSE-IV

Semester IV

Sr. No.	**Name of Subject and Code in CBCS (New) (2023–24)**	**Name of Subject and Code in which to be absorbed in NEP (2024–25)**	**Remarks**
1	BOT-401 DSC-XI Applied Botany	BOT-401 DSC-I.4 Applied Botany	Direct equivalence
2	BOT-402 DSC-XII Plant Ecology	BOT-402 DSC-II.4 Plant Ecology & Environmental Dynamics	Expanded scope
3	BOT-403 DSC-XIII Environmental Ecology	BOT-402 DSC-II.4 Plant Ecology & Environmental Dynamics	**Merged into Ecology course**
4	SEC-I BOTS-401 Plant Biotechnology & Genetic Engineering	BOT-403 DSC-III.4 Plant Biotechnology & Genetic Engineering	Shifted to Core DSC

Environmental Science

SEMESTER-I			
Sr. No.	**Name of Subject and Code in CBCS (New)**	**Name of Subject and Code in which to be absorbed in to NEP-2020 pattern.**	**Remark**
1	DSE-I Environmental Science- An Interdisciplinary Approach; EVS 101	DSC-I.1 Environmental Science – An Interdisciplinary Approach EVS-101	
2	DSE-II Concept of Ecology and Biodiversity. EVS-102	DSC-III.1 Concept of Ecology and Biodiversity EVS- 103 DSC-II.1	
3	DSE-III Environmental Chemistry EVS-104	DSC-III.2 Water Pollution EVS-109	
4	DSC- IV Geodynamic and Energy Resources EVS 105	Geodynamics and Energy Resources EVS-102	

SEMESTER-II			
1	DSC- V Bioinformatics in Environmental analysis EVS 201	DSC-II.4 – Environmental Statistics and Modelling EVS-121	
2	DSC-VI Environmental Microbiology EVS 202	DSC-I.2 Environmental Microbiology, Toxicology and Biotechnology EVS -107	
3	DSC-VII Air and Noise Pollution EVS-204	DSC-II.2 Air and Noise Pollution EVS- 108	
4	DSC-VIII Water pollution EVS -205	DSC-III.2 Water Pollution EVS-109	
SEMESTER-III			
1	DSC-IX Terrestrial Pollution: EVS-301	DSC-I..3- Solid Waste Management EVS-113	
2	DSC-X Remote Sensing GIS & Computer Applications- EVS- 302	DSC-II.3- Remote Sensing, GIS& Computer Application EVS-114	
3	DSE- I Environmental Impact Assessment & Audit: EVS-303	DSC-III.3 -Environmental Impact Assessment & Environmental Audit EVS-115	
4	DSE -II Pollution Control Technology EVS-304	DSC-I.4 Environmental Engineering and Technology EVS-120	
SEMESTER-IV			
1	DSC-XI Environmental Toxicology and Hazardous Waste Management: EVS 401	DSC-I..3- Solid Waste Management EVS-113	
2	DSC-XII Industrial Hygiene And Safety EVS 402	MOOC/ DSILL̥L̥IE-I -Industrial Hygiene and Safety EVS -104	
3	DSC -XIII Environmental Policies and Legislation: EVS 403	DSC- III.4 Environmental Policies and Legislation EVS-122	
4	SEC Nature, Conservation And environmental Management EVS 404	MOOC/ DSE-IV- 4 Environmental Management System and Life Cycle Assessment	

Physics

Sr. No	Class (CBCS)	CBCS (New) Pattern/ Subject and Code	Equivalent New subject & Code (NEP)	Absorption Scheme
1.	Semester I	1Phy1:Mathematical Physics	DSC-I: Mathematical Physics	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
2.	Semester I	1Phy2: Classical Mechanics	DSC-II: Classical Mechanics	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
3.	Semester I	1Phy3: Quantum Mechanics-I	DSC III- Quantum Mechanics I	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
4.	Semester I	1Phy4: Computational Methods and Programming	DSE-I (i): Computational Methods and C Programming	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.

5.	Semester II	2 Phy1: Electrodynamics-I	DSC-V: Electromagnetic Theory	Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
6.	Semester II	2 Phy2: Quantum Mechanics-II	DSC-IV: Quantum Mechanics II	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
7.	Semester II	2 Phy3: Solid State Physics	DSC-VIII: Solid State Physics	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
8.	Semester II	2Phy 4 (i): Network Theorems and Solid-State Devices	DSE-II (iii): Network Theorems and Solid-State Devices	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
9.	Semester II	2Phy 4 (ii): Lasers and Laser Applications	DSE-II (i): Lasers and Laser Applications	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
10.	Semester III	3PHY-1: Statistical Mechanics	DSC- IX: Statistical Mechanics	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
11.	Semester III	3PHY-2: Atomic & Molecular Physics	DSC-VI: Atomic and Molecular Physics	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
12.	Semester III	3PHY -3 (i) (Elective): Radiation and Plasma Physics	DSC XII : Radiation and Plasma Physics	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
13.	Semester III	3PHY -3 (ii) (Elective): Spectroscopic Techniques	DSE-II (ii): Spectroscopic Techniques	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
14.	Semester III	3PHY-4(i): (Elective) Digital Techniques	DSE-III (iii): Digital Techniques I	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
15.	Semester III	3 PHY-4(ii): (Elective) Condensed Matter Physics-I	DSE III (i): Condensed Matter Physics-I	Since no equivalence be given, two additional chances be given.
16.	Semester III	3PHY-4 (iii) (Elective) Photonics-I	DSE-III (ii): Photonics I	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
17.	Semester IV	4PHY-1: Nuclear and Particle Physics	DSC X: Nuclear and Particle Physics	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
18.	Semester IV	4PHY-2 : Op Amp Theory and Applications	DSC XI: Operational Amplifier and Linear Integrated Circuits	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
19.	Semester IV	4PHY-3 (i) Nano Science and Nanotechnology	DSC-VII Nanoscience and Nanotechnology	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.

20.	Semester IV	4PHY-3 (ii): (Elective) Advanced Microprocessor and Microcontroller	DSC-VII Nanoscience and Nanotechnology	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
21.	Semester IV	4PHY- 4 (i): (Elective) Microprocessor Programming and Interfacing	DSE IV (iii): Digital Techniques-II	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
22.	Semester IV	4PHY-4 (ii): (Elective) Condensed Matter Physics-II	DSE IV (i): Condensed Matter Physics-II	60+40=100 Internal Marks should be awarded based on the percentage of Marks obtained in the theory paper.
23.	Semester IV	4PHY-4 (iii): (Elective) Photonics-II	DSE IV (ii): Photonics- II	Since no equivalence be given, two additional chances be given.

Electronics

Sr. No.	Class	CBCS/New CBCS Pattern/Subject and Code	Equivalent NewSubject& Code (NEP)	AbsorptionScheme
1	**M.Sc. I (Semester-I)**	**Code:1ELE1**Fundamentalsof Semiconductor Devices	**Code:DSC-I.1** Fundamentalsof Semiconductor Devices	i) Marks obtained bythe student out of 60 under NEP Sem.-1 syllabus in the theory paper DSC-I.1 (Fundamentals of Semiconductor Devices) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be inproportion to the marks obtained in theory out of 60.
2	**M.Sc. I (Semester-I)**	**Code:1ELE2**Instrumentation andMeasurement Techniques	**Code:DSC-II.1** Instrumentation and Measurement Techniques	i) Marks obtained bythe student out of 60 under NEP Sem.-1 syllabus in the theory paper DSC-II.1 (Instrumentation and Measurement Techniques) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
3	**M.Sc. I (Semester-I)**	**Code:1ELE3**Biomedical Instrumentation	**Code:DSE- I/MOOC** Biomedical Instrumentation	i) Marks obtained bythe student out of 60 under NEP Sem.-1 syllabus in the theory paper DSE-I/MOOC (Biomedical Instrumentation) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.

4	**M.Sc. I (Semester-I)**	**Code:1ELE4**OpticalElectronic devices and applications	**Code:DSC-III.1** Optical Electronics Devices andApplications	i) Marks obtained by the student out of 60 under NEP Sem.-1 syllabus in the theory paper DSC-III.1 (Optical Electronics Devices and Applications) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
1	**M.Sc. I (Semester-II)**	**Code:2ELE1** AnalogCircuit DesignAnd Analysis	**Code:DSC-I.2** AnalogCircuit Design and Analysis	i) Marks obtained by the student out of 60 under NEP Sem.-II syllabus in the theory paperDSC-I.2(Analog Circuit design and Analysis) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
2	**M.Sc. I (Semester-II)**	**Code:2ELE2**Microprocessorand Microcontroller	**Code:DSC-II.2** Microprocessor and Microcontroller	i) Marks obtained by the student out of 60 under NEP Sem.-II syllabus in the theory paper DSC-II.2 (Microprocessor and Microcontroller) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
3	**M.Sc. I (Semester-II)**	**Code:2ELE3** DigitalIC'S& Design	**Code:DSC-III.2** DigitalIC'sand Design	ii)Marks obtained by the student out of 60 under NEP Sem.-II syllabus in the theory paper DSC-III.2 (Digital IC's and Design) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by thecollege out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
4	**M.Sc. I (Semester-II)**	**Code:2ELE4** Mechatronics	**Code:DSE- I/MOOC** Mechatronics	i) Marks obtained by the student out of 60 under NEP Sem.-II syllabus in the theory paper DSE-I/MOOC (Mechatronics) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.

1	**M.Sc. II (Semester-III)**	**Code: 3ELE1**Antenna and Mobile Communications	**Code:DSC-II.3** Antenna and Mobile Communications	i) Marks obtained by the student out of 60 under NEP Sem.-III syllabus in the theory paper DSC-II.3 (Antenna and Mobile Communications) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
2	**M.Sc. II (Semester-III)**	**Code:3ELE2** PowerElectronics	**Code:DSC-III.3** Power Electronics	i) Marks obtained by the student out of 60 under NEP Sem.-III syllabus inthe theory paper DSC-III.3 (Power Electronics) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
3	**M.Sc. II (Semester-III)**	**Code: 3ELE3**Advanced Microcontroller and Embedded system	**Code:DSE-III/MOOC1** Advanced Microcontroller and Embedded system	i) Marks obtained by the student out of 60 under NEP Sem.-III syllabus inthe theory paper DSE-III/MOOC 1 (Advanced Microcontroller and Embedded system) shall be converted out of 80 inproportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
4	**M.Sc. II (Semester-III)**	**Code:3ELE4**Com puter Hardware and Interfacing	**Code:DSE-III/MOOC2** Computer Hardwareand Interfacing	i) Marks obtained by the student out of 60 under NEP Sem.-III syllabus inthe theory paper DSE-III/MOOC 2 (Computer Hardware and Interfacing) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
1	**M.Sc. II (Semester-IV)**	**Code:4ELE1**VL SIDesignand VHDL Programming	**Code:DSC-I.4** VLSIDesignand VHDL Programming	i) Marks obtained by the student out of 60 under NEP Sem.-IVsyllabus in thetheory paper DSC-I.4 (VLSI Design and VHDL Programming) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.

2	**M.Sc. II (Semester-IV)**	**Code:4ELE2**V irtual Instrumentation	**Code:DSC-II.4** Virtual Instrumentation	i) Marks obtained by the student out of 60 under NEP Sem.-IV syllabus in the theory paper DSC-II.4 (Virtual Instrumentation) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
3	**M.Sc. II (Semester-IV)**	**Code:4ELE3**Nume ricalMethods and Programming	**Code:DSC-III.4** CProgramming	ii)Marks obtained by the student out of 60 under NEP Sem.-IV syllabus in the theory paper DSC-III.4 (C Programming) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it is and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
4	**M.Sc. II (Semester-IV)**	**Code:4ELE4**Fuzz y logic and NeuralNetworks	**Code:DSE-IV/ MOOC** Fuzzy logic and NeuralNetworks	i) Marks obtained by the student out of 60 under NEP Sem.-IV syllabus in the theory paper DSE-IV/MOOC (Fuzzy logic and Neural Networks) shall be converted out of 80 in proportion. ii) Internal Marks if allotted by the college out of 20 shall be given as it isand if not allotted by the college shall be in proportion to the marks obtained intheory out of 60.

Chemistry

Sr. No	Class **(CBCS NEW)**	**CBCS NEW** Pattern/ Subject and Code	Equivalent New subject & Code **(NEP)**	Absorption/ Equivalence Scheme
24.	MSc (Chemistry) Semester I	Inorganic Chemistry (DSC01) CY101	Structural Inorganic Chemistry **(DSC I.1) CHE 101**	**As per the foot note***
25.	MSc (Chemistry) Semester I	Organic Chemistry (DSC-02) CY102	General Organic Chemistry **(DSC II.1) CHE 102**	**As per the foot note***
26.	MSc (Chemistry) Semester I	Physical Chemistry (DSC-03) CY 103	Physical Chemistry -II **(DSC II.2) CHE 201**	**As per the foot note***

27.	MSc (Chemistry) Semester I	Analytical Chemistry-I (DSC 04) CY 104	Basic Analytical Chemistry **(DSC II.2) CHE 203**	i) Marks obtained by the student out of 60 in the respective NEP theory paper shall be converted out of 80 in proportion. ii) If a failure student in both the courses of CBCS (NEW) (Sr no 4 & 5), passes in the equivalent course. The same marks be considered for both CBCS (NEW) courses. iii) Internal Marks if allotted by the college out of 20 shall be converted to out of 40 and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
28.	MSc (Chemistry) Semester II	Analytical Chemistry-II (DSC 08) CY 204	Basic Analytical Chemistry **(DSC II.2) CHE 203**	
29.	MSc (Chemistry) Semester II	Advanced Inorganic Chemistry (DSC 06) CY 201	Coordination Chemistry **(DSC II.2) CHE 202**	**As per the foot note***
30.	MSc (Chemistry) Semester II	Organic Reaction Mechanism (DSC 06) CY202	Organic Reaction Mechanism **(DSE I (ii) CHE 104 (ii)**	**As per the foot note***
31.	MSc (Chemistry) Semester II	Physical Chemistry-II (DSC 07) CY 203	Physical Chemistry -I **(DSC III.1) CHE 103**	**As per the foot note***
32.	MSc (Chemistry) Semester III	Spectroscopy-I (DSC IX) CY 301	Spectroscopy I **(DSC II.3) CHE 302**	**As per the foot note***
33.	MSc (Chemistry) Semester III	Selected topics in Chemistry-I (DSC X) CY 302	Thermal and Electroanalytical Techniques **(DSE II (iv)) CHE 204 (iv)**	**As per the foot note***
34.	MSc (Chemistry) Semester III	Inorganic Chemistry special paper-I (Bio-inorganic Chemistry) (DSE-I) CY 303 (i)	Bioinorganic Chemistry **(DSE I (i)) CHE 104 (i)**	**As per the foot note***
35.	MSc (Chemistry) Semester III	Inorganic Chemistry special paper-II (Solid State Chemistry) (DSE-II)) CY 304 (i)	Solid State Chemistry (Inorganic special) **(DSE–III (i))CHE 304 (i)**	**As per the foot note***
36.	MSc (Chemistry) Semester III	Organic Chemistry special paper-I (Organic Synthesis-I) (DSE-I) CY 303 (ii)	Advanced Organic Synthesis **(DSE III (ii)) CHE 304 (ii)**	**As per the foot note***

37.	MSc (Chemistry) Semester III	Organic Chemistry special paper-II (Drugs Chemistry) (DSE-II) CY 304 (ii)	Natural Products and Medicinal Chemistry **(DSE IV (iii)) CHE 404 (ii)**	i) Marks obtained by the student out of 60 in the respective NEP theory paper shall be converted out of 80 in proportion. ii) If a failure student in both the courses of CBCS (NEW) (Sr no 14 & 15), passes in the equivalent course. The same marks be considered for both CBCS (NEW) courses. iii) Internal Marks if allotted by the college out of 20 shall be converted to out of 40 and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
38.	MSc (Chemistry) Semester IV	Organic Chemistry special paper-IV (Natural Products) DSE (IV) CY-404 (ii)	Natural Products and Medicinal Chemistry **(DSE IV (ii)) CHE 404 (ii)**	
39.	MSc (Chemistry) Semester III	Physical Chemistry special paper-I (Polymer Chemistry) (DSE-I) CY303 (iii)	Polymer Chemistry **(DSE–I (iii)) CHE 104 (iii)**	**As per the foot note***
40.	MSc (Chemistry) Semester III	Physical Chemistry special paper-II (Electrochemical Processes and Applications) (DSE-II) I CY304 (iii)	Electrochemical Processes and Applications **(DSE–II (iii)) CHE 204 (iii)**	**As per the foot note***
41.	MSc (Chemistry) Semester III	Industrial Chemistry special paper-I (Heat Transfer, Mass Transfer and Unit Processes) (DSE-I) CY 303 (v)	Heat Transfer and Mass Transfer **(DSE–I (v)) CHE 104 (v)**	**As per the foot note***
42.	MSc (Chemistry) Semester III	Industrial Chemistry special paper-II (Fuels and Heavy Chemicals) (DSE-II) CY 304 (v)	Fuels and Heavy Chemicals (Industrial special) **(DSE–III (v)) CHE 304 (v)**	**As per the foot note***
43.	MSc (Chemistry) Semester III	Paper XII Analytical Chemistry Special Paper II (Recent Advances in analytical chemistry CY303 (iv)	Optical Methods of Analysis (DSE–I (iv))CHE 104 (iv)	**As per the foot note***
44.	MSc (Chemistry) Semester III	Analytical Chemistry Special Paper-II Chemical Analysis of Environmental and Industrial Samples (DSE-II) CY 304 (iv)	Analytical Chemistry Special Paper-II Chemical Analysis of Environmental and Industrial Samples (DSE-II) CY-304 (iv)	**As per the foot note***

45.	MSc (Chemistry) Semester IV	Spectroscopy -II (DSC XI) CY 401	Spectroscopy II **(DSC II.4) CHE 402**	**As per the foot note***
46.	MSc (Chemistry) Semester IV	Selected topics in Chemistry-II (DSC XII) CY 402	Advanced Analytical Chemistry (Analytical special) (DSE–III (iv)) CHE 304 (iv)	i) Marks obtained by the student out of 60 in the respective NEP theory paper shall be converted out of 80 in proportion. ii) If a failure student in both the courses of CBCS (NEW) (Sr no 23 & 24), passes in the equivalent course. The same marks be considered for both CBCS (NEW) courses. iii) Internal Marks if allotted by the college out of 20 shall be converted to out of 40 and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.
47.	MSc (Chemistry) Semester IV	Analytical Chemistry special paper-IV (Pharmaceutical, Clinical, Food, and Beverage Analysis) DSE (IV) CY-404 (iv)	Advanced Analytical Chemistry (Analytical special) (DSE–III (iv)) CHE 304 (iv)	
48.	MSc (Chemistry) Semester IV	Inorganic Chemistry special paper-III (Photo-inorganic and Organometallic Chemistry) (DSE-III) CY 403 (i)	Photo-inorganic chemistry and Organometallics **(DSE–II (i)) CHE 204 (iv)**	**As per the foot note***
49.	MSc (Chemistry) Semester IV	Inorganic Chemistry special paper-IV (Material Chemistry) DSE (IV) CY-404 (i)	Material Chemistry **(DSE-IV (i))CHE 404 (i)**	**As per the foot note***
50.	MSc (Chemistry) Semester IV	Organic Chemistry special paper III (Organic Synthesis - II)(DSE-III) CY 403(ii)	Principles of Organic Synthesis **(DSC–I.4)CHE 401**	**As per the foot note***
51.	MSc (Chemistry) Semester IV	Physical Chemistry special paper- III (Computational Quantum Chemistry) DSE III CY 403 (iii)	--	Since no equivalence be given, two additional chances be given. After that still student(s) remain failure then exemption be givenas per existing rules of the university.
52.	MSc (Chemistry) Semester IV	Analytical Chemistry special paper-III (Analytical Techniques in Thermal and Electrochemical Analysis) DSE III CY-403 (iv)	Thermal and Electro-Analytical Techniques **(DSE–II (iv)) CHE 204 (iv)**	**As per the foot note***

53.	MSc (Chemistry) Semester IV	Physical Chemistry special paper-IV (Physical Chemistry of Materials) DSE IV CY-404 (iii)	Physical Chemistry IV (DSE-IV (iv)) CHE 404 (iii)	**As per the foot note* Physical Chemistry IV (DSE-IV (iv))**
54.	MSc (Chemistry) Semester IV	Industrial Chemistry special paper-III (Polymers, Dyes and Paints) DSE III CY-403 (v)	Polymer, Dyes and Paints **(DSE-IV (v))CHE 404 (v)**	**As per the foot note***
55.	MSc (Chemistry) Semester IV	Industrial Chemistry special paper-IV (Chemical Process Industries, Green Chemistry and Process Economics) DSE IIICY-404 (v)	Processes and Green Chemistry **(DSE II (v)) CHE 204 (v)**	**As per the foot note***

Note: The green highlighted text represents the course which is given equivalence for more than one corresponding paper in CBCS (NEW).

Absorption of the student in NEP Scheme *:

i) Marks obtained by the student out of 80 in the respective CBCStheory paper shall be converted out of 60 in proportion.

ii) Internal Marks if allotted by the college out of 20 shall be converted to out of 40 and if not allotted by the college shall be in proportion to the marks obtained in theory out of 60.

Sd/-
(Dr. Avinash M. Asanare)
Registrar,
Sant Gadge Baba Amravati University

******