OUTCOME CUM OF HISTORY SUBJECT IN PRESENT SCENARIO

History is important to study because it is essential for all of us in understanding ourselves and the world around us. There is a history of every field and topic, from medicine to music,to art. To know and understand history is necessary, even though the results of historical study are not as visible, and less immediate.

1. Our World

History gives us a very clear picture of how the various aspects of society — such as technology, governmental systems, and even society as a whole — worked in the past so weunderstand how it came to work the way it is now.

2. Society And Other People

Studying history allows us to observe and understand how people and societies behaved. Forexample, we can evaluate war, even when a nation is at peace, by looking back at previous events. History provides us with the data that is used to create laws or theories about variousaspects of society.

3. Identity

History can help provide us with a sense of identity. This is one of the main reasons that history is still taught in schools around the world. Historians have been able to learn about how countries, families, and groups were formed, and how they evolved and developed overtime. When an individual takes it upon themselves to dive deep into their own family's history, they can understand how their family interacted with larger historical change. Did family serve in major wars? Were they present for significant events?

4. Present-Day Issues

History helps us to understand present-day issues by asking deeper questions as to why thingsare the way they are. Why did wars in Europe in the 20th-century matter to countries around the world? How did Hitler gain and maintain power for as long as he had? How has this shaped our world and our global political system today?

5. The Process Of Change Over Time

If we want to truly understand why something happened — in any area or field, such as onepolitical party winning the last election vs the other, or a major change in the number of smokers — we need to look for factors that took place earlier. Only through the study of history can people see and grasp the reasons behind these changes, and only through history can we understand what elements of an institution or a society continue regardless of continual change.

6. Political Intelligence

History can help us become better-informed citizens. It shows us who we are as a collective group, and being informed of this is a key element in maintaining a democratic society. This knowledge helps people take an active role in the political forum through educated debates and by refining people's core beliefs. Through knowledge of history, citizens can even change their old belief systems.

7. History Teaches Morals And Values

By looking at specific stories of individuals and situations, you can test your morals and values. You can compare it to some real and difficult situations individuals have had to face in trying times. Looking to people who have faced and overcome adversity can be inspiring. You can study the great people of history who successfully worked through moral dilemmas, and also ordinary people who teach us lessons in courage, persistence, and protest.

8. Builds Better Citizenship

The study of history is a non-negotiable aspect of better citizenship. This is one of the main reasons why it is taught as a part of school curricula. People that push for citizenship history (relationship between a citizen and the state) just want to promote a strong national identity and even national loyalty through the teaching of lessons of individual and collective success.

9. Learn From The Past And Notice Clear Warning Signs

We learn from past atrocities against groups of people; genocides, wars, and attacks. Through this collective suffering, we have learned to pay attention to the warning signs leading up to such atrocities. Society has been able to take these warning signs and fight against them whenthey see them in the present day. Knowing what events led up to these various wars helps us better influence our future.

10. Gaining A Career Through History

The skills that are acquired through learning about history, such as critical thinking, research, assessing information, etc, are all useful skills that are sought by employers. Many employerssee these skills as being an asset in their employees and will hire those with history degrees invarious roles and industries.

11. Personal Growth And Appreciation

Understanding past events and how they impact the world today can bring about empathy and understanding for groups of people whose history may be different from the mainstream. Youwill also understand the suffering, joy, and chaos that were necessary for the present day to happen and appreciate all that you can benefit from past efforts today.

Department of Economics
Course outcome

B.A.1 (Micro Economics):

The outcome of Micro Economics is to understand the economic behaviour of individuals, firms and markets. It is mainly to equip the students in a rigorous and comprehensive understanding with the various aspects of consumer behaviour and demand analysis, production theory and costs, the theory of traditional markets and equilibrium of firms.

B.A.2 (Macro Economics):

Macro Economics paper provides theoretical foundation of some advanced issues and policies. It enables students to discuss the functional relationships between economic aggregates. It helps to understand the macro issues such as money, inflation, unemployment and foreign trade etc.

B.A.3 (Indian Economy)

It enables students to become policy literates and thus be more informed citizens. They learn the development issues and challenges faced by the Indian economy. They also learn the functioning of fiscal and monetary policies designed for developed & developing Economies.

Parbhu
20/12/2022

PRINCIPAL
Govt. Women College
JIND (HR)

COURSE OUT COMES OF B.Sc ZOOLOGY

B.Sc ZOOLOGY

I. Life& Diversity of Protozoa to Porifera& Cell Biology
II. Life& Diversity of Coelenterata to Helminthes & Cell Biology
III. Life& Diversity of Annelida to Arthropoda & Genetics-I
IV. Life& Diversity of Mollusca to Hemichordata & Genetics-II
V. Life& Diversity of Chordate-I
VI. Mammalian Physiology-I
VII. Life& Diversity of Chordate-II
VIII. Mammalian Physiology-II
IX. Environmental Biology
X. Evolution& Development Biology
XI. Aquaculture& Pest Management-I
XII. Aquaculture& Pest Management-II

Along with Lectures Practical work and Field visit are Mandatory for Students

15.12.2022

16/12/22

Course outcomes of BSC Botany

BSC 1 On completion of course, students are able to understand diversity of microbes, students are able to identify various types of bacteria, Algae, Fungi, bryophytes and Pteridophytes. They are able to distinguish useful and harmful microbes, their economic importance. Cell Biology and genetics are very common topics for Botany students where they are able to understand cell structure, cell function, cell cycle, DNA structure, gene structure, gene expression, gene regulation, protein structure and functions. Various genetical disorders are identified by the students.

BSC 2 On completion of course, students can identify various gymnosperms, get idea of fossils and fossil plants. They have a vast

knowledge of geological time scale, past and present life, gradual changes due to evolution. Further students are familiar with angiosperms, very common in their surroundings. Diversity in plants can be illustrated by living Taxa. Various types of plants, their morphological and anatomical diversity help them to correlate nature role in speciation. Anatomy provides a best illustration to know the internal structure of plants. Further students know the concept of Taxonomy and systematic. Scientific naming, identification and classification of plants can be illustrated by complete description of various plant families. Flower is a beautiful gift to the nature by plants, but for a Botanist this is the organ of reproduction. Reproducing plants, their development, seed structure and embryo formation is studied in this curriculum.

BSC 3 Students are able to know the various internal phenomenon in plants, plant growth, plant growth regulators, plant movements, Photosynthesis, respiration, minerals transport, water transport, flowering, seed dormancy and fruit ripening. Ecology provides a vast idea of environment, population, community, eco-system, biosphere, environmental pollution and global changes. Students are able to know the concept of plant tissue culture and genetic engineering. These phenomenon are practically important for daily life activites.

Course Outcomes of Political Science

M. No: 418 Dt.: 16-12-2022

- It is the main subject in UPSC exam.
- It helps the students to familiar with the structure of centre & state govt.
- It also helps the students to understand the process of judiciary system.
- It awares the students about constitution of India.
- It gives information to the students about international organization.
- It provides the ideology of nationalism & socialism.

16/12/22

PRINCIPAL
Govt. Women College
UNA (HP)

Course Outcomes of Public Administration

M.A. 417 Pt.

- It is the main subject in UPSC exam for I.A.S.
- Haryana government created the post of Labour Inspector where only the students of Public Administration can apply.
- It awares the students about the structure of Urban & Rural administration.
- It awares the students about the emerging trends of administration.
- It helps the students to familiar with the structure of centre & state govt.
- It also helps the students to understand the process of judiciary system.

16/12/2022

PRINCIPAL
Govt. Women College
JIND (HR)

Subject: हिन्दी	
Year	Course outcomes
1st Year	ध्रुवस्वामिनी नाटक में नारी जीवन की विभिन्न कठिनाईयों को दर्शाया गया है जिसके माध्यम से बच्चे आधुनिक युग में प्रचलित समस्याओं के बारे में भी अवगत होते हैं । और उनका समाधान भी ढूंढने का प्रयास करते हैं। भक्ति काल के माध्यम से बच्चों को राम और श्री कृष्ण के जीवन के बारे में पता चलता हैं और व्यवहारिक हिंदी के द्वारा बच्चें भाषा और बोली में अंतर को स्पष्ट कर ज्ञान प्राप्त करते हैं। हिन्दी वर्तनी विषय के माध्यम से बच्चों को हिन्दी में होने वाली गलतियों का ज्ञान कराया जाता है और उन्हें सुधारने का प्रयत्न किया जाता हैं। जो बच्चों को प्रतियोगी परीक्षाओं और उच्च शिक्षण के लिए भी बहुत महत्वपूर्ण है।
2nd Year	विभिन्न कहानियों के माध्यम से बच्चे हमारे समाज में प्रचलित विभिन्न समस्याओं से अवगत होते हैं। जैसे की गरीबी, निम्न वर्ग को पारिवारिक समस्याएँ आदि। इन समस्याओं को पढ़कर बच्चे अपने दिमाग सें समस्याओं का समाधान ढूढ़नें का भी प्रयास करते हैं। यह हमारे समाज के लिए अति महत्वपूर्ण हैं। क्योंकि आज के युवा ही हमारे समाज का मजबूत आधार या रीढ की हड्डी हैं। क्योंकि उच्च शिक्षण के लिए बच्चों में चिंतन का होना अति महत्वपूर्ण है। और हिन्दी साहित्य के आधुनिक काल में जो उपन्यास, कहानी, नाटक, निबंध आलोचना है उनके द्वारा बच्चें बहुत कुछ सीखते हैं। और उन्हें आलोचना या चिंतन करने की शक्ति का विकास होता हैं।
3rd Year	अनेक निबंधों माध्यम से बच्चें विभिन्न लेखकों की सोच को समझ पातें हैं। और अपने तरीके से उनमें आलोचना करने की शक्ति का विकास होता हैं। हरियाणवी लोक साहित्य के इतिहास के माध्यम से बच्चें हमारी हरियाणवी संस्कृति के बारे में ज्ञान प्राप्त करते हैं। और अपनी हरियाणवी संस्कृति को बढ़ावा देने का प्रयास करते हैं। वह हरियाणवी साहित्य में अपना हाथ भी आजमाना चाहते हैं। ताकि हमारा साहित्य फले–फूले और सही दिशा में अग्रसर हो ।

PRINCIPAL
Govt. Women College
UND (KR)

15/11/2022

5-A

OFFICE OF THE PRINCIPAL GCW JIND

COURSE OUTCOME OF ENG HONS

The literature of English honours is very helpful to the students in getting a glimpse into Indian writing in English modern British literature and modern world literature, it is said that literature is a mirror to life what is being thought and done in the society at large is being reflected in the literature. The students come to know about Indian way of thinking, writing Indian traditions and Customs through Indian writing in English. Modern British literature and modern world literature teaches about the latest techniques like monologue, stream of consciousness, magic realism. They come to know about the latest concepts like colonialism, post colonialism, postmodernism, feminism. The students are made aware about romantic literature, Victorian literature and about grammar and contemporary English usages .They deeply enjoy the poets like Wordsworth, Coleridge and have a deep healing power of nature as a guide. All these things develop their hearts as well as their minds and lead of what we call unification of sensibility, i.e. Balanced growth of head and heart.

Dr. Anupma

Office of the Principal GCW, College for women Jind

Course Outcome Subject: ENGLISH	
Year	Course Outcomes
1st Year	The short story has numerous instances in all culture of the world. The literary world of short stories develop the critical thinking of the students. Students will acquire an understanding on the different facets of life. Life is a big challenge and everyone has to face it. These short stories make the students to face the life boldly. Students will acquire an understanding of not only human goodness but human greed and cruelty also. They will acquire the knowledge of phonetic transcription and through vocabulary exercises they will be able to enrich their vocabulary that will be beneficial for their competitive exams.
2nd Year	The syllabi of the second year will act as tool to refine the spoken communication skill which enable them to work efficiently in their personal and professional lives. Through skilful blending of dialogue, legend and dramatic action of Plays, Students will learn the best way of communication. After the completion of course, they will be able to write E-Mail, Resumes for themselves.
3rd Year	Students are expected to imbue with the following qualities which help them in their future life to achieve the expected goals. 1 Realisation of human values 2 Sense of social service 3 Responsible and dutiful citizen 4.Critical thinking 5. Creative ability

Deptt. of English 11.02.2021

Course Outcome

BA Geography Hon's

- Interpret the theories, approaches and concepts in discipline of Geography.
- Articulate the theories of special patterns the interrelationship between people and places and the interaction between nature and society.
- Explain and distinguish differences among the various methodologies use in geographic research and analysis.
- Analysis, evaluate and interpret geographic data.
- Understand Remote Sensing and GIS techniques.
- The students will be able to understand the structure, compositions of different spheres of the earth and its atmosphere.
- Understand the process of agent of changes on and under the earth surface.
- Get information about the course and effects of local, national and international problems or issues (Like global warming, acid rain, ozone depletion, soil degradation and deforestation etc).
- Students will learn about formation of landforms.
- Students will be able to do social surveys and analyze the data.

Students will have the knowledge about geographical, socio-economic and political background of main continents and Indian sub continents.

21/12/22

Course Outcome

BA Pass course Geography

- Interpret the theories, approaches and concepts in discipline of Geography.
- Articulate the theories of special patterns the interrelationship between people and places and the interaction between nature and society.
- Explain and distinguish differences among the various methodologies use in geographic research and analysis.
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21/12/22

Course Outcome
Chemistry Department

Class B.Sc.-I

Semester-Ist

Paper no.	Code no	Nomenclature	Max. marks + I.A.	Time
VIII	CH-201	INORGANIC CHEMISTRY	32+8	3 Hrs
IX	CH-202	PHYSICAL CHEMISTRY	32+8	3 Hrs
X	CH-203	ORGANIC CHEMISTRY	32+8	3 Hrs

Inorganic chemistry paper contains topic Atomic structure, periodic table, Covalent Bond, Ionic Solid. These topics are very knowledgeable for students and very useful for their competitive exam point of you like IIT JAM.

Physical chemistry paper contains about behavior of real gas and ideal gas. This paper also contains about state of matters like liquid and solid state.

Organic chemistry paper contains about chemistry of chemical compounds. Such as bond type and their properties. This topic is very useful for knowledge of fuels used in daily life. This paper also give knowledge how and why reaction take place in between chemical compounds.

Class B.Sc.-I

Semester-II

Paper no.	Code no	Nomenclature	Max. marks + I.A.	Time
IV	CH-104	INORGANIC CHEMISTRY	32+8	3 Hrs
V	CH-105	PHYSICAL CHEMISTRY	32+8	3 Hrs
VI	CH-106	ORGANIC CHEMISTRY	32+8	3 Hrs
VII	CH-107	PRACTICALS	60	7 Hrs

This semester papers contains lot of knowledge like internal forces in chemical compounds, semiconductor used in daily life in electronic equipments, some noble gases in nature. Students also found about why these noble gases does not react and how can we use them for industrial purpose.

Class B.Sc.-II

Semester-III

Paper no.	Code no	Nomenclature	Max. marks + I.A.	Time
VIII	CH-104	INORGANIC CHEMISTRY	32+8	3 Hrs
IX	CH-105	PHYSICAL CHEMISTRY	32+8	3 Hrs

X	CH-106	ORGANIC CHEMISTRY	32+8	3 Hrs

Inorganic chemistry paper contain about some coordination complex which are very useful in medicinal and pharmaceutical industry. Students got lot of knowledge from this paper. This paper also told about some non aqueous solvents.

Physical chemistry paper gives knowledge about natural phenomena such as energy of natural processes and entropy of natural processes. Students also got why some compounds are not miscible into each other.

Organic chemistry paper contains about chemical properties of some acid and alcohol, their uses and harmful effect. Also got knowledge about use of Ultra violet

Class B.Sc.-II Semester-IV

Paper no.	Code no	Nomenclature	Max. marks + I.A.	Time
XI	CH-204	INORGANIC CHEMISTRY	32+8	3 Hrs
XII	CH-505	PHYSICAL CHEMISTRY	32+8	3 Hrs
XIII	CH-206	ORGANIC CHEMISTRY	32+8	3 Hrs
XIV	CH-207	PRACTICALS	60	7 Hrs

Inorganic chemistry paper contain about some radioactive substances. How they are used and how they are harmful. Their chemical properties.

Qualitative and quantitative analysis of inorganic compounds and organic compounds. This is very useful topic for industrial point of view.

Physical chemistry contains about thermodynamics and electrochemistry. Both are interesting topic. Electrochemistry gives knowledge of electric and chemical cells used in daily life. Their principle and working.

Class B.Sc.-III Semester-V

Paper no.	Code no	Nomenclature	Max. marks + I.A.	Time
XV	CH-301	INORGANIC CHEMISTRY	32+8	3 Hrs
XVI	CH-302	PHYSICAL CHEMISTRY	32+8	3 Hrs
XVII	CH-303	ORGANIC CHEMISTRY	32+8	3 Hrs

Inorganic chemistry contains about metal coordination complexes their formation, their chemical reactions, their uses and electronic spectra. Most of these are useful in medicinal industry.

Physical chemistry contain about quantum mechanics and Molecular Spectroscopy. Both topics are very interesting. Molecular spectroscopy tell about structural information of chemical compounds. This knowledge can be used in industry.

Organic chemistry have topic like NMR spectroscopy, Carbohydrates and organometallic compounds. NMR spectroscopy is very useful in pharmaceutical industry. Complete knowledge of chapter told all about NMR.

Class B.Sc.-III

Semester-VI

Paper no.	Code no	Nomenclature	Max. marks + I.A.	Time
XVIII	CH-304	INORGANIC CHEMISTRY	32+8	3 Hrs
XIX	CH-305	PHYSICAL CHEMISTRY	32+8	3 Hrs
XX	CH-306	ORGANIC CHEMISTRY	32+8	3 Hrs
XXI	CH-307	PRACTICAL	60	7 Hrs

Inorganic chemistry contains about acids and bases. It discussed about their strength and uses. Bioinorganic chemistry also included in this paper. Bioinorganic give knowledge about some body's important parts which is quite useful for students. This paper also contains about silicones and poshphazenes.

Physical chemistry contains photochemistry, solutions, phase equilibrium etc. Photochemistry tells about chemical reactions take place in sun light. Solution chapter tell about how solution is formed and their chemical properties.

Organic chemistry contains about heterocyclic compounds, amino acid, proteins and synthetic polymers. All these topic are very important for medicinal and industrial point of view.

20/12/22

Course Outcome
Subject: Computer Science (BSc. CS)

Year	Course Outcomes
1st year	• *To understand the components of computer, software, hardware.* • *To provide an overview of peripheral devices.* • *To provide internet, multimedia and animation concepts.* • *To get familiar with Windows Operating System.* • *To understand the important Application softwares used in office automation.* • *To provide the concepts word processing software for document writing.* • *To provide internet, multimedia and animation concepts.* • *To get familiar with Windows Operating System.* • *To provide the students with a foundation in computer programming.* • *To develop the basic programming skills in students.* • *To applying the basic knowledge of programming to solve problems.* • *To get familiar with High Level Language 'C'.* • *To introduce the fundamentals of Digital Electronics.* • *To get familiar with Number System and Logic Gates.* • *To understand the concept of Logic circuit, Flip-flop, Register, Counters and Memory.*
2nd year	• *To introduce the fundamentals of Data structures.* • *To get familiar with Arrays, String and various searching techniques.* • *To know about stack, queue and linked lists.* • *To understand the advanced data structures Tree and Graph.* • *To understand the concept of Software Engineering and Requirement Specification.* • *To know how to plan and design a software project.* • *To get familiar with coding, testing and maintenance of the software.* • *To understand the concept of mapping real objects into programming constructs.* • *To know about various Object oriented techniques like Inheritance, Polymorphism, and Encapsulation.* • *To understand the design and functionality of Operating System.* • *To know about Process management and concurrent processes..* • *To acquire the knowledge of Memory management.* • *To provide the idea of various Disk scheduling techniques and Security.*
3rd year	• *To understand the concept of Networking.* • *To get familiar with various Network Reference model and Communication Model.* • *To understand the basics of Switching and Multiplexing* • *To know about the Data Link and Network Layer.* • *To understand the concept of designing a Web site.*

14/12/22

	• To know about basics of Internet and HTML, DHTML. • To acquire the knowledge of Java Script and XML. • To understand the basic concept of DBMS. • To know about the Entity relationship model. • To get familiar Structured Query Language. • To acquire the knowledge of Transaction Processing Concepts of Relational Database.

Asha 14/12/22

PRINCIPAL
Govt. Women College
JIND (HR)

Course Outcomes B.A/B.Sc Mathematics

Course Have basic understanding and knowledge in different core areas of Mathematics such as algebra, analysis, calculus, differential equations, mechanics, numerical analysis and in some of the other elective areas. Demonstrate understanding of the concepts /theories/methods from such areas of Mathematics.

Have a **broad background** in Mathematics and develop the essential mathematical reasoning, knowledge, skills and aptitude to pursue further studies and research in Mathematics.

Communicate mathematics effectively and precisely by written, computational and graphical means.

Apply knowledge, understanding, methods, techniques and skills of Mathematics to analyse, evaluate and solve problems of Mathematics and/or the mathematical problems having applications in engineering/science/technology/life sciences/social sciences so as to enhance career prospects in different fields.

Calculus:-

Course Outcomes: This course will enable the students to:

Calculate the limit of functions, examine the continuity of functions, understand differentiability of different type of functions, successive differentiation of functions and series expansions.

Understand concepts of tangents, normals, asymptotes, curvature, evolutes and involutes of a curve; the geometrical meanings of these terms and to solve related problems

Determine singular points of a curve and their types. To understand rectification of curves and to apply the reduction formulae.

Determine area bounded by curves and volumes and surface area of solids formed by revolution of curves

Algebra and Number theory:-

Course Outcomes: This course will enable the students to:

Determine rank of a matrix, eigen values, eigen vectors, characteristic equation and characteristic polynomial of square matrices. Understand unitary and orthogonal matrices and to solve related problems.

Find solution of homogeneous and non-homogeneous system of linear equations using matrices. Determine relation between roots and coefficients of a general polynomial equation. Identify multiple roots. Application of Descarte's rule of sign. Solve cubic and biquadratic equations.

Understand the basic concepts of number theory and their applications in problem solving. Prove Fermat and Wilson's theorems and their applications.

Advanced Calculus:-

Course Outcomes: This course will enable the students to:

Understand and to prove Rolle's Theorem, mean value theorems and their geometrical interpretations. To determine indeterminate forms.

Learn conceptual variations while advancing from one variable to several variables in calculus, limit and continuity, partial differentiation of such functions. To understand composite functions, homogeneous functions and to solve related problems.

Understand differentiability of real valued functions of two variables and to prove associated results. To determine maximum and minimum of functions of two variables and to apply multivariable calculus in optimization problems.

Evaluate double and triple integrals. To learn about Dirichlet integrals, Beta and Gamma functions and to solve related problems.

Differential Equations:-

Course Outcomes: The course will enable the students to:

Understand the basic concepts of ordinary differential equations and to learn various techniques of finding exact solutions of certain solvable first order differential equations. And Develop the skills of solving homogeneous and non-homogeneous second order linear ordinary differential equations with constant coefficients and with variable coefficients.

Understand total differential equations and basic concepts of partial differential equations. To learn methods and techniques for solving linear PDEs of first order.

Apply theory of PDEs to determine integral surfaces through a given curve and to find orthogonal surfaces. To understand compatible systems and Charpit method, Jacobi method methods for solving PDEs. To learn techniques of solving second order PDEs.

PROGRAMMING SKILLS WITH C:-

Course Outcomes: This course will enable the students to:

Familiarize with C programming language. Learn elements of C, data types, constants and variables, operations and operators, statements and expressions. Use these tools for writing C programs. Learn Input/ Output functions in C, to write reading and writing statements in C, decision making statements and structures in C. Apply this knowledge to use as tools in writing C programs.

Understand loops and arrays, their types, characteristics and structures. Attain the skill to write C programs which involve arrays and multiple iterations.

Learn strings of characters, their declaration, input/ output, operations on strings and functions which handle strings. Learn declaration, types and calling of user defined functions in C.

Sequence and Series:-

Course Outcomes: This course will enable the students to:

Understand basic concepts of real number system and set theory. Preliminary results on neighbourhood of a point, interior and limit points, open sets, closed sets etc.

Learn real sequences, their limit, boundedness and convergence. To find convergence and divergence of a sequence. To understand Cauchy sequence, subsequence and to prove related theorems. Understand infinite series and its basic properties. Attain skills to determine convergence of a series of real numbers by applying various tests.

Understand absolute and conditional convergence of alternating series and related tests. Learn the basic concepts of pointwise convergence and uniform convergence of sequence and series of functions.

Real Analysis:-

Learn basic theory of Riemann integration. Learn fundamental theorem and mean value theorem of integral calculus.Understand improper integrals and to have knowledge to test their convergence. Understand integral as a function of a parameter. Apply this knowledge for problem solving.Understand concepts of metric spaces, sub spaces and their properties. Learn open, closed and bounded sets, interior and limit points , Cauchy sequence and completeness.

Learn dense sets, compact and separable metric spaces and related results. Learn important theorems viz. Baire's category theorem, Banach contraction principle, Bolzano–Weierstrass property, Heine–Borel theorem. Use this basic knowledge for life -long learning purposes.

Statics and Dynamics:-

Course Outcomes: This course will enable the students to:

Understand basic concepts of forces, their resultant and moment; couples and their moments. To attain the problem solving skill for scientific problems.Learn the concepts of friction and laws of friction, centre of mass and centre of gravity and to solve problems related to these concepts.Learn fundamentals of dynamics like velocity, acceleration, angular velocity and acceleration, Newton's laws of motion, simple harmonic motion and to develop the skill of solving simple dynamical problems.

Understand concepts of work, power, energy and projectile motion and to solve related problems. Learn about Kepler's laws of the planetary motion

Numerical Analysis:-

Course Outcomes: This course will enable the students to:

Understand errors and their types. Learn techniques to obtain numerical solutions of algebraic and transcendental equations.

Attain numerical skills to find solutions of system of linear equations by different methods. Learn different interpolation and extrapolation methods and their applications. Apply numerical methods to obtain derivatives.

Understand numerical methods for evaluating integrals and solving differential equations and to develop skill of applying these methods for future use in scientific problems.

Vector Calculus:-

Course Outcomes: This course will enable the students to:

Understand and solve problems related to scalar and vector product of vectors. Learn vector differentiation and directional derivatives and their problem solving.

Learn gradient, divergence and curl operators. Apply knowledge and these tools in problem solving. Understand vector identities, Laplacian operator. Learn vector integration and line integral. Solve problems using these concepts.

Learn surface and volume integral formulations and their evaluation. Prove Gauss Divergence, Green's and Stoke's theorems. Realize importance of Green, Gauss and Stokes' theorems.

Special Functions and Integral Transform:-

Course Outcomes: This course will enable the students to:

Understand singular points of a differential equation and to solve such differential equation by power series method. Learn Hypergeometric differential equation, Hypergeometric function and its properties.Know Bessel's differential equation and its solution. Understand recurrence relations, generating function and othogonality of Bessel's function. Understand Bessel integral. Attain skills to make use of Bessel functions in scientific problem solving.

Familiarise with Legendre's differential equation and its solution in the form of Legendre functions.

Understand recurrence relations, generating function and othogonality of Legendres function, Rodrigues' formula. Apply knowledge in problem solving.

Know Hermite's differential equation and its solution in the form of Hermite functions. Understand recurrence relations, generating function and othogonality of Hermite function, Rodrigues' formula. Attain skill to apply these tools for investigation and solution of problems. Know about Laplace transforms and its properties in detail and to apply those in solving differential equations.

Familiarize with Fourier transforms of functions, properties of Fourier transform, inverse

Fourier transforms and relation between Laplace and Fourier transforms. Develop skill of applying Fourier transforms to solve differential equations.
Know about Laplace transforms and its properties in detail and to apply those in solving differential equations.
Familiarize with Fourier transforms of functions, properties of Fourier transform, inverse Fourier transforms and relation between Laplace and Fourier transforms. Develop skill of applying Fourier transforms to solve differential equations.

Linear Algebra:-

Course Outcomes: This course will enable the students to:
Understand the concepts of vector spaces, subspaces, bases and their properties; linear transformations and their rank and nullity and to use those concepts for problem solving.
Learn to determine eigen values, eigen vectors and characteristic polynomial of linear transformations and their further use in investigation and solution of problems.
Have knowledge of inner product spaces, orthogonalization and diagonalization of matrices/ linear transformations and to apply that in further learning and for scientific applications.
Learn adjoint operation, Hermitian, unitary, normal and triangular forms of linear transformations and related problem solving.

Partial Differential Equations :-

Course Outcomes: This course will enable the students to:
Learn classification of second order partial differential equations, their canonical forms, and methods of solving those. Find characteristic equations and curves. Apply this knowledge to solve problems of science and society.
Model physical phenomena using partial differential equations such as the Laplace, heat and wave equations and to solve these equations. Learn solving non-linear equations by Monge's method. Apply these methods as a tool for modelling and solving real world problems.

Jitender Kumar
Mathematics Deptt

Department of Computer Science

Course Outcome Subject: Computer Science(BCA)	
Year	**Course Outcomes**
1st year	Students are able to do WORD PROCESSING, Spreadsheet designing, Presentation Designing as a part of OFFICE AUTOMATION. They are able to do programming in 'C 'language. They also learnt digital electronics (circuits, flip flops, registers, counters etc.). Communication skills played an important role to develop their self-confidence and personality. They learnt to write resumes, report writing, technical letters, and participation in group discussions. Typing test is also taken as a part of practical. Each student is able to give seminar with power point presentation.
2nd year	Students are able to do Object Oriented Programming Using C++, they learnt about the software development life cycle, how to manage a Database and query language to operate on the database and also PL/SQL, current e-commerce practices are also learnt.
3rd year	Students learnt to make simple webpages, use of internet, function of an operating system like windows /Linux in the system, students are introduced to Artificial intelligence, Expert systems, Natural language processing, Computer networks – LAN, MAN, WAN, Data transmission, congestion control etc. Digital signatures, Network Security, Encryption. Students learnt to create forms in Visual Basic, Multimedia, Graphic designing. Java programming. Big data tools like Hadoop.

Principal
Govt. College for Women
IND (Haryana)

Course Outcome (Physics)

- Students will have a firm foundation in the fundamentals and application of theory and laws of physics in field of technology.
- Students are able to use modern library searching and retrieval methods to obtain information about experimental techniques used for understanding laws of physics.
- They are skilled in problems solving, critical thinking, analytical reasoning, understanding the ethical, historical and environmental dimensions of problems and issues in the field of physics and technology.
- They are able to use modern instrumentation and classical techniques, to design experiments, for improvement in technology in use for betterment of human life.
- Knows the proper procedures and regulations for safe handling and use of electric and electronic devices and can follow the proper procedures and regulations for safe handling when working with electric appliances.
- Are able to identify and solve problems and explore new areas of research and are also able to communicate the results of their work in oral, written and electronic formats.
- Ability to find gainful employment in industries like manufacturing of hardware, electronic and electric appliances etc. Ability to find employment in Govt. Organizations and academic institutions.

2.6.1

BSC Medical is a three year degree course in which students are taught about Chemistry, Botany & Zoology.Regular Lectures are delivered along with practical work. Field visits are mandatory for students regarding Plant collection and their study, animal collection , animal identification etc. Students practical work in chemistry and Botany is up to the such level that students are able to analyze chemical or bio chemical nature of soil, plants or other organic mass. Activities like science exhibition, quiz, essay writing are imposed on students to make them well aware with present scenario. Students can choose various career options. A BSC medical degree holder can opt for a MSC Program, can always go for research work. Students can major in Agriculture , medicine, chemistry etc. Students can opt for

- MSC in Chemistry, Botany, Zoology or in allied sciences
- Pharma Course
- Management
- Research
- Marketing
- Various diploma and certificate courses

2.6.2

- Job opportunities available for BSC Medical Student
- Scientist, Ecologist, Editor, Medical writing, Plant Explorer, Biochemist and Forest Ranger
- Students can opt for UPSC and SSC

13/12/22