



# Government College, Hindaun City (Raj.)

## Programme & Courses Outcomes

### **PROGRAM OUTCOMES: FACULTY- SCIENCE**

**As a Graduate in the science faculty a student will be able to:**

1. Acquire the knowledge of facts and figures related to various subjects in pure sciences such as Physics, Chemistry, Botany, Zoology, Mathematics, etc.
2. Understand the basic concepts, fundamental principles, and scientific theories related to various scientific phenomena and their relevancies in day-to-day life.
3. Acquire the skills in handling scientific instruments, planning and performing in laboratory experiments
4. Obtain the skills of observation and drawing logical inferences from scientific experiments.
5. Analysis the given scientific data critically and systematically and the ability to draw objective conclusions.
6. Been able to think creatively (divergent and convergent) to propose novel ideas in explaining facts and figures or providing a new solution to problems.
7. Realize how developments in any science subject helps in the development of other science subjects and vice-versa and how an interdisciplinary approach helps in providing better solutions and new ideas for the sustainable developments.
8. Enhance the capability of decision-making at personal and professional levels.
9. Develop entrepreneurial skills.
10. Develop a scientific outlook not only with respect to science subjects but also in all aspects related to life.
11. Realize that knowledge of subjects in other faculties such as humanities, performing arts, social sciences etc.
12. Imbibe ethical, moral, and social values in personal and social life.
13. Develop various communication skills such as reading, listening, speaking and communicating etc. which will help in expressing ideas and views clearly and effectively.
14. Realize that pursuit of knowledge is a lifelong activity and in combination with untiring efforts and positive attitude and other necessary qualities leads towards a successful life.
15. Develop flair by participating in various social and cultural activities voluntarily, in order to spread knowledge, create awareness about the social evils, blind faith, etc.
16. Students will be able to get self-employed and will be eligible to fight various competitive examinations.

### **DEPARTMENT OF BOTANY**

#### **The Course Outcomes, B. Sc. in Botany**

**At the completion of B. Sc. in Botany the students are able to:**

1. Understand the structural organization and variation in chromosomes
2. Get self-employment in the fields as: mushroom Cultivation, organic manure preparation, horticultural plant production, cultivation of crops in poly-house conditions, plant tissue, culture laboratories, etc.
3. Understand plant structures in the context of the physiological functions of plants.
4. Understand lipid metabolism in plants.
5. Understand the morphological and structural organization of Cryptogams and Phanerogams.
6. Economics Botany and plant utilization in concerned with human life.
7. Diversity of plants
8. National plant wealth.
9. Developmental biology of plants.
10. Industrial application of microorganisms
11. Eligible for further higher studies.

## **DEPARTMENT OF CHEMISTRY**

### **The Course Outcomes, B. Sc. in Chemistry**

#### **At the completion of B. Sc. in Chemistry the students are able to:**

1. Provide a broad foundation in chemistry that stresses scientific reasoning and Analytical problem solving with a molecular perspective.
2. Achieve the skills required to succeed in graduate school, the chemical industry, and professional school.
3. Get exposure of a breadth of experimental techniques using modern instrumentation.
4. Understand the importance of the Periodic Table of the Elements, how it came to be, and its role in organizing chemical information.
5. Understand the interdisciplinary nature of chemistry and integrate the knowledge of mathematics, physics, and other disciplines to a wide variety of chemical problems.
6. Learn the laboratory skills needed to design, safely, and interpret chemical research.
7. Acquire a foundation of the chemistry of sufficient breadth and depth to enable them to understand and critically interpret the primary chemical literature.
8. Develop the ability to communicate scientific information and research results in written and oral formats.
9. Learn professionalism, including the ability to work in teams and apply basic ethical principles.
10. Eligible for further higher studies.

## **DEPARTMENT OF MATHEMATICS**

### **The Course Outcomes, B. Sc. in Mathematics**

#### **At the completion of B. Sc. in Mathematics the students are able to:**

1. Learn to solve improper integrals.

2. Make use of linear equations for solving any differential equations
3. Understand various problems related to planar graphs.
4. Understand the Concepts of Matrices and linear equations.
5. Learn properties of inverse Laplace transforms
6. Eligible for further higher studies.

## **DEPARTMENT OF PHYSICS**

### **The Course Outcomes, B. Sc. in Physics**

#### **At the completion of a B. Sc. in Physics students are able to:**

1. Demonstrate a rigorous understanding of the core theories & principles of physics, which include mechanics, electromagnetism, thermodynamics, & quantum mechanics.
2. Learn the Concepts as Quantum Mechanics, Relativity, introduced at the degree level in order to understand nature at atomic levels.
3. Provide knowledge about material properties and their application for developing technology to ease the problems related to society.
4. Understand the set of physical laws, describing the motion of bodies, under the influence of the system of forces.
5. Understand the relationship between particles & atoms, as well as their creation & decay.
6. Relate the structure of atoms & subatomic particles
7. Understand the physical properties of molecules the chemical bonds between atoms as well as molecular dynamics.
8. Analyze the applications of mathematics to the problems in physics & develop suitable mathematical methods for such applications & for the formulation of physical theories.
9. Learn the structure of solid materials & their different physical properties along with metallurgy, cryogenics, electronics, & material science.
10. Understand the fundamental theory of nature at a small scale & levels of atom & sub-atomic particles.
11. Eligible for further higher studies.

## **DEPARTMENT OF ZOOLOGY**

### **The Outcomes of UG Course, B. Sc. in Zoology**

#### **At the completion of B. Sc. in Zoology the students are able to:**

1. Animal Diversity & appreciate variability their morphology, anatomy & behavior.
2. Learn about different systems, their coordination, and control.
3. Learn about human evolution along with other animals. Understand the Lamarckism, Neo-Lamarckism and Darwinism.
4. Should be able to analyze qualitative and quantitative parameters regarding evolution, biochemistry (constituents)
5. Learn classical genetics and molecular biology

6. Learn the importance of Taxonomy, structural organization & diversity of Non-chordates & chordates & compare various systems structurally and functionally.
7. Understand evolutionary history & functional and structural affinities of different animals.
8. Understand population and community characteristics, ecosystem development, food chains, food webs, energy models, and ecological efficiencies.
9. Learn to appreciate nature & make judicious use of ecological resources for sustainable development.
10. Obtain knowledge of cell, Prokaryotic, eukaryotic cell, macromolecular, membranes, organelles, cell division, etc.
11. Structure –Functional relationship of enzymes, Carbohydrates proteins, lipids, various biochemical techniques & perform laboratory tests for qualitative analysis
12. Development of Multicellular organisms from the single-cell zygote.
13. Understand animal behavior
14. Understand Biotechnology techniques viz. ELISA technique and DNA fingerprinting.
15. Understand the applications of zoology and develop skills for entrepreneurship in fields of aquatic biology, lac culture, sericulture, apiculture, poultry, vermicomposting, etc.
16. Contribute to policymakers In wildlife conservation animal preservation and environment protection.

#### **Program Outcomes: Faculty–Arts**

##### **As a Graduate in Arts faculty a student will be able to:**

1. Acquire the knowledge of facts and figures related to various subjects of Arts like Economics, Sociology, History, Psychology, Drawing & Painting, Hindi, English, Sanskrit, Music, Philosophy, Home Science.
2. Understand the basic concepts, fundamental principles, and their relevancies in day-to-day life.
3. Acquire the skills in handling instruments, planning, and performing laboratory experiments in Psychology, Home Science, Music, and D & P.
4. Obtain the skills of observations and drawing logical inferences.
5. Analysis of the given scientific data critically and systematically and the ability to draw objective conclusions.
6. Been able to think creatively (divergently and convergently) to propose novel ideas in explaining facts and figures or providing new solutions to problems.
7. Realize that knowledge of subjects in other faculties such as humanities, performing arts, social sciences, etc.
8. Enhance the capability of decision-making at personal and professional levels.
9. Develop entrepreneurial skills.
10. Imbibe ethical, moral, and social values in personal and social life.
11. Develop various communication skills such as reading, listening, speaking and communicating, etc. which will help in expressing ideas and views clearly and effectively.
12. Realize that pursuit of knowledge is a lifelong activity and in combination with untiring efforts and positive attitude and other necessary qualities leads towards a successful life.

13. Develop flair by participating in various social and cultural activities voluntarily, in order to spread knowledge, create awareness about the social evils, blind faith, etc.
14. Students will be able to get self-employed and will be eligible to fight various competitive examinations.

### **Programmes Specific Outcomes**

#### **Course Outcomes: HINDI (Lit.)**

1. Students will be able to understand the origin of the Hindi language and its literature.
2. They will be able to identify the dialects of the Hindi language family.
3. They will be able to understand the concept of the history of literature.
4. Students will be able to read and analyze the scripts and poetries.
5. Students will be able to interpret works of literature of various writers within the course.
6. Students will be able to acquaint themselves with various forms of writing.
7. Students will be able to develop aesthetic sense.
8. Students will be able to interpret the techniques of literary works.

#### **Course Outcomes: ECONOMICS**

Students who have completed Graduation will be able to -

1. Understand theories and principles in microeconomics including price theory, market structure, trade-offs, comparative advantage, factor markets, consumer theory, public goods, externalities, and market failure.
2. Apply various principles to analyze economic issues
3. Understand theories and principles in macroeconomics including national income accounting, models of output determination, models of aggregate demand and supply, the money market, fiscal policy, and monetary policy.
4. Apply various principles to analyze economic issues
5. Communicate through presentations about specific economic issues.
6. Acquire quantitative skills used in economic analyses.

#### **Course Outcomes: ENGLISH (Lit.)**

1. Students will be able to read and analyze the scripts and poetries.
2. Students will be able to interpret works of literature of various writers within the course.
3. Students will be able to acquaint themselves with various forms of writing.
4. Students will be able to develop an aesthetic sense.
5. Students will be able to interpret the techniques of literary works.

#### **Course Outcomes: SOCIOLOGY**

1. Students will be able to acquire knowledge about society and social progress.
2. Students will be able to understand the effects of social elements on an individual and understand humankind better.
3. Students will be able to understand the social issues and contribute to solutions.

4. Students will be able to make rational perceptions of people and their good/bad/frustrating habits.
5. Students will be able to develop skills of teamwork, self-dependence, and autonomy.
6. Sociology in combination with another subject like Maths/Music makes a person more vibrant and dynamic.

### **Course Outcomes : Geography**

1. This Course in geography covers an extensive area of Structural & Dynamic geomorphology, Economic Geography, Geography of Environment, Bio- geography, Agriculture Geography, Cultural Geography, Political Geography and Industrial Geography. A weekly seminar for Final year students provides exposure in Laboratory work, map work, test and surveying.
2. The Course specific outcomes are of immense help to students and opens up opportunities for Urban Geography and planning, Regional Planning & Development, and also in the field of tourism with the help of courses like Geography of Tourism, Geography of Population & Settlement and Remote sensing & G.I.S.
3. Students are able to understand physical, Agriculture and urban geography of India and Rajasthan.

### **Course Outcomes: Political Science**

Students will be able to inter-relate theories of various govt.

1. Students will be able to understand democratic values, rights, duties, etc.
2. Students will be able to understand national and international relations within country and beyond countries respectively.
3. They can understand the basic methodology of research and analysis and formulate effective argumentation strategies.
4. Students can understand the philosophical thoughts of leaders their ideologies and political parties.

### **Course Outcomes: HISTORY**

1. Students will be able to understand customs, religion, and administration through historical events.
2. They can understand the present existing social, political, religious, and economic conditions of people and compare them to ancient and medieval times.
3. They can participate in historical drama and historical occasions.
4. They can visit places of historical interest archeological sites museums and archives.
5. Students will be able to develop moral values.
6. Students will be able to develop feelings of patriotism.
7. Interest in old coin collections, ancient art, historical models, tools, maps, and charts can develop personalities.

### **Course Outcomes: SANSKRIT**

1. Students will be able to understand the origin of Sanskrit and Sanskriti through ancient Indian history of Literature.
2. They will be able to develop skills in literary criticism.
3. They will be able to use proper grammar in text and oral communication.
4. They will be able to understand the concept of the history of literature.
5. Students will be able to read and analyze the scripts and poetries.
6. Students will be able to interpret works of literature of various writers within the course.
7. Students will be able to acquaint themselves with various forms of writing.
8. Students will be able to develop an aesthetic sense.
9. Students will be able to interpret the techniques of literary works.

### **Course Outcomes: Philosophy**

1. The course gives an understanding of major philosophical thoughts, reasoning, logic, ethics and religion.
2. Students will be able to develop moral values.
3. Students can understand the philosophical thoughts of Western and Indian Philosophers and their ideologies .
4. By the end of programme the students are qualified to conceptualize Epistemology and Meta Physics with reference to Indian philosophy , western philosophy, logic both Indian and western, philosophy of yoga, and ethics.
5. The specific outcomes of the programme make the student proficient in the Philosophy of Religion, Vedanta Darshan. Philosophy of Gandhi, Philosophy of Bhagvatagita, Philosophy of Law.

### **Program Outcomes: Faculty- Commerce**

**As a Graduate in Commerce faculty the program outcomes makes a student:**

1. Able learners to get theoretical and practical exposure in the commercial sector which includes Accounts, Commerce, Marketing, Management, Economics, Environment, etc.
2. Develops communication skills and builds confidence to face the challenges of the corporate world.
3. Enhance the capability of decision-making at personal and professional levels.
4. Makes students industry ready and develops various managerial and accounting skills for better professional opportunities. Develops entrepreneurial skills amongst learners.
5. Strengthens their capacities in varied areas of commerce and industry aiming toward the holistic development of learners.
6. Thus, after completing their graduation learners develop a thorough understanding of the fundamentals of Commerce and Finance. Program Specific Outcomes.
7. Students will be able to get self-employed and will be eligible to fight various competitive examinations.

### **Course Outcomes - B.Com.**

#### **ACCOUNTANCY AND BUSINESS STATISTICS (A.B.S.T.)**

1. Learners venture into Managerial positions, Accounting areas, Banking Sectors, Auditing, Company Secretary Ship, Teaching, Professor, Stock Agents, Government Employment, etc.
2. Enables learners to prove themselves in different Professional examinations like CA, CS, CAT, GRE, CMA, MPSC, UPSC, etc.
3. Learners further move towards research in the field of Commerce.
4. Enables students to demonstrate Progressive learning of various tax issues and tax forms related to individuals and businessmen and setting up their own businesses start-up.
5. The vast syllabi cover various fields of commerce and accountancy which helps students grasp practical and theoretical knowledge.

### **Course Outcomes - B.Com.**

#### **ECONOMIC ADMINISTRATION AND FINANCIAL MANAGEMENT (EAFM)**

1. B.Com in Banking and Insurance is developed as per the requirements of the Banking and Finance Industry where students learn banking operations, regulations, monetary auditing, and selling of financial products and services.
2. The specially designed syllabus creates trained professionals who can handle various financial activities associated with the banking and insurance sectors.
3. Specialization in Banking and Insurance helps students to operate efficiently in the Banking and Insurance environment in the financial service sector and handle various technologies employed in the field of Banking and Insurance.
4. It gives students theoretical and application-based knowledge in the banking and financial sector and analytical skills to work with various financial tools, such as regulatory agencies and global markets.

### **Course Outcomes - B.Com.**

#### **BUSINESS ADMINISTRATION (Bus. Adm.)**

1. Transmits understanding of basic concepts of business along with setting business unit and logical provisions for initiating business. Gives clues to learners on entrepreneurship and exposes them to the problems and prospects of women entrepreneurs. Conveys to the learners the current trends in business, managerial economics, business law, and business communications.
2. Corporate communication helps future managers and employees in performing managerial functions smoothly. Creates awareness, imparts knowledge, shapes attitudes, and overall improves overall interaction between people. Environmental Studies Make students learn the role of the environment and ecosystem. Creates awareness about the relationship between population & environment. Various laws of commerce to undergraduate students of commerce so that they can use them in the field of commerce & industries to solve real-life problems. Facilitates decision-making with the help of decision-making techniques and Makes learners understand the fundamentals of commerce.



and plans regarding various strategies to increase service and trends in services. Imparts knowledge related to retail changes in India with a global perspective and converses on problems and prospects in retail. Furnishes details regarding BPO, KPO and various e-commerce activities focusing on logistics earners can pursue careers as financial experts and also develop a better understanding of the markets as this course gives an in-depth understanding of the essential qualities and areas of expertise required for such jobs.

3. Students get opportunities to explore many career paths like investment and portfolio management, stock market, security analysis, mutual fund, and capital market analysis, accounting field, financial field, etc.
4. The programmer aims to develop professional skills among students and build a strong foundation in accounts, Finance, and Ethics which will benefit themselves as well as society.

### **Program Outcomes – M.A. Political Science**

1. By the end of the programme the students are able to interpret Western Political Theory From Plato to Marx, Comparative Political Institutions, International Politics, Theory and Practice of Public Administration, Modern and Contemporary Political Theory and Indian Government and Politics. The programme is designed to develop competence of the learners for all competitive exams.
2. . Students will think critically and rationally about various social issues.  
..They can display the ability to engage vigorously on social interacting platforms.
3. Students will develop an understanding of the nature of gender equity and equality.
4. They can raise the voices of the people and society on contemporary issues through justified media of expression in any form of mass media.
5. They can participate in policy engagement.
6. They can engage in design and evaluation research in the subject and interdisciplinary research.

### **Course Outcomes: Political Science**

1. Students will be able to explain and apply major theoretical perspectives in Political Science.
2. They can understand the theories of various Political thinkers of the world.
3. They can understand and apply scientific methods to understand social political realities.
4. To assist students in preparing (personal guidance, books) for competitive exams. E.g. - NET/SET, Staff Selection Commission, Banking sector, School Service Commission, etc.
5. They can understand policy engagement, civic responsibility, global political issues and sustainability.
6. Students will be able to link theories and cross-cutting issues.
7. They can understand the theoretical perspective of globalization.
8. They can understand recent trends in International Issues and recent challenges .
9. They can develop ground-level research skills.
10. Students will be able to understand the political issues and contribute to solutions.
11. An extensive study of all the courses exposes the students to the concept of state, nation, political systems, thinkers, theories, and major debates.

### **Program Outcomes – M.A. HINDI**

1. To prepare the students with skills to analyze the concept and different theories of Hindi literature and language.
2. Continue to acquire relevant knowledge and skills appropriate to professional activities.
3. Imbibe effective communication in both mediums of expression (oral and writing).
4. Create awareness to become an enlightened citizen with a commitment to deliver one's responsibilities within the scope of bestowed rights and privileges.
5. To prepare the students for pursuing research or careers in Hindi language and literature and its allied fields.

#### **Course Outcomes: HINDI (Lit.)**

1. Students will be able to understand the origin of Hindi language and its literature.
2. They will be able to identify the dialects of Hindi language family.
3. To assist students in preparing (personal guidance, books) for competitive exams.

E.g. NET/SET, Staff Selection Commission, Banking sector/Govt. of India undertakings (Rajbhasha Sahayak of Hindi Officer/Hindi Translator), School Service Commission, etc.

1. To provide advanced knowledge of different theories of the Hindi language and literature and empower the students to pursue higher degrees/research at reputed academic institutions.
2. Students will be able to read and analyze the scripts and poetries.
3. Students will be able to interpret works of literature of various writers within the course.
4. To encourage the students for original thinking/thought/decision making.
5. They will be able to understand the concept of the history of literature.
6. To prepare and motivate students for research studies in the Hindi language and literature and related fields.
7. Students will be able to acquaint themselves with various forms of writing.
8. To imbibe effective communication in both mediums of expression (oral and writing).
9. Students will be able to develop an aesthetic sense.
10. Students will be able to interpret the techniques of literary works.
11. To nurture analytical qualities or skills, thinking power, creativity through assignments & project works.

#### **Program Outcomes – M.Sc. Mathematics**

1. The students are able to solve basic mathematical problems, exponential problems. There are a wide number of career opportunities viz., Operational research, IT, College and School teacher, The Actuarial Profession etc.
2. To make them eligible for higher education.
3. Prepare students for the profession of teacher, Staff Selection Commission, Banking, Indian Navy, RPSC, UPSC, etc.

#### **Course Outcomes: M.Sc. Mathematics**

1. By the end of this programme the student has a very clear concept of Advanced abstract algebra, analysis, mathematical methods, differential and integral equations and numerical methods, topology and functional analysis. Continuum mechanics

2. The outcome of this specific programme is that it enriches the student with the knowledge about Generalized hypergeometric functions, Advance Discrete Mathematics, Mechanics, Fluid dynamics, Operation research, Topology, Mathematical theory of Statistics, Computer Applications and Relativity and Cosmology.

### **Program Outcomes – M.Sc. Chemistry**

The student after completing M.Sc. Chemistry is well versed with the four basic branches of Chemistry viz., Inorganic, Organic, Physical and Analytical Chemistry. . A detailed knowledge on computational chemistry is gained by the student related to Fortran, running of advanced scientific packages, various semi-empirical and density functional theories; instrumentation methods and analysis related knowledge is gathered by the student studying Analytical Chemistry, viz., Spectroscopy and Spectrophotometric methods, chromatography, pharmaceutical analysis, clinical analysis, analysis of soil, fertilizers and fuels, environmental analysis, food and forensic analysis and organic industrial analysis etc.

### **Course Outcomes: M.Sc. Chemistry**

1. In addition, the student gains information related to principles of Spectroscopy, Photochemistry, and use of computers in Chemistry and other modern techniques and scope of Chemical Biology. They can become Scientists, College and School teachers, Chemists, Pharmacists, Cosmetic industry, Lab. Technician, Industrial research scientist, etc.
2. A student who studies Inorganic Chemistry gains knowledge pertaining to alkyls, aryls, compounds of transition metal-carbon metal bonds, metal in medicine, metalloenzymes, supramolecular chemistry, metal complexes, polymers and ceramics; one who opts for Organic Chemistry becomes well acquainted with organic synthesis, organometallic reagents, heterocyclic and natural products, alkaloid, steroids plant pigments etc.; those who study Physical Chemistry understand the concepts in molecular orbital and valence bond theory, Principle of reactivity, kinetic isotope effect, structural effects on reactivity, solvation and solvent effects, theory and properties of liquids etc