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शासकीय मो.ह.गृह विज्ञान एवं विज्ञान महिला, महाविद्यालय

GOVERNMENT M. H. COLLEGE OF HOME SCIENCE & SCIENCE FOR WOMEN

नैपियर टाउन, जबलपुर - 482002 मध्य प्रदेश, भारत

Napier Town, Jabalpur - 482002 Madhya Pradesh, India

**Objectives of programme outcome:-**

**After completion of the Programme, the student will be able to:**

1. Subject specific knowledge - Detailed knowledge of the respective subject  
Analyze and apply knowledge in the areas of learning research and real life.
2. Problem solving capability situation in multi-disciplinary issues.
3. Innovation and research -develop aptitude for innovation and entrepreneurship identify contemporary research problem analyze data and propose solutions.
4. Scientific communication skill- Prepare, present and publish research paper and articles.
5. Digital skills- use of advance software resources, computation skill digital tools.
6. Ethical practices follow ethical principle and practice in academic profession and social fields.

## Undergraduate Programme: 13

<b><u>Programme Code</u></b>	<b><u>Programme</u></b>	<b><u>Subject Combinations</u></b>	<b><u>Programme Abbreviation</u></b>
<b>C037</b>	<b>B. H. Sc.</b>	<b>Home Science</b>	<b>H.SC</b>
<b>D360</b>	<b>B. Sc.</b>	<b>Physics-Computer Maintenance - Mathematics</b>	<b>PCMM</b>
<b>C058</b>	<b>B. Sc.</b>	<b>Biochemistry - Chemistry - Zoology</b>	<b>CBCZ</b>
<b>C062</b>	<b>B. Sc.</b>	<b>Biotechnology - Botany - Chemistry</b>	<b>CBTB</b>
<b>C067</b>	<b>B. Sc.</b>	<b>Biotechnology - Chemistry - Zoology</b>	<b>CBTZ</b>
<b>C080</b>	<b>B. Sc.</b>	<b>Botany - Chemistry - Microbiology</b>	<b>CMBB</b>
<b>C085</b>	<b>B. Sc.</b>	<b>Botany - Chemistry - Zoology</b>	<b>CBZ</b>
<b>C116</b>	<b>B. Sc.</b>	<b>Chemistry - Mathematics - Physics</b>	<b>PCM</b>
<b>C118</b>	<b>B. Sc.</b>	<b>Chemistry - Microbiology - Zoology</b>	<b>CMBZ</b>
<b>C122</b>	<b>B. Sc.</b>	<b>Clinical Nutrition - Chemistry - Zoology</b>	<b>CCNZ</b>
<b>C129</b>	<b>B. Sc.</b>	<b>Computer Application - Mathematics - Physics</b>	<b>PCAM</b>
<b>C137</b>	<b>B. Sc.</b>	<b>Computer Science - Mathematics - Physics</b>	<b>PCSM</b>
<b>C144</b>	<b>B. Sc.</b>	<b>Electronics - Mathematics - Physics</b>	<b>PEM</b>

## Programme -1 B. Sc. (Physics, Chemistry, Mathematics)

### Programme - Outcome

After completion of the Programme, the student will be able to:

- PO 1:** Understand the basic concepts of mechanics and the dynamics to explain the working principles of machines & engines. Students will also gain the knowledge of optical phenomena & instruments, LASER, electric and magnetic fields in static and dynamic situations.
- PO 2:** Demonstrate comprehensive knowledge about chemistry, current research, scholarly and professional literature of advanced learning areas of Chemistry.
- PO 3:** Recognize consistent and inconsistent system of linear equations by the row echelon form of the augmented matrix using the rank of matrix and to find the Eigen values and corresponding Eigen vectors for a square matrix.
- PO 4:** To understand the concept of Riemann integrability, partial derivatives, Theory of metric spaces & continuous functions and determine convergence of improper integrals.
- PO 5:** Find Double and triple integrals volume and surface of solids of revolution and change of order of integration and the solution of linear equations by various numerical methods, direct methods, integration & differentiation.

## Programme -2 B. Sc. (Physics, Computer Application, Mathematics)

### Programme - Outcome

After completion of the Programme, the student will be able to:

- PO 1:** Understand the basic concepts of mechanics and the dynamics to explain the working principles of machines & engines. Students will also gain the knowledge of optical phenomena & instruments, LASER, electric and magnetic fields in static and dynamic situations.
- PO 2:** Build data-driven application using the .NET framework, C# & ADO.NET and

acquire skills to create web based applications and reports using .NET technology.

- PO 3:** Publish & Addressing web site, Absolute & Relative addresses, URL. They will also get huge knowledge about HTML, Different kind of Tags, three-click navigation, email links, site linkage.
- PO 4:** Recognize consistent and inconsistent system of linear equations by the row echelon form of the augmented matrix using the rank of matrix and to find the Eigen values and corresponding Eigen vectors for a square matrix.
- PO 5:** To understand the concept of Riemann integrability, partial derivatives, Theory of metric spaces & continuous functions and determine convergence of improper integrals.

### Programme -3 B. Sc. (Physics, Computer Science, Mathematics)

#### Programme - Outcome

After completion of the Programme, the student will be able to:

- PO 1:** Understand the basic concepts of mechanics and the dynamics to explain the working principles of machines & engines. Students will also gain the knowledge of optical phenomena & instruments, LASER, electric and magnetic fields in static and dynamic situations.
- PO 2:** Identify and describe common abstract user interface components to design GUI in Java using Applet & AWT along with response with events. Students will also able to Design and Develop complex graphical user interface using principal java Swing classes based on MVC architecture.
- PO 3:** Students will gain huge knowledge about Memory Management, fragmentation, swapping relocation, compaction, paging , segmentation ,Virtual Memory algorithms , Thrashing, page fault frequency, Storage Management, Device Management:
- PO 4:** Recognize consistent and inconsistent system of linear equations by the row echelon form of the augmented matrix using the rank of matrix and to find the Eigen values and corresponding Eigen vectors for a square matrix.

## Programme -4 B. Sc. (Physics, Electronics, Mathematics)

### Programme - Outcome

After completion of the Programme, the student will be able to:

- PO 1:** Understand the basic concepts of mechanics and the dynamics to explain the working principles of machines & engines. Students will also gain the knowledge of optical phenomena & instruments, LASER, electric and magnetic fields in static and dynamic situations.
- PO 2:** Understand electronic circuits and related techniques of many electronic devices. Also students will be capable to understand the concepts of digital electronics, microprocessors, operational amplifiers, Bio medical devices and related electronic systems.
- PO 3:** Understand the basic power electronics, electrical motors for developing skills in the related areas, electronic communication systems and their applications.
- PO 4:** Recognize consistent and inconsistent system of linear equations by the row echelon form of the augmented matrix using the rank of matrix and to find the Eigen values and corresponding Eigen vectors for a square matrix.

## Programme -5 B. Sc. (Physics, Computer Maintenance, Mathematics)

### Programme - Outcome

After completion of the Programme, the student will be able to:

- Understand the basic concepts of mechanics and the dynamics to explain the working principles of machines & engines. Students will also gain the knowledge of optical phenomena & instruments, LASER, electric and magnetic fields in static and dynamic situations.
- Analyzing network needs security and control, errors might occur and how to control network errors.

- Perform computer experiments/projects as per program framework of different programming software and trouble-shootings.
- Recognize consistent and inconsistent system of linear equations by the row echelon form of the augmented matrix using the rank of matrix and to find the Eigen values and corresponding Eigen vectors for a square matrix.

### Programme -6 B. Sc. (Chemistry, Botany, Zoology)

#### Programme - Outcome

After completion of the Programme, the student will be able to:

- Demonstrate comprehensive knowledge about chemistry, current research, scholarly and professional literature of advanced learning areas of Chemistry.
- Understand the classification of enzymes their nomenclature and its mechanism and describe the plant hormones their discovery and mode of actions.
- Critically analyze the structure and function of DNA and RNA students will also able to understand the genetic inheritance and gene interaction.
- Understand vital process like digestion, respiration excretion, Osmoregulation and thermoregulation. Develop understanding of physiology of nerve impulse• and muscle contraction. Students will learn about laws of inheritance and causes of variations among different organisms. structure, function and application of DNA and RNA .
- Identify Larval form of Crustacea, Mollusca and Echinodermata and understand the significance of trochophore larva in evolution, Larval form of Crustacea, Mollusca and Echinodermata and understand the significance of trochophore larva in evolution.

### Programme -7 B. Sc. (Chemistry, Clinical Nutrition, Zoology)

#### Programme - Outcome

After completion of the Programme, the student will be able to:

- Demonstrate comprehensive knowledge about chemistry, current research, scholarly and professional literature of advanced learning areas of Chemistry.

- Understand the importance of Balanced diet, Meal planning at different phases of life, the tools of Nutritional assessment, screening and the role of different nutritional agencies for the upliftment of health.
- Understand vital process like digestion, respiration excretion, Osmoregulation and thermoregulation. Develop understanding of physiology of nerve impulse• and muscle contraction. Students will learn about laws of inheritance and causes of variations among different organisms. structure, function and application of DNA and RNA .
- Identify Larval form of Crustacea, Mollusca and Echinodermata and understand the significance of trochophore larva in evolution, Larval form of Crustacea, Mollusca and Echinodermata and understand the significance of trochophore larva in evolution.

#### Programme -8 B. Sc. (Chemistry, Bio-Chemistry, Zoology)

##### Programme - Outcome

After completion of the Programme, the student will be able to:

- Demonstrate comprehensive knowledge about chemistry, current research, scholarly and professional literature of advanced learning areas of Chemistry.
- Understand vital process like digestion, respiration excretion, Osmoregulation and thermoregulation. Develop understanding of physiology of nerve impulse and muscle contraction. Students will learn about laws of inheritance and causes of variations among different organisms. structure, function and application of DNA and RNA .
- Understand the fundamental concepts in modern biology to meet the emerging trends and Handling microbial,cellular and biochemical systems.

#### Programme -9 B. Sc. (Chemistry, Bio-Technology, Zoology)

##### Programme - Outcome

After completion of the Programme, the student will be able to:

- Demonstrate comprehensive knowledge about chemistry, current research, scholarly and professional literature of advanced learning areas of Chemistry.
- Understand vital process like digestion, respiration excretion, Osmoregulation and thermoregulation. Develop understanding of physiology of nerve impulse and muscle contraction. Students will learn about laws of inheritance and causes of variations among different organisms. structure, function and application of DNA and RNA .
- Understand various branches of Biotechnology such as genetics, molecular biology, biochemistry, immunology, fermentation technology, environmental biotechnology and tissue culture techniques.

### Programme -10 B. Sc. (Chemistry, Bio-Technology, Botany)

#### Programme - Outcome

After completion of the Programme, the student will be able to:

- Demonstrate comprehensive knowledge about chemistry, current research, scholarly and professional literature of advanced learning areas of Chemistry.
- Understand various branches of Biotechnology such as genetics, molecular biology, biochemistry, immunology, fermentation technology, environmental biotechnology and tissue culture techniques.
- Understand the classification of enzymes their nomenclature and its mechanism and describe the plant hormones their discovery and mode of actions.
- Critically analyze the structure and function of DNA and RNA students will also able to understand the genetic inheritance and gene interaction.

### Programme -11 B. Sc. (Chemistry, Micro-Biology, Botany)

#### Programme - Outcome

After completion of the Programme, the student will be able to:



- Demonstrate comprehensive knowledge about chemistry, current research, scholarly and professional literature of advanced learning areas of Chemistry.
- Understand the classification of enzymes their nomenclature and its mechanism and describe the plant hormones their discovery and mode of actions.
- Critically analyze the structure and function of DNA and RNA students will also be able to understand the genetic inheritance and gene interaction.
- Work in any Research Laboratory/Institutes (ICMR, NII, CCMB, and any other CSIR Lab) as JRF/ SRF/ RA.
- Grab opportunities in various fields-
  - Medical Science organizations.
  - Health care organizations.
  - Forensic Science Laboratories.
  - Food Industries.
  - NGOs

## Programme -12 B. Sc. (Chemistry, Micro-Biology, Zoology)

### Programme - Outcome

After completion of the Programme, the student will be able to:

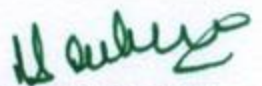
- Demonstrate comprehensive knowledge about chemistry, current research, scholarly and professional literature of advanced learning areas of Chemistry.
- Work in any Research Laboratory/Institutes (ICMR, NII, CCMB, and any other CSIR Lab) as JRF/ SRF/ RA.
- Understand vital process like digestion, respiration excretion, Osmoregulation and thermoregulation. Develop understanding of physiology of nerve impulse and muscle contraction. Students will learn about laws of inheritance and causes of variations among different organisms. structure, function and application of DNA and RNA .

Programme -13 B. Sc. (Home Science)

Programme - Outcome

After completion of the Programme, the student will be able to:

- Demonstrate comprehensive knowledge about Food & Nutrition,
- Demonstrate comprehensive knowledge about Human Development,
- Demonstrate comprehensive knowledge about Resource Management
- Demonstrate comprehensive knowledge about Clothing & Textile.

  
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