

# L\_3\_General\_Ed\_Arts\_Stream

## 1. Home Science

### COURSE STRUCTURE

<b>One Paper (Theory)</b>	<b>Time: 3 Hours</b>	<b>70 Marks</b>
<b>Unit</b>		<b>Marks</b>
I. Concept of Home Science		02
II. Know myself		17
III. Nutrition for Self and Family		17
IV. My Resources and Community		17
V. My Apparel		17
		70

## **UNIT I: CONCEPT OF HOME SCIENCE AND ITS SCOPE**

Home Science, its scope.

## **UNIT II: KNOW MYSELF : ISSUES RELATED TO ADOLESCENTS**

Adolescence, meaning

### **Characteristics:**

- (i) Physical development - growth spurt, sexual development.
- (ii) Social and Emotional development : period of storm and stress, importance of peer group, interest in opposite sex, varied and changing interest, identity crises, concern for future.
- (iii) Cognitive development.

### **Individual differences:**

Difference between two sex and same sex, early and late maturers, role of heredity and environment (family, peers, school and neighbourhood)

### **Special Needs of adolescents :**

- (i) Nutritional requirements of adolescents - qualitative and quantitative (nutritional problems of adolescents - Iodine deficiency disease (IDD) Anaemia, obesity.)
- (ii) Eating disorders of adolescents - anorexia nervosa, Bulimia, obesity, (importance of exercise and physical activity)

### **Some problems of adolescence:**

Awkwardness due to growth spurt; depression; alcohol, drugs and smoking; delinquency; problems related to sex; HIV / AIDS and other sexually transmitted diseases;

### **Population Education:**

- (i) Causes and effects of overpopulation.
- (ii) Neglect of girl child - causes, government incentives to improve status of girl child and women empowerment.

### **First Aid**

- (i) First aid in cuts, burns, fractures.
- (ii) Prevention of fire, electric shock and fall.

## **Unit III : Nutrition for Self and Family**

- (i) Definition of food, nutrition, health and Nutritional status.
- (ii) Signs of good health

### **Functions of food:**

Physiological (body building, energy giving, protective, regulatory), psychological and social functions.

### **Selection of foods for optimum nutrition and good health:**

- (i) Nutrients : sources, functions, deficiency and prevention, Proteins, Carbohydrates, Fats, Vitamins- Fat soluble (A, D, E, K) and water soluble (B<sub>1</sub>, B<sub>2</sub>, Niacin, Folic acid, B<sub>6</sub> and

and Vitamin C<sup>12</sup>), Minerals (Calcium, Iron, Zinc and Iodine).

- (ii) Basic Food Groups (ICMR) and their contribution ; Concept of Balance diet, food and nutritional requirements for family (ICMR tables).
- (iii) Factors influencing selection of food : culture, family food practices, media, peer group and availability of foods)

**Maximum nutritive value from food by proper selection, preparation, cooking and storage: (i)**

**Selection and Storage of Foods :** Perishable, semi-perishable, non-perishable, convenience foods.

**(ii) Preservation of food :**

- (a) Reasons of spoilage of food
- (b) Brief description of household methods of preservations -
  - Refrigeration, dehydration
  - Use of chemicals and household preservatives.

**(iii) Preparation of food :** loss of nutrients during preparation of food and their minimization.

**(iv) Cooking :**

- (a) Principles of cooking
- (b) Methods of cooking - boiling, steaming, pressure cooking, deep and shallow frying, baking, sauteing, roasting, grilling, solar cooking and microwave cooking.
- (c) Effect of cooking on the nutritive value of food.
- (d) Method of enhancing nutritive value-germination, fermentation, fortification and food combination.

**UNIT IV: MY RESOURCES AND COMMUNITY**

**(i) Resources: Meaning, characteristics and types:**

- (a) Human / Personal Resources : knowledge, skills, time, energy, attitudes;
- (b) Non-human / material resources : money, goods, property;
- (c) Community facilities / shared resources : Schools, parks, hospitals, roads, transport, water, electricity, library, fuel and fodder.
- (d) Need to manage the resources and methods of conservation of shared resources.

**(ii) Management:**

- (a) Meaning and need for management.
- (b) Steps in management: planning, organizing, controlling, implementing and evaluation.
- (c) Decision making and its role in management.

**(iii) Time and energy management:**

- (a) Need and procedure for managing time for occupation and leisure.
- (b) Work simplifications : meaning and methods.
- (c) Need and ways to organize space for household.
- (d) Use of colours and accessories to make house attractive.

**(iv) Work ethics:**

- (a) Meaning and importance; discipline at work place; reaching on time, staying in seat, knowing the job, using polite language.

**Unit V: My Apparel**

**(i) Introduction to Fibre Science:**

- (a) Characteristics of fibre
- (b) Classifications of fibre
  - Natural-cotton, silk and wool
  - Man-made (Regenerated & Synthetic), (rayon nylon and polyester)
  - Blends - Characteristics (terrycot, terrysilk, terrywool).

**(ii) Fabric Construction:**

- (a) Yarn making : Basic procedure (spinning, mechanical spinning, chemical spinning)
- (b) Weaving: Basic mechanism, types of weaves : plain (basket and rib), twill & satin weave. A brief mention of special weaves (pile and jacquard weaves)
- (c) Other methods of fabric constructions : knitting and nonwoven fabrics. (felting and bonding).
- (d) Effect of weaves on appearance, durability and maintenance of garment.

**(iii) Fabric Finishes:**

- (a) Meaning and importance.
- (b) Classification of finishes.
  - Basic finishes : (cleaning scouring), bleaching, stiffening, calendering and tentering.
  - Special finishes : (Mercerisation, shrinkage control (sanforizing), water proofing; dyeing and printing.

## PRACTICALS

Time: 3 Hours

30 Marks

UNIT	MARKS
I. Concept of Home Science	-
II. Know myself	-
III. Nutrition for Self & Family	8
IV. My Resources and Community	8
V. My Apparel	7
Record	5
Viva	2
Total	30

### UNIT I : CONCEPT OF HOME SCIENCE

#### UNIT II : KNOW MYSELF : ISSUES RELATED TO ADOLESCENTS

**Activity:** Observe and test your own strengths and weaknesses; Discuss about them in class with your teacher and fellow students; take decision about maximum utilization of strength, overcoming weaknesses, stress management.

**Activity:** Report situations from your life to indicate your interaction within the family, with peers and with members of the community.

#### UNIT III : NUTRITION FOR SELF AND FAMILY

**Activity:** Look for signs of good health within your family.

**Activity:** Make a list of foods available in the local market according to food groups.

**Activity:** Observe how different food stuffs are stored at home and evaluate the effectiveness of the method; practise skills to preserve and optimise nutrients by preparing meals and snacks.

**Practical:** Preparing meals and snacks

**Practical:** Household methods of food preservation - Jam, Squash / Syrup / Pickles / Chutney.

#### UNIT IV : MY RESOURCES AND COMMUNITY

**Activity (Observation):** Observe and list resources available at home and in neighbourhood. Make a detailed study on available community resource and its management, suggest improvements.

**Activity:** Critically evaluate anyone activity centre of your house. Suggest improvements.

**Activity:** Suggest a work plan for yourself for a day and state where and why will you take help from others.

**Practicals:** Make flower and foliage arrangements, floor decorations, clean and polish brass, glass, iron, aluminium and plastic surfaces.

#### UNIT V : MY APPAREL

**Activity:** Collect samples of fabrics and study characteristics for identification.

**Activity:** Collect samples of weaves and identify them.

**Practicals:** Carry out burning test, slippage test, tearing test and test for colour fastness.

**Practical:** Dyeing: plain and tie dye printing: use blocks (available or make you own) on small sample.

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## 2. ECONOMICS

**Paper 1** **3 Hours** **100 Marks**  
**UNITS** **Marks**

### **Part A : Statistics for Economics**

1. Introduction	3
2. Collection, Organisation and Presentation of Data	12
3. Statistical Tools and Interpretation	30
4. Developing Projects in Economics	5
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	50

### **Part B: Indian Economic Development**

5. Development Policies and Experience (1947-90)	10
6. Economic Reforms since 1991	8
7. Current Challenges facing Indian Economy	25
8. Development experience of India-A comparison with neighbours	7
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	50

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### **Part A : Statistics for Economics**

In this course, the learners are expected to acquire skills in collection, organisation and presentation of quantitative and qualitative information pertaining to various simple economic aspects systematically. It also intends to provide some basic statistical tools to analyse, and interpret any economic information and draw appropriate inferences. In this process, the learners are also expected to understand the behaviour of various economic data.

#### **UNIT 1: INTRODUCTION**

What is Economics?

Meaning, scope and importance of statistics in Economics

#### **UNIT 2: COLLECTION, ORGANISATION AND PRESENTATION OF DATA**

Collection of data - sources of data - primary and secondary; how basic data is collected; methods of collecting data; Some important sources of secondary data: Census of India and National Sample Survey Organisation.

Organisation of Data: Meaning and types of variables; Frequency Distribution.

Presentation of Data: Tabular Presentation and Diagrammatic Presentation of Data: (i) Geometric forms (bar diagrams and pie diagrams), (ii) Frequency diagrams (histogram, polygon and ogive) and (iii) Arithmetic line graphs (time series graph).

### **UNIT 3: STATISTICAL TOOLS AND INTERPRETATION**

(For all the numerical problems and solutions, the appropriate economic interpretation may be attempted. This means, the students need to solve the problems and provide interpretation for the results derived)

Measures of Central Tendency- mean (simple and weighted), median and mode

Measures of Dispersion - absolute dispersion (range, quartile deviation, mean deviation and standard deviation); relative dispersion (co-efficient of quartile-deviation, co-efficient of mean deviation, co-efficient of variation); Lorenz Curve: Meaning and its application.

Correlation - meaning, scatter diagram; Measures of correlation - Karl Pearson's method (two variables ungrouped data) Spearman's rank correlation.

Introduction to Index Numbers - meaning, types - wholesale price index, consumer price index and index of industrial production, uses of index numbers; Inflation and index numbers.

Some Mathematical tools used in Economics : Equation of a line, slope of a line, slope of a curve.

### **UNIT 4: DEVELOPING PROJECTS IN ECONOMICS**

The students may be encouraged to develop projects, which have primary data, secondary data or both. Case studies of a few organisations / outlets may also be encouraged. Some of the examples of the projects are as follows (they are not mandatory but suggestive):

- (i) A report on demographic structure of your neighborhood; (ii)  
Consumer awareness amongst households
- (iii) Changing prices of a few vegetables in your market
- (iv) Study of a cooperative institution: milk cooperatives

The idea behind introducing this unit is to enable the students to develop the ways and means by which a project can be developed using the skills learned in the course. This includes all the steps involved in designing a project starting from choosing a title, exploring the information relating to the title, collection of primary and secondary data, analysing the data, presentation of the project and using various statistical tools and their interpretation and conclusion.

## **Part B: Indian Economic Development**

### **UNIT 5: DEVELOPMENT POLICIES AND EXPERIENCE (1947-90):**

A brief introduction of the state of Indian economy on the eve of independence. Common goals of Five Year Plans.

Main features, problems and policies of agriculture (institutional aspects and new agricultural strategy, etc.), industry (industrial licensing, etc.) and foreign trade.

### **UNIT 6: ECONOMIC REFORMS SINCE 1991:**

Need and main features - liberalisation, globalisation and privatisation; An appraisal of LPG policies

### **UNIT 7: CURRENT CHALLENGES FACING INDIAN ECONOMY:**

Poverty- absolute and relative; Main programmes for poverty alleviation: A critical assessment; Rural development: Key issues - credit and marketing - role of cooperatives; agricultural

diversification; alternative farming - organic farming

Human Capital Formation: How people become resource; Role of human capital in economic development; Growth of Education Sector in India

Employment: Formal and informal, growth and other issues: Problems and policies. Inflation : Problems and Policies

Infrastructure: Meaning-and Types: Case Studies: Energy and Health: Problems and Policies- A critical assessment;

Sustainable Economic Development: Meaning, Effects of Economic Development on Resources and Environment, including global warming.

## **UNIT 8: DEVELOPMENT EXPERIENCE OF INDIA:**

### **A comparison with neighbours**

India and Pakistan

India and China

Issues: growth, population, sectoral development and other developmental indicators.

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## **3. ENTREPRENEURSHIP**

### **THEORY**

**Total Marks: 70**

#### **UNIT I: ENTREPRENEURSHIP AND HUMAN ACTIVITIES**

**30 Marks**

##### **A. Entrepreneurship**

- Concept, Functions and need
- Entrepreneurship : Characteristics and Competency
- Relevance of Entrepreneurship to Socio-Economic Gain: generating National Wealth, creating Wage and Self -Employment, Micro, Small and Medium Enterprises, Optimizing Human and Natural Resource and Solving Problems in the path of prosperity, building enterprising Personality and Society.
- Process of Entrepreneurship Development. B.

##### **Entrepreneurial Pursuits and Human Activities:**

- Nature, Purpose and pattern of Human Activities: Economic and Non-Economic, Need for innovation.
- Rationale and Relationship of Entrepreneurial pursuits and Human Activities.

#### **UNIT II: ACQUIRING ENTREPRENEURIAL VALUES AND MOTIVATION 30Marks**

- Entrepreneurial Values, Attitude and Motivation-Meaning and concept.
- Developing Entrepreneurial Motivation and Competency - concept and process of Achievement Motivation, Self-efficacy, Creativity, Risk Taking, Leadership, Communication and Influencing Ability and Planning Action.
- Barriers to Entrepreneurship
- Help and support to Entrepreneurs



### **Unit III: Introduction to Market Dynamics**

**10 Marks**

- Understanding a Market
- Competitive Analysis of the Market
- Patents, Trademarks and Copyright

#### **PRACTICAL**

**30 Marks**

- I. Study visit by students to any enterprise of own choice. With the help of a schedule/questionnaire the students will record observation regarding - the background of entrepreneur, reasons for selecting the entrepreneurial career, starting the enterprise, the type of enterprise, the process of setting this enterprise, products/services, production process, investment made and marketing practices followed, profit or loss, growth and development, problems faced, institutions/organisations which offer support and entrepreneur's level and type of satisfaction.
- II. Preparation of a brief report based on the observations made during study-visit to an enterprise.

## 4. HISTORY

Paper One	Time: 3 hours	100 Marks
Units		Marks
1. Introduction to World History		-
<b>Section A: Early Societies</b>		<b>15</b>
2. Introduction		
3. From the beginning of time		
4. Early Cities		
<b>Section B: Empires</b>		<b>25</b>
5. Introduction		
6. An empire across three continents		
7. Central Islamic lands		
8. Nomadic Empires		
<b>Section C: Changing Traditions</b>		<b>25</b>
9. Introduction		
10. Three orders		
11. Changing cultural traditions		
12. Confrontation of cultures		
<b>Section D: Paths to Modernization</b>		<b>25</b>
13. Introduction		
14. The Industrial Revolution		
15. Displacing indigenous People		
16. Paths to modernization		
<b>Map work (units 1-16)</b>		<b>10</b>

## Themes in World History

Themes	Periods	Objectives
<p><b>1. Introduction to World History</b>  <b>SECTION A: EARLY SOCIETIES</b></p> <p><b>2. Introduction</b></p> <p><b>3. From the Beginning of Time</b>            Focus: Africa, Europe till 15000 BC            (a) Views on the origin of human beings.            (b) Early societies.            (c) Historians' views on present-day hunting-gathering societies.</p> <p><b>4. Early Cities</b>            Focus: Iraq, 3rd millennium BC            (a) Growth of towns. (b) Nature of early urban societies.            (c) Historians' Debate on uses of writing.</p> <p><b>SECTION B: EMPIRES</b></p> <p><b>5. Introduction</b></p> <p><b>6. An Empire across Three Continents</b>            Focus: Roman Empire, 27 B.C to A.D 600.            (a) Political evolution (b) Economic expansion (c) Religion (d) Late Antiquity.            (e) Historians views on the institution of Slavery.</p> <p><b>7. Central Islamic Lands:</b>            Focus: 7th to 12th centuries            (a) Polity (b) Economy (c) Culture.            (d) Historians viewpoints on the nature of the crusades.</p> <p><b>8. Nomadic Empires:</b>            Focus: the Mongol, 13th to 14th century            (a) The nature of nomadism. (b) Formation of empires. (c) Conquests and relations with other states. (d) Historians' views on nomadic societies and state formation.</p>		<p>%o Familiarize the learner with ways of reconstructing human evolution. Discuss whether the experience of present-day hunting-gathering people can be used to understand early societies.</p> <p>%o Familiarize the learner with the nature of early urban centres.            %o Discuss whether writing is significant as a marker of civilization.</p> <p>%o Familiarize the learner with the history of a major world empire            %o Discuss whether slavery was a significant element in the economy.</p> <p>%o Familiarize the learner with the rise of Islamic empires in the Afro-Asian territories and its implications for economy and society.            %o Understand what the crusades meant in these regions and how they were experienced.</p> <p>%o Familiarize the learner with the varieties of nomadic society and their institutions.            %o Discuss whether state formation is possible in nomadic societies.</p>

Themes	Objectives
<p><b>SECTION C: CHANGING TRADITIONS</b></p> <p><b>9. Introduction</b></p> <p><b>10. Three Orders</b> Focus: Western Europe, 13th-16th century (a) Feudal society and economy: (b) Formation of states. (c) Church and Society. (d) Historian’s views on decline of feudalism</p> <p><b>11. Changing cultural traditions</b> Focus on Europe, 14th to 17th century’. (a) New ideas, and new trends in literature and arts. (b) Relationship with earlier ideas (c) The contribution of West Asia.  (d) Historian’s view points on the validity of the notion ‘European Renaissance’.</p> <p><b>12. Confrontation of Cultures</b> Focus on the America 15th to 18th century. (1) European voyages of exploration. (b) Search for gold; enslavement, raids, extermination. (c) Indigenous people and cultures - the Arawaks, the Aztecs, the Incas. (c) The history of displacements.  (d) Historian's view points on the slave trade,</p> <p><b>SECTION D: PATHS TO MODERNIZATION</b></p> <p><b>13. Introduction</b></p> <p><b>14. The Industrial Revolution.</b> Focus on England, 18th and 19th century. (a) Innovations and technological change (b) Patterns of growth. (c) Emergence of a working class. (d) Historians' viewpoints Debate, 'Was there an Industrial Revolution?</p>	<ul style="list-style-type: none"> <li>‰ Familiarize the learner with the nature of the economy and society of this period and the changes within them.</li> <li>‰ Show how the debate on the decline of feudalism helps in understanding processes of transition.</li> <li>‰ Explore the intellectual trends in the period.</li> <li>‰ Familiarize students with the paintings and buildings of the period</li> <li>‰ Introduce the debate around the idea of ‘Renaissance’.</li> <li>‰ Discuss changes in European economy that led to the voyages.</li> <li>‰ Discuss the implications of the conquests for the indigenous people.</li> <li>‰ Explore the debate on the nature of the slave trade and see what this debate tells us about the meaning of these “discoveries”.</li> <li>‰ Understand the nature of growth in the period and its limits.</li> <li>‰ Initiate students to the debate on the idea of industrial revolution.</li> </ul>

## 5. POLITICAL SCIENCE

One Paper

Time 3hrs.

Marks 100

Units	Marks	
<b>Part A: Indian Constitution at work</b>		
1. Constitution : Why & How?	}	10
2. Rights in the Indian Constitution		
3. Election and Representation	}	10
4. Executive		
5. Legislature	}	10
6. Judiciary		
7. Federalism	}	10
8. Local Governments		
9. Constitution as a living document.	10	
10. The Philosophy of the constitution		10
	_____	_____
		<b>50</b>
<b>Part B: Political Theory</b>		
11. Political Theory : An Introduction	}	10
12. Freedom		
13. Equality	}	10
14. Social Justice		
15. Rights	}	10
16. Citizenship		
17. Nationalism		10
18. Secularism		
19. Peace		10
20. Development		
	_____	_____
		<b>50</b>

**Course Content:**

**Part A: Indian Constitution at work**

- 1. The Constitution : Why and How?**  
Why do we need a constitution?  
The authority of a Constitution
- 2. Rights in the Indian Constitution**  
The Importance of Rights, Fundamental Rights in the Indian Constitution, Directive Principles of State Policy, Relationship between Fundamental Rights and Directive Principles
- 3. Election and Representation**  
Elections and Democracy, Election System in India, Reservation of Constituencies, Free and Fair Elections, Electoral Reforms
- 4. Executive**  
What is an Executive? Different Types of Executive. Parliamentary Executive in India, Prime Ministers and Council of Ministers. Permanent Executive : Bureaucracy,
- 5. Legislature**  
Why do we need a Parliament? Two Houses of Parliament. Functions and Power of the Parliament, Legislative functions, control over executive. Parliamentary committees. Self-regulation.
- 6. Judiciary**  
Why do we need an Independent Judiciary? Structure of the Judiciary, Judicial Activism, Judiciary and Rights, Judiciary and Parliament
- 7. Federalism**  
What is Federalism? Federalism in the Indian Constitution, Federalism with a strong Central Government, conflicts in India's federal system, Special Provisions.
- 8. Local Governments**  
Why do we need Local Governments? Growth of Local Government in India, 73<sup>rd</sup> and 74<sup>th</sup> Amendments, implementation of 73<sup>rd</sup> and 74<sup>th</sup> Amendments
- 9. Constitution as a Living Document**  
Are Constitutions static? The procedure to amend the Constitution. Why have there been so many amendments? Basic Structure and Evolution of the Constitution. Constitution as a Living Document
- 10. The Philosophy of the Constitution**  
What is meant by Philosophy of the Constitution? The Political philosophy of our Constitution, Procedural Achievements, Criticisms

## **Part B: Political Theory**

### **11. Political Theory: An Introduction**

What is Politics? What do we study in Political Theory? Putting Political Theory to practice. Why should we study Political Theory?

### **12. Freedom**

The Ideal of Freedom. What is Freedom? Why do we need constraints? Harm principle. Negative and Positive Liberty

### **13. Equality**

Significance of Equality. What is Equality? Various dimensions of Equality. How can we promote Equality?

### **14. Social Justice**

What is Justice? Just Distribution. Justice as fairness. Pursuing Social Justice

### **15. Rights**

What are Rights? Where do Rights come from? Legal Rights and the State. Kinds of Rights. Rights and Responsibilities

### **16. Citizenship**

What is citizenship? Citizen and Nation, Universal Citizenship, Global Citizenship

### **17. Nationalism**

Nations and Nationalism, National Self-determination, Nationalism and Pluralism

### **18. Secularism**

What is Secularism? What is Secular State? The Western and the Indian approaches to Secularism. Criticisms and Rationale of Indian Secularism.

### **19. Peace**

What is Peace? Can violence ever promote peace? Peace and the State. Different Approaches to the pursuit of peace. Contemporary challenges to peace.

### **20. Development**

What is development? Criticism of the dominant. Development Model. Alternative conceptions of development.

## 6. GEOGRAPHY

### Class XI

One Theory Paper	3 Hours	70 Marks
<b>Part A. Fundamentals of Physical Geography</b>		<b>35 (Marks)</b>
Unit-1: Geography as a discipline		3
Unit-2: The Earth		5
Unit-3: Landforms		8
Unit-4: Climate		10
Unit-5: Water (Oceans)		4
Unit-6: Life on the Earth		3
Unit-7: Map work		2
<b>Part B. India- Physical Environment</b>		<b>35 (Marks)</b>
Unit-8: Introduction		3
Unit-9: Physiography		10
Unit-10: Climate, vegetation and soil		10
Unit-11: Natural hazards and Disasters		9
Unit-12: Map Work		3
<b>Part C. Practical Work</b>	<b>3 Hours</b>	<b>30 Marks</b>
Unit-1: Fundamentals of Maps		10
Unit-2: Topographic and Weather Maps		15
Unit-3 : Practical Record Book & Viva		5

#### UNIT-1: GEOGRAPHY AS A DISCIPLINE

- z Geography as an integrating discipline, as a science of spatial attributes;
- z Branches of geography; importance of physical geography.

#### UNIT-2: THE EARTH

- z Origin and evolution of the earth; Interior of the earth;
- z Wegener's continental drift theory and plate tectonics;
- z Earthquakes and volcanoes.

#### UNIT-3: LANDFORMS

- z Rocks: major types of rocks and their characteristics;
- z Landforms and their evolution
- z Geomorphic processes: weathering, mass wasting, erosion and deposition; soil-formation



#### **UNIT 4: CLIMATE**

- z Atmosphere- composition and structure; elements of weather and climate.
- z Insolation-angle of incidence and distribution; heat budget of the earth-heating and cooling of atmosphere (conduction, convection, terrestrial radiation and advection); temperature-factors controlling temperature; distribution of temperature-horizontal and vertical; inversion of temperature.
- z Pressure-pressure belts; winds-planetary, seasonal and local; air masses and fronts; tropical and extratropical cyclones.
- z Precipitation-evaporation; condensation-dew, frost, fog, mist and cloud; rainfall-types and world distribution.
- z World climates-classification (Koeppen and Thornthwaite), greenhouse effect, global warming and climatic changes.

#### **UNIT 5: WATER (OCEANS)**

- z Hydrological Cycle.
- z Oceans - distribution of temperature and salinity; movements of ocean water-waves, tides and currents; submarine reliefs.

#### **UNIT 6: LIFE ON THE EARTH**

- z Biosphere - importance of plants and other organisms; biodiversity and conservation; ecosystem and ecological balance.

#### **Unit 7: Map work on identification of features based on the above units on the outline political map of the world.**

#### **Part B. India - Physical Environment**

##### **Unit 8: Introduction**

- z Location-space relations and India's place in the world.

##### **Unit 9: Physiography**

- z Structure and Relief;
- z Drainage systems: concept of watershed; the Himalayan and the Peninsular;
- z Physiographic divisions.

##### **Unit 10: Climate, Vegetation and Soil**

- z Weather and climate — spatial and temporal distribution of temperature, pressure winds and rainfall, Indian monsoon: mechanism, onset and withdrawal, variability of rainfalls : spatial and temporal; Climatic types (Koeppen)

- z Natural vegetation-forest types and distribution; wild life; conservation; biosphere reserves;
- z Soils - major types (ICAR's classification) and their distribution, soil degradation and conservation.

**Unit 11: Natural Hazards and Disasters: Causes, Consequences and Management (One case study to be introduced for each topic)**

- z Floods, Clouds bursts and droughts
- z Earthquakes and Tsunami
- z Cyclones
- z Landslides

**Unit 12: Map Work of features based on above units for locating and labelling on the Outline Political map of India.**

**C. Practical Work**

**Unit 1: Fundamentals of Maps**

- z Maps -types; scales-types; construction of simple linear scale, measuring distance; finding direction and use of symbols.
- z Latitude, longitude and time.
- z Map projection- typology, construction and properties of projection : Conical with one standard parallel and Mercator's projection.

**Unit 2: Topographic and Weather Maps**

- z Study of topographic maps (1 : 50,000 or 1 : 25,000 Survey of India maps); contour cross section and identification of landforms-slopes, hills, valleys, waterfall, cliffs; distribution of settlements.
- z Aerial Photographs: Types & Geometry-vertical aerial photographs; difference between maps & aerial photographs; photo scale determination.
- z Satellite imageries, stages in remote sensing data-acquisition, platform & sensors and data products, (photographic & digital).
- z Identification of physical & cultural features from aerial photographs & satellite imageries.
- z Use of weather instruments: thermometer, wet and dry-bulb thermometer, barometer, wind vane, raingauge.
- z Use of weather charts: describing pressure, wind and rainfall distribution.

**Unit 3: Practical Record Book and Vivavoce'.**

## 7. PSYCHOLOGY

### Theory

One Theory Paper  
Unitwise weightage

3 Hours

Marks : 70

Units	Marks
<b>Foundations of Psychology</b>	
I. Introduction to Psychology	08
II. Methods of Psychology	09
III. The Bases of Human Behaviour	08
IV. Human Development	07
V. Sensory and Perceptual Processes	08
VI. Learning	08
VII. Human Memory	08
VIII. Language and thought	07
IX. Motivation and Emotion	07
Practicals (Projects, experiments, small studies)	30

### Foundations of Psychology

#### UNIT I: INTRODUCTION TO PSYCHOLOGY

**08 Marks**

The unit seeks to help understanding and appreciating psychology as a discipline, its applications and relationships with other sciences through appropriate and interesting examples and analysis of everyday experiences.

Nature of psychology; Basic concepts: Person, States of Consciousness: Sleep and Wakefulness and altered States of Consciousness, Behaviour and Experience: Similarities and variations in psychological attributes; Evolution of the discipline of psychology; Developments in psychology in India; Psychology and other disciplines; Linkages across psychological processes. Emerging perspectives: evolutionary, cultural and positive psychologies.

#### UNIT II: METHODS OF PSYCHOLOGY

**09 Marks**

The objective of this unit is to familiarize with the methods of studying and understanding Qualitative method, psychological questions and issues.

Goals of psychological enquiry; Some important methods: Observation, Naturalistic, Experimental; Correlational study; Interview, Case study; Psychological tools: Tests, Questionnaires and gadgets; Qualitative Methods, Quantitative Analysis of data: Concepts and computation of the Measures of Central Tendency: Graphical Presentation of Data: Bar, Histogram, Polygon; Ethical issues in the study of psychological processes.

### **UNIT III: THE BASES OF HUMAN BEHAVIOUR**

**08 Mark**

This unit focuses on the role of biological and socio-cultural factors in the shaping of human behaviour and experience.

Evolutionary perspective on human behaviour; Biological and cultural roots; Nervous system and endocrine system: Structure and relationship of with behaviour and experience; Brain and behaviour, Role of Neurotransmitters in behaviour. Sleep and weakfulness. Genetic bases of behaviour; Culture and human behaviour: Socialization, Enculturation and Acculturation; Globalization; Diversity and pluralism in the Indian context.

### **UNIT IV: HUMAN DEVELOPMENT**

**07 Marks**

This unit deals with variations in development and the developmental tasks across the life span.

Meaning of development; Factors influencing development; Contexts of development; Overview of developmental stages: Prenatal development, Infancy, Childhood, Adolescence (particularly issues of identity, health, social participation and moral development), Adulthood and Old age.

## **UNIT V: SENSORY AND PERCEPTUAL PROCESSES**

**8 Marks**

This unit aims at understanding how various sensory stimuli are received, attended to and given meaning.

Knowing the world; Nature of stimuli; Nature and functioning of sense modalities; Sensory Adaptation; Attention : Nature and determinants; Selective and sustained attention; Principles of perceptual organization; Role of perceiver , characteristics in perception; Pattern recognition; Perceptual phenomena : After images; Space Perception, Perceptual constancy, Illusions, Person perception; Socio-cultural influences on perception.

## **UNIT VI : LEARNING**

**8 Marks**

This unit focuses on how human beings acquire new behaviour and how changes in behaviour take place.

Nature of learning and learning curve: Paradigms of learnings: Classical and Operant Conditioning, Observational Learning, Cognitive learning, Verbal learning, Concept learning, skill-learning; Factors facilitating learning; Transfer of learning: Types and Applications, Learning styles: Learning disabilities; Some Applications of learning principles.

## **UNIT VII : HUMAN MEMORY**

**8 Marks**

This unit deals with how information is received, stored, retrieved and lost. It will also discuss how memory can be improved.

Nature of memory; Information Processing Approach; Levels of processing; Memory systems - Sensory memory, Short-term memory, Long -term memory; Knowledge representation and organisation in memory; Memory as a constructive process; memory and emotions; prospective memory; Nature and causes of forgetting; Enhancing memory; Brain and memory.

## **UNIT VIII : LANGUAGE AND THOUGHT**

**07 Marks**

*This unit deals with thinking and related processes like reasoning, problem-solving, decision making and creative thinking and relationship between thought and language.*

Building blocks of thinking: Thought and language: Nature and interrelationship; Stages of cognitive development: Introduction to the ideas of Piaget and Vygotsky, Development of language and language use; Reasoning: Problem-solving; Decision making; Creative thinking: Nature, process and development.

## **UNIT IX: MOTIVATION AND EMOTION**

**07 Marks**

*This unit focuses on why human beings behave as they do. It also deals with how people experience positive and negative events and respond to them.*

Human existence and nature of motivation; Biological needs; Social and psychological motives: Achievement, Affiliation and Power, Maslow's hierarchy of needs; Emerging concepts: Competence, Self efficacy and Intrinsic Motivation; Nature of emotions; Physiological, cognitive and cultural bases of emotions; Expression of emotions; Positive emotions: Happiness, Optimism, Empathy and Gratitude; Development of positive emotions; Managing negative emotions such as anger and fear.

## Practicals (Projects, experiments, small studies, etc.)

30 Marks

The students shall be required to undertake one project and conduct one experiments. The project would involve the use of different methods of enquiry and related skills. Practical would involve conducting experiments and undertaking small studies, exercises, related to the topics covered in the course (e.g. Human development, Learning, Memory, Motivation, Perception, Attention and Thinking).

(i) Practical (Experiments) file	05 Marks
(ii) Project File	05 Marks
(iii) Viva Voce (Project and experiments)	05 Marks
(iv) One experiment : (05 for conduct and 10 for reporting)	15 Marks

## 8. SOCIOLOGY

One Paper Theory

3 Hours

Unitwise Weightage

Marks: 80

Units	Marks
<b>A. Introducing Sociology</b>	<b>34</b>
1. Society, Sociology and relationship with other social sciences	6
2. Basic Concepts	8
3. Social Institutions	10
4. Culture and Society	10
5. Practical Sociology : Methods & Techniques: <b>Evaluated through Practical</b>	
<b>B. Understanding Society</b>	<b>46</b>
6. Structure, Process and Stratification	10
7. Social Change	10
8. Environment and Society	10
9. Western Social Thinkers	8
10. Indian Sociologists	8

## Practical Examination

**Max. Marks 20**

**Time allotted : 3hrs**

**Unitwise Weightage**

<b>A. Project (undertaken during the academic year at school level)</b>	<b>07 marks</b>
i. Statement of the purpose :	2 marks
ii. Methodology / Technique :	2 marks
iii. Conclusion :	3 marks
<b>B. Viva - based on the project work</b>	<b>05 marks</b>
<b>C. Research design</b>	<b>08 marks</b>
i. i Overall format :	1 mark
iii. Research Question/Hypothesis :	1 mark
iv. Choice of technique :	2 marks
v. Detailed procedure for implementation of technique :	2 marks
Limitations of the above technique :	2 marks

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**A. INTRODUCING SOCIOLOGY** **Marks**

**UNIT 1: SOCIETY & SOCIOLOGY AND RELATIONSHIP WITH OTHER SOCIAL SCIENCES**

- z Introducing Society: Individuals and collectivities. Plural Perspectives
- z Introducing Sociology: Emergence. Nature & Scope. Relationship to other disciplines

**UNIT 2: BASIC CONCEPTS**

- z Social Groups
- z Status and Role
- z Social Stratification
- z Social Control

**UNIT 3: SOCIAL INSTITUTIONS**

- z Family and Kinship
- z Political and Economic Institutions

- z Religion as a Social Institution
- z Education as a Social Institution

#### **UNIT 4: CULTURE AND SOCIETY**

- z Culture. Values and Norms: Shared, Plural, Contested
- z Socialization: Conformity, Conflict and the Shaping of Personality

#### **UNIT 5: PRACTICAL SOCIOLOGY: METHODS & TECHNIQUES**

- z Tools and Techniques: Observation, Survey, Interview
- z The Significance of Field Work in Sociology

### **B. UNDERSTANDING SOCIETY**

#### **UNIT 6: STRUCTURE, PROCESS AND STRATIFICATION**

- z Social Structure
- z Social Processes: Cooperation, Competition, Conflict
- z Social Stratification: Class, Caste, Race, Gender.

#### **UNIT 7: SOCIAL CHANGE**

- z Social Change: Types and Dimensions; Causes and Consequences.
- z Social Order: Domination, Authority & Law; Contestation, Crime & Violence
- z Village, Town & City: Changes in Rural & Urban Society

#### **UNIT 8: ENVIRONMENT AND SOCIETY**

- z Ecology and Society
- z Environmental Crises and Social Responses

#### **UNIT 9: WESTERN SOCIAL THINKERS**

- z Karl Marx on Class Conflict
- z Emile Durkheim on Division of Labour
- z Max Weber on Bureaucracy

#### **UNIT 10: INDIAN SOCIOLOGISTS**

- z G.S. Ghurye on Race and Caste
- z D.P. Mukerji on Tradition and Change

10 Marks



- z A.R. Desai on the State
- z M.N. Srinivas on the Village

## 9. Philosophy

### THEORY

**One Theory Paper**

**Time: 3 Hours**

**100 Marks**

**Unitwise Weightage**

<b>Units</b>	<b>Marks</b>
<b>Scientific Method</b>	
1. Methods of Natural and Social Sciences	10
2. Observation and Experiment	10
3. Science and Hypothesis	10
4. Mill's Methods of Experimental Inquiry	10
5. Nyaya Theory of Knowledge (General Survey)	10
<b>Logic</b>	
6. The nature and subject matter of logic	06
7. Terms and Propositions	15
Relation between Propositions	
8. Categorical Syllogism	10
9. Elements of Symbolic Logic	06
10. Buddhist Formal Logic	13

**UNIT 1 : METHODS OF NATURAL AND SOCIAL SCIENCES**

Value of Science. Nature and aim of Scientific Methods: Difference between Scientific induction, and Induction by simple enumeration. Difference between methods of Natural Sciences and Social Sciences.

**UNIT 2 : OBSERVATION AND EXPERIMENT**

Their Differences; fallacies of observation.

**UNIT 3 : SCIENCE AND HYPOTHESIS**

The place of hypothesis in scientific method. Formulation of relevant hypothesis. Formal conditions of valid hypothesis. Hypothesis and crucial experiments.

**UNIT 4 : MILL'S METHODS OF EXPERIMENTAL INQUIRY**

The method of  
agreement; The method  
of difference;  
The joint method of agreement and  
difference; The method of concomitant  
variation;  
The method of residue

**UNIT 5 : NYAYA THEORY OF KNOWLEDGE**

General Survey – Prama, Pramana, Pramanya, Pratyaksa, Anumana, Upamana, Sabda

**LOGI  
C**

**UNIT 6: THE NATURE AND SCOPE OF LOGIC**

What is Logic? Use and application of Logic. Difference between Truth and Validity

**UNIT 7 : TERMS AND PROPOSITIONS**

Definition of Term; Denotation and Connotation of Terms. Definition of Proposition and traditional classification of Propositions. Distribution of Terms.

**Relation between Propositions**

Traditional Square of Propositions

**UNIT 8: CATEGORICAL SYLLOGISM**

Its definition: Rules of valid syllogism and Fallacies.

## **UNIT 9 : ELEMENTS OF SYMBOLIC LOGIC**

Value of using symbols in Logic  
Basic Truth-tables.

## **UNIT 10 : BUDDHIST FORMAL LOGIC : THEORY OF ANUMAN**

### **Suggested reference:**

#### **A. English**

- |                                 |                              |
|---------------------------------|------------------------------|
| 1. Bhola Nath Roy               | Text-book of Inductive Logic |
| 2. Bhola Nath Roy               | Text-book of Deductive Logic |
| 3. I.M. Copi                    | Introduction to Logic.       |
| 4. S.C. Chatterjee              | Nyaya Theory of Knowledge    |
| 5. C. D. Bijalrav               | Indian Theory of Knowledge   |
| 6. S. R. Bhatt and Anu Mehrotra | Buddhist Epistemology        |

# 10. FASHION STUDIES

## UNIT - I : INTRODUCTION TO FASHION STUDIES

10 Marks

### Objectives of the course

1. To learn appropriate fashion terminology
2. To understand the fashion business
3. To gain knowledge of the working and interrelationships of different industries and services that comprise fashion business
4. To differentiate and appreciate the nuances of fashion terminology

### Learning outcome

1. After finishing the course, the students shall be able
2. To use appropriate terminology used in fashion world
3. To understand the interrelationship in fashion business
4. To get the overview of fashion

### Course content

1. Fashion-definition of fashion in all its aspects.
2. Style-the definition of style and differentiation from fashion.
3. Trend-definition of the term, origin of trends and fashion.
4. Understanding the similarity and difference between design art and craft.
5. Understanding the role of fashion professionals like designer, stylist, merchandiser and coordinator.

6. Fashion Cycle, International Trade in Fashion.
7. The various aspects of fashion business. designing, manufacturing and retailing scenarios for apparel.

**Methodology of teaching:** Illustrated lectures with slides and visuals

**Reference Text:** Concept to consumer, by Gini Stephens Frigns  
Inside Fashion Business, by v. Jeanette A. Jarrow, Miriam Guerrero,  
Beatrice Judelle

## **Unit. II: Introduction to Fabrics**

**20 Marks**

### **Objectives of the course**

1. To initiate students into the world of fabrics
2. To introduce students to the origin and properties of natural, manmade and synthetic fibres and fabrics.
3. To make students aware of spinning, weaving, knitting and bonding etc.
4. To teach the students behavior of fabrics in terms of use and performance.
5. To brief them about various finishes.

### **Learning outcome**

1. After finishing the course, the students shall be able
2. To identify and differentiate between fabric varieties
3. To understand the various processes of fabric manufacturing
4. To understand the various kinds of finishes both of routine nature and special finishes that enhance performance and aesthetics of the fabric.

### **Course content**

1. Uses of fabrics-for various categories of apparel.
2. Understanding the characteristics and properties of natural, synthetic and manmade fibres and blends.
3. Conversions of fibres into yarns, novelty yarns, difference between thread and yarn.
4. Conversion of yarns into fabrics using looms & knitting machines etc. illustrated through actual fabric samples.
5. Understanding different type of routine fabric finish - from grey fabric to fully finished fabric.
6. Performance finishes: fabric finishes enhancing properties of fabrics such as shrink resistance, permanent press, flame retardant etc.

7. Aesthetic finishes: Fabric finishes for value addition of the fabrics such as printing, embossing, dyeing etc.
8. Product Cycle and the link between yarn, fabric and garment.

**Teaching Methodology:** Illustrated lectures with slides and visuals along with actual fabric samples. A teacher would be expected to create a library of fabrics to explain conduct the classes.

**Reference Text: ‘Textiles’ by Sara Kadolph & Anna Langford Essentials of Textiles, by Marjorie Joseph.**

### **UNIT - III: ELEMENTS OF DESIGN**

**20 Marks (Theory)**

**15 Marks (Practical)**

#### **Objectives of the course:**

1. To introduce the students to the basic elements of design
2. To increase and build sensitivity to the forms around them
3. To develop and initialise a design vocabulary, an essential tool for practicing as designers
4. To create visual images with a greater variety of methods and materials to provide unexpected excitement and solutions.

#### **Learning outcome**

After finishing the course, the students shall be able

1. To demonstrate enhanced ability and sensitivity to elements of design
2. To use their developed ability to observe finer details around them
3. To develop basic design language
4. To relate the elements of design to understand design process for their projects

#### **Course content**

1. Understand the concept of design.
2. Understanding line as an important element of structure that determines the direction of visual interest in the context of a garment.
3. Understanding 2D and 3D forms.
4. Understanding the colour quality, intensity, relationship with other colours, textures, shape etc.
5. Selection of fabric for its appearance and texture- fibre, yarn, manufacturing technique, finish and colour.

6. Harmony to achieve the condition in which all the elements of design work together successfully.
7. Understanding of balance and proportion to enable the students to emphasize or to underplay and certain elements.

**Teaching Methodology:** Illustrated lectures with slides, visuals and demonstrations wherever required.

**Evaluation Criteria**

Understanding of the assignment given

Quality of the work submitted

Daily assessment to be done after each student presents their work

Marks would be given for level of improvement of work

10% marks to be given for punctuality, regularity and sincerity

Timely completion of the project

**Reference Text:** 'Grafix' by Wolfganghageney  
 Repeat pattern-Peter Phillips, Gillian Bunce  
 Design Elements 2 -Richard Hora

**UNIT - IV : ELEMENTS OF GARMENT MAKING**

**20 Marks (Theory)**  
**15 Marks (Practical)**

**Objectives of the course**

1. To Introduce the students to garment making
2. To make them familiar with sewing machine and its parts
3. To make them familiar with use of other sewing aids
4. To teach them basic hand and machine stitches
5. To teach them simple machine operations

**Learning outcome**

After finishing the course, the students shall be able

1. To work proficiently on the sewing machine
2. To rectify simple problems of the machine
3. To stitch different seams on the machine
4. To finish edges with hand stitches
5. To make gathers, pleats and tucks on the fabric

## **Course content**

1. Introduction to sewing machine, its various parts and functions along with other sewing aids.
2. Understanding the simple problems of sewing machine and its maintenance.
3. Develop proficiency in straight and curved seams.
4. Basic hand stitches - basting, hemming, back stitch, running stitch etc. with their end use.
5. Basic machine seams used for stitching or finishing various parts of the garments like plain seam
6. French seam, flat fell, lapped etc.
7. Fabric manipulation like gathers, pleats and tucks etc.

**Teaching Methodology:** Illustrated lectures with slides, visuals and demonstrations where ever required.

## **Evaluation Criteria**

Understanding of the assignment given

Quality of the work submitted

Daily assessment to be done after each student presents their work

Marks would be given for level of improvement of work

10% marks to be given for punctuality, regularity and sincerity

Timely completion of the project

**Reference Text:** Encyclopaedia of Dressmaking, by Marshall Cavendish

Readers Digest book of Sewing, Encyclopedia of Sewing.

## **Fashion Studies (Practicals)**

Exercises using elements of art like line, form, colour, texture, space etc. following the principles of design

Exercises on colour wheel, value chart, intensity chart, colour schemes

Exercises on hand stitches - basting, running, hemming, back stitch and its variations

Seams - plain, French, lapped, flat fell, Hongkong, eased and top stitched

Gathers, pleats and tucks

End term project

Viva voce and portfolio