

				<p>11. Characteristic Tests for carbohydrates; fats and proteins and their detection</p> <p>Study of simple reactions of carbohydrates; fats and proteins. in pure form and detection of their presence in given food stuffs.</p> <p>12. Tests for the functional groups present in organic compounds</p> <p>Test of functional groups present in given unknown organic compounds</p> <p>(i) Test of unsaturation</p> <p>(ii) Test for Carboxylic, phenolic, aldehydic and ketonic groups.</p>	
8.	<b>Module- VIII</b> <b>Chemistry in Everyday Life</b> 30. Drug and Medicines 31. Soaps, Detergents and Polymers 32. Environmental Chemistry	20	This module deals with the chemistry in everyday life. This module highlights the role of chemistry in the field of drugs, medicines, soaps, detergents, and polymers. This module also deals with		04

			<p>environmental issues in the form of various types of pollution, global warming, ozone layer depletion etc. It also gives knowledge about achievement of green chemistry for reducing pollution.</p>		
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# **Biology**

## **Code No. 314**

### **Introduction**

Biology is the science of life and the revised course includes both Classical and Modern Biology. The course content begins from Biodiversity classification; Structure and function of the living; their reproduction and development and also Genetics, Molecular Biology, Biotechnology and Immunology which are the modern fields of Biology. An exhaustive treatment of the environment in all its aspects is also contained in the curriculum and so are topics like some common human diseases and health and nutrition which are closely related to human welfare.

### **Rationale**

Biology arose in a twofold manner - firstly, as a practicing art towards exploring and improving a variety of usable plant and animal products as well as towards maintaining good health; secondly, as an academic pursuit out of curiosity to know about humans and other living beings and to understand their position on the planet Earth. In other words, the storehouse of knowledge about living beings started building up only when humans were curious to know about life. The course in Biology helps us to respect and appreciate the great diversity of life at all its levels of organization and to understand the impact of progress in biology on our life style.

Biology is not merely a correlational science but also an experimental discipline, which deals with different tools and techniques. In most of the activities that we perform, biology has a role to play. Therefore, the present course aims at imparting biological knowledge vis-a-vis the ever growing human needs. Besides integrating the content and adequate depth into the subject recent advancements in concepts as well as emerging areas like Biotechnology and Immunology have also been introduced.

### **Objectives**

After completing this course, the learner will be able to:

- acquire knowledge of biological terms, facts, concepts, principles and processes in order to understand the living world as a whole;
- appreciate diversity in the living world as also the interrelationships of various living organisms, ecological balance in nature, and the role of biology in human welfare;
- visualize the hazards of environmental pollution, and to create awareness for sustainable use of natural resources in the service of humankind;
- develop insight into the role and impact of Biology in various allied areas such as medicine, agriculture, forestry, biotechnology, veterinary sciences and pharmacology etc.; and
- develop interest in the living world with an aim to respect life.

## Scope and job opportunity

This field has a large number of opportunities for employment, some of these are:

Indian Biologists have been pursuing research in the multifarious branches of Biology and we are proud of them. We hope that one day some of you learners will be well known biologists. Knowledge of Biology opens many avenues which you may select as a career. Once you are initiated into Biology and wish to pursue a course related to biology you have the following options:

- Teacher, Environmentalist, Research Scientist, Marine Scientist,
- Medicine, Paramedical Sciences such as Physiotherapy, Forensic Scientist
- Pharmacy, Food Technology, Nursing, Biotechnology,
- Microbiology, Bio-Chemistry and Bio-physics,
- Professionals in the field of Intellectual Property Rights for biologists looking after sanctuaries, zoos and Botanical gardens.

## Eligibility conditions

**Age:** 15 years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** Hindi, English, Urdu, Bengali, Gujarati and Odia

**Duration of the course:** 1 Year

**Weightage**

**Theory:** 80 Marks

**Practical:** 20 Marks

**Tutor Marked Assignments (TMA):** 20% of the theory marks

**Scheme of studies:** Theory (240 hours), practical (30 hours), TMA (self paced)

**Scheme of evaluation:**

Mode of evaluation	Syllabus/Contents	Duration	Weightage
Tutor Marked Assignment (TMA)	All contents marked as TMA	Self paced	20%
Public/Final Examination	All contents marked as PE Practical	3 Hours(Theory) 3 Hours (Practical)	80%

**Pass criteria:** 33% in each component

## Course content

S. No.	Module/Topics	Duration (in hours)	Module Approach/ Description	Description of practicals	Weightage (marks)
1.	<b>Module-I</b> <b>Diversity and Evolution of Life</b> <ol style="list-style-type: none"> <li>Origin and Evolution of Life and Introduction to Classification</li> <li>The Kingdoms Monera, Protocista and Fungi</li> <li>Kingdoms Plantae and Animalia</li> <li>Cell - Structure and Function</li> <li>Tissues and other Levels of Organization</li> </ol>	50	<p>This module would enable the learner to visualize the origin of life on earth and the vast diversity in the living world, and also to group them together at various classification levels. It also intends to stimulate our learner to understand the concepts and theories of evolution. The module also highlights the cell as the basic unit of life and its organization into various forms of tissues.</p>	<p>There are 15 exercises in the Biology Practical Manual. These 15 activities are distributed under three sections as:</p> <p><b>Exercise 1</b> Some common instruments</p> <p><b>Exercise2 (Slide mounting)</b></p> <p>2.1 Preparation of temporary mount of onion peel to observe and study epidermal cells</p> <p>2.2 Preparation of temporary stained mount of human cheek cells.</p> <p>2.3 Temporary stained preparation and study of striated muscle fibres in cockroach.</p> <p><b>Exercise 3</b></p> <p>Study of the microscopic anatomy (histology) of mammalian tissues and organs</p> <p><b>Exercise 4</b></p> <p>Study of animal specimens and their classification to identify the characteristic features of sponge, earthworm, butterfly,</p>	12

				<p>apple snail, starfish, dogfish (<i>Scoliodon</i>) bonyfish (Rohu), toad, house lizard, pigeon and bat.</p> <p><b>Exercise 5</b></p> <p>Preparation of a slide of onion root tip for observation of stages of mitosis.</p>	
2.	<p><b>Module-II</b></p> <p><b>Forms and Functions of Plants and Animals</b></p> <p>6. Root System</p> <p>7. Shoot system</p> <p>8. Absorption, Transport and water Loss in Plants</p> <p>9. Nutrition in plants- Mineral Nutrition</p> <p>10. Nitrogen Metabolism</p> <p>11. Photosynthesis</p> <p>12. Respiration in Plants</p> <p>13. Nutrition and Digestion</p> <p>14. Respiration and Elimination of Nitrogenous Waste</p> <p>15. Circulation of Body Fluids</p> <p>16. Locomotion and movement</p>	70	<p>This module highlights the complex nature of the structure and function of the different organ systems in plants and animals with special emphasis on the life processes.</p>	<p><b>Exercise 2 (Slide mounting)</b></p> <p>2.4 Preparation of temporary mount of leaf epidermis to study the structure of stomata.</p> <p>2.5 Preparation and study of xylem and phloem from <i>cucurbita</i> stem</p> <p><b>Exercise 6</b></p> <p>Study of morphological modifications of plant parts like root, stem and leaf.</p> <p><b>Exercise 7</b></p> <p>To study the T.S. of dicot and monocot stems and roots from permanent slide.</p> <p><b>Exercise 8</b></p> <p>To study the structure and function of different parts of flowers (<i>China rose and Petunia</i>)</p> <p><b>Exercise 9</b></p> <p>(a) To study the physical</p>	26

	17. Coordination and Control 18. Homeostasis			properties of different soil samples (b) To study the water holding capacity of different soil samples <b>Exercise 10</b> Demonstration of osmosis by potato osmometer <b>Exercise 11</b> Determine the rate of photosynthesis in an aquatic plant ( <i>Hydrilla</i> or <i>Elodea</i> ) <b>Exercise 12</b> To demonstrate the release of CO <sub>2</sub> during germination of seeds. <b>Exercise 13</b> To study about the action of salivary amylase on starch	
3.	<b>Module-III Reproduction and Heredity</b> 19. Reproduction in Plants 20. Growth and Development in Plants 21. Reproduction and Population Control 22. Principles of Genetics 23. Molecular Inheritance and Gene	60	This module is designed to highlight the diverse methods of reproduction in living beings from unicellular organisms to complex forms including humans. This module highlights the increase in human population all over the world	<b>Exercise 14</b> Study the structure and germination in gram and bean.	22

	<p>Expression</p> <p>24. Genetics and Society</p>		<p>and also provides adequate information about the methods of family planning and birth control. The principles and mechanisms of heredity in determining the characteristics of organism have also been discussed in this module.</p>		
4.	<p><b>Module- IV</b></p> <p><b>Environment and Health</b></p> <p>25. Principles of Ecology</p> <p>26. Conservation and Use of Natural Resources</p> <p>27. Pollution</p> <p>28. Nutrition and Health</p> <p>29. Some Common Human Diseases</p>	50	<p>This module emphasizes the basic understanding of rules governing the interrelationships in a biotic community. It brings out the basic principle of conservation by pointing out that conservation of natural resources would brighten the prospect of future of humankind. This module aims to create an idea about healthy living. It also</p>	<p><b>Exercise 15</b></p> <p>To study the special adapting features in some plants and animals</p>	13



			imparts knowledge regarding role of proper and balanced diet to prevent nutritional deficiency diseases. The types, causes and modes of transmission of human diseases are discussed		
5.	<b>Module- V</b> <b>Emerging Areas in Biology</b> 30. Biotechnology 31. Immuno biology: An Introduction	10	This module has been included in the Biology course to familiarize the learners with the importance of the new emerging areas of biology like Biotechnology and Immunology which have an impact on human lifestyles.		07

# **History**

## **Code No. 315**

### **Introduction**

History revolves round the story of Human civilization through the ages. It is not just the history of kings or emperors but its subject matter is very vast ranging from political aspect to social, economic, religious, cultural aspects of human civilization. Ancient influences have helped spawn variant interpretations of the nature of history which have evolved over the centuries and continue to change today. The modern study of history is wide-ranging, and includes the study of specific regions and the study of certain topical or thematic elements of historical investigation. Often history is taught as part of primary and secondary education, and the academic study of history is a major discipline in university studies.

### **Rationale**

History is the scientific study of human society at any given point of time and its evolution through the ages. It occupies an important place in the school curriculum. It is taught as a general subject forming a part of Social Science both at the Middle and the Secondary Stages. At the Middle Stage the entire span of Indian History is covered, while at the Secondary Stage, the landmarks in the development of human society are taught.

At the Senior Secondary Stage, the main thrust of History is to bridge the gap between the presence of change-oriented technologies of today and the continuity of our cultural traditions. This shall ensure that the coming generation will represent the fine synthesis between change and continuity. It is, therefore, deemed essential to take up the entire Indian History from the Ancient to the Modern period for Senior Secondary Stage.

### **Objectives**

After completing this course, the learner will be able to:

- trace the major stages in the evolution of Indian society through the ages;
- identify the historical forces responsible for the evolution of Indian society in the Ancient, Medieval and Modern times;
- develop an appreciation of the diverse cultural and social systems of the people living in different parts of the country;
- analyze the legitimate pride in the achievements of Indian people in different ages and in different parts of the country;
- describe the process of change which evolved as a result of interaction with other cultures;
- recognize that the Indian culture is a result of a synthesis of different cultures;
- sensitise younger generation to prejudices and complexes transmitted from the biased interpretation of History, the social environment and the accident of birth;

- reconstruct the contribution of people in the making of the national heritage;
- identify the contemporary problems of India in historical perspective so as to develop an enlightened citizenship for active participation in the establishment of a just social order; and
- develop the scientific temper and objectivity to the study of India's past in order to relate it to the present.

## **Scope and job opportunity**

This field has a large number of opportunities for employment, some of these are:

**Heritage manager:** A heritage manager is responsible for the conservation and management of heritage sites like historic buildings, landscapes, museums, ancient monuments and other properties.

**Historic buildings inspector/conservation officer:** A historic buildings inspector or conservation officer advises and promotes the conservation of the historic environment, particularly in the areas of long-term care, preservation and enhancement.

**Museum education officers:** Museum education officers aim to deliver high quality and dynamic programmes of learning and participation. They ensure that the collections in a museum act as a learning resource for all ages. They can work both within galleries and museums and also in a community context.

**Museum or gallery curator:** A museum or gallery curator manages collections of artifacts or works of art. This includes dealing with the acquisition, care and display of items with the aim of informing and educating the public.

**Museum/gallery exhibitions officer:** A museum/gallery exhibitions officer is responsible for planning, developing, organising, marketing, administering, producing, buying/sourcing and maintaining individual permanent or travelling exhibitions.

**Archaeologist:** Archaeologist examines ancient sites and objects to learn about the past. The aim of the role is to record, interpret and preserve archaeological remain for future generations.

**School teacher:** Teachers support, observe and record the progress of their class. They also plan lessons in line with national objectives, with the aim of ensuring a healthy culture of learning.

## **Eligibility condition**

**Age:** 15 Years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** Hindi, English, Urdu, Bengali, Gujarati and Odia mediums.

**Duration of the course:** 1 year

**Weightage**

**Theory:** 100 Marks

**Tutor Mark Assignment (TMA):** 20% Marks of the theory

**Scheme of studies:** Theory (240 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 100 marks (3 hours) , internal assessment (TMA) - 20% of theory marks(self paced)

**Pass criteria:** 33% marks in theory

## Course content

S. No.	Module/Topics	Duration (in hours)	Module Approach/Description	Weightage (marks)
1.	<b>Module-I</b> <b>Ancient India</b> 1. Understanding Indian History 2. The Geographical settings of India and Pre-historic cultures of India 3. The Harappan Civilization 4. The Vedic Age 5. From Janpadas to Empire 6. Post Maurya Developments 7. Guptas and their Successors upto AD 750 8. India Between AD 750-1200	55	This module acquaints the learner with the past evidences, archaeological sources and traditions, which help in understanding past history. It gives an overview of the development of the historical process in India from prehistoric times to around 750 A.D. It traces the social, political, economic, religious and cultural development in ancient period. It highlights the importance of Harappan and Vedic Age in the growth of later trends and developments.	20
2.	<b>Module-II</b> <b>Medieval India</b> 9. Establishment and expansion of the Delhi Sultanate 10. Establishment of Mughal Rule	55	This module is designed to highlight the factors and forces responsible for the advent of the Turkish and Mughals in India. It traces the efforts made by the Mughals towards political integration of India and the development of a composite culture due to the assimilation of various	20

	11. Emergence of the regional states 12. Administrative system of Institutions 13. Economy of Medieval India 14. Cultural Developments in Medieval India 15. Understanding the 18 <sup>th</sup> Century		cultures. It acquaints the students with the new trends in polity, economy, society and culture. It makes an attempt to analyse various opinions about the 18 <sup>th</sup> century leading to an understanding of the period. It also identifies the forces that led to the disintegration of the Mughal rule and emergence of independent states in India	
3.	<b>Module-III</b> <b>Modern India</b> 16. Establishment of British rule in India till 1857 17. Economic changes 18. Social changes 19. Popular resistance to company rule	35	This module describes the advent of the British and establishment of British in India. The module is designed to promote a critical approach towards the British policies which transformed a trading company into a sovereign power and to study the impact of modern western ideas on the Indian society which contributed to the social awakening and religious reform movements. It also highlights the cumulative effect of the British rule in the form of popular resistance movements culminating in the revolt of 1857	15
4.	<b>Module-IV</b> <b>India National movement and Contemporary India</b> 20. Nationalism 21. National Movement and Indian Democracy	35	This module deals with the Indian National Movement and the problems, challenges and developments of contemporary India. It acquaints the students with the different trends of Indian National Movement the non-violent, Satyagraha Movement of Gandhiji. Revolutionary movement and about the national movement organized outside India. It also traces the post independence reforms and trends. It is desired to make the learner aware about India's relation with other countries of the world.	15

5.	<b>Module-V</b> <b>20<sup>th</sup> Century World</b> 22. Legacy of 19th century 23. World War I and the Russian Revolution 24. The Inter War Period and The Second World War 25. Cold War and its Effects 26. National Liberation Movements 27. Social Transformation in the Twentieth Century 28. Changes in the Twentieth Century	30	The module is designed to acquaint the learner with all the major developments of 20 <sup>th</sup> century in order to develop a global perspective for historical development.	15
6.	<b>Module-VI A*</b> <b>Evolution of state in India Prerequisite Knowledge</b> 29. Towards the formation of state 30. Early States 31. Medieval States 32. Colonial State	30	The optional modules are designed to give the learner, the flexibility and freedom to choose a topic of his /her choice. The learner has to choose one of the two modules. These modules are designed to give a deeper understanding into a specific area of history and culture: and is expected to inculcate a rational outlook and analytical approach.	15
6.	<b>Module-VI B*</b> <b>Culture in India</b> 29. Contemporary Cultural Situation 30. Cultural Production 31. Cultural Communication	30		

**\*Note: Learner has to choose one Module from VI A or VI B**

# Geography

Code No. 316

## Introduction

Geography is study of the description earth's surface. It is concerned with various aspects explaining the casual relationships of phenomena on the earth. These phenomena are changing with changing locations on the surface of the earth. The variation over the earth surface is known as spatial differentiation. Not only is that, even the changes seen at the same place over a period of time. It is known as temporal variation. Certain scientific reasons are the driving force for these phenomena. The whole of the earth may be studied with respect to certain component. The distribution of that component may be explained by general principles. These components may be varied like earth, water, air, climate, soil, vegetation, environment or life for global study.

## Rationale

Geography is introduced as an independent subject at Senior Secondary level. Prior to this, a component of geography is a part of environmental studies till primary level and part of social sciences at secondary level. Being the entry point for higher and professional education, learners choose geography for various purposes. These purposes may broadly be divided as academic interest (i.e. higher studies, research, teaching etc.) and vocational interest (i.e. Cartographer, Regional Planners, GIS & Remote Sensing Specialist, Demographers, Environmentalist etc.) Therefore, there is a need for providing a broad understanding about the subject. Apart from this, geography is also very useful for day-to-day life. Its contributions lie in the contents, cognitive processes, skills and values that geography promotes and thus helps the learners explore, understand and evaluate the environmental and social dimensions of the world.

Interface between people and their environment being the focal point of geography study, it tries to explore the complex relationship between the two at different levels – macro, meso, and micro. Being a distributional science, it tries to understand the variations and patterns of physical and human phenomena over the earth.

Geography is also known as an integrated science. This is the only discipline which acts as a link between social sciences and physical sciences. The former includes contents from economics, history, political science, sociology, anthropology, commerce etc. whereas the latter includes geology, botany, geo-physics, oceanography, climatology etc.

## Objectives

After completing this course, the learner will be able to:

- explain the terms, key concepts and basic principles of geography;
- explore the processes and patterns of the spatial arrangements of the natural as well as human phenomena;

- explain the complex relationship that exists between physical and human environment;
- apply geographical knowledge and methods of enquiry to emerging issues and problems at different levels – local, regional, national and global;
- develop an understanding of diverse physical resource base, economic activities and regional inequalities in India;
- summarize the concept of unity in diversity in India and its demographic structure; and
- recognize the spirit and purpose of geography as a discipline in the modern world.

## **Scope and job opportunity**

This field has a large number of opportunities for employment, some of these are:

Armed services, environment management, water resources, disaster management, meteorology and planning and various social sciences. Apart from that, a geographer can help in day to day life like tourism, commuting, housing and health related activities.

## **Eligibility conditions**

**Age:** 15 Years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** Hindi, English, Urdu, Bengali, Gujarati and Odia mediums.

**Duration of the course:** 1 Year

### **Weightage**

**Theory:** 80 Marks

**Practical:** 20 Marks

**Tutor Marked Assignments (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (248 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 80 marks (3 hours), practical 20 marks (3 hours), internal assessment (TMA) - (20% of theory marks)

**Pass criteria:** 33% marks in each component

## **Course content**



S. No.	Module/Topics	Duration (in hours)	Module Approach/ Description	Description of practicals	Weightage (marks)
1.	<b>Module-I</b> <b>The study of Geography as a discipline</b> 1. Nature of Geography as a discipline	08	This module provides the learners an opportunity to know about Geography as an integrating discipline and as a science of spatial organization.		04
2.	<b>Module-II</b> <b>Changing face of the earth</b> 2. Earth's interior and its Material 3. Dynamic surface of the earth 4. Evolution of Land forms due to internal forces 5. The work of running water and underground water 6. The work of moving ice, wind and sea waves 7. Major landforms and their economic significance	22	This module aims at giving an understanding of origin and evolution of the earth. It has also been designed to develop among learners an insight into dynamic surface of the Earth and processes of evolution of different landforms.		10
3.	<b>Module-III</b> <b>The domain of the water on the earth</b> 8. Ocean: sub marine relief and circulation of ocean water	08	The purpose of this module is to acquaint the learner with the Ocean, sub marine relief and circulation of ocean water.		04

4.	<b>Module-IV</b> <b>The domain of air on the earth</b> 9. Structure and composition of atmosphere 10. Insolation and temperature 11. Atmospheric pressure and winds 12. Humidity and precipitation 13. Weather and climate	22	This module has been designed to bring awareness about the atmosphere, Insolation, temperature, pressure, winds, humidity, precipitation and climate.		10
5.	<b>Module-V</b> <b>The domain of life on the earth</b> 14. Biosphere 15. Biomes	12	This module provides the learners an opportunity to know about biosphere and biomes. This module has been designed to enable the learners to understand about ecology, eco-system and energy flow, case study of desert, coast, mountain eco-systems and global climatic changes.		06
6.	<b>Module-VI</b> <b>Physical setting of India</b> 16. India–Physical Features 17. Climate of India 18. Natural Disasters	20	This module provides an understanding of the Physiography of India. This module has been designed to enable the learners to know about Climate, its factors influencing climate, distribution of temperature,		08

			pressure, winds & rainfall, mechanism of monsoon, onset and withdrawal, cause and effect of climatic changes and natural Disasters in India.		
7.	<b>Module-VII</b> <b>Natural resources and their development in India</b> 19. Our Resources 20. Land, Soil and Vegetation Resources in India 21. Our Water Resources	20	This module provides the learners an opportunity to know about Concepts of resources, classification as biotic and abiotic, their distribution, utilization of resources, conservation and management of natural resources. This module has been designed to enable the learners to know about vegetation and soils and water resources in India.		09
8.	<b>Module-VIII</b> <b>Economic activities and infrastructural development in India</b> 22. Land Use and Agriculture 23. Development of Mineral and Energy Resources 24. Industrial Development 25. Transport,	20	This module aims at giving an understanding of land use and agriculture. This module provides the learners an opportunity to know about Mineral energy resources, transport, communication and international trade.		09

	Communication and Trade in India				
9.	<b>Module-IX</b> <b>Human resource and their development in India</b> 26. Population Density, Distribution and Growth in India 27. Population Composition in India 28. Human Development 29. Human Settlement	16	This module provides the learners an opportunity to know about population, distribution, density, growth, migration, patterns, population composition, age, sex, occupation, distribution of scheduled castes and scheduled tribes. This module aims at giving an understanding of Human Development Index, selected indicators and regional population patterns.		08
10.	<b>Module-X</b> <b>Optional module</b> <b>(a) Local Area Planning</b> 30. Local Area Planning 31. Recommendations through case studies 32. Data collection, Processing and Analysis	30	This module provides the learners an opportunity to know about local area planning, recommendations through different case studies, data collection, Processing and Analysis.		12
	<b>(b) Geography of Tourism in India</b> 30. Tourism-Concept, Resources and Development		This module aims at giving an understanding of concept of tourism, tourism Operations,		

	31. Development of Infrastructure and Growth of Tourism 32. Prospects and Problems of Tourism		management,different types problems of tourism. This module provides the learners an opportunity to know about promoting tourism, role of advertising, souvenirs, information booklets, websites, marketing and management.		
11.	<b>Practical Geography</b> Map and its elements	<b>10*</b>		This module aims at giving a brief idea about construction of Linear Scale, Latitude and Longitude, Map Projections, interpretation of Topographical Sheets, study of Weather Maps and representation of data.	3
	Map interpretation	<b>30*</b>		This module provides the learners an opportunity to know about maps, photographs, diagrams, interpretation, identifying physical & cultural features on a map, photographs, diagram,drawing sketches and sketch maps.	5

	Statistical Diagrams	<b>30*</b>		This module provides the learners an opportunity to know about data presentation, interpretation and representation of statistical data through diagrams.	5
	Practical Record and Viva voice	<b>30*</b>		This module provides the learners an opportunity to know about data	5

**\*including preparation time for record book**

# **Political Science**

**Code No. 317**

## **Introduction**

Political Science is the study of man in the process of government himself/herself. Political Science comprises theory of the state, concept of sovereign powers, form and functions of government, making and execution of laws, election, political parties, rights and duties of citizens, functions of forces, administration and study of welfare activities of state and government. In broader terms it provides the study of the role of individual in relation to the entire society ranging from small unit of family to the whole world.

The curriculum of Political Science for Senior Secondary course developed by NIOS seeks to provide an understanding and knowledge of Constitution of India, various organisations, political and non-political setups and their operations at the village, district, state, national and global level.

## **Rationale**

Study of human society is not as simple as is generally believed. Society is a complex network of social relations. The individuals entering these relationships are in perpetual change. Therefore, every society searches for an order and also mechanisms to cope with these changes. Emergence of the state or political order is a part of this complex process. The concerns of political order and the way it carries those functions and the problems that it faces are of universal concern. The concerns of political order have further increased with the new role viz. changing the large socio-economic order so as to improve the living conditions. Political Science deals with this vital domain of the society, keeping in mind the changed scenario.

The subject of Political Science seeks to enable the students to gain critical awareness about the political institutions which govern their lives. These institutions are created to maintain peace, order and co-operation, which would otherwise be threatened by conflicts over socio-ethnic identities or religious beliefs, etc. This course seeks to impart knowledge about political institutions which operate at the village, city, district, national and global levels. Thus, segments of the course deal with nation-state, Panchayati raj, district administration, central and state governments as well as United Nations and World Order. It also deals with problems, issues, concerns and political processes that arise in the working of the system. The Political Science syllabus deals not only with political institutions but also with the political ideas. Those ideas deal with the nature, needs, competence, pertaining to justice, liberty, equality, rights, and obligations etc. of the people. They also deal with the requirements, responsibilities and limits of political authority. Thus, the study of Political Science is concerned with the role and responsibilities of governmental agencies at various levels. Political Science focuses on the study of the state, nation, society, government etc.

In this course the primary focus is to strengthen the intellectual capabilities of the students not only to appreciate the theoretical concerns but their application in the concrete context. For this purpose, Indian Political system and its unfolding experience is incorporated in this syllabus. The subject-matter primarily deals with four important aspects:

- i. the theoretical framework;
- ii. the Indian constitutional framework with a focus on the institutions and organs of the government;
- iii. the processes and practices flowing from the constitution in action; and
- iv. our relationship with the world outside.

## Objectives

After completing this course, the learner will be able to:

- develop an interest in the theory and principles of Political Science;
- outline the institutions and organs through which the power is structured and exercised;
- gain an insight into various political processes and practices;
- construct the democratic values and philosophy of the Indian Constitution;
- illustrate national and global concerns so as to become responsible citizens and agents of democratic governance; and
- explain attitudes and values necessary for healthy civic and political life.

## Scope and job opportunity

After completing a course in Political Science, several opportunities are available in both government and private sectors. Professional in politics, public administration, law, and marketing fields are always needed. One can opt for campaign management, polling and electoral politics. The career prospects in political science have widened in the voluntary organization sectors, such as NGOs. The international voluntary organizations, like UNO, have huge scope for proficient political science students across the world. Besides, they can go for higher studies in this field and after that they can join media houses as political journalists and political researchers/analysts. What's more, they can become members of Parliament or State Legislative Assemblies, or serve various political parties as party president, party member, or activist.

## Eligibility conditions

**Age:** 15 Years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** Hindi, English, Urdu, Bengali, Gujarati and Odia

**Duration of the course:** 1 Year

**Weightage**

**Theory:** 100 Marks

**Tutor Marked Assignments (TMA):** 20% marks of theory

**Scheme of studies:** Theory (240 hrs), TMA (self paced)



**Scheme of evaluation:** Theory paper 100 marks (3hours), internal assessment (TMA) - (20% of theory marks)

**Pass criteria:** 33% marks in theory

## Course content

S. No.	Module/Topics	Duration (in hours)	Module Approach/Description	Weightage (marks)
1.	<b>Module-I</b> <b>Individual and the State</b> <ol style="list-style-type: none"> <li>1. Meaning and Scope of Political Science</li> <li>2. Nation, State</li> <li>3. Distinction between Society, Nation, State and Government</li> <li>4. Major Political Theories</li> </ol>	30	This module aims at acquainting the learners with the concept and their meaning such as politics and political science. It seeks to familiarize the learners with various concepts related to citizen, nation, state and government. This module also emphasizes upon the major political theories so that an understanding could be developed among learners about Liberalism, Marxism and Gandhism.	14
2.	<b>Module-II</b> <b>Aspects of the Constitution of India</b> <ol style="list-style-type: none"> <li>5. Preamble and the Salient Features of the Constitution of India</li> <li>6. Fundamental Rights</li> <li>7. Directive Principles of State Policy and Fundamental Duties</li> <li>8. Indian Federal System</li> <li>9. Emergency Provisions</li> </ol>	35	This module aims at giving an understanding of the ideals and principles that have been incorporated in the Preamble of the Indian Constitution. It has also been designed to develop among learners an insight into the Fundamental Rights and Duties enshrined in the Constitution. It highlights the importance of Fundamental Duties in a citizens' life. Learners are expected to understand the directions and instructions given in the Constitution to the governments, whether Union or States, to follow while framing policies and programmes. These constitutional directions are aimed at establishing a welfare State in India. Further, the module explains how various	15

			features of federalism are incorporated in the centre state relationship. Besides, through this module learners are given an understanding of the emergency provisions to meet any national crisis situation.	
3.	<b>Module-III</b> <b>Structure of Government</b> 10. Union Executive 11. Parliament of India 12. Supreme Court of India 13. The Executives in the States 14. The State Legislature 15. High Courts and Subordinate Courts 16. Local Government: Urban and Rural	50	The purpose of this module is to acquaint the learner with the three organs of government at the Union and State levels in India and their functionaries. The module also deals with structure and functions of Panchayati Raj System and Urban Local Government.	17
4.	<b>Module-IV</b> <b>Democracy at Work</b> 17. Universal Adult Franchise and the Methods of Representation 18. Electoral System in India 19. National Political Parties 20. Regionalism and Regional Parties 21. Public Opinion and Pressure Groups	35	This module has been designed to bring awareness about the functioning of democracy in India. It seeks to impart information about the electoral system in the country. It also highlights the importance of universal adult franchise and the role of political parties both at the national and the regional level in making the Indian democracy a success. It throws light on the importance and role of Election Commission in conducting free and fair elections in the country.	12
5.	<b>Module-V</b> <b>Major Contemporary</b>	35	This module provides the learners an opportunity to reflect on various	15

	<b>Issues</b> 22. Communalism, Caste and Reservation 23. Environmental Awareness 24. Good Governance 25. Human Rights		emerging national and global concerns. Under the module the concerns and issues that are included are communalism, caste and reservation, environmental awareness, good governance and human rights.	
6.	<b>Module-VI</b> <b>India and the World</b> 26. India's Foreign Policy 27. India's Relations with USA, Russia 28. India and its Neighbours- China, Pakistan and Sri-Lanka	25	This module has been designed to make the learners aware of India's foreign policy and its increasing role in World politics. This module explains the objectives and principles of India's foreign policy. It also explains India's role in the United Nations and its commitment to world peace through this international forum i.e. United Nation. This module also analyses India's relations with two major powers viz. U.S.A. and Russia and also with three of her neighbours i.e. China, Pakistan and Sri Lanka.	12
7.	<b>Module-VII A*</b> <b>World order and the United Nations</b> 29. Contemporary World Order 30. The United Nation 31. United Nations Peace Activities 32. United Nations and Economic and Social Development	30	This module has been designed to enable the learners to understand the post cold war contemporary world order. The learners will also be introduced to the role and working of the United Nations and its principal organs. It also explains the peace activities of the United Nations. This module also highlights significance of major United Nations agencies as instruments of socio-economic development.	15
7.	<b>Module-VII B*</b> <b>Administrative System in India</b> 29. Public Service		This module provides an understanding of the administrative system in India by focusing firstly on the founding or Public Service	

	<p>Commission</p> <p>30. Administrative Machinery at the Centre, State and District Levels</p> <p>31. Political Executives and Bureaucracy</p> <p>32. Public Grievances and Redressal Machinery</p>		<p>Commission's at the Union and State levels and secondly analysing the administrative machinery at the centre, state and district levels. The module also deals with the role of bureaucracy, its relationship with the political executive and mechanism for redressal of public grievances.</p>	
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**\*Note: Learner has to choose one Module from VII A or VII B**

# Economics

Code No. 318

## Introduction

Economics helps the people of a nation to decide on the optimal allocation of our limited resources. The demand is always greater than the resources available. Economics gives a guidance to manage the scarcity of available resources. Economics can reduce unemployment. Without Economics, welfare of the citizens is not possible. Economics can make society a better place. The curriculum in Economics at Senior Secondary Level has been designed to help specific needs of NIOS learners. The main areas covered relates to the daily working environment of the learners.

## Rationale

Economics has become a very sought after subject in the field of Social Science. The knowledge of Economics is very important in pursuing various activities in everyday life such as production, consumption and investment. In Consumption, every individual wants to utilize the income in the best possible manner so as to get maximum satisfaction from the goods and services purchased.

Similarly, as producer, the individual/firm/industry uses the resources to minimize cost and get maximum output/profit. At the economy level, everybody wants that there should be economic growth and development through higher income and employment. Study of economics is very useful to achieve these goals.

At NIOS, students are introduced to the subject of Economics at Secondary stage. The level at this stage is elementary in nature. However, at the Senior Secondary level, students will be exposed to more areas of economics. They are also expected to know the use of tables and graphs/statistical tools to understand and explain various concepts and theories of economics.

## Objectives

After completing this course, the learner will be able to:

- understand the structure, problems, working and recent changes in the Indian economy;
- recall principles, laws and concepts of Economics;
- distinguish between factor incomes and non-factor incomes;
- collect, classify and present economic data;
- construct pie chart, frequency polygon and histogram;
- use statistical tools to analyse, interpret and explain data; and
- explain producer's and consumer's behaviour.

## Scope and job opportunity

This field has a large number of opportunities for employment, some of these are:

- Economic policy maker in every organization.
- Teaching Economics.
- Research.
- business, government, education etc.

## Eligibility conditions

**Age:** 15 Years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** Hindi, English, Urdu, Bengali, Gujarati and Odia

**Duration of the course:** 1 Year

**Weightage**

**Theory:** 100 Marks

**Tutor Marked Assignment (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (300 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 100 marks (3 hours), internal assessment (TMA) (20% of theory marks)

Mode of evaluation	Syllabus/Contents	Duration	Weightage
Tutor Marked Assignment (TMA)	All contents under Part-1 (Module 1, 2 & 3)	Self paced	20%
Public Examination	All contents under Part-2 (Module 4 to 11)	3 Hours	80%

**Pass criteria:** 33% marks in theory

## Course content

S. No.	Module/Topics	Duration (in hours)	Module Approach/Description	Weightage (marks)
<b>PART - 1</b>				
1.	<b>Module-I</b> <b>Indian Economic Development</b> 1. Overview of Indian	35	Features of Indian Economy- National and Per capita Income, Status of the Social sector, State of agriculture, Industry and foreign trade.	6

	<p>Economy</p> <p>2. Economic Planning in India</p>		<p>Meaning of Economic Planning, need for planning, objectives of planning, strategies of economic planning, achievements and drawbacks of Five Year Plans in India, New Economic Policy 1991- Liberalization, Privatization &amp; Globalization</p>	
2.	<p><b>Module-II</b></p> <p><b>Current Challenges before the Indian Economy</b></p> <p>3. Economic Growth and Economic Development</p> <p>4. The Problem of Unemployment, Poverty and Inequality</p>	35	<p>Meaning of Economic Growth and Economic Development. Difference between Economic Growth and Economic Development; Concept of Sustainable Economic Development; Concept of Human Development, Human Development Index, factors affecting economic growth, Common features of underdeveloped countries</p> <p>Meaning, Types and measures of unemployment, Causes of unemployment in India, Concept of Poverty line and estimates of Poverty, Causes of Poverty in India, Poverty alleviation and employment generation programmes in India, Inequality in income and Regional Inequality.</p>	6
3.	<p><b>Module-III</b></p> <p><b>Introduction to Statistics</b></p> <p>5. Meaning, Scope and its Need in Economics</p> <p>6. Collection and Classification of Data</p> <p>7. Presentation of data</p>	50	<p>Need and scope of statistics, Meaning, functions and importance of statistics in economics, limitations of statistics.</p> <p>Primary and secondary data, collection of primary data, sources of secondary data; organization of data into arrays and frequency distribution.</p> <p>Tabulation, Bar diagrams and pie diagrams, Graphs – Line graph, histogram, Polygon and Ogive.</p>	8

<b>PART - 2</b>				
4.	<b>Module-IV</b> <b>Statistical Tools</b> 8. Measures of Central Tendencies 9. Measures of Dispersion 10. Correlation Analysis 11. Index Numbers	35	Meaning of central tendency, computation of arithmetic mean, combined mean, weighted arithmetic mean, median, quartiles and mode. Meaning of dispersion, Measures and methods of computing dispersion, Range, quartile deviation mean deviation, standard deviation (Absolute and Relative measures), Lorenz curve. Meaning, Scatter diagram, Karl Pearson's coefficient of correlation, Spearman's Rank correlation. Meaning, types, Construction of simple and weighted index numbers, Laspeyer's, Paasche's and Fischer's wholesale price index, Consumer price index and index of industrial production, uses of index numbers.	19
5.	<b>Module-V</b> <b>Introduction to Economics</b> 12. Introduction to the Study of Economics 13. Central Problems of an Economy	16	Meaning of Economics, Meaning of Microeconomics and Macroeconomics, relationship and distinction between the two, positive and normative economics. Meaning of economic problem, why Economic Problem arises, Central Problems, What to produce, How to produce and for Whom to produce; Concept of production possibility frontier, Opportunity Cost and marginal opportunity cost.	9
6.	<b>Module-VI</b> <b>Consumer's Behaviour</b> 14. Consumer's Equilibrium 15. Demand 16. Price Elasticity of Demand	25	Meaning of Utility, Marginal and Total utility, Law of Diminishing Marginal Utility, Consumer's Equilibrium based on utility analysis. Meaning of Indifference curve and budget line, consumer's equilibrium using in difference curve and budget line. Meaning, factors affecting demand,	14



			<p>law of demand, Individual and market demand, demand schedule and demand curve movement along the demand curve and shift in demand curve.</p> <p>Meaning, Factors affecting price elasticity of demand. Methods of Calculating price elasticity of demand</p> <p>(a) Percentage method (b) Total expenditure method (c) Geometric method</p> <p>Simple numerical problems based on each method</p>	
7.	<b>Module-VII</b> <b>Producer's Behaviour</b> 17. Production Function 18. Cost of Production 19. Supply 20. Price Elasticity of Supply	40	<p>Meaning of production function, Production function in the Short Run- Law of Variable Proportion.</p> <p>Meaning of Cost, Fixed and Variable cost, Explicit and Implicit cost, Monetary cost, Real cost, Private and Social costs, Short run costs.</p> <p>Meaning, determinants of supply, law of supply, individual and market supply, supply schedule and supply curve, movement along the supply curve and shift in supply curve.</p> <p>Meaning, measurement of price elasticity of supply by (a) Percentage method (b) Geometric method</p> <p>Factors affecting price elasticity of supply</p>	22
8.	<b>Module-VIII</b> <b>Market and Price Determination</b> 21. Forms of Market	16	<p>Meaning of market, Different forms of market – Perfect competition, monopoly, monopolistic competition and oligopoly- their meaning and features</p>	9

	22. Price determination Under Perfect Competition 23. Revenue and Profit maximization of a Competitive Firm		Meaning of equilibrium price, Determination of equilibrium price, excess demand and excess supply; Effect of changes in demand and supply on equilibrium price and quantity; Simple applications of demand and supply analysis – ceiling price, floor price. Concept of revenue – Total Revenue, Average Revenue Marginal Revenue. Various concepts of profit; profit; Maximization of a competitive firm Total revenue and total cost approach, Marginal revenue and Marginal cost approach	
9.	<b>Module-IX</b> <b>National Income Accounting</b> 24. National Income and Related Aggregates 25. National Income and its Measurement	16	Meaning of income, four factors of production, factor incomes and non-factor incomes, final goods and intermediate goods, basic economic activities, closed and open economy, stock and flow, circular flow of income, concept of domestic territory and normal residents, value of output and value added, market price vs factor cost, domestic income vs national income, real & nominal GDP concept of depreciation. Concepts of GDP, NDP GNP & NNP (at market price and factor cost) Methods of calculating national income-value added or product method, income method and expenditure method, private income, personal income and personal disposable income, national disposable income (gross and net), GDP and economic welfare.	9
10.	<b>Module-X</b> <b>Theory of Income and</b>	16	Consumption function, saving function and investment function,	9

	<b>Employment</b> 26. Consumption, Saving and Investment 27. Theory of Income Determination		propensity to consume and save Concept of aggregate demand, Determination of Equilibrium level of Income, Increase in income Through Multiplier Process; Excess demand and Deficiency in demand.	
11	<b>Module-XI</b> <b>Money, Banking and Government Budget</b> 28. Money and Banking 29. Government and the Budget	16	Barter system of exchange; Money- its meaning and functions, Supply of Money - currency held by the public and net demand deposits held by the commercial banks, Measures of Money Supply process of credit creation, Central bank-meaning, functions, Monetary Policy to control money supply.  Meaning, Objectives, components, Revenue Receipts and Capital Receipts, Revenue expenditure and Capital expenditure, Measures of deficit (Revenue Deficit, Fiscal Deficit and Primary Deficit - their meaning and implications); Fiscal policy and its role.	9

# **Business Studies**

**Code No. 319**

## **Introduction**

Business activities affect every citizen at their place of work. Business is an activity involving regular production or purchase of goods and services for sale with the object of earning profit. All learners will encounter the world of business when they start working. In order to prepare them to engage in business activity with confidence and competence, we introduce Business Studies as a course at the Senior Secondary Level. This course gives a clear explanation of the functions of business. The curriculum in Business Studies at Senior Secondary Level has been designed to help specific needs of NIOS learners.

## **Rationale**

Business is a dynamic process that brings man, money, machine and materials together to produce goods and services that not only fulfills our basic needs but also provides us comfort and makes our lives easier. If we look into the past we realize that the procedures and practices followed in business in those days were completely different from modern days. Today, the use of modern technology in every field of business, whether it is production or distribution, has made the business globally competitive. It is more sensitive and mostly affected by the consumption pattern of the people, government's policies and changes in information and communication technology, better transportation facility, etc. It is more exposed to risk and uncertainties than what it was in past. Therefore, a systematic effort is required to understand, analyze, manage and respond to the changes that affect the functioning of business in the present day society.

Keeping in mind the above, the curriculum in the subject of Business Studies at Senior Secondary level is designed to cater to the needs of the learners of National Institute of Open Schooling (NIOS). It aims at creating an interest and understanding in the area of nature and scope of business, business practices in past and the modern trends, forms and formation of business organization, trade and its auxiliaries, management, finance, marketing, consumer protection and would enable the learners to acquire the necessary knowledge to enter into the area of self-employment as well as wage employment.

## **Objectives**

After completing this course, the learner will be able to:

- understand nature of business;
- distinguish different types of business organizations;
- discuss fundamentals of Management;
- recall the functions and Principles of management;
- explain different types of business finance; and
- distinguish internal and external trade.

## Scope and job opportunity

This field has a large number of opportunities for employment, some of these are:

- Careers in the field of marketing
- Careers in the field of teaching.
- Business careers in media, advertising, human resources, education, travel & tourism, hotel industry etc.
- Careers in the field of research .

## Eligibility conditions

**Age:** 15 Years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** Hindi, English, Urdu, Bengali, Gujarati and Odia

**Duration of the course:** 1 Year

**Weightage**

**Theory:** 100%

**Tutor Marked Assignment(TMA):** 20% Marks of theory

**Scheme of studies:** Theory (250 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 100 marks (3 hours), internal assessment (TMA) (20% of theory marks)

**Pass criteria:** 33% marks in theory

## Course content

S. No.	Module/Topics	Duration (in hours)	Module Approach/Description	Weightage (marks)
1.	<b>Module-I</b> <b>Business Around Us</b> 1. Nature and Scope of Business 2. Support Services to Business 3. Business Environment	20	1. Economic Activities – Business, Profession and Employment 2. Characteristics of Business 3. Objectives of Business 4. Significance of Business 5. Classification of Business Activities	8

	4. Modern Modes of Business		<p>Meaning and importance of support services Types of support services and their nature.</p> <ul style="list-style-type: none"> <li>• Banking, Insurance, Transport, Warehousing, Communication</li> <li>• Meaning and Importance of Business Environment</li> <li>• Dimension of Business Environment</li> <li>• Economic Environment of Business</li> <li>• Social Environment of Business</li> <li>• Political and Legal Environment of Business</li> <li>• Technological Environment of Business</li> <li>• Demographic Environment of Business</li> <li>• Recent Developments in Indian Economy</li> <li>• Concept and Importance of Social Responsibility</li> <li>• Social Responsibility towards various interest groups</li> <li>• Business Ethics</li> <li>• E-business, E-commerce, E-banking, E-post, Outsourcing of Services</li> </ul>	
2.	<b>Module-II</b> <b>Business Organisations</b> 5. Forms of Business Organisation 6. Company Form of Business Organisation 7. Public Sector Enterprises	20	<ul style="list-style-type: none"> <li>• Meaning of forms of Business Organisation</li> </ul> <p>Different forms of Business Organisation: Sole proprietorship, Joint Hindu Family, Partnership, Co-operative Societies – Meaning, Characteristics, Merits, Limitations, Suitability and Formation.</p> <p>1. Meaning, Characteristics and</p>	8

			<p>Types of Joint Stock Company</p> <ol style="list-style-type: none"> <li>2. Merits, Limitations and Suitability of Joint Stock Company</li> <li>3. Choosing the right form of business organisation.</li> <li>4. Multinational Company - Meaning, Features, Advantages and Limitations</li> <li>1. Concept of Private and Public Sector</li> <li>2. Forms of Public Sector Enterprises-Departmental Undertaking, Public Corporation, Government Company</li> <li>3. Role and Importance of Public Sector Enterprises</li> </ol>	
3.	<b>Module-III</b> <b>Preparing for Employment</b> <ol style="list-style-type: none"> <li>8. Self-employment</li> <li>9. Getting Ready for Wage Employment</li> </ol>	10	<ul style="list-style-type: none"> <li>• Meaning and importance of self-employment</li> <li>• Characteristics of self-employment</li> <li>• Avenues for self employment, manufacturing, trading, providing services</li> <li>• Meaning and characteristics Small Business</li> <li>• Importance and scope of Small Business in India</li> <li>• Government's policies towards small Business in India</li> <li>• Institutional Support to small Business in India</li> <li>• Various sources</li> <li>• Employment exchange-meaning,procedure of registration, types of job offered</li> <li>• Placement agencies-meaning, concept, jobs offered</li> </ul>	4

			<ul style="list-style-type: none"> <li>Advertising media-print and electronic types of job offered</li> <li>Getting ready for employment-preparing bio-data, preparing for employment test, preparing for interview.</li> </ul>	
4.	<b>Module-IV</b> <b>Business Management : Nature and Scope</b> 10. Fundamentals of Management	25	<ul style="list-style-type: none"> <li>Concept, Characteristics and Importance of Management</li> <li>Nature of management – as a science, as an art, as a process, as a discipline, as a group, as an activity</li> <li>Levels of Management</li> <li>Principles of Management</li> <li>Functions of Management.</li> </ul>	10
5.	<b>Module-V</b> <b>Functions of Management</b> 11. Planning and Organising 12. Staffing 13. Directing 14. Co-ordination and Controlling	50	Meaning, features and importance of planning Steps in Planning Meaning and process of organizing Organisation Structure <ul style="list-style-type: none"> <li>Staffing- meaning and importance</li> <li>Process of staffing</li> <li>Recruitment and selection training</li> <li>Directing- meaning and importance</li> <li>Elements of directing- communication, supervision, motivation, leadership</li> <li>Coordination- meaning, and significance</li> <li>Controlling- meaning and nature</li> <li>Importance of controlling</li> <li>Process of control</li> </ul>	20



6.	<b>Module-VI</b> <b>Business Finance</b> 15. Financing of Business 16. Sources of Long term Finance 17. Financial Planning 18. Indian Financial Market	50	<ul style="list-style-type: none"> <li>• Meaning of Business Finance</li> <li>• Importance of Business Finance</li> <li>• Types of Business Finance- Short term, Medium term and Long term Finance</li> <li>• Methods of Raising Capital:</li> <li>• Short term Capital: Trade Credit, Bank Credit (Loans and Advances, Cash Credit, Overdraft, Discounting of bills), Factoring, Advance from Customers, Installment credit.</li> <li>• Long term Capital: Issue of Share, Issue of Debenture, Loans from Financial Institutions, Public Deposits, Retention of Profits, Leasing, FDI, GDR, ADR.</li> <li>• Nature and Importance of Long-term finance</li> <li>• Sources- Capital market, Special Financial Institutions, Banks, Non-Banking Financial Companies, Mutual Funds, and Retained profits.</li> <li>• Foreign Sources of Finance- External Borrowings, Foreign Investment, NRI-financing.</li> <li>• Meaning and objectives of Financial Planning</li> <li>• Concept of Capital Structure</li> <li>• Concept of Capitalization</li> <li>• Determining Fixed and Working capital requirement</li> <li>• Dividend and its determinants</li> <li>• Meaning of Financial market</li> <li>• Capital market and Money market</li> </ul>	20
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			<ul style="list-style-type: none"> <li>• Primary market and Secondary market</li> <li>• Stock Exchange– Role and Functions,</li> <li>• Stock Exchanges in India</li> <li>• Role of SEBI</li> </ul>	
7.	<b>Module-VII</b> <b>Marketing Management</b> 19. Introduction to Marketing 20. Marketing-mix 21. Advertising and Salesmanship	50	<ul style="list-style-type: none"> <li>• Meaning of Marketing</li> <li>• Importance of marketing</li> <li>• Marketing vs. Selling</li> <li>• Objectives of Marketing</li> <li>• Functions of Marketing</li> <li>• Concept of Marketing-mix</li> <li>• Product-meaning, classification</li> <li>• Pricing- Factors and approaches</li> <li>• Place- channels of distribution-meaning, types and factors affecting the choice of an appropriate channel</li> <li>• Promotion – meaning and concept of promotion mix</li> <li>• Advertising- meaning, difference between advertising and publicity, objectives, media</li> <li>• Salesmanship - Meaning, role, qualities of a good salesman</li> <li>• Sales promotion- meaning, objectives and tools used</li> </ul>	20
8.	<b>Module-VIII</b> <b>Trade and Consumer Protection</b> 22. Internal Trade 23. External Trade 24. Consumer Protection	25	<ul style="list-style-type: none"> <li>• Meaning and characteristics of Internal trade</li> <li>• Types of middlemen and their role-Wholesaler; Retailer</li> <li>• Large Scale retail stores</li> <li>• Recent trends in distribution-Direct marketing, Tele-marketing, Internet marketing</li> </ul>	10

			<ul style="list-style-type: none"> <li>• Meaning, importance and types</li> <li>• Difficulties faced in external trade</li> <li>• Export trade procedure</li> <li>• Import trade procedure</li> <li>• Export promotion measures</li> <li>• Meaning of consumer</li> <li>• Consumer protection-meaning and importance</li> <li>• Rights and responsibilities of Consumers</li> <li>• Mechanism for Consumer Protection</li> </ul>	
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# Accountancy

Code No. 320

## Introduction

Owners of an enterprise record financial information to analyse profits. In order to measure the performance of a company, owners require accounting data. Entrepreneurs require capital to start and run a business. If capital is to be raised from banks, then financial statements are to be given to them. Management of every business is done on the basis of financial information given by accountants. Because of this importance of Accounting in organisations, we have introduced Accounting as a course at Higher Secondary Level. This course gives a clear explanation of the activities done by an accountant. The curriculum in Accountancy has been designed to help specific needs of NIOS learners. The main areas covered relates to the daily working environment of the Accountant learners. The course contains seven modules.

## Rationale

The last decade has witnessed tremendous changes in business education. The liberalization and globalization have been the primary cause for such changes. With the fast changing economic scenario, the elementary business education along with Accountancy 'as a language of business' is gaining its importance. The curriculum in Accountancy provides a firm foundation in basic accounting concepts and also keeps them informed of changes in its methodology concerning particular aspects of the subject. The thrust of the course follows new trends in accounting practices and developing a basic understanding of the nature and purpose of the accounting information and reporting. Further, information technology has occupied a vital place in business activities. Therefore, a lesson designed on computer and computerized accounting shall expose the learners to the basic knowledge about the utility of computers in the business world. The course in Accountancy will prepare learners to logically analyse, evaluate and respond to changes which affect business operations. It opens the doors for higher education as well as sharpens the skills for those who are going for self-employment.

## Objectives

After completing this course, the learner will be able to:

- recall basic accounting terminology;
- record business transactions;
- prepare Journal, Ledger and Trial Balance;
- prepare the financial statements and to do analysis of it;
- construct Depreciation Account using different methods;
- develop skill in preparing Partnership accounts ;
- explain and prepare Company Accounts; and
- understand the need, importance and advantages of computerized accounting .

## Scope and job opportunity

This field has a large number of opportunities for employment, some of these are:

- career in the field of Accounts Manager
- career in the field of Chartered Accountant
- career in the field of Management Consultant
- career in the field of Teaching

## Eligibility conditions

**Age:** 15 Years

**Qualification:** 10<sup>th</sup> Pass

**Medium of instruction:** Hindi, English, Urdu, Bengali, Gujarati and Odia

**Duration of the course:** 1 Year

**Weightage**

**Theory:** 100 Marks

**Tutor Marked Assignment (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (250 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 100 marks (3 hours), internal assessment (TMA) (20% of theory marks)

**Pass criteria:** 33% marks in theory

## Course content

There are three parts in Accountancy. Part A is compulsory for all, while the learner has to choose any one part from B or C respectively, during Public Examination.

S. No.	Module/Topics	Duration (in hours)	Module Approach/Description	Weightage (marks)
<b>PART –A</b>				
1.	<b>Module-I</b> <b>Basic Accounting</b> 1. Accounting - An Introduction	25	<ul style="list-style-type: none"><li>• Accounting: Meaning, Objectives, Types of accounting information, advantages and limitations. Users of Accounting information and their needs.</li></ul>	10

	<ol style="list-style-type: none"> <li>2. Accounting Concepts</li> <li>3. Accounting Conventions and Standards</li> <li>4. Accounting for Business Transactions</li> <li>5. Journal</li> <li>6. Ledger</li> <li>7. Cash book</li> <li>8. Special Purpose Books</li> </ol>		<p>Double Entry system. Basis of accounting-Cash basis, accrual basis and hybrid basis.</p> <ul style="list-style-type: none"> <li>• Basic Accounting Terms: Business transaction, Event, Account, Capital, Drawings, Liability : Internal &amp; External, Long term &amp; Short term, Asset (Intangible &amp; Tangible, Fixed, Current, Liquid, Fictitious) Receipts (Capital &amp; Revenue), Expenditure (Capital, Revenue &amp; Deferred Revenue), Expense, Income, Profits, Losses, Purchases, Sales, Stock, Debtors, Bills Receivables, Creditors, Bills Payables, Goods, Cost,</li> <li>• Vouchers, Discount (Trade, Cash, Received &amp; Allowed).</li> </ul> <ol style="list-style-type: none"> <li>1. Fundamental Accounting Assumptions: Going concern, Consistency, Accrual.</li> <li>2. Accounting Principles: Accounting Entity, Money Measurement, Accounting Period, Full Disclosure, Materiality, Prudence, Cost Concept, and Dual Aspect.</li> </ol> <ol style="list-style-type: none"> <li>1. Accounting conventions: consistency, Full Disclosure, Materiality, Conservatism.</li> <li>2. Accounting Standards: Concept &amp; objective</li> </ol> <ol style="list-style-type: none"> <li>1. Accounting Equation: Meaning, Analysis of transactions using Accounting Equation.</li> <li>2. Rules of Debit and Credit: For Assets, Liabilities, Capital, Revenue and Expenses.</li> </ol>	
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			<p>3. Origin of transaction-Source Documents (Invoice, Cash memo, Pay in slip, Cheque), Preparation of Vouchers-cash (Debit &amp; Credit), Non Cash (Transfer).</p> <p>1. Journalising the simple and compound transactions, classification of journal into special journal &amp; journal proper.</p> <p>2. Books of Original Entry : Meaning, Format and Process of Journalising</p> <ul style="list-style-type: none"> <li>Meaning, Utility, Format, Posting from Journal in to ledger.</li> </ul> <p>Simple Cash book, Cash Book with Bank Column, Petty Cash Book.</p> <p>Purchases Book , Sales Book, Purchases Returns Book, Sales Returns Book, Bills Receivable Book, Bills Payable Book and Journal Proper , with formats &amp; recording of transactions.</p>	
2.	<p><b>Module-II</b></p> <p><b>Trial Balance and Computers</b></p> <p>9. Trial balance</p> <p>10. Bank Reconciliation Statement</p> <p>11. Bills of Exchange</p> <p>12. Errors and Their Rectification</p> <p>13. Computers and Computerised Accounting System</p>	25	<ul style="list-style-type: none"> <li>Meaning, Objectives and Preparation of Trial Balance</li> <li>Meaning, Objectives, Causes of differences between Cash Book and Balances as per Pass Book/ Bank Statement and Methods of Preparing Bank Reconciliation Statement.</li> </ul> <p>Bills of Exchange and Promissory Note: Definition, Feature, Parties, Specimen and Distinction.</p> <ul style="list-style-type: none"> <li><b>Important Terms:</b> Term of Bill, Due date, Days of Grace, Date of Maturity , Bill at Sight, Bill after Date, Discounting of Bill, Endorsement of Bill, Bill Sent for</li> </ul>	10

			<p>Collection, Dishonour of Bill, Noting of Bill, Insolvency of Acceptor , Retirement and Renewal of a bill, Accounting Treatment of bill transactions.</p> <ul style="list-style-type: none"> <li>• Errors and their types: Errors not affecting trial balance and Errors affecting trial balance.</li> <li>• Rectification of errors before and after the preparation of financial statements.</li> <li>• Suspense account: Meaning, preparation and treatment of suspense account balance in final statements.</li> </ul> <ol style="list-style-type: none"> <li>1. Introduction to Computer Accounting System: Components of CAS, Features, Grouping of Accounts, Using Software of CAS, Advantages &amp; Limitations CAS, Accounting Information System.</li> <li>2. Application of computers in Accounting – Automation of accounting process, designing accounting reports, data exchange with other information systems.</li> <li>3. Comparison of accounting processes, manual and computerized accounting, highlighting advantages and limitations of automation.</li> <li>4. Sourcing of accounting system: Readymade, customized, tailor-made accounting system. Advantages and Disadvantages of each option.</li> </ol>	
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3.	<b>Module-III</b> <b>Financial Statements</b> 14. Depreciation 15. Provision and Reserves 16. Financial Statement - An Introduction 17. Financial Statements – I 18. Financial Statements – II 19. Not for Profit Organisations - An Introduction 20. Financial Statements (Not for Profit Organisation) 21. Accounts From Incomplete Records	50	1. Depreciation: Meaning, Need and Factors affecting depreciation. 2. Methods of computation of Depreciation: Straight Line Method, Written Down Value Method (Excluding Change in method) Accounting Treatment of Depreciation: By charging to asset account, by creating Provision for depreciation/accumulated depreciation account, Preparation of Asset Disposal Account. 1. Meaning, Objective and Difference between Provisions and Reserves. 2. Types of Reserves: Revenue Reserve, Capital Reserve, General Reserve, Specific reserves, Secret reserves. 1. Financial Statements: Meaning, Objective and Importance. 2. Trading and Profit and Loss account: Gross Profit, Operating Profit and Net Profit 3. Balance Sheet. 1. Preparing Trading Account and Profit & Loss Account 2. Balance Sheet: Need, Grouping, Marshalling of Assets and Liabilities. Adjustments in Preparation of Financial Statements: With respect to closing stock, outstanding expenses, prepaid expenses, accrued income, income received in advance, depreciation, Bad debts, provision for doubtful debts,	20
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			<p>provision for discount on debtors, Manager 's commission, abnormal loss, goods taken for personal use, goods distributed as free Sample.</p> <p>Preparation of Trading and Profit and Loss Account and Balance Sheet of Sole Proprietorship Concerns.</p> <ol style="list-style-type: none"> <li>1. Not For Profit Organisations: Concept.</li> <li>2. Receipts and Payment Account: Meaning and Features.</li> <li>3. Balance Sheet: Meaning and Features</li> <li>4. Income and Expenditure Account: Meaning and Features, Preparation of Income and Expenditure Account and Balance Sheet from the given Receipt and payment Account with additional information.</li> </ol> <p>Preparation of Income &amp; Expenditure Account</p> <p>Preparation of Receipts &amp; Payments Account</p> <p>Preparation of Balance Sheet of a Not for Profit Organisation.</p> <ol style="list-style-type: none"> <li>1. Incomplete Records: Meaning, Uses and Limitations.</li> <li>2. Ascertainment of Profit/Loss by Statement of Affairs Method.</li> <li>3. Preparation of Trading and Profit and Loss Account and Balance Sheet (with reference to missing figures in total debtors account, total creditors account, Bills Receivable A/C, Bills Payable A/C, Cash Book and Opening Statement of Affairs).</li> </ol>	
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4.	<b>Module-IV</b> <b>Partnership Accounts</b> 22. Partnership - An Introduction 23. Admission of Partners 24. Retirement and Death of a Partner 25. Dissolution of Partnership Firm	50	1. Meaning: Partnership, Partners, Firm, Partnership Deed. 2. Provisions of The Indian Partnership Act 1932 affecting Accounts in the absence of Partnership Deed. 3. Fixed v/s Fluctuating Capital Accounts, Division of Profit among partners, Guarantee of profits, past adjustments (Relating to interest on capital, interest on drawing, salary and Profit sharing Ratio), and Preparation of P & L Appropriation Account. 4. Goodwill: Nature, Factors affecting and Methods of valuation – Average profit, super profit, and capitalization. 1. Change in the Profit Sharing Ratio among the existing partners – sacrificing ratio, Gaining Ratio, Accounting for Revaluation of Assets and Re-assessment of Liabilities and Distribution of Reserves and Accumulated profits. 2. Admission of a Partner-Effect of admission of a Partner on: change in the Profit Sharing Ratio, Treatment of goodwill (As per AS 26), treatment for Revaluation of Assets and Re-assessment of Liabilities, Treatment of Reserves and Accumulated profits, Adjustment of Capital Account and Preparation of Balance Sheet. • Effect of Retirement/Death of a partner – change in Profit	20
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			<p>Sharing Ratio, Treatment of goodwill, treatment for Revaluation of Assets and Re-assessment of Liabilities, Adjustment of Accumulated Profit and Reserves. Calculation of deceased partner's share of profit till the date of death. Preparation of Deceased partner's Executor's account and Preparation of Balance Sheet.</p> <ul style="list-style-type: none"> <li>• Meaning and Types of Dissolution of firm. Settlement of accounts –Preparation of Realization account, and related accounts as Capital, Cash &amp; Bank (excluding piecemeal distribution, sale to a company and insolvency of partners).</li> </ul>	
5.	<b>Module-V</b> <b>Company Accounts</b> 26. Company - An Introduction 27. Issue of Shares 28. Forfeiture of Shares 29. Reissue of Forfeited Shares 30. Issue of Debentures	50	<p>Meaning of company form of business organization, characteristics of company, types of companies, difference between public &amp; private company, various types of shares issued by company with the type of share capital.</p> <ol style="list-style-type: none"> <li>1. Meaning, Nature and Types</li> <li>2. Accounting for Share Capital: Issue and Allotment of Equity shares, Private placement of Shares. Public Subscription of shares-over subscription and under subscription of shares. Issue at Par and Premium, calls in advance and arrears, Issue of shares for consideration other than cash.</li> </ol> <p>Meaning of forfeiture shares, Various situations in which share can be</p>	20

			<p>forfeited.</p> <ol style="list-style-type: none"> <li>1. Meaning of reissue of Shares, Minimum price of which a company can reissue its forfeited shares and accounting treatment of reissue of shares in different situations.</li> <li>2. Disclosure of Share capital in Company's Balance Sheet (Vertical form)</li> </ol> <p>Meaning &amp; types of debentures, procedure of Issue of debentures and its accounting treatment. Issue of debentures for consideration other than cash, Debentures as collateral security accounting treatment for writing off discount &amp; loss on Issue of debentures. Interest on Debentures.</p>	
<b>PART – B</b>				
6.	<b>Module-VI</b> <b>Analysis of Financial Statements</b> 31. Financial Statements Analysis - An Introduction 32. Accounting Ratios – I 33. Accounting Ratios - II 34. Cash Flow Statement	50	<ol style="list-style-type: none"> <li>1. Balance Sheet of a Company in the prescribed Vertical Form with major headings and sub headings (As per Schedule VI of The Companies Act 1956).</li> <li>2. Financial Statement Analysis: Meaning, Objectives and Limitations.</li> <li>3. Tools for Financial Statement Analysis: Comparative Statements, Common Size Statements, Cash Flow Analysis, Ratio Analysis.</li> </ol> <ol style="list-style-type: none"> <li>1. Accounting Ratios: Objectives and Classification of Ratios.</li> <li>2. Liquidity ratios: Current and Quick Ratio.</li> </ol> <ol style="list-style-type: none"> <li>1. Solvency Ratios: Debt to Equity Ratio, Total Asset to Debt Ratio,</li> </ol>	20

			<p>Proprietary Ratio, Interest Coverage Ratio.</p> <p>2. Activity ratios: Stock Turnover Ratio, Debtors Turnover Ratio, Creditors Turnover Ratio, Working Capital Turnover Ratio.</p> <p>3. Profitability Ratios: Gross Profit Ratio, Operating Ratio, Operating Profit Ratio, Net Profit Ratio.</p> <ul style="list-style-type: none"> <li>• Meaning Objective and preparation of Cash Flow Statement.</li> </ul>	
<b>PART – C</b>				
7.	<b>Module-VII</b> <b>Application of Computers in Financial Accounting</b> 35. Electronic Spread Sheet 36. Use of Spreadsheet in Business Application 37. Graphs And Charts for Business 38. Data Base Management System for Accounting	50	<p>Concept, Data Entry Text Management and Cell formatting, Data Formatting, Output Reports, Preparation of Reports Using Pivot table, Common Errors in Spread Sheet.</p> <p>Payroll Accounting, Asset Accounting</p> <ul style="list-style-type: none"> <li>• Data Graphs and Charts, Preparation of Graphs and Charts using Excel, Advantages of using Graphs and Charts.</li> </ul> <p>1. Defining Database Requirements, Identification of data to be stored in Tables, Structuring of Data.</p> <p>2. Creating data tables for accounting, Using queries, forms and reports for generating accounting information with the help of Microsoft Access Software.</p>	20

# Home Science

Code No. 321

## Introduction

Home Science is concerned with the home, health and happiness of all members of the family and community. It is the art of managing resources efficiently combined with the science of achieving a healthier and happier home. This subject supports the personal enrichment and professional development. It integrates the application of various sciences and humanities to improve human environment, family nutrition, management of resources and child development.

Home Science is a subject for all now, because everyone has a dream of having a perfect home life. The days are gone that household activities were the responsibility of women folk. Now both men and women share the responsibilities in all affairs of the home. It empowers the learner to achieve all round development in different pursuits of life. It opens up endless avenues for the learners to settle as a self employed persons or posses any desirable jobs in established organizations including the NGOs.

## Rationale

At no time in history the demands of humans begins have been as diverse as they are today. The individuals are constantly faced with problems of change. They have to make continuous adjustment to their life style that tests their decision making skills.

Home Science teaches an individual to develop knowledge and skills in order to interact better with their environment that includes the family, food clothing and home. The basic aim of studying Home Science is to efficiently use the goods and services available for improving the quality of human life.

Home Science as a subject is of great social significance as it affects an individual's way of living, eating, raising young ones, etc., which in turn affects the welfare and stability of the family and the society at large. Besides grooming individuals for better living, the study of Home Science also opens up vistas of future vocational pursuits

## Objectives

After completing this course, the learner will be able to:

- develop skills that help in bringing a positive change in daily life style and solving problems;
- develop creative thinking and a rational approach towards everyday life;
- develop scientific temper and a spirit of inquiry; and
- sensitivity to values of ethical living.

## Scope and job opportunity

The scope of Home Science extends far beyond the 'home' and is not limited to cooking, laundry,

needlework and home decoration. In fact it is the only subject which prepares young learners for the two most important goals in their lives – looking after their home and family and preparing for a career or vocational life. The areas covered in Home Science are vast and varied. There are jobs available if the learner wish to work out side home and as wage employment or the learner can start his or her own enterprise e.g. boutique, production unit, laundry service etc. There are various opportunities available for Home Science students and some of the broader options are mentioned below:

- Catering
- Food preservation/bakery / confectionery
- Interior decoration
- Arts and crafts
- Housekeeping and laundry services
- Dress designing, garment construction: textile science
- Teaching
- Communication and extension
- Resource managers and consumer education

## **Eligibility conditions**

**Age:** 15Years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** Hindi, English, Urdu, Bengali, Gujarati and Odia

**Duration of the course:** 1 Year

**Weightage**

**Theory:** 80 Marks

**Practical:** 20 Marks

**Tutor Marked Assignment (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (240hours), practical (30hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 80 marks (3 hours), practical 20 marks (3hours), internal assessment (TMA) (20% of theory marks).

**Pass criteria:** 33% in each component.



## Course content

S. No.	Module/ Topics	Duration (in hours)	Module Approach/ Description	Description of practicals	Weightage (marks)
1.	<b>Core Moduels</b>		Home is a place, which provides comfort and meets an individual's need for safety, security, identity and a sense of belongingness. This module provides an understanding of designing and arranging the environment at home in such a manner that it promotes healthy physical and social development of individuals. It also creates awareness about the various vocational areas in the subject of Home Science.		
2.	<b>The Art and Science of Managing Home Approach</b>	20	<b>L 1 Home Science</b> concept <ul style="list-style-type: none"> <li>• scope</li> <li>• employment opportunities</li> </ul> <b>L2 Family, Health and Security</b> <ul style="list-style-type: none"> <li>• definitions</li> <li>• types of family</li> <li>• importance of health</li> <li>• factors contributing to health</li> <li>• methods of providing safety and security at home</li> </ul> <b>L3 Ethics in Daily Living</b> <ul style="list-style-type: none"> <li>• definition and need</li> <li>• problems faces</li> <li>• code of ethics</li> <li>• raising ethical standards</li> </ul>		4
3.	<b>Food and Nutrition</b>	45	Good health is dependent on the food that we eat. Our diet consists of a variety of food that can be prepared by applying simple knowledge of food and nutrition. This module covers important topics like food, nutrition,		16

			meal planning and preparation. This knowledge helps to alter food habits that can contribute to ensuring good health.		
4.			<b>L4 Food, Nutrition and Health</b> <ul style="list-style-type: none"> <li>• definition and functions of food</li> <li>• sources and requirements of nutrients, deficiency of nutrients</li> <li>• relationship between food, nutrition and health</li> </ul> <b>L5 Meal Planning</b> <ul style="list-style-type: none"> <li>• food groups</li> <li>• balanced diet</li> <li>• meal planning</li> <li>• factors influencing meal planning</li> <li>• planning balanced meals for the family</li> <li>• definition, need and types of therapeutic diet</li> <li>• diet in common diseases</li> </ul> <b>L6 Nutritional Status</b> <ul style="list-style-type: none"> <li>• definition</li> <li>• assessing nutritional status</li> <li>• causes and prevention of malnutrition</li> <li>• recognizing deficiency disorders: Vitamin A, Iron and Iodine</li> <li>• causes and prevention of the above deficiency disorder</li> </ul> <b>L7 Purchase and Storage</b>	<ol style="list-style-type: none"> <li>1. To preserve seasonal foods</li> <li>2. To prepare and evaluate dishes using the following methods of food enrichment such as: Combination Fermentation Germination</li> <li>3. To collect different food items that is available at home and categorizes them under various food groups.</li> </ol>	

			<b>of Food</b> <ul style="list-style-type: none"> <li>• selection of food</li> <li>• food spoilage</li> <li>• safe handling of food</li> <li>• methods of storage</li> </ul> <b>L8 Preparation of food</b> <ul style="list-style-type: none"> <li>• importance of pre-preparation and preparation of food</li> <li>• methods of cooking</li> <li>• conservation and enhancement of nutrients</li> <li>• hygienic food handling in the kitchen</li> </ul> <b>L9 Food Preservation</b> <ul style="list-style-type: none"> <li>• importance</li> <li>• principles</li> <li>• household methods of preservation</li> </ul>		
5.	<b>Resource Management</b>	45	In these days of stress, home is a person's last refuge from the chaos of outside world. One can feel well adjusted if one possesses the knowledge of optimal use of all the resources in one's environment to achieve satisfaction. 'Doing things right' within the available resources is the aim of this module. This module aims at teaching a creative and systematic approach to an improved life.	16	
6.			<b>L10 Family Resources Management</b> <ul style="list-style-type: none"> <li>• definition, steps and motivating factors</li> <li>• decision making</li> <li>• Definition, sources and characteristics</li> <li>• types of resources,</li> </ul>	4. To identify sources of pollution in one's area and to suggest remedial measures.  5. To take one's own family as an example and	

			<ul style="list-style-type: none"> <li>• optimal use of resources</li> </ul> <p><b>L11 Time and Energy Management</b></p> <ul style="list-style-type: none"> <li>• significance of making a time plan</li> <li>• energy management and fatigue</li> <li>• principles of work simplification</li> <li>• methods of saving time and energy</li> </ul> <p><b>L12 Space Management</b></p> <ul style="list-style-type: none"> <li>• meaning and need</li> <li>• significance of work areas</li> <li>• space organization for various activities</li> </ul> <p><b>L13 Income Management</b></p> <ul style="list-style-type: none"> <li>• meaning of income, expenditure and investment</li> <li>• expenditure plan</li> <li>• income and expenditure record</li> <li>• investing money wisely</li> <li>• generating additional income</li> </ul> <p><b>L14 Energy Conservation</b></p> <ul style="list-style-type: none"> <li>• meaning and need</li> <li>• environmental degradation</li> <li>• role of individuals and government in creating an eco-friendly environment</li> </ul> <p><b>L15 Environment</b></p>	<p>6. List the household and related task performed by each member</p> <p>7. Analyse the work patterns according to age and gender differences in responsibility</p> <p>8. Comment on this division of tasks</p> <p>(i) To record the expenditure for one's own family for a month</p> <p>(ii) To evaluate the family's pattern on expenditure and on the basis of the evaluation prepare a budget for the family.</p>	
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			<p>Management</p> <ul style="list-style-type: none"> <li>• Meaning and need</li> <li>• Environment</li> <li>• Effect of environment</li> <li>• Role of individual and government in creating an eco-friendly environment</li> </ul> <p><b>L16 Household Equipment</b></p> <ul style="list-style-type: none"> <li>• selection and use</li> <li>• care and maintenance</li> </ul> <p><b>L17 Consumer Education</b></p> <ul style="list-style-type: none"> <li>• definition</li> <li>• problems faced by consumers</li> <li>• consumer protection laws and redressal</li> <li>• role of standardization marks, labeling and packaging</li> <li>• consumer rights and responsibilities</li> </ul>		
7.	<b>Human Development</b>	45	<p>Since every one is a product of environment, their well-being is affected by both external and internal factors. External factors constitute people around you and the housing, food; clothing equipment etc. internal factors are physical, mental, emotional and psychological health. This module explains the role of a family that acts as a life support system and helps to adapt to the changes occurring within and around an individual.</p>		16
8.			<p><b>L18 Growth and Development (0-5 years)</b></p> <ul style="list-style-type: none"> <li>• definition and principles of development</li> <li>• development during</li> </ul>	<p>9. To observe children in the age group of 1yr 6 months – 3yrs for their language</p>	

			<p>infancy and childhood</p> <ul style="list-style-type: none"> <li>physical, motor, socio-emotional, cognitive and language development</li> <li>behaviour problems in children</li> </ul> <p><b>L19 Growth and Development (6-11 years)</b></p> <ul style="list-style-type: none"> <li>characteristics of physical, motor, socio-emotional, cognitive and language development</li> </ul> <p><b>L 20 Adolescence</b></p> <ul style="list-style-type: none"> <li>definition and physical development</li> <li>sexual maturation and sex education</li> <li>characteristics of physical, motor, socio-emotional, cognitive and language development</li> <li>problems faced by adolescents</li> </ul> <p><b>L 21 Concerns and Issues in Human Development</b></p> <ul style="list-style-type: none"> <li>position of the girls child in society</li> <li>juvenile delinquency</li> <li>child lab or</li> <li>socio-economically disadvantaged children</li> <li>major physical disabilities</li> <li>mental retardation</li> <li>safe motherhood</li> <li>HIV/AIDS</li> </ul>	<p>achievements</p> <p>10. To observe a child in the age group of 1-2 yrs and record how he/she expresses anger and fear.</p> <p>11. To visit a nearby nursery school and observe and three children for their social behaviour</p> <p>12. To obtain a teenager's view about the physical changes and social and emotional problems faced during adolescence.</p>	
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9.	<b>Textiles and Clothing</b>	45	“Clothes make a man” and help to create personal identity and build self-confidence. Using well constructed garments from textiles that are composed of fibres, yarns and finishes enhance the personality and present ability of individuals. This modules aims to given an understanding of the properties of textiles. This knowledge is important for fabricating, constructing, selecting, using and caring for the textiles in daily use.	16	
10.			<b>L21 Introduction to Fabric Science</b> <ul style="list-style-type: none"> <li>• meaning and scope of fabric science</li> <li>• fibre-definition, classification and properties</li> </ul> <b>L22 Yarn and its Construction</b> <ul style="list-style-type: none"> <li>• definition and yarn processing</li> <li>• properties and types of yarns</li> <li>• textured yarns</li> </ul> <b>L 23 Fabric Construction</b> <ul style="list-style-type: none"> <li>• techniques of fabric construction</li> <li>• weaving</li> <li>• knitting</li> </ul> <b>L 24 Textile Finishes</b> <ul style="list-style-type: none"> <li>• meaning and importance</li> <li>• types of finishes and their properties</li> <li>• dyeing and printing</li> </ul> <b>L 25 Selection of Textiles and Clothing</b> <ul style="list-style-type: none"> <li>• selection of textiles for different and use</li> <li>• selection of clothing</li> <li>• quality assurance –</li> </ul>	13. To weave plain and it will weave using strips of paper 14. To collect six samples each of fabrics made by these two weaves 15. To remove curry, blood, mud, ink and tea/ coffee stains from white cotton fabrics 16. To launder the following materials; Cotton – ‘A’ line frock/ pillow case/ petticoat / pyjama Silk –blouse /scarf Wool –cardigan/cap/ scarf Synthetic –shirt/saree/ pant	

			<p>indicators and mal-practices</p> <p><b>L 26 Care and Maintenance of textile</b></p> <ul style="list-style-type: none"> <li>• Steps in laundering</li> <li>• Characteristics of auxiliaries – soap, detergents, blue and starch</li> <li>• Identification and removal of stains</li> <li>• Dry cleaning</li> <li>• Storage of clothes</li> </ul>		
11.	<b>Optional Moduels</b>	30			12
12.	<b>House-keeping-6 A</b>	<p>Every individual enjoys living in a clean environment, which includes homes place and community. The knowledge of housekeeping enables the individuals to promote and maintain cleanliness, and derive psychological satisfaction by promoting aesthetics at home and workplace. The module is aimed at imparting knowledge in housekeeping for everyday activities and also facilitates in taking up housekeeping related jobs.</p>			
13.			<p><b>L26 Introduction to Housekeeping</b></p> <ul style="list-style-type: none"> <li>• meaning</li> <li>• importance</li> <li>• areas of housekeeping</li> <li>• functions of a housekeeper</li> <li>• personal grooming of the housekeeper</li> </ul> <p><b>L 27 Cleaning and cleaning materials</b></p> <ul style="list-style-type: none"> <li>• cleaning materials and equipment</li> <li>• methods of cleaning</li> <li>• types of cleaning</li> </ul> <p><b>L 28 Maintenance of Premises</b></p>	<p>17. To care for, maintain and clean wooden, floor, brass, aluminum, silver and plastic</p> <p>18. To use waste material for preparing useful household items</p> <p>19. To practice cleaning the following (to be done under adult supervision only)</p> <ul style="list-style-type: none"> <li>• An electric Fuse</li> <li>• 3 pin plug of an</li> </ul>	



		<ul style="list-style-type: none"> <li>• maintenance of different surfaces</li> <li>• common household repairs</li> </ul> <p><b>L 29 Aesthetics at Home</b></p> <ul style="list-style-type: none"> <li>• flower arrangement</li> <li>• floor and wall decoration</li> <li>• accessories</li> </ul>	electric iron	
14.	<b>Creative Hand Embroidery- 6 B</b>	Hand embroidery is an ancient art of our country and in the present time embroidered clothes have become a fashion both among girls and boys. Embroidery enriches and clothes that you wear. This vocational module is aimed at providing knowledge and skill to venture into the area of creative hand embroidery for beautifying one's own clothing or to take up embroidery as a vocation.		
15.		<p><b>L30 Introduction to Creative Hand Embroidery</b></p> <ul style="list-style-type: none"> <li>• historical perspective</li> <li>• meaning</li> <li>• materials and tools</li> </ul> <p><b>L31 Design</b></p> <ul style="list-style-type: none"> <li>• types of design (geometric, stylized, abstract)</li> <li>• enlargement /reduction of design</li> <li>• transfer of design</li> <li>• placement of design</li> </ul> <p><b>L32 Colour</b></p> <ul style="list-style-type: none"> <li>• Prang's colour wheel</li> <li>• properties of colour</li> <li>• colour schemes</li> </ul> <p><b>L33 Embroidery Stitches</b></p> <ul style="list-style-type: none"> <li>• common hand embroidery stitches</li> <li>• running stitch, stem, stitch, chain, stitch, cross stitch, herringbone stitch, blanket stitch, French knot, long and short stitch.</li> </ul>	<p>To make a colour wheel</p> <p>To prepare samples of various embroidery stitches</p> <p>To do enlargement and reduction of motifs created.</p>	

# Psychology

Code No. 328

## Introduction

Psychology is the scientific study of the mind and behavior. Psychology is a multifaceted discipline and includes many sub-fields of study such as human development, sports, health, clinical, social behavior and cognitive processes.

Psychology is really a very new science, with most advances happening over the past 150 years or so. However, its origins can be traced back to ancient Greece, 400 – 500 years BC. The emphasis was a philosophical one, with great thinkers such as Socrates influencing Plato, who in turn influenced Aristotle.

## Rationale

Psychology is a discipline which is relevant to all walks of life. Its applications to the various areas of personal, organizational and social functioning are well recognized. All of us use various psychological concepts without knowing them. This course at the Senior Secondary level has been designed in such a way that the learners will know the basics of psychology in simple language. Attention has also been paid to the Indian context.

The course at the Senior Secondary level is also introducing project work for the first time. Understanding psychological concepts and their application requires study of textual material as well as practical work. Project work will help the learners to apply the key concepts of psychology as well as help them to get hands – on – experience of the various methods used by psychologists. It also contributes to the development of scientific approach different from common sense or speculation. Attention has also been paid to give the practical applications of various psychological concepts with the help of case studies, examples and real life experiences.

## Objectives

After completing this course, the learner will be able to:

- explain the basic concepts used in psychology;
- enumerate skills for personal growth and development;
- select basic research methods in psychology;
- apply the principles of psychology in field work;
- recall and relate psychology to personal and social life; and
- lead a purposeful life by using the principles of psychology in personal, professional and social life.

## Scope and job opportunity

This field has a large number of opportunities for employment, some of these are:

- **Clinical psychologists:** Clinical psychologists aim to reduce the distress and improve the psychological wellbeing of their clients. They use psychological methods and research to make positive changes to their clients' lives and offer various forms of treatment.
- **Counsellor:** As a counselling psychologist one uses psychological theory and research in therapeutic work to help clients with a variety of problems. These problems can include difficult life issues and mental health conditions.
- **Educational psychologists:** Educational psychologists help children or young people who are experiencing problems that hinder their successful learning and participation in school and other activities. These problems can include a range of emotional and social problems or learning difficulties.
- **Health psychologists:** Health psychology examines how biological, social and psychological factors influence health and illness. Health psychologists use psychological science to promote health, prevent illness and improve health care system.
- **Occupational psychologists:** Occupational psychologists apply expert knowledge to all levels of working and may work on organisational issues, such as culture and change, as well as issues at an individual or team level.
- **Primary care graduate mental health workers:** Primary care graduate mental health workers provide a range of treatments, support and advice to people suffering from common mental health issues, such as anxiety and panic attacks.
- **Sport and exercise psychologists:** Sport and exercise psychologists are concerned with the behaviours, mental processes and well-being of individuals, teams and organizations involved in sport and exercise. They typically specialize in either sport or exercise, although some work across both fields.

## **Eligibility conditions**

**Age:** 15 Years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** Hindi, English, Urdu, Bengali, Gujarati and Odia.

**Duration of the course:** 1 Year

**Weightage**

**Theory:** 100 Marks

**Tutor Marked Assignment (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (240 hours), Tutor Marked Assignment TMA (self paced)

**Scheme of evaluation:** Theory paper 100 marks (3 hours), internal assessment (TMA) (20% of theory marks).

**Pass criteria:** 33% marks

## Course content

S. No.	Module/Topics	Duration (in hours)	Module Approach/Description	Weightage (marks)
1.	<b>Module-I</b> <b>Foundations of Psychology</b> 1. Psychology: Understanding Self and Others 2. How Psychologists Study? 3. Biological and Cultural Shaping of Mind and Behaviour 4. Becoming Aware of the World Around Us 5. Attention and Perception	40	This module would help the learners to understand the basic processes and applications of psychology, methods used in studying psychology, the psychological functioning of the human and its effects.	14
2.	<b>Module-II</b> <b>Key Psychological Processes</b> 6. Learning Process and Acquiring Skills 7. Remembering and Forgetting 8. Going Beyond the Reality: Thinking and Reasoning 9. Motivation 10. Emotions	40	This module is primarily concerned with those psychological processes which constitute the dynamics of human functioning. Thus they are not only theoretically important but have practical relevance. In particular, this module deals with learning, memory, thinking, motivation and emotion. In this way it covers the entire range of psychological process involved in interacting with environment and developing competence in areas central to success in life.	17
3.	<b>Module- III</b> <b>Developmental Processes</b>	40	This module aims at describing the various stages of human development and their characteristics. It also focuses on	17

	11. Development: Its Nature 12. Domains of Development 13. Adolescence 14. Adulthood and Aging 15. Understanding Individual Differences: The case of Intelligence		adolescence, adulthood and aging which are the important phases of human life. The nature, range and assessment of individual differences will also be dealt with in this module.	
4.	<b>Module- IV</b> <b>Self and Personality</b> 16. What is Self? 17. Self and Psychological Processes 18. Personality Theories 19. Personality Assessment 20. Psychological Disorder	40	Human beings not only respond to the external world but also attend to themselves. In other words self is also an object and all of us deal with it. We have awareness of self and we like to evaluate ourselves positively. We make positive self presentation. In recent years self has been given significant place in the analysis of cognition, motivation and emotion. The kind of self concept which people have is also influenced by our culture. Assessment of personality has also occupied the attention of researchers and various methods have been developed. Finally due to various causal factors such as genetics, environmental and cultural, people develop different kinds of psychological disorders. This module attends to all these important aspects of self and personality. It will contribute to the well being of learners and adjusting with the demands of environment.	17
5.	<b>Module- V</b> <b>Social and Applied Psychology</b>	40	Social psychology is an important branch of psychology. It deals with the social functioning and processes. This module has been redesigned to	20

	21. Group Processes 22. Person Perception and Interpersonal Attraction 23. Man Environment Interaction 24. Psychotherapy 25. Health Psychology		facilitate the learners in understanding various social factors and processes. It intends to help the learners in adopting interventions for leading a healthy lifestyle.	
6.	<b>Module- VI A*</b> <b>World of Work</b> 26. Education and work 27. Career Development 28. Vocational Choice and Vocational Adjustment 29. Stress and Your Health 30. Stress management and Well-Being	40	This module familiarizes the learners with the application of Psychology in the work situation. It would help the learners in understanding the psychological processes involved in career choice, vocational adjustment and managing stress and promoting well-being.	15
	<b>Module- VI B*</b> <b>Facilitating Early Childhood Education</b> 31. Developmental Patterns in Early Childhood 32. Play Centre: Objectives 33. Play Centre: Structural Details 34. Planning and Conducting Programmes 35. Involvement of Parents and Community in a Play Centre	40	This module would develop an understanding of the importance of early childhood education. It will also help the learners to understand the usefulness of play centers and the role of parents and community in the play centers.	

**\*Note: Learner has to choose one Module from VI A or VI B**

# Computer Science

Code No. 330

## Introduction

Computer has become indispensable in today's life. Computer Science is an exciting, challenging field that has impact in most aspects of today's life. Most important aspect of computer science is problem solving skills and analytical skills which learner will develop by studying computer science subject. These skills are mandatory for anyone who is searching a job. Moreover, Computing jobs are the highest paid jobs. Keeping in view of the above Computer Science course has been designed.

The syllabus of Computer Science for Senior Secondary course developed by NIOS to provide knowledge and understanding of basic components of computer and their working, uses of Internet, C++ programming and problem solving skills.

## Rationale

In recent years there has been a spur in the use of computers in India, from simple word processing to sophisticated scientific applications. Along with this there is a tremendous demand for computer education. In order to cater to this need and to provide quality education at reasonable price this course has been designed.

## Objectives

After completing this course, the learner will be able to:

- identify the basic components of computer and their working;
- use of operating system;
- list the types of computer network;
- use of various services provided by internet;
- practice basics of Java programming language;
- use of C++ programming;
- state basic concepts of OOP;
- use of control statements in C++ programming;
- define library and user defined functions in C++ programming;
- use of one dimensional and two dimensional array;
- select members of the class;
- explain the concept of inheritance;
- use pointers in arrays; and
- use of files in C++ programming.

## Scope and job opportunity

Information technology professionals plan, coordinate and implement computer and information systems within an organization. Typically, they work with other managers within the company to determine the computer-related needs of an organization in relation to computer systems, software, servers, computer networking or network security. Information technology (IT) professionals go on to a variety of careers as IT managers, IT project managers, IT directors and, at the highest levels of business, chief technology officers or chief information officers. Job opportunities for computer information systems managers are keep on increasing. IT professionals, particularly those with specialized technical skills and business management backgrounds, will have the best opportunities for advancement in the field.

Nowadays every organisation is computerised. Government is also promoting digital literacy. So each person should have the basic knowledge of the computer whether he/ she is working in office / banking or teaching in a school or doing e-commerce business or designing a website or developing mobile app. Comptuer Science course will help the learners to face the present and future world.

## Eligibility conditions

**Age:**15 Years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** English

**Duration of the course:** 1 Year

**Weightage**

**Theory:** 60 Marks

**Practical:** 40 Marks

**Tutor Marked Assignment (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (144 hours), practical (96 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 60 marks (3 hours), practical 40 marks (3 hours), internal assessment (TMA) (20% of theory marks)

**Pass criteria:** 33% in each component

## Course content



S. No.	Modules	Duration (in hours)	Module Approach/ Description	Description of practicals	Weightage (marks)
1.	<b>Module-I</b> <b>Computer Fundamentals</b> <ol style="list-style-type: none"> <li>1. Anatomy of a Digital Computer</li> <li>2. Data Processing Concept</li> <li>3. Computer Software</li> <li>4. Operating System</li> <li>5. Data Communication and Networking</li> <li>6. Fundamentals of Internet and Java Programming</li> </ol>	54 (32 + 22)	This module explains about digital computer, data processing concept, computer software, data communication & networking and fundamentals of Internet and Java.		15
2.	<b>Module-II</b> <b>C++</b> <ol style="list-style-type: none"> <li>7. Introduction to C++</li> <li>8. General Concept of OOP</li> <li>9. Control Statements</li> <li>10. Functions</li> <li>11. Array</li> <li>12. Structure, Typedef &amp; enumerated</li> </ol>	186 (112+74)	This module explains about C++ programming concepts.	<ol style="list-style-type: none"> <li>1. Write a program to input the values of Principle, Rate, and Time and calculate Simple Interest.</li> <li>2. Write a program to input the unit price of an item and the quantity of item to be bought. Then calculate the total price.</li> <li>3. Write a program to covert temperature from Fahrenheit to</li> </ol>	85

	<p>data type</p> <p>13. Classes &amp; objects with constructors / destructors</p> <p>14. Inheritance extending classes</p> <p>15. Pointer</p> <p>16. Files</p>			<p>Celsius.</p> <p>4. Write a program to input two numbers and swap them using third variable or swap them without using third variable.</p> <p>5. Write a program to input a character and check whether it is an alphabet, or digit, or some other character.</p> <p>6. Write a program to input an year (e.g., 1994) and check whether it is a leap year.</p> <p>7. Write a program to input a character. If the character is a lowercase alphabet then display the corresponding upper case alphabet and vice-versa. If the character is not an alphabet then display the character as it is.</p> <p>8. Write a program to input 10 numbers and find their sum and average.</p> <p>9. Write a program to input a number. If the number is negative, then again input the number.</p>	
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				<p>Keep on doing so until the user enters a non-negative number.</p> <p>10. An Armstrong number is a number the sum of the cubes of whose digits is equal to the number itself. An example of an Armstrong number is 153 (<math>1^3+5^3+3^3 = 153</math>). Write a program to input a number and find whether it is an Armstrong number.</p> <p>11. Write a program to input a number n and display factorials of all the numbers from 1 to n using loop.</p> <p>12. Write a program to input a string and then display this string in reverse order.</p> <p>13. Write a program that reads a list of numbers from the user and places them in an array of type float. Once the numbers are stored in the array, the program should find their average and print it along with the list of numbers. Use pointer notation</p>	
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				<p>wherever possible.</p> <p>14. Write a menu driven program in C++ to perform the following functions on a binary file "BOOK.DAT" containing objects of the following class:</p> <pre> class Book {int BookNo; char Book_name[20]; public: // function to enter book details void enterdetails(); //function to display Book details void showdetails(); //function to return Book_no int Rbook_no() {return Book_no;} //function to return Book_name int Rbook_name() {return Book_name;} }; </pre> <ol style="list-style-type: none"> <li>Append Records</li> <li>Modify a record for a given book no.</li> <li>Delete a record with a given book no.</li> <li>Search for a record with a given Book name</li> <li>Display a sorted list of records (sort on Book No.)</li> </ol>	
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# **Sociology**

**Code No. 331**

## **Introduction**

The world we live in today, is simultaneously shrinking and expanding, growing and under constant pressure for change. The large-scale changes in use of technology, the great increase in the traffic in culture and political and economic changes are the cause of the changes around the world. Understanding these socio-cultural changes requires studying the social world scientifically and developing some understanding of the character of society.

Sociology is the scientific study of society and its institutions, social interactions, organizations, and groups. It investigates the practices and processes operating in the society. By observing the broad range of activities in society, and getting a space for exploring topics such as family, caste, class, gender, religion, socialization and population dynamics, Sociologists provide a base for in-depth understanding and perspectives on our social order and processes of social change. Sociology provides an important platform which is useful both to personal wellbeing and social development as well. Sociology is among the broadest of the social sciences and thus provides the opportunity for the learners to understand the broad range of social issues operating in the space between individual, community and society.

## **Rationale**

After the Secondary level, a student starts developing some understanding of the nature and character of the society he lives in. Sociology explores all aspects of the social relationship, and it helps to understand why human beings create the societies they inhabit and how they behave with other individuals and groups in which they live. Sociology is considered as another branch of all Social Sciences because it studies the economic, political, anthropological, historical geographical and psychological dimensions of society. Sociology, however, is primarily concerned with the diversity of human relation particularly along the lines of social class, race, ethnicity, gender and age etc.

Ignorance about society is the cause of all social evils. The knowledge, obtained by scientific methods, about society, can contribute to the development of a good society. August Comte, father of Sociology, has said the man would become the master of this social destiny as soon as he develops a science of society.

Change is continuous and permanent. The changes occurring today in the world make Sociology an extremely important subject to study. This course on Sociology will make students familiar with processes of change and development in general and with reference to Indian Society in particular.

## **Objectives**

After completing this course, the learner will be able to:

- define basic concepts in Sociology;
- draw generalizations about various social institutions and social divisions in society;

- explain the process of change and development in society in general and with reference to Indian society in particular;
- extrapolate the different dimensions of Indian society;
- evaluate social realities objectively; and
- develop the ability to perceive social realities scientifically.

## Scope and job opportunity

The career potential in the subject of sociology majors is almost limitless. The experts in Sociology are employed by research institutes, public health and various welfare organizations at both national and international level. Students with degree in sociology have the potential of getting secure employment as social researchers, case workers, community organizers, public policy researchers, and data analysts. Sociology also provides scope for going on to law school, social work programme, criminology and public policy etc.

## Eligibility conditions

**Age:** 15 Years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** Hindi, English, Urdu, Gujarati, Bengali, Odia

**Duration of the course:** 1 Year

### Weightage

**Theory:** 100 Marks

**Tutor Marked Assignments (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (240 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 100 marks (3 hours), internal assessment (TMA) (20% of theory marks)

**Pass criteria:** 33% marks in theory

## Course content

S. No.	Module/Topics	Duration (in hours)	Module Approach/Description	Weightage (marks)
1.	<b>Module-1 Sociology: Basic</b>	70	The Module is meant to introduce Sociology to the learner. It acquaints	30

	<b>Concepts</b> <ol style="list-style-type: none"> <li>1. An Introduction to Sociology</li> <li>2. Emergency and Development of Sociology</li> <li>3. Sociology: It Relationship with other Social Sciences</li> <li>4. Methods and Techniques of Research in Sociology</li> <li>5. Social, Community, Association and Institution</li> <li>6. Social Groups</li> <li>7. Social Structure and Social System</li> <li>8. Norms and values</li> <li>9. Status and Role</li> <li>10. Cooperation, Competition and Conflict</li> <li>11. Acculturation, Assimilation &amp; Integration</li> </ol>		<p>the learner with the definition of Sociology, its development and growth, relationship with other Social Sciences. It further exposes the learner to certain techniques used in Sociological research. This module also explains important basic sociological concepts.</p>	
2.	<b>Module-II</b> <b>Social Institutions and Social Stratification</b> <ol style="list-style-type: none"> <li>12. Marriage</li> <li>13. Family</li> <li>14. Kinship</li> <li>15. Economy, Polity and Religion</li> <li>16. Social Stratification: Hierarchy, Differentiation and Inequality</li> </ol>	35	<p>This module has been designed to acquaint the learner about major social institutions found in a society and also to acquaint him with the system of social divisions based on hierarchy, differentiations and inequality.</p>	12

3.	<b>Module-III</b> <b>Social change, Socialization and Social Control</b> 17. Factors of Social change 18. Processes of Social Change 19. Socialization 20. Social control 21. Social Deviance 22. Society and Environment	35	This module acquaints the learner with the processes of social change in society, and how an individual becomes an accepted member of a society through socialization. It also explains how social control is maintained in a society, and the relationship between society and environment.	13
4.	<b>Module-IV</b> <b>Indian Society</b> 23. Indian Social Thinkers 24. Unity and Diversity 25. National Integration : Concept and Challenge 26. Indian Society: Tribal, Rural and Urban 27. Caste System in India 28. Major Religious communities in India 29. Major Social Problems of India 30. Problem of Scheduled Castes and Scheduled Tribes 31. Problems of other Deprived Sections	60	This module acquaints the learner with certain Indian Social thinkers and various dimensions of Indian society. It sensitizes and learner with major social problems of India in general and of certain weaker sections in particular	30
5.	<b>Module-V(A)*</b> <b>Status of Women</b> 32. Status of Women in Indian Society: A	40	This module has been designed to acquaint the learner with the status of women from historic to present times. It also explains gender	15



	<p>Socio-Historical perspective</p> <p>33. Gender Discrimination</p> <p>34. Problems of women</p> <p>35. Quest for Equality and Women's Empowerment</p>		<p>discrimination and problems of women and their quest for equality and empowerment.</p>	
	<p><b>Module-V(B)</b></p> <p><b>Culture</b></p> <p>32. Culture: Concept and Characteristics</p> <p>33. Indian Cultural Heritage</p> <p>34. Cultural Pluralism</p> <p>35. Media and culture</p>		<p>This module has been designed to acquaint the learner with concept of culture and its characteristics. This also enriches the knowledge about different aspects of culture in general and with particular reference to Indian cultural heritage. It also briefly tells us about the influence of media on culture.</p>	

**\*Note: Learner has to choose one Module from VA or VB**

# **Painting**

## **Code No. 332**

### **Introduction**

An introduction to painting is a medium of visual expression. Emphasis is placed upon the exploration of formal and technical concerns. Basic studies include drawing and will explore a variety of subject matter and media directed toward the organization of the two dimensional plane.

It is a powerful way of self-expression providing a sense of fulfillment and achievement, skills to express oneself through colour and proportion and it also helps cultivate an aesthetic sense. It further aims to develop the visual sense of the learner and to help him/her appreciate expressive value of line, texture, space, rhythm etc.

### **Rationale**

This course is provided with necessary inputs of practical work and skill to the learner's familiarity of the theory of art through the ages. This will further help in aesthetic development, ability to appreciate and discover the beauty of life and integrate it into one's own personality. Thus, art will make more sense to the Cultural Heritage, environment and develop a creative attitude in day-to-day activities.

### **Objectives**

After completing this course, the learner will be able to:

- explain the visual ideas;
- differentiate between the space division and expressive value of the line;
- distinguish between the various styles of art and their salient features;
- work with harmony and contrast of color;
- draw and illustrate with various materials such as pencils, pastels, water and oil colors, ink etc; and
- explain the visual aspects of composition, rhythm, texture and tonal gradation.

### **Scope and job opportunity**

This field has a large number of opportunities for employment, some of these are:

Illustrator, Printmaker, Designer, Painter, Interior decoration designer, Graphic designer, Designer and teaching etc.

### **Eligibility Conditions**

**Age:** 15 Years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** Hindi, English, Urdu, Bengali, Gujarati and Odia

**Duration of the course:** 1 Year

Weightage

**Theory:** 30 Marks

**Practical:** 70 Marks

**Tutor Marked Assignments (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (70 hours), practical (170 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 30 marks (1½ hours), practical 60 marks (3 hours) and Portfolio Assignment 10 marks, internal assessment (TMA) (20% of theory marks)

Mode of evaluation	Duration in hours	Marks	
		Distribution	Total
<b>Tutor Marked Assignment</b>	Self paced		<b>6</b>
<b>Theory (One paper)</b>	1½		<b>24</b>
<b>Practical – One paper + Portfolio Assessment</b>	1+1+1=3 hrs.		
Part I: Object Drawing			
• Composition and Drawing		8	<b>20</b>
• Treatment of Media		8	
• Presentation		4	
Part II: Painting and Composition			
• Arrangement of forms and including emphasis on the subject		8	<b>20</b>
• Treatment of Media		8	
• Presentation		4	
Part III: Folk Art as Motif			
• Design and Layout		8	<b>20</b>
• Treatment of Media		8	
• Presentation		4	

Portfolio Submission	Self paced		<b>10</b>
Complete work		3	
Quality of work		5	
Presentation		2	
<b>Total</b>			<b>100</b>

**Pass criteria:** 33% in each component.

## Course content

S. No.	Modules/Topics	Duration (in hours)	Module Approach/ Description	Description of practicals	Weightage (marks)
1.	<b>Module-I</b> <b>History and Appreciation of Indian Art</b> <ol style="list-style-type: none"> <li>1. Art of Indus Valley Civilization</li> <li>2. Art of Mauryan to Gupta Period</li> <li>3. Ajanta Caves: Mural Paintings</li> <li>4. Temple Art and Sculpture</li> <li>5. Indian Bronzes</li> <li>6. Indo-Islamic Architecture</li> </ol>	30	<p>The art objects, belonged to Indus Valley Civilization, are the only available earliest evidence of great tradition of India. The nature form of these art works helps us to imagine that tradition of Indian art must have begun long before 2500 B.C. Changing conditions of politics and religions kept on motivating Indian art through the ages from 4<sup>th</sup> C.B.C. to 16<sup>th</sup> C.A.D., leaving a missing link for approximately 1000</p>		12

			<p>years from post Indus Valley civilization to Mauryan period. Indian Art under the patronage of Hindu, Muslim, Buddhist and Jain rulers, flourished till 16<sup>th</sup> C.A.D. to face a new era of art movement after the Mughals became the rulers of India.</p>		
2	<p><b>Module-II</b>  <b>History and Appreciation of Indian paintings and sculptures</b></p> <p>7. Mughal School  8. Rajasthan School  9. Pahari School  10. Deccan School  11. Company School  12. Pioneers of Contemporary Art Movements in India  13. Contemporary Art of India</p>	30	<p>The 16<sup>th</sup> century saw a profound change in the stylistic development of Indian art. Art of miniature painting became very popular in Rajputana and in the court of the Mughals. It also influenced the South Indian painters.</p> <p>The Muslim rulers were great admirers of architecture. They enriched Indian art with superb structures, including one of the wonders of the world, Taj Mahal. Under the British</p>		12

			<p>rule, the character of Indian art underwent a thorough change. Beside the painters like self-taught artist Raja Ravi Verma, many Indian artists followed the realistic style of European art. On the other hand, Abanindranath Tagore and his Bengali school tried to bring back classical Indian style with contemporary themes and Jamini Roy modernized the folk style of India. Amrita Shergil, with her passion, art education, was the most influential painter in the contemporary art scene, while Rabindranath Tagore visualized the most modern aesthetics in his painting. These pioneers inspired the next generation of Indian artists to discover their identity in the field of international art.</p>	
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3	<b>Module- III</b> <b>Folk Painting</b> 14. Folk Painting	10	<p>Folk art is considered an essential form of expression in the rural society with typical characteristics of its own. India has an enormous range of folk art which varies in style from district to district.</p> <p>Rural artists are carrying on the traditional technique and style generation after generation with very little modification. These are mainly decorative, ritualistic and utilitarian in nature. These include earthen ware, floor painting, wall painting, stitching on cloth, etc. Some of the Indian folk art is a highly appreciated world over.</p>		6
4	<b>Practical</b> <b>Object Drawing</b> Topics:- <ul style="list-style-type: none"> <li>• Object Study</li> <li>• Nature Study</li> </ul>	65		<p>Awareness of the fundamentals of Drawing like space, line, tone, volume, perspective, light, and shade, etc. through simple experimental exercises. Study of two or these</p>	20

				<p>simple objects including natural and geometrical be arranged together and composed on a given format either vertically or horizontally.</p> <p>Simple objects based on geometrical shapes could include, for example, jug, tumbler, basket, plate, bottle, kettle, vase, book, magazine, cup and box etc. of a variety of materials like terracotta, ceramics, cane, glass, paper, wood, plastic, drapery, leather and metal etc. Natural forms locally available like fruits, vegetables, flowers, leaves, twigs, etc. are to be used. Select any two or three on given objects.</p>	
5	<b>Painting and Composition</b> Topics:- <ul style="list-style-type: none"> <li>• Fundamentals of Painting</li> <li>• Composition</li> <li>• Sketching from Life and Memory</li> </ul>	65		<p>Free hand drawing directly from life of Human Figures, animals, trees, building, interior of a room, bus stop, market place, Vehicles, etc. Paint on a given topics e.g. Festival, Fair, Railway station, Man reading a book or newspaper, Playing with your pet, Eating out, Night scene, Rainy day, wedding, Gram Panchayat, Pollution, library, mother</p>	20



				<p>and child etc. using imagination and everyday sketches.</p> <p>Starting with Basic Design and various Experiments to understand variety in forms and overlapping, their simplification, colour wheel, variety in colour, hue, tone and texture, rhythm and continuity in application, concept of far etc. all brought together meaning fully in a composition. (Select any one on given topics).</p>	
6	<p><b>Folk Art as Motif</b></p> <p>Topics:-</p> <ul style="list-style-type: none"> <li>Folk Art as Motif</li> </ul>	40		<p>In regional Folk, traditions, art and everyday life go hand in hand. It is both diverse and deep-rooted in the minds of people of India. The genesis of lies mainly in the religious and festival ceremonies, whether it is Mithila Paintings from Bihar, Kalighat Painting from Bengal, Worli Painting from Maharashtra, Phad Painting from Maharashtra, Phad Painting from Rajasthan, Kalamkari from Andhra Pradesh and making of Alapana/Rangoli etc. Select any one form of Regional Folk painting</p>	15

				and utilize its visual imagery for creating a composition or design.	
7	<b>Portfolio Submission</b>	Home Assignment	<p>Portfolio Submission (Home Assignment)</p> <ol style="list-style-type: none"> <li>1. Four Object and Nature Studies paper size- <math>\frac{1}{2}</math> imperial size or (15"x22") approximate, with one in Line, (ii) one with Tone in pencil and two in colours;</li> <li>2. Four Painting and Composition paper size- <math>\frac{1}{4}</math> imperial size or (15"x11") approximate size, two compositions in colours and two in mixed media on any four topics which already mentioned.</li> <li>3. Four Regional Folk Paintings in any traditional or locally available materials, (ii)</li> </ol>	<p>Learners need to submit a portfolio with minimum Twelve works, and one sketchbook (sketchbook should include sketches from memory, nature and objects-animate and inanimate objects etc.)</p> <p>Concept of presentation, which includes dating, mounting and maintaining the work.</p>	15

			<p>paper size- <math>\frac{1}{4}</math> imperial size or (15"x11") approximate.</p> <p>Sketchbook (i) size - 8"/11" or minimum 20 pages of any available paper, (ii) sketches in soft pencil. It should include all the sketches which you have studied so as to make your composition (figurative) and other studies, like landscape, animal-birds, flower, plants etc.</p> <p><b>Materials to be used:-</b>Traditionally or locally available materials.</p>		
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**\*\*Students will have to bring their own painting materials, only the drawing sheet, will be provided by NIOS at the time of examination.**

# **Environmental Science**

**Code No. 333**

## **Introduction**

Rapid growth of population coupled with increasing industrial development and all round increase in consumerism throughout the world are posing a serious threat to the environment. People in almost all nations of the world are becoming increasingly conscious of the danger of deteriorating environmental conditions. In view of the critical importance of the environmental issues, it is necessary to introduce Environmental Science as a full-fledged subject at the Senior Secondary level. Environmental Science deals with the relationships between environment and humans and draws upon physical sciences, biological sciences and social sciences.

## **Rationale**

Humans have been concerned with environment since the beginning of civilization. Even our ancient scriptures have emphasized the virtues and values of environmental conservation. Now, it is even more critical than ever before for mankind to have a better understanding of environmental issues to promote sustainable development practices. Environmental science embraces problems related to conservation of natural resources, deforestation, loss of biodiversity, environmental pollution, deterioration of life support systems and issues like global warming, ozone depletion etc. All this and much more is dealt within the subject.

The course covers all the major components of the environment including natural resources, ecological principles and population dynamics, pollution, wildlife conservation, and impact of industrialization. In addition, it also addresses environment related socio-economic, cultural and ethical aspects, which are important to ensure a sustainable future for humans. The course also provides practical insight into environmental management to enable an appreciation of the issues related to sustainable livelihood and human welfare.

## **Objectives**

After completing this course, the learner will be able to:

- trace the origin of earth and evolution of life, and appearance of human species;
- develop concerns for environmental problems;
- describe the ecological principles;
- harmonize environmental concerns with technological and socio-economic issues;
- develop respect for nature and living beings and to help maintain ecological balance;
- take active part in protecting and conserving the environment; and
- assume the responsibilities for change of society.

## Scope and job opportunity

This field has a large number of opportunities for employment. Learners can go for higher studies, teaching and research work. **Learners can also join different** National Level Departments or Organizations such as industries (fertilizer plants, mines, refineries, textile mills}, social development, research, forest and wildlife management, NGOs, Pollution Control Boards. Public Institutions and Private Industries and Firms, Schools, Colleges, Universities and Ministry of Environment and Forests(MoEF) etc. They can join international organizations such as United Nations Environment Programme (UNEP), Inter-governmental Panel on Climate Change (IPCC) etc.

## Eligibility conditions

**Age:**15 years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** Hindi, English, Urdu, Gujarati, Bengali and Odia

**Duration of the course:** 1 Year

## Weightage

**Theory:** 80 Marks

**Practical:** 20 Marks

**Tutor Marked Assignments (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (180 hours for core and 30 hours for optional), practical (30hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 80 marks (3 hours), Practical 20 marks (3 hours), Internal Assessment (TMA) (20% of theory marks).

**Pass criteria:** 33% in each component.

## Course content

S. No.	Modules/Topics	Duration (in hours)	Module Description (Theory)	Description of practicals	Weightage (marks)
1.	<b>Module-I Environment through Ages</b> 1. Origin of Earth	15	This module is intended to enable the learners to visualize the origin of earth and the	The purpose of teaching Environmental Science is not only to acquaint the learner with theoretical knowledge	05

	<p>and Evolution of Environment</p> <p>2. Human Society and environment</p> <p>3. Degradation of Natural Environment</p>		<p>development of conditions for support of life. This module contains one unit “Environment-Origin, Evolution of Environment and its use by Humans’. This module has three lessons.</p>	<p>but also to develop practical skills. Development of these skills leads to better understanding of the environment through hands-on experience and mutual reinforcement of theory and practice.</p> <p>Field exercises and laboratory work develop psychomotor skills.</p> <p>The present course involves field work, laboratory exercises and short innovative projects to exercise creative thinking and problem solving skills.</p> <p>The list of practical exercises to be carried by a student as part of this course on Environmental Science is as follows:</p> <ol style="list-style-type: none"> <li>Field Studies (any three)</li> <li><b>Laboratory Exercise (Compulsory)</b></li> <li>Creative Activities (any two)</li> </ol>	
2.	<p><b>Module-II Ecological Concepts and Issues</b></p> <p>4. Principles of Ecology</p>	30	<p>This module aims to introduce the learner to the principles of ecology and functioning of nature. This</p>	<p><b>a. Field Studies</b></p> <ol style="list-style-type: none"> <li>Study a simple ecosystem (suggested habitats pond, river, estuarine, lake,</li> </ol>	12

	5. Ecosystem 6. Natural Ecosystem 7. Human Modified Ecosystem		<p>module also deals with natural as well as human modified ecosystems also. This module contains one unit “Principles of Ecology – Composition and Types of Ecosystems”. This module has four lessons.</p>	<p>grassland, forest, and desert) and describe the biotic and abiotic components of the ecosystem.</p> <p>2. Study of the effect of human interactions with the natural environment.</p> <p><b>b. Laboratory Exercise</b></p> <p>1. To study the effect of light intensity on the growth of plants</p> <p><b>c. Creative activities</b></p> <p>1. Set up an aquarium</p> <p>2. To prepare a list of plants and animals which are used as food for humans and to comment on their habit and habitat.</p>	
3.	<b>Module-III</b> <b>Human Impact on Environment</b> 8. Human Societies 9. Deforestation	20	<p>This module is designed to enable the learner to understand the varieties of problems that have arisen due to increasing human habitations in the form of cities. The module also covers the highly important aspects of deforestation, loss of biodiversity. This module contains</p>		07

			one unit “Human Settlements and their impact of Environment”. This module contains two lessons.		
4.	<b>Module-IV</b> <b>Contemporary Environmental Issues</b> 10. Pollution – Its Causes, Consequences and Prevention 11. Environment and Health 12. Disasters and their Management 13. National Environmental Issues 14. Global Environmental Issues	40	This module brings about awareness of the contemporary environmental issues related to natural and man-made problems. Major national and global environmental issues have been described in this module to familiarize the learner with environmental pollution and natural disasters. Environment related human health problems are also highlighted in this module. This module contains two units “Environmental Pollution and Natural Disasters” and “National and Global Environmental Issues” this module has five lessons.	<b>a. Field Studies</b> 1. Describe the environmental problem of your locality and suggest their remedy. 2. Visit to different water bodies in your village/ locality and describe their uses and source of water pollution. If any <b>b. Laboratory exercises</b> 1. Study of water quality. 2. To estimate dust (particulate) deposition on the leaves of road side plants. <b>c. Creative Activities</b> 1. To describe: a) climate of an urban areas; b) yearly variation in suspended particulate matter in the same area.	15



5.	<b>Module-V</b> <b>Environmental Conservation</b> 15. Biodiversity Conservation 16. Conservation of other Natural Resources 17. Soil and Land Conservation 18. Water and Energy Conservation	35	This module introduces the importance of and methods of conservation of biodiversity, land, soil, water, energy and natural resources. This module contains one unit "Conservation of Biodiversity and Other Natural Resources (Soil, Water etc.). This module contains four lessons.	<b>a. Field Studies</b> 1. Survey of vegetation, birds, insects and other animals in your locality. 2. Choose five common tree species plants from your neighbourhood and list their common names. Describe each plant in terms of its height and leaf characteristics. <b>b. Laboratory exercises</b> 1. Soil texture and analysis of components. <b>c. Creative Activities</b> 1. To study the biodiversity birds and insects in your locality. 2. Make herbarium sheets of 10 different plants/ trees. Consult your teacher how to make a herbarium sheet. 3. To make an audit of the electrical energy consumption by various house hold appliances of your home.	14
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6.	<b>Module- VI</b> <b>Sustainable Development</b> 19. Concept of Sustainable Development 20. Modern Agriculture 21. Concept of Sustainable Agriculture 22. Cleaner Technology	40	This module aims to inform the learner about the concept of sustainable development for integrating environmental conservation with Developmental objectives. This module elaborates the concept of sustainable agriculture including crop rotation, genetic control, organic agriculture, integrated pest management and cleaner technology. This module contains one unit "Sustainable Development with regard to Agriculture and Cleaner Technology". This module contains four lessons.	<b>a. Field Studies</b> 1. To segregate domestic solid waste into biodegradable and non-biodegradable components.	07
7.	<b>Module- VII</b> <b>Environmental Management</b> 23. Environmental Legislation 24. Environmental Impact Assessment	20	This module aims to inform learner about the concept of environment impact assessment and its relevance for promoting environ-friendly		08

	<p>(EIA)</p> <p>25. Environment related Institutions and Organizations</p> <p>26. Environmental Ethics and Gandhian Approach</p>		<p>development. The learner will also be introduced to various national and international legislation promulgated for environmental improvement and conservation. This module also highlights the need to respect all life forms, ethics and Gandhian approach towards environment conservation. This module contains three units “Legislations for Environmental Improvement and Conservation”, “Organisation related to Environment” and “Environmental Ethics and Gandhian Approach”. This module contains four lessons.</p>		
8.	<p><b>Module-VIII A*</b></p> <p><b>Water Resource Management</b></p> <p>27. Global Circulation of Water</p> <p>28. Ground Water</p>	30	<p>Fresh water is a costly commodity required not only by humans but also by other living beings. A good deal of fresh water is also required for</p>		12

	<p>Resources</p> <p>29. Fresh Water Resources and Distribution</p> <p>30. Methods of Water Harvesting</p> <p>31. Conservation at Different Levels</p>		<p>agricultural and industrial uses.</p> <p>The hard fact is that the fresh water resources are limited thereby warranting careful management of fresh water resources by avoiding wastage. Emphasis of this module is on fresh water management including ground water resource. Steps to be taken by individuals and communities are highlighted not only to conserve fresh water but also to prevent its wastage and pollution.</p> <p>The learner is also told about the traditional as well as modern methods of water conservation. This module contains two unit “Water as Resource” and “Conservation of Water”. This module contains five lessons.</p>		
	<b>Module-VIII B*</b> <b>Energy and Environment</b>	30	This module exposes the learner to the vital		12

	27. Importance of Energy in Society 28. Non-renewable Sources of Energy 29. Renewable Sources of Energy–1 30. Renewable Sources of Energy –2 31. Energy Conservation		<p>area of energy and both its renewable and non-renewable sources. The learner is also exposed to the concept of alternative sources of energy apart from the traditional ones.</p> <p>The learner is also told about the impact of energy use on environment. A good deal of emphasis is laid on the need and methods of conservation of energy. This module contains two units “Energy use and its impact on Environment’ and “Energy Conservation”. This module contains five lessons.</p>		
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**\*Note: Learner has to choose one Module from VIII A or VIII B**

# **Mass Communication**

**Code No. 335**

## **Introduction**

The course of Mass Communication at the Senior Secondary level has been designed in such a way that the learners will know the basics of communication and understand the creative activities of media. In 2009, the course was introduced in NIOS to help the specific needs of learners. The curriculum is concerned with various aspects explaining the role of mass media and its linkage with the society. Mass communication plays an influential role in modern society and motivates individuals towards creative thinking to make effective communication. Mass Communication is practical oriented course also empowers the learners to develop abilities of creative writing for print, electronic and new media.

## **Rationale**

The recommendations of National Curriculum Framework (NCF) 2005 for School education were incorporated in the curriculum of Mass Communication. Today the various fields of Mass Communication has emerged as a good career choice. It also promotes understanding of the latest development in the field of mass communication and revolution brought in by the internet, social media, mobile phones and use of computers in communication; in business and interpersonal communications. One of the basic aims of learning Mass Communication at senior secondary level is to develop creative thinking, awareness, problem solving skills, use of media and experiences to write and produce for the various media.

## **Objectives**

After completing this course, the learner will be able to:

- describe basic concepts, principles, forms and terms of Mass Communication;
- explain the role of media in understanding the relationship between mass media and society;
- develop creative writing skills for various media;
- explain the process of media production for radio and television;
- relate mass communication knowledge to solve problems and develop positive attitude;
- demonstrate communication skills and their application in real life; and
- explore exciting career and creative opportunities in media industry;

## **Scope and job opportunity**

This field has a large number of opportunities for employment, some of these are:

- Reporter/Journalist
- Copy Editor

- Layout Designer
- Public Relation Assistant
- Anchor/announcer
- Production Executive
- Camera Operator
- Sound Recorder
- Video Editor
- Photographer
- Web Page content developer

## Eligibility conditions

**Age:** 15 Years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** Hindi, English

**Duration of the course:** 1 year

**Weightage**

**Theory:** 80 Marks

**Practical:** 20 Marks

**Tutor Marked Assignment (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (245 hours), practical (30 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 80 marks (3 hours), practical 20 marks (3 hours), internal assessment (TMA) (20% of theory marks)

**Pass criteria:** 33% in each component

## Course content

S. No.	Modules/Topics	Duration (in hours)	Module Approach/ Description	Description of practicals	Weightage (marks)
1.	<b>Module-I</b>	20	This module acquaints the	1. Construction of a simple and clear	7

	<b>Introduction to Mass Communication</b> 1. Introduction to Communication 2. Mass Communication 3. Role and impact of Mass Media 4. Development Communication		learner to communication, mass communication, role and impact of mass media and Development communication	message. 2. Observation of nonverbal communication in the print media.	
2.	<b>Module-II Print media</b> 5. Introduction to print media 6. What is news? 7. Reporting and Editing 8. Language press in India	35	This module describes the print media, news, reporting, writing for media and Editing. Language press in India also describes under this module.	3. Cultivating the habit of newspaper reading and analyzing a newspaper. 4. Preparation to conduct an interview.	12
3.	<b>Module-III Radio</b> 9. Characteristics of Radio 10. The Radio Station 11. Formats of Radio Programmes 12. Radio Programme Production	35	This module is designed to highlight the characteristics of radio and introduce the learners with the radio station, various formats of radio programmes and the process of radio programme production.	5. Differentiation between the spoken word used in radio and the written word used in print media. 6. Identification of different formats of radio programmes.	12
4.	<b>Module-IV: Television</b> 13. Television in	35	This module deals with historical emergence of	7. Differentiation between television and print as two	12



	India 14. Role of television as a mass medium 15. Television channels 16. Television programme production		television in India, role of television as a mass medium, television channels and process of television programme production.	different mediums of mass communication. 8. Categorisation of television channels.	
5.	<b>Module-V Advertising and Public Relations</b> 17. Advertising-an introduction 18. Advertising-an industry 19. Public relations - an introduction 20. Public relations-tools	35	This module describes advertising, advertising industry, public relations and various tools used in effective public relations.	9. Identification of different forms of advertisements in the print media. 10. Observation of activities involved in product public relations.	12
6.	<b>Module-VI New Media</b> 21. Characteristics of New Media 22. New Media - The industry 23. New media - target audience 24. New Media - employment opportunities	30	This module describes the characteristics of New Media, New Media industry, target audience of New Media and employment opportunities through New media.	11. Accessing facilities on the internet. 12. Opening an e-mail account.	10
7.	<b>Module-VIIA* Traditional Media</b> 25. Introduction to Traditional Media	45	The optional modules are designed to introduce with the Traditional Media,	13. Communicating effectively through traditional media. 14. Identifying a traditional media	15

	26. Types of traditional media 27. Comparison of Traditional Media with Electronic Media 28. Communicating through Traditional Media		types of traditional media and its comparison with Electronic Media. Various ways of communication through Traditional Media are also elaborated in this module.	form and its function in society.	
	<b>Module-VII B*</b> <b>Photojournalism</b> 25. Introduction to Photography 26. The Camera 27. Photojournalism 28. Role of a photojournalist		Introduction to photography, camera, types of camera, parts of camera, photojournalism and role of a photojournalist is described in this module.	15. Making a photograph 16. Preparing a photo feature	

**\*Note: Learner has to choose one Module from VII A or VII B**

# **Data Entry Operations**

**Code No. 336**

## **Introduction**

Computer has become indispensable in today's life. Computer education provides learners with the knowledge and skills required effectively solve problems. Learning Computer and office applications is an exciting one among learners. This skill is one of the soft skills required by almost all companies.

The only software package called out within the top 20 skills across all occupations is Microsoft Office, explicitly required in 15 percent of high-growth, high-salary positions.

The syllabus of Data Entry Operations at Senior Secondary course developed by NIOS to provide knowledge and understanding of basics of computer and use of office applications (Word processing, Spreadsheet and Presentation) and Internet.

## **Rationale**

Keeping in view the importance of data entry operations in recent years, this course has been designed in a manner so as to make the students learn of the basic concepts of computer, Operating System, generalized packages viz., Word Processing, Spreadsheet and Presentation software and also about Internet.

## **Objectives**

After completing this course, the learner will be able to:

- define basic components of computer system;
- explain the features of operating system;
- develop the skills of creating, printing and formatting the documents;
- create, modify and format spreadsheet;
- create PowerPoint presentation; and
- use internet.

## **Scope and job opportunity**

Information technology professionals plan, coordinate and implement computer and information systems within an organization. Typically, they work with other managers within the company to determine the computer-related needs of an organization in relation to computer systems, software, servers, computer networking or network security. Information technology (IT) professionals go on to a variety of careers as IT managers, IT project managers, IT directors and, at the highest levels of business, chief technology officers or chief information officers. Job opportunities for computer information systems managers are keep on increasing. IT professionals, particularly those with specialized technical skills and business management backgrounds, will have the best opportunities for advancement in the field.

Nowadays every organisation is computerised. Government is also promoting digital literacy. So each person should have the basic knowledge of the computer whether he/ she is working in office / banking or teaching in a school or doing e-commerce business or designing a website or developing mobile app. Data entry operations course will be eligible for data entry job.

## Eligibility conditions

**Age:** 15 Years

**Qualification:** 10<sup>th</sup> pass.

**Medium of instruction:** Hindi, English and Urdu

**Duration of the course:** 1 Year

## Weightage

**Theory:** 40 Marks

**Practical:** 60 Marks

**Tutor Marked Assignment (TMA):** 20 % Marks of theory

**Scheme of studies:** Theory (96 hours), practical (144 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 40 marks (2 hours), practical 60 marks (3hours), internal assessment (TMA) (20% of theory marks)

**Pass criteria:** 33% in each component

## Course content

S. No.	Topics	Duration (in hours Th + Pr)	Module Approach/ Description	Description of practicals	Weightage (marks)
1.	<b>Basics of Computer</b>	10 (10 + 0)	This lesson explains the concept of Computer and list of input devices and output devices connected to the computer, and classification of	Write down the following details. <ul style="list-style-type: none"> <li>Configuration of your system</li> <li>RAM Capacity</li> <li>Hard disk Capacity</li> <li>Different drives available on your system.</li> <li>At least 5 features of any operating system being used at your study center/home.</li> </ul>	5

			computers. This lesson also emphasizes upon the classification of computer languages.		
2.	<b>Operating System</b>	24 (8 + 16)	This lesson aims at explain the features of Windows operating system and file management in Windows. This lesson also explains about install software and hardware.		10
3.	<b>Basics of Word Processing</b>	65 (25+ 40)	Word Processing lessons make the learner to develop the skills of creating editing and printing and formatting the documents.	<p>1. Enter your Bio-data with the following details in Times New Roman, font size 10 and save this file with name 'Details' in My documents.</p> <ol style="list-style-type: none"> <li>Name :</li> <li>Father's Name:</li> <li>Date of Birth:</li> <li>Postal Address:</li> <li>Sex :</li> <li>Nationality :</li> <li>Educational Qualification:</li> <li>Work Experience:</li> </ol> <p>2. Perform the following activities on the above file:</p> <ul style="list-style-type: none"> <li>Copy the file on CD and take the CD out.</li> <li>Delete the file from the</li> </ul>	28

				<p>computer system</p> <ul style="list-style-type: none"> <li>• Insert the CD again and scan it for virus.</li> </ul>	
4.	<b>Formatting Documents</b>			<ol style="list-style-type: none"> <li>1. Open the file “Details” and perform the following activities <ol style="list-style-type: none"> <li>a. Make the headings from serial no. (i) to (viii) bold.</li> <li>b. Make the entry at serial no. (v) underline</li> <li>c. Make the entry at serial no. (iii) italics.</li> <li>d. Select the whole document and increase its font size by 2 points.</li> <li>e. Make the line spacing 2.0 (whole document)</li> <li>f. Type ‘Bio-Data’ at the top of the document and make it Bold, Center aligned, Underlined. Set the font size to 14.</li> <li>g. Type the following at the end:   Name: _____  Place: _____  Date: _____ </li> </ol> </li> <li>2. Type a document of at least 2 pages on any topic with the following specifications: <ul style="list-style-type: none"> <li>• Line spacing 1.5</li> <li>• Insert space after every paragraph</li> <li>• Include at least one numbered list and one bulleted list</li> <li>• Perform spellcheck and grammar check on the</li> </ul> </li> </ol>	

				<p>whole document</p> <ul style="list-style-type: none"> <li>• If there is any name in the document, it should not appear as a misspelled word.</li> <li>• Title of the document should also be set as the page header</li> <li>• Footer should include Page number and your name.</li> <li>• Left margin: 1.5", Right margin: 0.5", Top margin: 1", Bottom Margin: 1"</li> </ul> <p>3. Create a time table using table in MS Word.</p>	
5.	<b>Mail Merge</b>			<p>1. Create a data source having rollno, email id and address details. Save this file as Mydata.</p> <p>2. With the help of Mail Merge facility, use the file 'Invitation' as Main Document, 'Invitees' as Data Source and merge them with the following format:</p> <p>&lt;Title&gt; &lt;Firstname&gt; &lt;Last Name&gt; &lt;Designation&gt; &lt;Institute&gt; &lt;City&gt;</p> <p>Save it as 'Invitation Letter' in the folder 'abc'. Take print out of this Merged Document (invitation letter).</p>	
6.	<b>Basics of Spreadsheet</b>	78 (30+ 48)	Spreadsheet lessons make the learner to	<p>(i) Create a workbook containing two worksheets.</p> <p>(ii) Save the workbook with the</p>	34

			develop the skills of creating, editing, printing and formatting the spreadsheet. This also explains about inserting formulas and functions and charts to your worksheets.	<p>name 'Marksheet'.</p> <p>(iii) Rename the worksheets as 'DataSheet', and 'ChartsSheet',</p> <p>(iv) Enter the data in DataSheet. Save the worksheet</p>	
7.	<b>Formatting worksheets</b>			<p>1. Using a Spreadsheet program, enter the employee data like employee name, employee id and salary in a worksheet. Save it as 'Result' in the folder 'abc' and take its print out.</p> <p>(i) Insert one column and one row in the above worksheet as per the following:</p> <p>(ii) Column to be inserted between B and C:</p> <p>(iii) Data for New column</p> <p>(iv) Date of Birth 29-10-1986 30-07-1991 05-03-1984 08-10-1986</p> <p>(v) Calculate total salary for all the employees using appropriate formula and enter it in row 6 and giving the row heading as Total salary</p> <p>(vi) Plot a pie chart for the above data.</p>	



8.	<b>Formulas, Functions and Charts</b>			<p>(1) Enter your marksheet data in an Excel sheet and insert suitable graphs to represent the data.</p> <p>(2)</p> <p>(i) Enter the data of expenditure on various items in your family in the worksheet and save it in the name as 'expenditure'.</p> <p>(ii) Plot a pie chart based on the data in the file 'expenditure'. Save the file.</p> <p>(iii) Open the file 'expenditure' and plot a bar chart. Save the file.</p>	
9.	<b>Creating Presentation</b>	37 (15+ 22)	This lesson makes the learner to create, edit and format presentation as per the topic given.	<p>(1) Create a presentation using following slides and save this with the name 'My School'. Apply animation style to your PowerPoint presentation. Insert Slide numbers and Date in all the slides.</p> <p>Title Slide, Introduction Slide, at least one slide each for (i) School Achievements in Academics, (ii) School Achievements in Sports, (iii) School Achievements in Extra-Curricular activities, Credits slide, Thank You slide.</p>	13
10.	<b>Introduction to Internet</b>	26 (8 + 18)	This lesson explains about Internet, different types Internet connections. This lesson also emphasizes the various services provided by Internet.	<p>(1) Create your e-mail ID in at least two free e-mail Service Providers like Yahoo, Gmail, Hotmail etc. Send a mail from one id to the other. Then, from the second id send reply to the first. Include an attachment with the reply.</p> <p>(2) Send a letter to your friend</p>	10

				<p>inviting him to attend a family function from your new e-mail ID.</p> <p>(3) Search websites of popular newspaper. and download important events related to sports on a particular day.</p> <p>(4) Go to NIOS website <a href="http://www.nios.ac.in">www.nios.ac.in</a>. Try to find and open the link for MuktaVidyaVani in NIOS website. Take the print out of today's MuktaVidyavani schedule.</p> <p>(5) Open the NIOS website of NIOS and make a list of online courses available under academic / vocational.</p>	
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**Note: Weightage will be given to practical record notebook maintenance and viva voce based on the activities.**

# Introduction to Law

Code No. 338

## Introduction

In our daily life, we often come across situations where legal advice and interpretations are required. In such cases, basic legal knowledge and skills come in very handy. The growing number of colleges across India, the constantly improving quality of Law education and increasing enrolment of students in Law with every passing year are indicative of the changing trend. This is an opportunity for NIOS to fulfill the tremendous need created by this trend.

Legal education in India refers to the education of lawyers before entry into practice. It is offered by the traditional universities as well as by specialized law universities only after completion of a graduate degree or as an integrated five years degree, which includes a graduate degree. As a matter of legal principle, “Ignorance of law is no excuse” and you have to bear the consequences of breaking any law as applicable. This makes basic introduction and information of legal issues and its implications mandatory as well as beneficial. The course has been designed to develop an insight into various legal processes and practices.

## Rationale

Every law is enacted in the manner legally laid down for the purpose by the competent authority designated to legislate without any such procedural laws. If we stop here, there is no complication and nobody gets any justification to resist any law that has been lawfully enacted. But in that case, we would leave the floodgate wide open for an oppressive regime to frame laws to perpetuate its reign. Any law that serves purposes other than public becomes questionable instantly. This makes justness an essential component of the law, without which the legality of the law could well be questionable.

The law determines and enforces one's rights within a politico-legal setup. It is not possible to press rights into service against their sources. This is to say that the laws can be protested or can be challenged within the framework of the law. In other words, laws can be violated with impunity no matter how much hardship it causes. The objective of the legislation is to minimize pain and to provide happiness to the maximum number. According to Ayn Rand, “Happiness is that state of consciousness which proceeds from the achievement of one's values.”

“Laws are the dictates by which the State governs its prospects/people but are also binding on the State. By enacting the law the State also undertakes to obey them. But laws are not enacted for their sake. There has to be a clear purpose behind each piece of enacted law because all laws by their very nature have the tendency to impose some restrictions or mount some obligation on someone or other. Hence, introducing Law at senior secondary level shall equip learners with basic information in the legal domain that affects them daily. It will also help them to execute their duties while protecting their own and other's rights.

## Objectives

After completing this course, the learner will be able to:

- develop an insight into various legal processes and practices;
- sensitise socio economic, political legal, ethical and moral values emerging from national and global concerns;
- act and demonstrate as law abiding, responsible citizens and agents of democratic governance;
- define the legal institutions and organs of state through which the power is structured and exercised;
- rewrite brief ideas on the underlying legal philosophy and also different types of legal system;
- explain the meaning and significance of legal phenomena and social infrastructure;
- explain various aspect of “We the People” and their impact on the development of the nation; and
- create interest among themselves to learn the basic theory and principles of law.

## Scope and job opportunity

The law affects all aspects of our life. It protects us right from the mother’s womb to our education, service, marriage and other important events of life. Law plays a major role in our everyday lives, right from buying a newspaper or a bottle of milk or any other big or small item necessary for our life. The law is so important for our life that it becomes necessary to understand various aspects of the law. Moreover, there is a movement towards introducing ‘Law’ as a career option at increasingly earlier age. From the traditional approach of introducing ‘Law’ as a post-graduation Three years Course it is now being offered as Five years Integrated Course after +2. Studying ‘Law’ as a Course at Senior Secondary level will not only help to acquire working knowledge of Law at the early stage but also will help in higher studies in Law discipline.

Persons possessing Law degree can work as legal counsel and legal advisors for the corporate sector, firms, organizations, legal persons, individuals, and families. Law degree holder can also work as Legal Advisors in Department of Legal Affairs and Legislative Counsel in Legislative Department. Those who are interested in academic jobs can take up jobs in any University or Institute offering law courses to students

## Eligibility conditions

**Age:** 15 Years

**Qualification:** 10<sup>th</sup> pass

**Medium of instruction:** Hindi, English and Urdu

**Duration of the course:** 1 Year

## Weightage

**Theory:** 100 Marks

**Tutor marked Assignments (TMA) :** 20% Marks of theory

**Scheme of studies:** Theory (240 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 100 marks (3 hours), internal assessment (TMA) (20% of theory marks).

**Pass criteria:** 33% in each component.

## Course content

S. No.	Module/Topics	Duration (in hours)	Module Approach/Description	Weightage (marks)
1.	<b>Module-I</b> <b>Concept of Law</b> 1. Meaning of Law 2. Classification of Legal System 3. Personal Law I: Hindu Law and Muslim Law 4. Personal Law II: Christian, Parsi and Jewish Law	<b>35</b>	The purpose for this module is to acquaint the learners with the meaning of Law, the Legal Systems that prevail in the globe and the various classifications of legal systems.	<b>14</b>
2.	<b>Module-II</b> <b>Functions and Techniques of Law</b> 5. Normative Functions of Law and Social Control 6. Principles of Natural Justice 7. Techniques of Law and Remedies I 8. Techniques of Law and Remedies II	<b>35</b>	Law is omnipotent and accordingly it has many and varied functions. This module is designed to familiarise the students with the functions and techniques of law which would enable them to understand the application of law.	<b>12</b>

3.	<b>Module-III</b> <b>Classification of Law</b> 9. Territorial Law 10. Civil Law and Criminal Law 11. Substantive Law and Procedural or Adjective Law 12. Public Law and Private Law	30	This module is designed for the purpose of making the students aware about the various sources and classification of law. The basic understanding about the different categories in the types of law can be learned by the learner and their division is also available in this module	14
4.	<b>Module-IV</b> <b>Indian Court System and Methods of Resolution of Disputes</b> 13. Indian Judicial System 14. Justice Delivery System 15. Alternative Dispute Resolution Mechanisms 16. Legal Services and Lok Adalat	30	The module provides for the legal mechanism that is meant to resolve disputes and problems that arise in the day to day transactions even between the neighbours and those who reside in the community through the intervention of Courts, Tribunals and alternative means of dispute resolution.	12
5.	<b>Module-V</b> <b>The Constitution of India (I)</b> 17. Constitution and Its Nature 18. Constitutionalism and Preamble 19. Fundamental Rights and Duties 20. Directive Principles of State Policy	35	This module would give an idea of the structure of Indian Constitutional system. This will also acquaint the learners with the salient features of the Constitution. It has also been designed to develop among learners an insight into the Fundamental Rights, Fundamental duties and Directive Principles of the State Policy enshrined in the Constitution.	14
6.	<b>Module - VI</b> <b>The Constitution of India (II)</b>	35	The purpose of this module is to familiarise the learners with powers, functions and working of the principal	14

	21. The Executive 22. The Legislature 23. The Judiciary		functionaries of three organs of the government both at the Union and the State (provincial) level as embodied in the Indian Constitution.	
7.	<b>Module – VII A*</b> <b>Environmental Law, Role of Citizens, Police and Administration</b> 24. Environmental Law 25. Sustainable Development 26. General Principles of Environmental Law 27. Contemporary Developments	40	The module is designed to generate awareness about the legal mechanism to protect the environment and general principles of Environmental Law as well as the role of citizens in protecting the environment. The module also lays emphasis on the role of citizens in maintaining a good social order, Police System and the need for manpower training.	20
	<b>Module – VII B*</b> <b>Law Relating to Consumer Protection and Right to Information</b> 24. Consumer Protection 25. Unfair Trade Practices 26. Consumer Redressal Agencies 27. Consumer Activism	40	<b>Approach:</b> The emphasis in this module is given to explain the meaning of Consumerism and to inform about the rights of consumers as well as generate awareness about the Right to Information.	20

**\*Note: Learner has to choose one Module from VII A or VII B**

# **Library and Information Science**

**Code No. 339**

## **Introduction**

The Library and Information Science course is taught at different levels in India such as Certificate, Diploma, Bachelor's, Master's and at doctoral level, but as a vocational course. We have introduced this course as an academic subject at Sr. Secondary level. Library and Information science is the study of different aspects of library and Information Science such as Library, Information and Society, Information Sources, Organization of Information Sources, Library and Information Services, Management of Libraries and Information Retrieval System. We have included all these aspects in the present course.

## **Rationale**

We are living in the information society where information based occupations have been on the rise, as information society demands work force that can use information technology as a tool to increase productivity and creativity. This involves identifying reliable sources of information, accessing them, selecting the requisite information, synthesizing and communicating it effectively. To search, locate and use such information is only possible if one has the ability to use the available information access tools. Library and Information Science teaches an individual about the information resources and their effective use. Library and Information Science learning imparts necessary skills in the individual to be an independent learner.

The National Curriculum Framework (NCF) 2005, while stressing on the importance of libraries states "It is important that future planning treats the library as an essential component of the school at all levels. Both teachers and children need to be motivated and trained to use the library as a resource for learning, pleasure, and concentration ". Keeping in view the above we have introduced Library and Information Science as a course at senior secondary level which will fulfill the long felt need of developing skills in learners to identify, locate, evaluate and use needed information efficiently. The course will impart some of the basics of Library and Information Science to those who are aspiring to pursue higher studies in Library and Information science.

## **Objectives**

After completing this course, the learner will be able to:

- explain information storage, searching and retrieval system;
- develop library and information related skills;
- inculcate interest in the library and information science to opt this subject as a career;
- explain various information sources and their use;
- organize different sources of information;
- develop necessary skills for utilizing the library ;



- use of ethical information ; and
- use various information communication technology (ICT) tools and techniques in library and information science.

## **Scope and job opportunity**

There is lot of scope for further study in library and information science at Bachelors, Masters and Doctoral level. This field has a large number of opportunities for employment in the libraries, some of these are:

- Public/Government libraries
- Universities/Colleges schools and other academic institutions
- News agencies and organisations
- Private organisations and special libraries
- Foreign embassies
- Photo/film/radio/television libraries
- Information centres/documentation centers
- Companies and organisations including IT sector with large information handling requirements
- Museums and galleries, which have reading rooms and research facilities

## **Eligibility conditions**

**Age:** 15 Years

**Qualification:** 10<sup>th</sup> Pass

**Medium of instruction:** Hindi, English and Urdu

**Duration of the course:** 1 Year

**Weightage**

**Theory:** 80 Marks

**Practical:** 20 Marks

**Tutor Marked Assignments (TMA):** 20 % Marks of theory

**Scheme of studies:** Theory (192 hours), practical (30 hours), TMA (Self paced)

**Scheme of evaluation:** Theory paper 80 marks (3 hours), practical 20 marks (3 hours), internal assessment (TMA) (20% of theory marks).

**Pass criteria:** 33% in each component.

## Course content

S. No.	Modules/Topics	Duration (in hours)	Module Approach/ Description	Description of practicals	Weightage (marks)
1.	<b>Module-I</b> <b>Library, Information and Society</b> 1. Library and Information Centres: Concepts and Role in Society 2. Types of Libraries and Information Centres: Public, Academic, Special and National 3. Modern Library: Automated, Digital, and Virtual 4. Five Laws of Library Science	36	This module covers various types of libraries and information centres. It provides a bird's eye view of how these libraries are playing active role in acquiring, organizing and disseminating information to the user community for study, research and development, recreation and cultural development.	1. Observation of Library/Information Centre. 2. Observation of an Automated Library and its features 3. Services of Public Libraries and Information Centres	15
2.	<b>Module-II</b> <b>Information Sources</b> 5. Overview of Information Sources 6. Types of Information Sources 7. Reference Sources 8. E-Resources	48	Libraries form vital part of world's system of education. Through books, films, a/v media, etc., libraries make available the knowledge that has been accumulated through ages. People from all walks of life use	4. Features of primary and secondary sources of information 5. Abridged and unabridged English language dictionaries 6. Answering reference queries	18

			library resources for their work.		
3.	<b>Module-III Organization of Information Sources</b> 9. Organization of Library Material: Concept, Need and Purpose 10. Processing of Library Material: Classification and Cataloguing 11. Arrangement and Maintenance of Library Material	36	This module introduces the basics of preparation and organization of library material for use.	7. Library Classification 8. Understanding Catalogue 9. Shelving of Books	16
4.	<b>Module-IV Library and Information Services</b> 12. Library and Information Services for the Users 13. Traditional Library Services: Responsive and Anticipatory 14. Modern Library Services	36	Modern library is considered as a service institution. It not only acquires, organizes, stores and disseminates information but, also actively promotes its use.	10. Circulation Service 11. Compiling subject Bibliography 12. Online Databases	17
5.	<b>Module-VA* Management of Libraries</b>	36	This module aims at imparting knowledge in library	13. Accession register and the process of accessioning	14

	15. Library System and Management 16. Library Staff 17. Library Users 18. Librarianship as a Career		administration and management activities. It covers policies and procedures related to acquiring library material, library staff and promotion of library use.	14. Career in librarianship 15. Periodicals publications	
	<b>Module-VB*</b> <b>Information Retrieval Systems</b> 15. Information Retrieval System: Concept and Scope 16. Information Retrieval Tools: Catalogue, Index, Subject Heading Lists 17. Search Techniques: Basic and Advanced 18. Web Based Search	36	This module aims to create knowledge and required skills in the learner for searching information in print as well as digital media scattered all over the world.	16. Types of indexes 17. Web based search 18. Navigational Search	14

**\*Note: Learner has to choose one Module from VA or VB**

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