HISTORY (HIST)

Class - XI
Theory-80 marks
Project-20 marks

1. Understanding History

1.1 Pre-History, Proto-History, History.
   Early sources and their nature.
   Forms of recorded History.
   Facts and their interpretation.
   Ithasas-Purana tradition.
   Indo-Persian traditions of History writing in Medieval India

1.2 Notion of time in History: Linear and Cyclical.
   Periodisation in History and chronological sequencing.
   Rationale behind: a) conventional tripartite divisions.
   b) Recent trends in periodisation.

1.3 Time frame and focus covered in class XI: focus on main markers and transitions.

2. From Primitive Man to Early Civilizations.

2.1 Epochs in the stream of time: A brief outline of archaeological cultures- Pleistocene, Paleolithic, Neolithic, Chalcolithic.

2.2 Early Africa and Primitive Man - Hunter-gatherers and their culture. Changing Climates; Landscape features; migrations.

2.3 Early Pastoralists and Agriculturists; Riverine Civilizations:
   a) Indian subcontinent: Mehergarh and Harappa (First Urbanisation)
   b) Egypt and Sumer.


3.1 City-States: Classical Greece.

3.2 Monarchies: From Janapadas to Mahajanapadas (Chiefdoms to Kingdoms).

3.3 Empires: Definition; Difference with Monarchy.
   Empires compared:
   a) The Mauryan Empire and Macedonian Empire.
   b) The Roman Empire and The Gupta Empire.
   c) The Mughal Empire and The Ottoman Empire.


4.1 Nature of the State: The ideal Proto-type.
   a) Indian context: Kautilya, The Arthashastra and State Craft; Ziauddin Barani, Fatawa-i-Jahandari and the nature of the State under the Delhi Sultans.
b) European context: Cicero and the Roman World, Thomas Cromwell and the New Monarchy; Intellectual underpinnings of the Early Modern State.

4.2 Apparatus of Governance:
   a) Persia: Satraps.
   b) China: Mandarins.
   c) Delhi Sultanate: Iqtadars.
   d) Mughal: Mansabadars.

5. Aspects of Economy.

5.1 Slave Economy and Slavery as an Institution:
   a) Rome and Egypt
   b) India

5.2 Feudal Economy:
   a) Western Europe, The Classical Model
   b) Indian experiences: Gupta Empire and The Delhi Sultanate;

5.3 Trade and urbanisation. Between Expansion and Contraction: European and Indian Experiences compared.

6. Dynamics of Society.

6.1 Social Stratification:
   a) Slave Society: Greece-Helot, Periocei, and their relationship with Citizens.
   b) Varna and Jati (special mention of Forest-dwellers viz Nisadas)
   c) Fallen Ksatriyas- Yavanas, sakas, Hunas
   d) Rajputs as a status group.

6.2 Women in society: Indian context.
   a) Education of Women
   b) Forms of Marriage and the Household
   c) Inheritance and Property Rights (Streedhan)

7. Religion.

7.1 Religion and the State:
   Akbar, Din-i-llahi and Sulh-i-Kul
   b) Western Europe: The Holy Roman Empire and papacy.
   Crusades.
   c) Arab World: The Universal Caliphate.

7.2 Religion and Society:
   a) Vedic religion.
   b) Polytheism and the European context.
   c) New religious movements (Buddhism and Jainism).
   d) Reformation movements in Europe.
8. **Expanding Horizons.**

8.1 Origins of Modern Science: Alchemy to chemistry, Astrology to Astronomy- towards a Solar- centric Universe.

8.2 Technological advances: Agricultural, Military and technologies of Production, Ship building.

8.3 Printing revolution in Western Europe (Mention the contributions of China and the Arab world to the art of printing).

8.4 Geographical Explorations - towards a ‘New world’.

9. **Cultural and intellectual traditions.**

(For Project Work- on any one topic, 750-800 words)

9.1 The European context.
   a) Renaissance - Definition of the term; critiquing the validity of the proposition.
   b) Twelfth Century renaissance.
   c) Renaissance Humanism.
   d) Italian Renaissance - Impact on art, culture and Political thinking; Role of Patronage - different roles of the Pope, the Medicis, The Sforzas, Flemish burghers.

9.2 Systems of Knowledge and Literature: the Indian context.
   a) Schools of Indian Philosophy - an overview
   b) The Sciences, Mathematics, Astronomy, Medicine, Technology.
   c) Court literature: Sangram, Sanskrit, Persian.
   d) Vernacular literature - special reference to Bengali literature (from Charyapada to Vaishnave literature Mangala Kavya and translations).

9.3 Architecture, Sculpture and Painting: The Indian context
   a) Painting: Cave painting (From Bhimbetka to Ajanta), Miniatures (Mughal and Rajputs).
   b) Sculpture: Buddhist, Shaiva, Vaishnave Iconography.
   c) Temple architecture: Chola temples and Bengal Temple architecture
   d) Tombs, Mosques and forts in medieval India.
1. **Remembering the past**
   A: Imagine the past: myths, legends and folk-tales, memory and oral traditions.
   B: Inheritance of the past: the colonial constructs, Indigenous imaginations.
   C: Importance of History as a professional discipline- Methods of “Modern” History writing.
   
   I. Museums as institutions of organising the past.
   II. Brief outline of the development of museums and different types of museums, private collections.

2. **Situating colonialism and imperialism in the 19th & 20th Centuries**
   A. Brief overview of 7th & 18th century colonisation in Asia & the New World.
   C. **The Political Basis of Colonialism**: The necessity of controlling areas on which the imperialist country was economically dependent.
   D. **The Question of Race and its Impact of Colonial Societies**.

3. **The Nature of the Colonial Dominance: formal and Informal Empires**
   A. Case Study 1: India- as a ‘colonised’ state
      
      - How political hegemony was established
      - The instruments of control: Legislature / Bureaucracy / Police / Army
      - The economy of the colonial state: revenue collection --- trade patterns --- Deindustrialisation
      - Intellectual justification of the Empire : Mill, Macaulay an the Utilitarian

   B. Case Study 2 : China - where economic exploitation flourished without formal political control of the imperialist countries
      
      - Domination through economic exploitation - mining rights --- unequal treaties --
        -- the Canton trade
      - A comparative study of the Indian and Chinese experiences

4. **Reaction to Imperialistic Hegemony**
   A. India
      
      - The rise of a middle class - its features --- its acceptance of Western education -- its attitudes to traditional concepts in the social and religious context --- social reform
movements and leaders in Bengal --- Narayan Gure, Veersalingam and others outside Bengal, Sir S.A. Khan and the Aligarh movement.

- Change and transformation in society as a result of the above factors.
- Proliferation of the rural elite: Patidars, Sahukars, money-lenders and middlemen-greater fragmentation of rural classes due to economic reasons.
- The emergence of a new rural elite: patidars, Sahukars, money-lenders and middlemen-greater fragmentation of rural classes due to economic reasons.
- The emergence of an industrial force
- Subaltern groups: Adivasis, Dalits.
- Western ideas and the Indian response:
  - The aspiration of the middle class and its fallouts.
  - Regional cultural responses, in particular, the 'Bengal Renaissance'
  - How Western concepts of ‘time’, ‘health and ‘labour for wages’ brought about a change in Indian society and the local mindset.

B: China

- Emergence of a Western educated class- the influence of Christianity --- the scholars’ response- May Fourth Movement.

C: Migration of indentured labourers: formation of the Indian and Chinese Diaspora.

5. Governing the Colonial State India

- Govt. of India Acts of 1909, 1919, and 1935 at tools for limiting franchise, introducing communal electorates, maintaining administrative control and British hegemony
- The state machinery for suppressing freedom of expression e.g. the Rowlett Act and military / police control:
- The Jalianwala Bagh incident / the Meerut Conspiracy Case
- Divide and Rule policy: using community/caste/perceived/ ethnic groupings to divide and anti-colonial movement, e.g., supporting the demands of the Muslim League; the Communal Award of 1932; interfering in caste politics such as the temple entce issue
- The Princely states and the British Government: the creation of an alternative loyalist base
- Economic policies from 1914 to 1945 e.g. limited industrialisation; currency regulation after the First World War; high taxation even in famine conditions: (Gujarat, 1918,1928): the Bengal Famine

6. The Second World War and the Colonies

A: India, 1940-46

Linlithgow Offer --- Cripps Mission --- the Indian response and the Quit India Movement-Subhas Bose and the INA - INA Trials --- RIN Revolt - the backdrop to the Transfer of Power: The British government’s role: Cabinet Mission - Constituent Assembly - Mountbatten’s negotiations - Mountbatten Award - Transfer of power - The Indian response.
B: Japan and the Second World War

‘Asia for Asians”--- Japan and China - Japanese advance through South-East Asia and the consequent linking up with the INA.

C: Changed situation in the European colonial in S.E. Asia, e.g. Indochina and Indonesia.

7. The Era of the Cold War

A: The Cold War

Theoretical basis --- inception---developments from 1942 to 1948 --- the Truman Doctrine and the Marshall Plan --- the military alliances --- Impact---the Berlin Crisis---Eastern Europe under the U.S.S.R. ---Suez Crisis---Cuban Missile Crisis---Korea and Vietnam

B: The Nuclear Arms Race and Peace Initiatives

C: Non-Alignment

The Political Background ---its principles ---building up the movement ---Bandung, Belgrade and subsequent conference ---an evaluation

D: The Arab World: Israel vs. the Arab World ---Oil Diplomacy

E: People’s Republic of China: Its rise and plae in World Politics.

8. Decolonisation

A: Definition of the term; social, political and economic implications manifestations; development programmes and Nation building.

B: Africa: case study - Algeria.

C: South-east Asia: case study - Indonesia.

D: Nation building in South Asia

- Varying political experiences in South Asia - Emergence of Bangladesh - a brief study of political systems in India, Pakistan and Bangladesh.
- The economic organisation of India - economic planning - heavy industries and technological advances - socialist underpinnings of economic planning - liberalisation, how successful.
- Regional co-operation - SAARC.

9. The New World

(For Project Work-on any one topic, 750-800 words)

A: Interaction of Centripetal and Centrifugal Forces:

Transition from a bi-polar to a unipolar world - its political fallout---Globalisation---the “Clash of Civilisations"
B: Movements of Protest and Dissent

- The Peace Movements: the students’ movements of the ’60s and others
- Democratic and Civil Right Movements: USA/anti-apartheid movement in South Africa/ movements for universal adult franchise / present-day turmoil in the Arab world, Libya, Egypt etc.
- The movement for women's rights
- Environmental movements ---Chipko, Tehri-Garhwal, Narmada Banchao. Keeping alive the conflict between the First and Third Worlds over environmental issues.
- New Social Movements.
- The new economic order (the depression of 2008-11- a crisis of capitalism? ---the emergence of BRIC.)
HOME MANAGEMENT & FAMILY RESOURCE MANAGEMENT (HMFR)

Class - XI
Full Marks 100
Theory - 70 Marks

Unit I: An introduction to Home Management
- The Home – its role and function
- Concept of Home Management, its meaning and definition
- Relevance of the study of this discipline to other fields of Home science
- Family – its type, stages, functions
- Family life in a changing world
- Role of a woman in this changing world
- The nature and role of home management in a changing world

Unit II: Values, Goals and Standards
- Characteristics of values and how family value pattern develops
- Types of goals and why goals change
- Concept of standards and classification of standards
- Interrelatedness of values, goals and standards

Unit III: Family Resources
- Resources – meaning, types:
  i) Human – knowledge, skills, time, energy, attitudes;
  ii) Materials, money, goods, property
  iii) Community facilities, schools, parks, hospitals, roads, transport, water, electricity, fuel, fodder etc.
- Characteristics of resources
- Guides to increasing satisfaction

Unit IV: Child Development and Immunization
- Concept of growth & development; factors affecting growth development. Milestones of development from ages 0 to 12 years.
SYLLABUS

- Periods of growth & development during childhood; from conception to about 12 years of age (infancy, early, childhood, middle childhood and late childhood) – physical, motor, cognitive, emotional social and language development.

- Factors influencing development – development is multi dimensional and interdisciplinary development is continuous and cumulative; it is variable, reflecting individual variation; cultural difference are reflected in development; both heredity and environment influence development.

- Substitute care at home and outside: siblings, grand parents, neighbours creche, day care centres etc. Integrated Child Development Scheme (ICDS) – objectives and functions.

- Protection from preventable diseases: immunization – concept and types (natural and acquired), breast feeding (one of the ways to develop natural immunity); immunization chart; symptoms and incubation period of childhood diseases – TB, DPT, polio, measles, cholera, diarrhoea.

Unit –V  Food and Nutrition

- Relationship of food, nutrition and health.

- Classification of food on the basis of nutrients and functions. Functions of food: physiological, psychological and social.

- Elementary study of macro and micro nutrients. Functions and sources of nutrients: carbohydrates, proteins fats, minerals (iron, calcium, iodine and phosphorous) and vitamins (A, D, E, K, B1, B2, Niascin, Folic Acid & C); role of water and fibre in the diet.

- Recommended Dietary allowances (RDA) for all nutrients mentioned above.

Unit- VI-  Textiles (Fibre to Fabric)

- Textile fibres. Types of fibre:
  I. Natural- cotton, silk and wool
  II. Man-made –nylon, polyester and blended fibres (terrycot, terrysilk, terrywool, cotton silk)

- Identification of fibres – physical and chemical tests

- Fabric construction: Basic procedure of any yarn making (spinning, mechanical spinning, chemical spinning, weaving: plain, twill & stain, other methods – knitting
and nonwoven, effect of weaves on appearance, durability and maintenance of garment.

- Finishing: meaning and importance; types
  I. Basic: cleaning, bleaching, stiffening, tendering
  II. Special: mercerisation, shrinkage control, water proofing, dyeing and printing.

**Unit – VII Interior Decoration**

- Elements of Design and art
- Principles of Design
- Use of colour in interiors – prang’s colour wheel, characteristics of colour, colour schemes

**Unit- VIII First Aid at Home**

- Meaning, aims & scope of first aid
- Bandages and dressings
- Rendering first aid in case of an accident, sprain, fractures, cuts, burns, foreign body, bites, fainting.
1. Prepare materials for stimulating the sensory development of infants.
2. Observe and record the motor development of infants and prepare a chart based on your findings.
3. Identification of fibres – physical and chemical methods
4. Identify different weaves and finishes.
5. Basic stitches, running, hemming, back stitch, blanket stitch
7. Preparing prang’s colour chart and colour harmony
8. Application of elements and principles of design in flower arrangement and floor decoration (Alpana and Rangoli)
9. Application of bandages (roller and triangular)
10. Use of 24 hours dietary recall method to analyze and compare nutritional sufficiency of RDA.

Seminar or group discussion on:
1. Role of women in changing world
2. A comparative study between the rural and an urban homemaker
3. Interrelatedness of goals, values and standards and its implication on individual or family decisions.
4. Impact of working parents on the development of a child.

Marks Allotment:
Practical – 15
Viva - 5
Record Book - 10

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HOME MANAGEMENT & FAMILY RESOURCE MANAGEMENT (HMFR)

Class - XII
Full Marks 100
Theory Marks - 70

Unit-I  The Management Process in Family Living

A. The process of management
   - Steps in management process – planning, organizing, controlling and evaluating.
   - Management process applied to homemaking activities

B. Decision making
   - Importance of decision making in Home Management
   - Process of Decision Making
   - Types of decisions

Unit-II Work Management

A. Management of Time
   - Its importance, steps in time management
   - Time plans – steps in making daily and weekly time plans

B. Management of Energy
   - Its importance
   - Energy requirements for living and household tasks
   - Fatigue – types of fatigue, reducing fatigue

C. Work simplification
   - Definition and its importance
   - Mundel’s classes of change

Unit-III Management of Family Income

- Definition of family income
- Types of income
- Family budget – importance, types, steps in making budget, factors affecting budget
Account keeping – systems guidelines in keeping accounts

A. Savings
   - Objectives of savings
   - Types of savings – compulsory (GPF, CPF) and voluntary (PPF, P.O, savings, banks, LIC policies, LIC schemes, bonds, UTI schemes etc.)

B. Investments
   - Types of investment
   - Principles involved in investments

C. Fundamentals of banking
   - Opening and operating a bank account, types of cheques, fillings a deposit slip, procedure for making a Demand Draft, use of ATM, debit & Credit cards

D. Credit
   - Meaning and sources
   - Types – charge account, mortgage, instalment, sales contract
   - Wise use of credit

Unit- IV Adolescence & Adulthood
   - Physical development during adolescence. Physical development during puberty and adolescence; changes in body proportions and its effects; influence of sports and exercise on physical fitness.
   - Cognitive development and language. Language and communication – development of language; influence on language development; development of ways in which adolescents obtain information, remember it and utilize it for problem solving and reasoning.
   - Social and emotional. Socio-cultural influences on the adolescents – teenagers are influenced by social relationships in the family, neighbourhood, community, country and the world.
   - The family and socialisation – patterns of parenting, parental control techniques; role of siblings and grand parents. Development of peer relationship and friendship patterns.
   - Development of gender roles and stereotypes. Role of school and teachers on the social and emotional development of the teenager.
   - Some problem of adolescence; awkwardness due to growth spurt, freedom and control; depression, alcohol, drugs and smoking,
delinquency, problem related to sex, ignorance and increased curiosity, prevention of HIV/AIDS and other sexually transmitted diseases.

- Perspectives on Adult Development: meaning of adulthood. Transition to adulthood and accepting related responsibilities, dimensions of adulthood (premarital counselling, interpersonal relationship in a family life, concept of family planning and personal health).
- Issues of increasing life expectancy, sensitizing students to the needs and care of the elderly.

**Unit – V  Meal planning for the family**

- Factors affecting food selection. An understanding of how food consumption varies from one family to another; how food selected by families is affected by various factors like age, occupation, gender, physiological conditions, personal likes and dislikes, tradition, seasonal availability, economic considerations, religious beliefs, family size and composition.
- Balance diet.
- Meal planning for various age groups; preschool children, school-age children, adolescents, pregnant and lactating women, old age. Making meal plans for these age groups based on their nutritional requirement and RDA.
- Developing good food habits - importance of breakfast, following regular meal patterns, avoiding junk food and skipping of meal.

**Unit- VI  Clothing Management**

- Selection of clothing: clothing and its relation to personality; elements of line, colour, texture; elements of design – balance, rhythm, proportion, harmony, emphasis, age, climate, occupation, figure, occasion, fashion, purpose, quality, cost, season, reliable shop.
- Care of clothes: general principles and precautions to the followed while removing stains and washing: dry cleaning agents: soaps and detergents (basic differences).
- Storage of clothes.
Unit- VII  The organisation of work in the home
- Daily, weekly and periodic cleaning
- List of cleaning equipment and materials
- The operation, maintenance and care of household equipment- solar cooker, pressure cooker, toasters, mixers, oven, iron, refrigerators.
- House pests and their control

Unit- VIII  Family Housing
- Need and importance of Housing
- Factors influencing choice of a house
- Choice of furnishing materials for interiors: curtains, carpets & rugs, upholstery, bed, table linen.
- Materials used for furniture (wood, its derivatives, metals, glass, plastic, wicker etc.)
- The arrangement of furniture in different rooms
- Accessories in interiors: Importance and types (floor, wall and table top)

Unit- IX  Consumer and Extension Education
A. Consumer Education
- Meaning, problems faced by consumers
- Consumer protection Act and Services
- Consumer Aids – Labels, Standards, Advertising, Guidebooks, Leaflets
- Consumer Redressal Forum

B. Extension Education
- Methods of communication – individual, group and mass contacts.
  Individual – verbal and written
  Group – discussions, demonstrations, fieldtrips.
  Mass – Print and Electronic.
- Role of audio visual aids in Communication & Extension.
HOME MANAGEMENT & FAMILY RESOURCE MANAGEMENT (HMFR)

Class - XII

Practical Marks : 30

1. Preparing a chart on:
   a) Activities carried out in a day by a working and non working homemaker.
   b) To prepare a daily and weekly time schedule for self.
2. A) To collect account opening forms (savings, current, recurring) and pay – in – slips and to learn filling up process.
   B) To learn about writing of cheques, withdrawal forms.
3. To prepare family budget of different income groups.
4. Methods of keeping household accounts.
5. Preparing reading materials i.e. colour books, alphabet books,
   Counting books, nursery rhymes books, building blocks etc. In the laboratory.
7. a) Removal of stains from fabrics.
   b) Principles of simple method of dyeing or printing textile in the laboratory.
8. Cleaning and polishing of articles – metals, glass, leather.
9. Making furniture/floor layout for living room, dining room, bedroom, Bathroom and kitchen.
10. Collect and analyze labels of various food products, medicines and anyone household equipment.

Marks Allotment:
Practical 15
Viva 05
Record Book 10
1. **Definition of Journalism & Mass Communication**
2. **Different types of journalism & mass communication**
3. **Print Journalism:**
   a) Newspaper as a recorder of news & events; Newspaper as an organ of public opinion; Newspaper as an instrument of social service and as a promoter of democracy; impact of newspaper on society
   b) News: Definition; News sources; Different types of news; News Agencies—their services and functions; Different International News Agencies
   c) Different Departments/Sections of a Newspaper Organization—their duties & responsibilities
   d) Functions & responsibilities of the Editor; Editorial Freedom
   e) Functions & responsibilities of News Editor;
   f) Duties & functions of Chief Sub-Editor and Sub-Editors
   g) Duties, responsibilities & qualities of a Chief Reporter
   h) Duties & responsibilities of a Reporter
   i) News writing: Different structures of news writing (inverted pyramid structure); Intro; Lead; Language of news writing; Objectivity
   j) Writing techniques on society, fashion, music & arts, education, employment opportunities, health, environment
   k) Feature: Definition, different types

**Project (any one)—15 Marks**

a) Writing news reports; Headlines; Intro
b) Writing Short Feature
c) Editorial Writing
   and
**Viva-Voce—05 Marks**
SYLLABUS

JOURNALISM & MASS COMMUNICATION
(JMCN)

Class - XII

Full Marks - 100

Full Marks: 80 (Theory)+ 20 (Project)

1. Editing: Principles of editing; Copy Testing; Processing Copies
2. Making Headlines of news stories; Importance; Rules to be followed; Different types of Headlines
3. Proof Reading: Symbols of Proof reading; duties & responsibilities of proof readers
4. Copy writing: Types of Copy; How to prepare; Principles of writing, Main features
5. Copy Writer: Qualities, duties & responsibilities
6. Communication: Definition, Scope & Functions
7. Mass Communication: Definition, Scope & Functions; Theories & Models
8. Mass Media: Definition, Different types, functions, Print Media and Electronic Media
9. Specialization in Reporting: Science, Political, Administration, Crime, Fashion, Financial & Agriculture journalism; Sports journalism
10. Interpretative & Investigative reporting: Importance & Scope; Basic qualities; planning & style.

Project (any one)—15 Marks

a) Editing news copy & Proof reading
b) Copy writing
c) Specialized report on any one topic from the syllabus

Viva-Voce—05 Marks
SYLLABUS

MUSIC (MUSC)

Class - XI

FULL MARKS - 100
[THEORETICAL -45 & PRACTICAL -55]

THEORETICAL - 45
GROUP-A (MARKS-23)
GROUP-B (MARKS-22)

GROUP-A

1. Life Sketch with Musical Contribution from the list given below: [7M]
   a) Mian Tansen
   b) Ustad Allauddin Khan
   c) Hafez Ali Khan
   d) Sri Krishna Narayan Ratanjankar

2. Description and function of the following Instruments: [6M]
   a) Esraj
   b) Sarode
   c) Pakhwaj

3. Definitions of: [4M]
   a) Alankar
   b) Naad
   c) Grama
   d) Matra
   e) Laya

4. Knowledge of Hindusthani Notation System.
   VOCAL: Both Vilambit and Drut in Ektal and Trital respectively. [6M]
   a) Yaman
   b) Behag
c) Brindabani Sarang
d) Bhairab

INSTRUMENTAL
Mashidkhani and Razzakhani Gats in Trital of the above mentioned Ragas.

GROUP-B
Rabindra Sangeet and other Music

1. Rabindra Sangeet
   a) Knowledge of Akar Matrik Notation System [5M]
   b) Life Sketch of Rabindranath Tagore (Covering Music Composition) [6M]
      (ক) বাল্যজীবনে সঙ্গীতের প্রভাব
      (খ) রবীন্দ্রনাথের সঙ্গীতের সঙ্গীত

2. Other Types of Music
   Life Sketch of any one of the following (covering music composition) [6M]
   a) Dwijendra Lal Roy
   b) Rajani Kanto Sen
   c) Gopal Ude.

3. Life Sketch with their Musical contribution of the following. [5M]
   a) Meera Bai
   b) Lalan Fakir

N:B: All the Talas mentioned in Practical syllabus should be learnt with “TALA-LIPI” system.
SYLLABUS

MUSIC (MUSC)

Practical – 55

GROUP-A (MARKS-21)
GROUP-B (MARKS-12)
GROUP-C (MARKS-12)
VIVA-VOCE (MARKS-10)

GROUP-A

VOCAL

1. KHAYAL: Both Vilambit and Drut in Ektal and Trital respectively (Atleast two Vilambit Khayals in following Ragas ) [8+6M]
   a) Yaman
   b) Behag
   c) Brindabani Sarang
   d) Bhairab.

INSTRUMENTAL

Mashidkhani and Razzakhani Gats in the above mentioned Ragas in Trital.

2. Any one Dhrupad with Dwigun Laya in above mentioned Ragas. [7M]

INSTRUMENTAL

Any One “Dhun” to be learnt from the Rages mentioned below:
   (a) Bhairabi
   (b) Pilu.

GROUP-B

1. RABINDRA SANGEET: [6+6=12]
   a) TYPES: Dhrupad, Western and Baul Styles.
b) **TALS:** Jhampak,Sasthi,Chowtal,Ektal,Teora,Kaharba and Dadra.

c) **PARYAS:** Puja,Bichitra,Swadesh,Prem,Prakriti.

**GROUP-C**

1. **OTHER TYPES OF MUSIC:** (May use Harmonium)
   
a) Dwiyendra Geeti [4M]
   
or

b) Rajanikantor Gaan

c) Bhajan [4M]
   
or

d) Regional Folk song (Atleast Two songs)

e) Songs of “Theatre” or “Jatra” or Songs of Sachin Deb Burman. [4M]

**VIVA-VOCE**

NOTATION READING [4M]

IDENTIFICATION OF RAGA [3M]

IDENTIFICATION OF TALA [3M]
MUSIC (MUSC)

Class - XII

FULL MARKS - 100
THEORETICAL -45
PRACTICAL -55

THEORETICAL - 45
GROUP-A (MARKS-23)
GROUP-B (MARKS-22)

GROUP-A

1. Life Sketches with Musical contribution from the list given below: [7M]
   a) Amir Khusro
   b) Ustad Sadarang
   c) Pt. V.N.Bhatkhande
   d) Ustad Enayat Hussain Khan.

2. Description and Function of the following Instruments. [6M]
   a) Tambura
   b) Tabla- Bayan
   c) Sitar

3. Definitions of: [4M]
   a) Swara
   b) Raga
   c) Murchhana
   d) Tala
   e) Shruti

4. Knowledge of writing of Hindusthani Notation System.

VOCAL
Both Vilambit and Drut in Ektal and Trital respectively. [6M]
   a) Kedar
   b) Malkous
SYLLABUS

c) Bageshri
d) Jaunpuri

**INSTRUMENTAL**

Mashidkhani and Razzakhani Gats in Trital in the above mentioned Ragas.

**GROUP-B**

**1. RABINDRA SANGEET & OTHER MUSIC**

Rabindra Sangeet:

a) Knowledge of Akar Matrik Notation System. [5M]

b) Life Sketch of Rabindranath Tagore (covering Music Composition) [6M]

(ক) রবীন্দ্র সঙ্গীতে শাস্ত্রীয় সঙ্গীতের প্রভাব

(খ) রবীন্দ্র তৃত্তোতল: সম্প্রপক, সত্যত, রুপক, নকতাল, একাদশী, নবপঞ্জতাল

**2. OTHER TYPES OF MUSIC:**

(i) Life sketch with their Musical contribution of the following: [6M]

a) Atul Prasad Sen

b) Kaji Nazrul Islam

c) Girish Chandra Ghosh

ii) History of any one of the following:

a) Regional folk song (Bhatiali, Baul, Jhumur, Bhawaiya).

b) Kirtan.

_N:B: All the Talas mentioned in Practical Syllabus should be learnt with “TALA-LIPI” system._
GROUP-A

VOCAL

1. Both Vilanabits and Drut in Ektal and Trital respectively (Atleast two Vilambit Khayals in Following Ragas) [8+6M]
   a) Kedar
   b) Malkous
   c) Bageshri
   d) Jaunpuri

INSTRUMENTAL
Mashidkhani and Razzakhani Gats in Trital in the above mentioned Ragas.

2. Any one Dhrupad with Dwigun Laya in the above mentioned Rages. [7M]

INSTRUMENTAL:
Any one "DHUN" to be learnt from the Ragas mentioned below:
   a) Bhairabi
   b) Kafi.

GROUP-B

RABINDRA-SANGEET AND OTHER MUSIC

1. RABINDRA SANGEET [6+6=12M]
   a) TYPES: Khayal, Kirtan, Bhanusingher Padabali.
   b) TALAS: Choutal, Ektal, Teora, Kaharba, Jhamptala, Rupakra, Nabatala, Trital.
   c) PARYAS: Prem, Prakriti and Anusthanik.
1. OTHER TYPES OF MUSIC (May use Harmonium) [4M]
   a) Atulprasad
   or
   b) Nagrulgeeti
   c) Regional folk songs (Atleast two songs) [4M]
   or
   d) Kirtan (In any tala)
   e) Songs of ‘Theatre’or ‘Jatra’or Songs of Salil Chowdhury. [4M]

VIVA-VOCE

NOTATION READING [4M]
IDENTIFICATION OF RAGA [3M]
IDENTIFICATION OF TALA [3M]
SYLLABUS

NUTRITION (NUTN)

Class - XI
Full Marks 100
Theory Marks 70

A. An Introduction to Nutrition
   1. Basic concepts about food nutrition and health.
   2. Role of food in the maintenance of good health.

B. Nutrients and Nutritive Processes and concepts of Calorie
   1. Nutrients in food and food supplying them.
   2. Carbohydrates in nutrition - elementary principles.
   3. Protein and amino acid - their functions and requirements elementary principles, quality of food protein, animal vs vegetable protein – elementary principles.
   4. Fats and oils in nutrition- elementary principles.
   5. Vitamins and minerals- Source, functions and requirements, elementary principles.

C. Cookery and Kitchen Sanitations
   1. Methods of cooking and their effects on nutritive value of foods- measures for the prevention of loss of nutrients.
   2. Planning of an ideal kitchen.

D. Nutrition in Everyday Meal
   1. Daily food pattern
   2. Basic food groups and study of different foods: cereal, pulses, legumes, roots and tubers, leafy and other vegetables, meal, fish, egg and milk and milk products, fats and oils, sugar and jiggery.
   4. Balance diet for different age groups and occupations.

PRACTICAL (30 marks)
   1. Practice using weights and measures.
   2. Cooking of cereals in various way and evaluation of results.
   3. Milk and egg preparations.
SYLLABUS

NUTRITION (NUTN)

Class - XII
Full Marks 100
Theory Marks 70

A. Nutritive Process and concepts of Calorie
   1. Utilization of food by the body: digestion, absorption and metabolism.
   2. Energy requirement during rest, different physical activities and different physiological conditions, e.g. growth, pregnancy and lactation.

B. Dietetics and Diet Planning
   1. Balance diet for pregnant and nursing mother.
   2. Feeding of infants- breast feeding vs. artificial feeding. Infant weaning food.
   3. Defective feeding of infants as a cause of malnutrition.
   4. Formulation of low cost balance diet from locally available cheap foods.
   5. Preparation of simple therapeutic diets.

C. Nutrition for the Community
   1. The common deficiency diseases in India: Protein calorie malnutrition, Vitamin A malnutrition, anemia, goiter, etc.
   2. Supplementary feeding for vulnerable groups.
   3. Nutrition education for the community including cooking demonstrations.
   4. Methods of survey of food consumptions and food habits in families.
   5. Elementary idea about the current National Nutritional Programmes in India.
   6. Use of food value tables and calculation of nutritive value of the diet.

PRACTICAL (30 marks)
   1. Detection of carbohydrate, protein (albumin) and fat in food.
   2. Preparation of nutritious snacks for School Tiffin based on locally available food.
   3. Prepare a liquid diet to alleviate diarrhea.
   4. Prepare a day’s diet for an average adult women, allowances for pregnant and nursing mother.
   5. Carry out diet survey in a family and interpret the results in term of adequacy.

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PHILOSOPHY (PHIL)

Class - XI
Full Marks: 100

Group-A
Western Philosophy (40 Marks)

1. CONCEPT OF PHILOSOPHY
   (a) Nature of Philosophy.
   (b) Main branches of Philosophy—Epistemology, Metaphysics, Ethics, Social Philosophy, Logic.

2. NATURE AND THEORIES OF KNOWLEDGE
   (a) Three principle uses of the verb ‘to know’.
   (b) Proposition knowledge – conditions of Propositional knowledge.
   (c) Rationalism — Origin of Knowledge according to Descartes, Spinoza and Leibnitz.
   (d) Empiricism —Origin of Knowledge according to Locke, Berkeley and Hume.
   (e) Kant’s critical view about Origin of Knowledge in brief.

3. SUBSTANCE
   (a) Concept of Substance.
   (b) Different views of Substance—Aristotle, Descartes, Spinoza, Leibnitz, Berkeley, Hume.

4. CAUSALITY
   (a) Notion of Causal Relation.
   (b) Entailment theory of Causal Relation.
   (c) Hume’s Empirical View of Causal Relation—
      1) Denial of necessary connection between cause and effect,
      2) Causality as constant conjunction and regular succession.
   (d) Evaluation of Hume’s theory.

5. REALISM AND IDEALISM
   • Realism:
   (a) Notion of Realism—Naive Realism, Representative Realism.
   (b) Main tenets of Locke’s Representative Realism.
SYLLABUS

- Idealism:
  (a) Notion of Idealism.
  (b) Berkeley’s Subjective Idealism—“Esse est percipi”—Role of yod—Evaluation of the view.

**Group-B**
Indian Philosophy (40 Marks)

1. NOTION OF ‘DARSHANA’
   (a) Meaning of the term ‘Darshana’.
   (b) Distinction in brief between the Indian Concept of ‘Darshana’ and Western Concept of ‘Philosophy’.
   (c) The ‘aastika’ and ‘naastika darshana’ – Names of the different schools of Indian Philosophy.
   (d) Some basic concept—Pramaa, Pramaana, Prameya, Pramaata, Purushartha.

2. CHAARVAAKA
   (a) Meaning of the term ‘Charvaaka’.
   (b) Pratyaksa as the only Pramaana.
   (c) Refutation of Anumaana and Shabda.
   (d) Materialism—Four different physical elements, Svabhavavaada, Dehaatmavaada, Sukhavaada, Rejection of Chaarvaaka Materialism.

3. BUDDHISM
   (a) Main tenets of Buddhism:
      1) Four Noble Truths
      2) Nirvana
      3) Pratityasam upaadavaada
      4) Karmavaada
      5) Kshanikvaada
      6) Nairatmavaada
   (b) Main theory of Soutrantaka School.
   (c) Main theory of Yogaachaarvaada.
4. NYAAYA DARSHANA
(a) The different Pramaanas accepted by the Nyaaya, Definition of Pratyaksha.
(b) Sannikarsha—laukika and aloukika, Different types of Sannikarsha.
(c) Distinction in brief between Nirvikalpa and Savikalpa Pratyaksha.
(d) Definition of Anumiti, Concept of Paksha, Saadhya and hetu, Vyaapti as Sahachara Niyama, Vyaaptigraha,Pararthaanumiti. Panchavayavi Nyaaya.

5. ADVAITA VEDANTA
(a) Nature of Brahman in brief.
(b) Relation of Brahman with Jeeva(Self) and Jagata(World).

6. CONTEMPORARY INDIAN PHILOSOPHY
(a) Swaami Vivekananda: Philosophical thoughts on Karma-Yoga.
(b) Rabindranath Tagore: Philosophical thoughts on Humanism.

Group-C
Project-Work (20Marks)

1. Causality-Entailment theory, Hume’s theory.
2. Realism and Idealism.
4. Contemporary Indian Philosophy—Vivekanda’s Karma-Yoga, Tagore’s Humanism.
PHILOSOPHY (PHIL)

Class - XII
Full Marks : 100

Group-A
Deductive (50 Marks)

1. ARGUMENT
(a) Nature of Argument.
(b) Distinction between deductive and inductive argument with illustrations.
(c) Argument and Argument-form.
(d) Validity of Arguments.
(e) Validity and Truth.
(f) Invalidity of Arguments.

2. PROPOSITION
(a) Sentence and Proposition.
(b) Classification of Propositions according to Quality, Quantity and Relation.
(c) Four-fold scheme of Categorical Propositions.
(d) Proposition and Proposition-form.
(e) Distribution of Terms.
(f) Rules for transforming sentences into Logical Propositions.

3. OPPOSITION OF PROPOSITIONS
(a) Concept of Opposition of Proposition.
(b) Traditional Square of Opposition.
(c) Inference by Opposition.
(d) Laws of different types of Opposition.

4. IMMEDIATE INFERENCE
(a) Classification of Inference into Immediate and Mediate.
(b) Conversion as a form of Immediate Inference.
(c) Rules of Conversion.
(d) Simple Conversion.
(e) Obversion as a form of Immediate Inference.
(f) Rules of Obversion.
5. CATEGORICAL SYLLOGISM
(a) Nature of Categorical Syllogism.
(b) Structure of Categorical Syllogism.
(c) Figures of Categorical Syllogism.
(d) Moods of Categorical Syllogism.
(e) General rules of Syllogism.
(f) Fallacies:  1) Illicit Major
            2) Illicit Minor
            3) Undistributed Middle
            4) Fallacy of Four Terms (ambiguous terms excluded)
            5) Fallacy of Negative Premises.
(g) Enthymeme
(h) Testing the validity of Syllogism.

6. HYPOTHETICAL AND DISJUNCTIVE SYLLOGISM
(a) Compound Arguments.
(b) Hypothetical-Categorical Syllogism.
(c) Rules of Hypothetical-Categorical Syllogism.
(d) Testing the validity of Hypothetical-Categorical Syllogism.
(e) Disjunctive-Categorical Syllogism.
(f) Rules of Disjunctive-Categorical Syllogism (Strong sense of disjunction included).
(g) Testing the validity of Disjunctive-Categorical Syllogism.

7. BOOLEAN INTERPRETATION AND VENN DIAGRAM
(a) Boolean Interpretation of Categorical Proposition.
(b) Venn Diagram of Categorical Proposition.

8. TRUTH FUNCTIONS
(a) Variable and Constant.
(b) Truth Functional Propositions: Negation, Conjunction, Disjunction, Material Equivalence.
(c) Truth Values: Tautology, Self-Contradictory, Contingent.
(d) Truth table method for testing Proposition-forms and Argument-forms (Not more than 2 variables).

Group-B
Inductive (30 Marks)

1. NATURE OF INDUCTION
(a) Grounds of Induction:  1) Formal Grounds—Law of Uniformity, Law of Causation
                           2) Material Grounds—Observation, Experiment.
SYLLABUS

(b) Scientific and Unscientific Induction.
(c) Analogical Argument—Criteria for Evaluating Analogical Arguments.

2. CAUSE
(a) Nature of Cause.
(b) Cause as necessary condition.
(c) Cause as sufficient condition.
(d) Cause as necessary and sufficient condition.
(e) Doctrine of Plurality of Causes—Evaluation of the view.

3. MILL’S METHOD OF EXPERIMENTAL ENQUIRY
(a) Principle of Elimination.
(b) Method of Agreement, Method of Difference, Joint Method of Agreement and Difference,
Method of Concomitant variation—Definition and Explanation, Symbolic and Concrete
Instances, Characteristics, Advantages, Disadvantages.
(c) Testing the Inductive Arguments by applying Mill’s those methods.

4. INDUCTIVE FALLACIES
(a) Illicit Generalisation.
(b) Post hoc ergo propter hoc.
(c) Taking co-effects of the same cause as causes of one another.
(d) Taking a necessary condition as the whole cause.
(e) Taking an irrelevant factor as a cause.
(f) Bad Analogy.
(g) Testing Inductive Fallacies.

Group-C
Project Work (20 Marks)

1. Categorical Syllogism.
2. Cause.
4. Inductive Fallacies.
# HEALTH AND PHYSICAL EDUCATION (PHED)

## Class - XI

**Full Marks : 100**

**Theory - 40 Marks**

### Unit -1: Concept and History of Physical Education 10 marks

1.1 Meaning, Definition and Traditional Concept of Physical Education. Its aim & objectives.
1.2 Need & importance of physical education.
1.3 Concept of play, games & sports,
1.4 History of Physical Education in West Bengal in 20\textsuperscript{th} Century
1.5 History of Ancient Olympic Movement

### Unit -2: Health Education 10 marks

2.1 Concept of Health, Factors influencing Health, World Health Organization.
2.2 Hygiene, Personal Hygiene: Care and maintenance of teeth, skin and eye, Community hygiene.
2.3 Prevention and control of communicable diseases (Malaria, HIV/AIDS, Dengue, Chicken Pox, Cholera and Conjunctivitis) and Non- communicable diseases (Diabetes Mellitus and Cancer)
2.4 School Health Programme: Health Instruction, Health Service and Healthful School Living
2.5 Drug Abuse: Alcohol and Tobacco, Adverse effects on Health

### Unit -3: Scientific Basis of Physical Education 10 marks

3.1 Exercise: Aerobic and Anaerobic, Effect of exercises on muscular and circulatory system
3.2 Bio-mechanical concept of fundamental movements (Sitting, standing, walking and running
3.3 Body types and body composition
3.4 Concept and assessment of BMI
3.5 Postural deformities (Flat foot, Bow Leg, Knock Knee, Kyphosis, Lordosis, and Scoliosis)

### Unit -4: Management of Physical Education Programme 10 marks

4.1 Organization of Sports and Physical Education Programme in School.
4.2 Lay out of play fields. (Kabaddi, Khokho, Volleyball, Football, Netball and Athletic Arena- Discuss and Putting the Shot)
4.3 Organizational set up of School Games
4.4 Meaning and types of Tournament (Knock out and League)
4.5 Intramural and Extramural competition-Need and objectives.
HEALTH AND PHYSICAL EDUCATION (PHED)

Class - XI

Full Marks : 100

Practical - 60 Marks

Group- A: Formal activities- Marching, Brotachari and Callisthenic (10 marks)
1) Marching: Stand at ease, Attention, Left Turn, Right Turn & About Turn, Mark Time, Quick March and Halt. (3)
2) Brotochari: Surjimama Raibishe & Badhubaran Folk dance(For Girls),Raibanshe dance( for boys), Kathi (4)
3) Calisthenics: Neck exercise, Arm exercises, Trunk exercises, and Leg exercises) (3)

Group- B: Athletics (10 marks)
1) Running (block start, Techniques of Running, Finishing) (5)
2)A. Throwing Event (Putting the Shot and Discus Throw) (5)
   a) Putting the Shot: Holding the Shot, Placement, Initial stance, Glide, Release Action and Recovery.
   b) Discus Throw: Holding the discus, Initial stance, Preliminary Swing, Release and Recovery.

   OR

2)B. Jumping Event (Running Broad Jump/High Jump)
   b) High jump - Approach run, Take off, Flight-in-air and Landing

Group- C: Yogasana & Gymnastics (5 marks)
1) (a) Yogasana: (3)
   i) Paschimottanasana, Gomukhasana, Dhanurasana, Bhadrasana, Vakrasana
   ii) Surya Namaskara
   iii) Pranayama: Anulom Vilom and Kapalabhati
   iv) Meditation
2) (b) Gymnastics: Forward & Backward Roll, Cart Wheel, T Balance, Hand Stand and Arch (2)
Group- D: Team Game (10 marks) (Any one)
Handball, Netball, Football, Volleyball, Kabaddi, Kho Kho and Badminton

Group- E: Evaluation of Physical fitness (10 marks)
Evaluation of Physical Fitness be made by conducting the following test:

i) Speed Test (30 Meters)
ii) Flexibility (Sit and Reach),
iii) Explosive Power (Sergeant Vertical Jump or Standing Broad Jump),
iv) Muscular Endurance Test (Bent Knee Sit up for 30 seconds) and
v) Cardiovascular Endurance Test (Skipping for one minute or spot jogging for one minute)

The Teacher will administer the test, and performance of the students will be evaluated. The teacher will maintain records of the performance throughout the year.

● A norm for evaluation shall be circulated by the West Bengal Council of Higher Secondary Education in due course of time.

Group-F : National ideals & Leadership Development Activities (10 marks)
a) National Ideals: Participation in Observation National Days (5 marks)
(National Youth Day, Netaji's Birth Day, Republic Day and Independence Day)
b) Leadership Development activities organized by Government Organisations (Duration not less than 5 days) (Any one) (5 marks)
1) Participation in Adventure Sports.
2) Participation in Boys Scouts & Girls’ Guides
3) Participation in NSS Special Camping, NCC, Leadership Camp, Sports Camp
4) Completion of Bratachari Nayak Course
5) Nature Camp
6) First Aid Camp (St. John Ambulance / Red Cross Society)
7) Community Service Programme
SYLLABUS

Group-G: Sports Participation

LEVEL OF SCHOOL SPORTS PARTICIPATION

<table>
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<th>Marks</th>
<th>Zonal</th>
<th>Sub Divisional</th>
<th>District</th>
<th>State</th>
<th>National</th>
<th>Highest Marks Obtained</th>
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<td>2 marks</td>
<td>3 marks</td>
<td>4 marks</td>
<td>5 marks</td>
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The Physical Education teacher will maintain student's sports performance and will preserve the record by maintaining the register throughout the year. The students will be issued a certificate which will be produced to the examiner during examination. Marks will be awarded for highest performance on the basis of certificate issued by any organization recognized by IOA or MHRD.
HEALTH AND PHYSICAL EDUCATION (PHED)

Class - XII

Full Marks : 100

Theory - 40 Marks

UNIT- 1: Modern concepts of Physical Education, Health & Fitness

10 marks

1.1 Modern concept of Physical Education and Sports, Relationship of Physical Education with Other Disciplines Career aspects of Physical Education
1.2 Modern Olympics: Ideals, Flag, Motto, Emblem, Oath and Organisation
1.3 Recent concept of health and fitness, health related fitness and performance related fitness
1.4 Problems of adolescents: social, psychological and physical along with suitable programme.

UNIT-2: Scientific basis of Human Movement

10 marks

2.1 Effect of exercise on Respiratory System and Related terms
2.2 Motion: types of motion, Newton's Laws of motion and their application in sports & Games
2.3 Definition of Terms: Distance, Displacement, speed, Velocity, Acceleration and their application in sports and games.
2.4 Hypokinetism, active life style and control of obesity, high blood pressure, arthritis and diabetes mellitus

UNIT-3: Psycho-Socio basis of Physical Education

10 marks

3.1 Psycho-social unity of human being
3.2 Socialization through Physical Education and Sports Programme
3.3 Development of Peace and Values through Physical Education Programme
3.4 Psychological Factors (Emotion, Motivation and Interest behind sports performance)

Unit-4: Yoga and Sports Training

10 marks

4.1 Yoga as Indian Heritage
4.2 Benefits of Yogic Practices in Daily Life
4.3 Warm up, Conditioning and Cooling Down
4.4 Sports Training and its different methods (Interval and Continuous method)
HEALTH AND PHYSICAL EDUCATION (PHED)

Class - XII

Full Marks : 100
Practical - 60 Marks

Group- A: Formal activities- Marching, Brotachari and Callisthenics (Any Two)
(5+5=10 marks)

1) Marching: Stand at ease, Attention, Left Turn, Right Turn & About Turn, Mark Time, Quick March and Halt, Slow Marching, Flag Hoisting, Flag Bearing & Folding and Ceremonial Marching.

2) Brotachari: Jari, Dhali, Chash Jodi, Chal Hoi and Brotachari Nam

3) Calisthenics: Two tables of Exercise (8 exercises in one table with or without apparatus) involving entire body.

Group- B: Athletics (10 marks)

1) Running (block start, Techniques of Running, Finishing)
2) Throwing Event (Putting the Shot, Discus and Javelin Throw)
   a) Putting the Shot: Holding the Shot, Placement, Initial stances, Glide, Release Action and Recovery.
   b) Discus Throw: Holding the discus, Initial stance, Preliminary Swing, Release and Recovery.
   c) Javelin Throw: Holding the Javelin, Pegging, Initial Stance, Carrying the Javelin during running, last 5-7 strides, Release and Recovery
3) Jumping Event (Running Broad Jump/High Jump)
   b) High jump - Approach run, Take off, Clearing the Bar and Landing

Group- C: Yogasana & Gymnastics (5+5=10 marks)

1) (a) Yogasana:
   i) Paschimottanasana, Gomukhasana, Dhanurasana, Bhadrasana, Vakrasana, sarvangasana, Ardha Matsyendrasana, Mayurasana, Bhumasana, Shirsasana and Surya Namaskara
   ii) Kriya: Agnisara and Kapalabhati
   iii) Pranayama: Anulom Vilom and Bhastrika
   iv) Trataka and Meditation
2) **(b) Gymnastics:** Forward & Backward Role, Cart Wheel, T Balance, Hand Stand, Arch, V-Balance, Knee Balance, Leg split, Dive Roll, Split Jump and Cat Leap Jump

**Group- D: Team Game**
Handball, Netball, Football, Volleyball, Kabaddi, Kho Kho and Badminton

**Group- E: Activity based Project Report on "BMI Calculation and Physical Fitness Measure (for Primary and upper-primary students)***
The students will be required to submit activity based Project report as per format given in Health and Physical Education book published by WBCHSE.
POLITICAL SCIENCE (POLS)

Class - XI

Full Marks 100

Theory Marks – 80+20 (Project)

1. Political Science : The Subject and its Evolution

Evolution of Political Science as a discipline — Meaning of Politics — Definition and Subject matter of Political Science

2. State

Definition and characteristics of State — State and other Associations — Theories of the origin of State (Divine Origin Theory, Force Theory, Social Contract Theory, Evolutionary Theory)

3. Nationality, Nation and State

Nationality: Definition and factors behind its emergence — The Right to Self Determination — Nationalism and internationalism — Meaning and Relationship — Tagore’s Concept of Nationalism

4. Fundamental concepts of Modern Politics

a) i) Law: Meaning, Sources and classification (National Law/ Municipal Law and International Law)
   ii) Liberty: Definition and safeguards
   iii) Equality and Justice – meaning and relationship

b) i) Democracy – meaning and forms (Direct and Representative)
   ii) Dictatorship – meaning and forms (party dictatorship, military dictatorship, individual dictatorship)

5. Citizenship

Definition, acquisition and loss of citizenship (with special reference to India)

6. Constitution

a) Definition and modern classification of constitution (Rigid, Flexible, Written and Unwritten)
b) Framing of India’s constitution – a brief outline – The Philosophy of Constitution – Preamble – Salient features of the constitution

7. Forms of Government
   a) Unitary and Federal – Definition, basic features and difference between the two – Nature of Indian federalism
   b) Presidential and Parliamentary – Definition, features and difference between the two – Nature of parliamentary government in India

8. Fundamental Rights and Duties
   a) Rights – meaning and types (civil, social, political and economic) – Distinction between rights and human rights – U.N. Declaration of Human Rights
   b) Fundamental Rights and Duties of an Indian Citizen – Directive Principles of State Policy – significance and distinction between fundamental rights and directive principles – Fundamental Duties of Indian citizens

9. Political Party and Pressure Groups
   Definition of Political Party – Meaning of National and Regional Party – Meaning of Pressure Group – Difference between Political Party and Pressure Group – Basic features of party system in India

10. Universal Adult Franchise

11. Project (some suggested areas) 20 Marks
    Some suggested topics on which projects can be carried out
   a) Level of political awareness of
      i) Your neighbourhood
      ii) Your friend (not having political science as subjects)
   b) Success and problems of the application of universal adult franchise (local area study)
   c) Right to education and actual implementation – problem of drop-out (area of survey should be your village/ward etc.)
POLITICAL SCIENCE (POLS)

Class - XII
Full Marks 100
Theory Marks- 80 +20 (Project)

1. International Relations
   a) Meaning of International Relations – Development of International Relations as a discipline
   b) Some key concepts in International Relations:
      i) Power – Meaning and components
      ii) National Interest – Meaning and its role in the making of foreign policy
      iii) Globalisation – Meaning and its impact on state sovereignty

2. International Relations in the post-second world war period
   Cold war – Meaning and causes of its origin – Evolution – Challenges to Bipolarity: Non-Aligned Movement – its present relevance – From bipolarity to unipolarity

3. Foreign Policy
   Foreign Policy – Meaning – Basic features of India's foreign policy- India and SAARC

4. U.N.O.
   b) The U.N. and peace keeping operations

5. Some Major Political Doctrines
   a) Liberalism – Basic Features
   b) Marxism – Basic Tenets
   c) Gandhism- Non-violence and Satyagraha

6. Organs of Government
   a) Separation of Power
   b) i) Executive: Functions – political and permanent executive (Bureaucracy)
      ii) Legislature: Functions and Structure – Unicameral and bi-cameral legislature – Arguments for and against
iii) Judiciary: Functions – Independence of judiciary

7. Executive in India
   i) The President – Election, powers and position
   ii) The Prime Minister – Power and position
   iii) The Governor of a state – Powers and position
   iv) The Chief Minister of a state- Powers and position

8. Legislature in India
   i) The Parliament – Composition and functions – Relation between Loksabha and Rajyasabha– Role of the Speaker
   ii) State Legislative Assembly (with special reference to West Bengal) – Composition and function
   iii) Parliamentary procedure – Zero hour, No- confidence, Cut and adjournment motion, Calling Attention Motion (meaning)

9. Judiciary in India
   i) Supreme Court – Composition, Functions and role
   ii) High Court – Composition and Functions
   iii) Subordinate judiciary – Structure
   iv) Lok Adalat and Consumer Court

10. Local Self- Government
    a) Rural- 3-tier panchayat system-composition, functions and source of income
    b) Urban- Municipality and corporation- Composition and functions and sources of income

11. Project (some suggested areas) (20 Marks)
    i) Survey and observation on the functioning of Gram Panchayat, Panchayat Samiti or Zilla Parishad, Municipality, Borough Committee, Ward Committee etc.
    ii) Women's participation at local level politics
    iii) Functioning of legislative Assembly (If possible)

(N.B. Teachers are at Liberty to carry out project work on any relevant topic included in the syllabus)
PSYCHOLOGY (PSYC)

Class - XI

Full Marks – 100

THEORETICAL: 70 Marks

[1] INTRODUCTION

- Subject Matter – what is Psychology? (Definition)
- Development of Psychology – from old concept to modern concept with Special Reference to Psychological schools.
- Modern Approaches to Psychology – (Behavioural, Psychodynamic / Analytic, Cognitive, Humanistic)
- Why is Psychology an Objective Science?
- Branches of Psychology – Pure and Applied
- Development of Psychology in India – Contribution of Girindra Shekhar Bose and N. N. Sengupta and others.

[2] METHODS OF PSYCHOLOGY

Goals of Psychological Enquiry with special emphasis on definition and utility of methods and tools.

- Methods -
  a) Introspection - Brief outline
  b) Experimental method – Merits & Demerits
  c) Observation – Merits & Demerits
  d) Cross sectional / Longitudinal method
  e) Case study
Psychological tools –
a) Tests – Definition, Characteristics and Types, any two examples
b) Interview – Definition, characteristics, Types, Merits and Demerits
c) Questionnaires – Definition, Characteristics and Types, Merits and Demerits, any two examples

[3] BIOLOGICAL BASES OF BEHAVIOR

● Introduction for relation between body and mind with special Reference to human behaviour
● Neuron – Structure, Types and Functions with diagrams, Concept of Synapse
● Nervous System –
  a) Definition and Types of Nervous System(C.N.S., A.N.S., P.N.S.)
  b) Brain – Structure, Parts and Area Localization of brain with special reference to Cerebral Cortex, Diagram of Brain
  c) Spinal Cord – Structure of Spinal Cord (mention different segments), Functions (mention Reflex Action)
● Endocrine System – Role of Endocrine System in human behaviour, Hyper and Hypo Secretion of endocrine glands

[4] DEVELOPMENT

● What is development – Relation between Growth, Maturation, Development and Evolution
● Critical Periods of Development – Short discussion of different stages (Physical and mental changes), special reference to Adolescence Period
● Factors influencing development – Heredity and Environment

[5] SENSORY PROCESSES

● What is sensation? – Definition
● Human senses –
  a) Special senses – Eye, Ear, Nose, Tongue
b) Organic senses – Visceral / Motor

c) Other – Kinaesthetic / Vestibular

d) Attributes of sensation

e) Relation between sensation and Perception

[6] **PERCEPTUAL PROCESS**

- What is Perception? – Definition
- Natural / Characteristics of Perception
- Form Perception – Laws of organization, Concept of Figure – Ground Relationship
- Depth and Distance Perception – Binocular cues and Monocular cues
- Movement Perception – Concept of Real and Apparent motion
- Illusion – What is illusion? – Definition, Types - with special notes on Mullerlyer illusion
- Attention – Definition, characteristics, types (voluntary, involuntary, non-voluntary), factors that determine attention or conditions of attention subjective and objective

[7] **LEARNING**

- Definition and characteristics of learning
- Theories-
  a) Trial and Error (Thorndike) – Experiment, laws (Primary and Secondary), Importance of the theory and criticism.
  b) Classical conditioning (Pavlov) – Experiment, principles, importance of the theory with criticism.
  c) Operant conditioning (Skinner) - Experiment, principles, importance of the theory with criticism.
  d) Insight (Kohler) - Experiment, Importance of the theory with criticism.
- Difference between classical and operant conditioning
- Concept of learning by Indian Philosopher – Swami Vivekananda and Rabindranath Tagore
[8] MEMORY PROCESSES

- Definition
- Factors involved in Memory – Learning, Retention, Recall and Recognition
- Process involved in memory – Encoding, Storage, Retrieval
- Interaction Processing theory (Attkinson and Shiffrin Model) - Sensory Memory, Short-term memory, long-term memory
- Concept of Immediate memory span and capacity of memorization.
- Forgetting – Definition, Causes, Improvement / Training of Memory

[9] MOTIVATION

- Definition
- Motivation cycle
- Human Needs – Definition, Types – Primary and Secondary
- Maslow’s theory of Need Hierarchy
- Physiological mechanisms of motivation with special reference to Hypothalamus.

[10] EMOTION

- Definition and characteristics
- Relation between feeling, emotion and instinct
- Basic emotion – Fear, Anger, Love (Nature and Bodily Expressions)
- Theories of Emotion (Concept and criticism)
  a) James and Sauge
  b) Canaon and Bard
  c) Schachter and Singer
SYLLABUS

EXPERIMENTAL AND PRACTICAL WORK

PRACTICAL 30 MARKS

Problem – 10 Marks
Lab. Notebook – 05 Marks
Viva voce – 05 Marks
Project – 10 Marks

[1] SENSOR PROCESS (EXPERIMENT)

- Negative After Image using Red and Blue colour stimulus

[2] LEARNING AND MEMORY (EXPERIMENT)

a) Experiment on Immediate Memory span using digits as stimulus. Use both visual and auditory methods.

b) Compare the rate of learning of two subjects and interpret the results (use non-sense syllabus by visual or auditory presentation)

c) Determine the effect of meaning on memorizing capacity.

[3] BIOLOGICAL BASES OF BEHAVIOUR (PROJECT)

Fill work on brain or spinal cord (Structure, Functions and Diagram)
[1] **INTELLIGENCE**

- Definition and nature of intelligence
- Types of intelligence
  a) E. L. Thorndike
  b) R. Cattel
  c) H. Gardner
- Theories of Intelligence
  a) Spearman’s two factor theory with criticisms
  b) Thurstone’s Primary Mental Ability Theory
- Measurement of Intelligence
  a) Intelligence tests – Definition and types (with one example of each type)
    - Verbal
    - Non-verbal / performance (Alexander’s pass along and Dearborn Form Board)
  b) Concept of Mental Age and IQ (Intelligence Quotient)
- Gifted Children
  a) Definition
  b) I.Q. classification
  c) Characteristics of Gifted child
  d) Needs of gifted children
  e) Measures to solve the problems of Gifted child
- Backward children
  a) Definition
  b) Characteristics
  c) Causes
  d) Measures to solve problems of backward children

[2] **SOCIAL INFLUENCE AND GROUP PROCESSES**

- Social Influence – Definition and forms (Imitation, Conformity, Compliance and Obedience)
SYLLABUS

- Definition and characteristics of group
- Classification of groups
- Characteristics of Primary Groups and role of Primary Group in Socialization
- Characteristics of Secondary Group and role of Secondary Group in Socialization
- Difference between Primary and Secondary group
- Individual and group behaviour
- Leadership
  a) Definition of leader
  b) Characteristics and functions of leader
  c) What is leadership and how leadership develops
  d) Types of leadership

[3] ATTITUDE AND SOCIAL COGNITION

- Definition of attitude
- Characteristics
- Components
- Formation of attitude
- Measurement of attitude – Likert’s and Thurston’s Scale
- Change of attitude – Persuasion and Cognitive dissonance with one example
- Social Cognition with special reference on Schemas
- Prejudice – Definition and foundation of prejudice
- Discrimination

[4] PERSONALITY

- Definition of Personality
- Characteristics
- Factors that influence personality (Heredity and Environment)
- Traits of personality
  a) What are traits? characteristics
  b) R. B. Cattle
  c) G. W. Allport
- Personality types
  a) C. Jung
  b) Sigmund Freud
  c) Kret Schrees
d) Sheldon

Measurement of Personality
a) Interview
b) Questionnaire
c) Projective Techniques – Rorschach, TAT and Word Association
d) Free Association

[5] ADJUSTMENT

Definition & Concept of Adjustment (Self, Family, Society)
Cause of Maladjustment (Conflict, Sense of insecurity, hostility & Guilt)
Symptoms of Maladjustment / Defence mechanisms
a) Withdrawal or
b) Extreme Introversion
c) Day dream
d) Projection
e) Rationalization
f) Repression
g) Regression

Forms of Maladjustment
a) Timidity
b) Truancy
c) Lying
d) Stealing
e) Aggressiveness
f) Negativism
g) Sex offences

Counselling – Definition, utility of counselling among students and their family member

[6] HEALTH PSYCHOLOGY

Concept of Health Psychology
Definition of stress
Causes of stress – Family, School, Vocational, Economic
Effects of stress – Brief concept
Stress management
a) Physical – Exercise, Yoga & Meditation etc.
b) Mental – Positive self talk, Humour etc.
c) External Help – Counselling, Guidance and suggestion

[7] PSYCHOLOGICAL DISORDERS

- Concept of Abnormality
- Criteria of Normality (Traditional vs. Modern Concept)
- Traditional – Neurosis, Psychosis, Difference between Neurosis and Psychosis
  - Modern Multiaxial System (DSM-IV R)
- Major Psychological disorders (Symptoms, types, causes and brief outline of management)
  a) Schizophrenia
  b) Mood disorders – (i) Unipolar – Depression (ii) Bipolar
  c) Anxiety Disorders – Phobia, OCD, GAD, Panic disorder, PTSD
d) Antisocial Disorders
e) Substance Abuse Disorders

[8] IDENTITY DEVELOPMENT

- Identity – Definition
- Erikson’s stage of psycho-social development
- Adolescence – Why is it called a critical stage of development
- Identity Crisis; Mature identity – backed by James Marica’s Path to identity
- Factors influencing identity development (Personality, family, Peer-group, school, community and larger Society)
- Gender – Concept and definition of gender, gender role, gender stereotype, gender identity

[9] ENVIRONMENT AND BEHAVIOUR

- Environment – Definition, types and relation between man and environment
- Concept of Ecology and Ecosystem
- Environment Pollution – Types and of Pollutants
- Environment Education
  a) Importance of environment education (Objectives)
b) Teacher’s role in environment education
c) Students’ Role in environment education
[10] STATISTICS IN PSYCHOLOGY

- What is Statistics?
- Types of Statistics (Descriptive & Inferential)
- Role of Statistics in Psychology
- Short idea of Ranking; Scene; Variable; Scale; Series
- Frequency Distribution – Tabulation from raw scores; and graphical representation of frequency Distribution – Frequency Polygon and Histogram.
- Utility of Frequency distribution
- Measures of Central Tendency – Concept, Computation and Utility
  a) Mean (Short method)
  b) Median
  c) Mode
- Measures of Variability – Concept, Computation and Utility
  a) Range
  b) Standard Deviation (Short method)
- Neural Probability Curve –
  a) Concept
  b) Characteristics
  c) Deviations - Skewness and Kurtosis
  d) Application of NPC
- Correlation – Concept, Types (Positive and Negative), Utility
EXPERIMENTAL AND PRACTICAL WORK

PRACTICAL 30 MARKS

Problem – 10 Marks
Lab. Notebook – 5 Marks
Viva voce – 5 Marks
Project – 10 Marks

[1] INTELLIGENCE (EXPERIMENT)

Non-verbal Intelligence is to be tested using Dearborn from Board Test and Alexander Pass along Test.

[2] LEADERSHIP POTENTIALS (PROJECT WORK)

The Sociometric method will be followed for Class room practice at least 10 students of the same class should be provided.

[3] PERSONALITY (TEST)

Personality may be assessed by KNPI or KIEI

[4] GENERAL HEALTH (PROJECT WORK)

General Health Questionnaire (GHQ) - [Goldberg] should be used for measuring health status.

Note for Experimental and Project Work.
Each of the topics mentioned for both class XI and XII is compulsory.
SOCIOLOGY (SOCG)

Class – XI

FULL MARKS – 100

Theory : 80 Marks + Project : 20 Marks

Unit 1: Introducing Sociology
- Emergence of Sociology as an academic discipline – different forces : University Revolution (a very brief outline)
- Scientific nature of Sociology
- Sociological Methods – Quantitative & Qualitative; Positivist & Interactionist methods; Research methodology: Social research, Stages of research, Social survey, Observation, Questionnaire, Interview
- Use of statistical tools & techniques – graphical representation of statistical data – grouping of data (pie-chart, bar-diagram, histogram, frequency polygon)

Unit 2: Basic Sociological Concepts
- Society – Concept, Structure and Process
- Community & Association – Concept, Interrelationship and Differences
- Organization – Concept and Types
- Social Groups – Typology (special reference to Primary and Secondary Groups)

Unit 3: Culture, Social Interaction and Formation of Self
- Meaning and Importance
- Components of Culture – Values, Norms, Beliefs, Folkways, Mores, Laws, Language and Technology
- Types of Culture – Material & Non-material Culture, Culture and Civilization, Cultural lag, Sub- culture, Popular Culture, Folk Culture, Consumer Culture, Culture Pluralism (a very brief outline)
SYLLABUS

- Social Interaction – Verbal and Non-verbal interaction
- Socialization - Concept, Meaning, Agencies, Importance, Life Course, Socialized vs. Unsocialized children
- Socialization and Development of Personality (Cooley, Mead) – Nature vs. Nurture debate
- Socialization and Social control – Relationship and Importance
- Social Conformity, Non-conformity, Deviance and Delinquency (very briefly)
- Crime – Concepts and Types (Gender crime, Organized crime, Cyber crime and White Collar crime)

Unit 4: Social Institutions

- Meaning and Interrelationship among different institutions
- Economy – Types of Economic Systems – Means of Subsistence (in brief)
  - Direct Appropriation Economy
  - Pastoral Economy
  - Agricultural Economy
  - Handicraft Economy
  - Industrial Economy
- Religion, Magic and Science – Basic Concepts, Relationship and Differences
- Education – Meaning & Concepts, Functions of Education
- Health, Illness & Ageing – Concepts (A brief idea about mental health)
Unit 5: Social Stratification and Inequality

- Social Stratification – Concept, Bases of Social Inequality (Caste, Class, Race and Gender) Marxian concept of social stratification
- Social Mobility – Concept, Types (Vertical and Horizontal Mobility)

Project Work: 20 Marks

Suggested Areas for Assignment:

1) Sociological Perspectives
2) Culture, Interaction and Formation of Self (Unit 3)
3) Health, Illness and Ageing

N.B. Topics for assignment should be altered every year from the suggested areas. Two assignments should be completed in each year. Size of the assignment should be around 500 words. Marks will be awarded jointly by the internal and external examiners on the basis of the written assignments and viva-voce.

References:

- Browne, Ken (2008), An Introduction to Sociology, 3rd. ed. UK. Polity
- Pullinger, (2011), Sociological Thinking, Rawat Publications
SYLLABUS

SOCIOLOGY (SOCG)

Class – XII

FULL MARKS: 100

Theory : 80 marks + Project : 20 marks

Unit I: Sociology in India

Development of Sociology in India; Different perspectives in studying Indian Society; Indological, Historical, Structural-Functional, Dialectical, Subaltern.

Unit II: Indian Society: Structure and Process

a) Society in Pre-British India: Socio-economic and cultural conditions of Indian Society.

Unit III: Changes in Social Structure

a) FAMILY: Indian Joint Family; Changes in structure and functions of family; Recent trends in family pattern.
b) RURAL AND URBAN COMMUNITIES: Changes in economy and Land Ownership Pattern; Rural class structure and Urban class structure.
c) CASTE AND TRIBE: Changes in Caste system: Role of Vivekananda, Gandhi, Ambedkar to Caste system; Caste-Class continuum; Caste in Literature; Tribes in transition.
d) RELIGION: Views of Vivekananda, Maulana Abul Kalam Azad, Rishi Aurobindo; Religion in the present day society.
e) EDUCATION: Views of Vidyasagar, Rabindranath, Gandhi, Gokhale; Education & Modernization.

Unit IV: Contemporary Social Issues

a) Population, Poverty, Illiteracy and Unemployment: Concepts and their interrelations (in brief); Consequences and Remedies.
b) Communalism, secularism, Regionalism and Terrorism: Causes and consequences (in brief).
c) Corruption: Concept; Recent Legislations.
**SYLLABUS**

**d)** Women: Changing status of women in India, Violence against women, Women Movements.

**e)** Environment: Ecology-Man and Environment; Crises and Responses (Movements); Legislations.

**f)** Mass-Media: Concept; Role of mass-media in social life (both positive and negative).

**Project Work: (20 marks)**

**Suggested Areas for Assignment**

1) Recent trends in family pattern
2) Caste in Literature
3) Corruption: Recent Legislations
4) Women Movements
5) Environmental Issues
6) Role of mass-media in social life

**N.B.** Topics for assignment should be altered every year from the suggested areas. Two assignments should be completed in each year. Size of the assignment should be around 500 words. Marks will be awarded jointly by the internal and external examiners on the basis of the written assignments and viva-voce.

**References :**

Browne, Ken (2008), An Introduction to Sociology, 3rd ed. UK. Polity

Giddens, Anthony, Sociology, 5th & 6th, Edition Polity

Pullinger, (2011), Sociological Thinking, Rawat Publications


SYLLABUS

STATISTICS (STAT)

Class –XI

Full Marks - 100

THEORY (Full Marks –70)

Descriptive Statistics


Types of data: Primary and Secondary data, Time series and Cross-sectional data, Ordinal and Nominal data, Quantitative and Qualitative data, Discrete and Continuous data. Illustration with examples.

Collection of data: Designing a questionnaire and a schedule.

Scrutiny of data: Checking internal consistency and detection of errors in recording.

Presentation of data: Tabular presentation and diagrammatic presentation of data. Line diagram (Simple line diagram, ratio chart, multiple-axis-chart, multiple line diagram.). Bar diagram (Horizontal bar diagram, Vertical bar diagram, Multiple bar diagram, Divided bar diagram.) Pie diagram.

Frequency distributions, cumulative frequency distributions and their graphical representations. (Column diagram, Step diagram (discrete variable), Histogram, Frequency polygon, Ogive).

Measures of Central Tendency: Mean, Median, Mode.

Measures of Dispersion: Range, Mean deviation, Standard deviation, Coefficient of variation. Quantiles and Percentiles, Quartile deviation.

Moments: Raw and Central moments up to fourth order and their conversions.

Measures of Skewness and Kurtosis: Different measures based on moments and quantiles. (associated inequalities involving $b_1$ and $b_2$ coefficients.)

Mathematics

Inequalities: Some fundamental inequalities such as the square of a real quantity is non-negative, $A.M.e^G.M.e^H.M.$ for a set of positive quantities, Cauchy-Schwarz’s inequality – this topic must be extended to this limit.
Concept of Polynomials and Number Theory: Divisor of an Integer, Greatest Common Divisor, Concept of \((\text{mod } n)\). Prime and Composite number. Fermat’s number and Fermat’s theorem (without proof). Different forms of \(n^{\text{th}}\) degree polynomial relating to three interpolation formulae as per syllabus. Remainder Theorem. Roots of \(n^{\text{th}}\) degree equation. Relations connecting the roots and coefficients with simple examples.

Differencing: Concept of ‘Delta’-operator required for interpolation.

Simple interpolation: Newton’s forward, backward and Lagrange’s interpolation formulae. (Derivation of error terms is excluded)

**Probability**

Random Experiment: Sample Space, Notion of events and operations with events.

Definition of Probability: Classical and Relative-frequency approach to Probability, limitations of classical definition, axiomatic definition (statement only).

Theorem of Total Probability. Bonferroni’s inequality. Boole’s inequality.

Compound Probability, Conditional Probability and Bayes’ theorem.

Statistical Independence of events (no. of events not more than three) and problem sums.

**Application of statistics**

**Index Number:**


**Population Statistics:**

Introduction; Vital events, Sources of Data on Vital events, Rates and Ratios of Vital events. Measurements of Mortality: Crude Death Rate, Specific Death Rate, Standardized Death Rate.

Measurements of Fertility: Crude Birth Rate, General Fertility Rate, Age Specific Fertility Rate, Total Fertility Rate.

Measurement of Population Growth: Crude Rate of Natural Increase and Vital Index.

Complete Life Table: Description and its uses.
List of Problem Sets

1. Tabular Representation of data.
2. Diagrammatic Representation of Data. (Non-Frequency type)
3. Construction of Frequency distribution and Graphical Representation. (Univariate data only, both discrete and continuous)
4. Measures of Central Tendency. (Problems involving Open-end classes, Missing frequencies, Pooling of two sets of data, Checking, empirical relations etc. are also to be included.)
5. Measures of Dispersion. (Problems involving Open-end classes, Missing frequencies, Pooling of two sets of data, Checking, empirical relations etc. are also to be included.)
6. Moments and Measures of Skewness & Kurtosis. (Verification of inequalities between $b_1$ and $b_2$ is desirable.)
8. Different types of Index Number.
9. Mortality Rates, Fertility Rates and Life Table.
10. Project Work: It will be based on Descriptive Statistics
SYLLABUS

STATISTICS (STAT)

Class - XII

Full Marks - 100

THEORY (Full Marks—70)

Descriptive Statistics
Simple Regression Analysis and Least Square Method.
Rank data and Rank Correlation. (Spearman’s Rank Correlation Coefficient—case of no tie).

Probability Distributions
Joint Probability Distribution of two random variables (discrete case).
Maximum and Minimum of a Function. Standard definition of Gamma integral and result involving Gamma (1/2) without derivations.
Binomial distribution, Poisson distribution and Normal distribution and their properties. Problem Sums;
Fitting of above distributions, Concept of goodness-of-fit using Frequency $\chi^2$ approach.
Notion of Uniform distribution.
Scaling Methods: Z Scaling and Percentile scaling.

Sampling and Inference
Sampling Theory and Sampling Distribution:
Simple Random Sampling with and without replacement.
Concept of Sampling distribution of sample mean and its standard error.

**Basic Concepts of Inference:**

Estimation:

Testing of Hypothesis:
Tests of Significance related to a single Binomial proportion and Poisson mean (using large sample approximations), Mean and variance of a single univariate Normal distribution.

**Application of Statistics II [10M]**

Time Series Analysis:

Statistical Quality Control:
List of Problem Sets

1. Scatter Diagram, Correlation Coefficient and Regression (ungrouped data only).
2. Spearman’s Rank Correlation coefficient (case of no tie).
3. Applications and Fitting of Binomial Distribution, Poisson Distribution and only applications of Normal Distribution. (Fitting of Normal Distribution is excluded)
4. Drawing of Random samples (SRSWR and SRSWOR) –using Random Number Tables.
5. Sampling distribution of Sample Mean from a finite population based on simple random sampling with/without replacement. [Start with a population having finite number of values; choose a sample size (2,3 etc.), list all possible samples of the chosen size, calculate sample mean based on each such sample, obtain the frequency distribution of the sample mean and display diagrammatically.
8. Determination of Trend (Moving Average Method, Straight Line and Exponential Curve by Least Square Method.)
9. Construction of Control Chart: p, np, X, R.
10. PROJECT WORK
    It will be based on Collection and Analysis of Data. The analysis should be from any one of the following topics;
    (a) Correlation and Regression including Rank Correlation.
    (b) Trend Determination
    (c) Estimation of Population Mean and Standard Error in case of SRSWR, SRSWOR.
INSTRUCTIONS for Laboratory Session and Preparation of laboratory Note Book.

1. For Laboratory Note Book, square sheets and white sheets both are to be used by the students. But if the square sheets are not available then the students may use Laboratory Note book as used in practical in Biological Sciences, Physics, and Chemistry etc.

2. Strictly, HB pencil is to be used in Laboratory sessions. Scientific calculators may be used. Statistical tables if required are to be supplied by the institutions. Geometry Box may also be used.

3. A problem set on a specific topic covering different numerical problems based on secondary data is to be supplied to the students in a laboratory session. This may be typed or printed or neatly hand-written in white papers.

   Each problem set should carry at the top
   (a) The Problem Set Number.
   (b) Heading (in capital letters).
   (c) Working Date.

4. While solving any problem in any of the problem sets, students must mention the relevant formula with description of notations and theory, in brief if required, in the white papers or in the white side of the inter-leaf sheet. No derivation or discussion is needed.

5. The necessary calculations are to be shown step wise with specification of units, wherever required. Workings should be presented in a neat form through tables etc. whenever required, in the square sheet or in the ruled side of the inter-leaf sheet.

6. For graphs and diagrams the c.m. / m.m. graph paper of appropriate size that suits the practical note book are to be used. Both the axes should be labeled, scales to be mentioned and name of the chart (diagram) is to be mentioned clearly. The graph sheets are to be presented adjacent to the relevant workings of the problem concerned.

7. All the Problem sets enlisted in the syllabus must be completed, examined and signed with date by the teacher concerned. Finally it should be arranged serially, according to the content index.

8. There should be a content Index at the very beginning of the Laboratory Note Book consisting of
   (a) Serial Number
   (b) Heading of Problem Set
   (c) Working Date and
   (d) Page Number.
RULES for the Practical Examination

1. **The Practical Examination is to be held on a single day simultaneously in all the institutions.**
2. If it is not possible to hold the examination on a same day then there should be **at least three sets of questions** since it is a problem based Practical.
3. The Practical Examination will be of two hours duration including Viva-Voce.
4. Questions of Viva-Voce may be asked by the **External Examiner** to test the depth of understanding in both theory and practical, preferably on Project Work.
5. Only scientific calculators are allowed.
6. Statistical table will not be given in the question paper. If required, it will be supplied by the institution.
7. The completed Laboratory Note Book covering all the topics as prescribed in the syllabus must be submitted during the examination.
VISUAL ARTS (VISA)
(Painting/Sculpture/Design/Handicrafts)

CLASS XI

Full marks: 100
Theory - 45
Practical - 55

Theory / Group A

Indian Arts (20marks)

General background of India Art/Constraints of Indian Art Development. Evaluation of Indian Art-Sculpture.

1. Art of Indus Valley Civilization
2. Art of maurya: Asokan Pillars
3. Early Buddhist Art of India From Sunga to Ajanta.
   Sunga: Sanchi
   Kushan: Gandhara & Mathura
   Amaravati
   Gupta Period: Sarnath, Ajanta
4. Art of Mahabalipuram
   Ellora
   Konarak
   Chola Bronze: Nataraj

N.B. Emphasis should be on visual exposure according to the syllabus for making the students aware of the art works.

Theory / Group B

Western Arts (15marks)

1. Prehistoric Art: Altamira Cave Painting
2. Egyptian Art
3. Greco-Roman Art
4. Italian Renaissance Art
   Artists and art works to be studied:
   Giotto: (a) Death of St. Francis
   Leonardo Da Vinci: (a) Last Supper
      (b) Mona Lisa
Raphael : (a) Madonna
Michelangelo : (a) Pieta
(b) Sistine Chapel Ceiling
Vermeer : (a) Lace Maker
(b) Head of a girl with pearl earrings.
Bruegel : (a) Cracifixion

Theory / Group C

Creative Handicrafts / Design (15marks)
1. Preparation of common clay
2. Use of various hand tools and equipments for wood work.

Practical / Group A

Painting (choose any one of the following items) (20marks)
(a) Painting a market scene or a village fair or any other similar subject using pencil, pen & ink, water colour, oil pastels, or poster colours on paper.
(b) Study of still life or flowers or foliages in colour.

Drawing (choose any one of the following items) (15m)
(a) Drawing from nature, such as trees, flowers, foliages, birds, animals, human figures, etc.
    with pencil, dry pastel or pen & ink.
(b) Drawing from Copy Book (Rupabali)

Practical / Group B

Modelling (20m)
(a) Preparation of clay model images of animals, birds, fish, fruits and human forms in round and relief forms.

OR

Creative Handicrafts (20m)
(a) Preparation of a mask with card board painted with poster colour.
(b) Decorative patterns cut on wood.
(c) Preparation of a book cover with hand written title page.
VISUAL ARTS (VISA)
(PAINTING/SCULPTURE/DESIGN/HANDICRAFTS)

CLASS XII
Full marks : 100
Theory - 45
Practical - 55

Theory / Group A

Indian Arts (15marks)

General background of Indian art: Constraints Indian Art Development. Evaluation of Indian Art
— Sculpture

1. Miniature Paintings of India:
   (a) Mughal Miniatures
   (b) Rajput Miniatures

2. Bengal Art Tradition:
   (a) Terra cotta Temple of Bishnupur
   (b) Pata Chitra
   (c) Kalighat Painting
   (d) Folk & Tribal Art

3. Few Contemporary Indian Artists:
   Abanindranath Tagore, Rabindranath Tagore, Gaganendranath Tagore, Amrita Sher-gil, Jamini Roy, Nandalal Bose, Ramkinker Vaij, Benode Behari Mukhopadhyay, Jainul Abedin, Somenath Hore, M.F Hussain, Meera Mukherjee

4. Books to be read:
   (a) Bageswari Silpaprabandhabali (Abanindranath Tagore)
   (b) Chitra Katha (Benode Behari Mukhopadhyay)
   (c) Living Tradition (K.G Subramanyan)
Theory / Group B

Western Arts (Concept & Development) (15marks)

1. Baroque and Rococo:

2. Classicism, Romanticism, Realism (1800 – 1818 A.D)
   Turner (British): Rain, steam, speed
   Constable (British): Landscapes

3. Impressionism to Modern Art
   Manet (French): The Fifer
   Monet (French): Water Lilies
   Van Gogh (Dutch): Sunflower
   Cezanne (French): Still life with apple
   Picasso (Spanish): Guernica
   Matisse (French): The open window
   Dali (Spanish): The Persistence of memory
   Rodin (French): Thinker
   Brancusi (Romanian): Bird in Space
   Paul Klee (Swiss-German): Forgetful Angel, Conjuring Trick

N.B: Emphasis should be on visual exposure according to the syllabus for making students aware of the art works.

Theory / Group C

Handicrafts / Design / Architecture / Photography Theory (15m)

2. Method, materials and process of mould and plaster casting.
3. Traditional Handicrafts of Bengal.
4. Past Architecture of India.
6. Eminent Indian Photographers of 20\textsuperscript{th} Century.
SYLLABUS

Practical / Group A

Painting  (20 marks)
(a) Composition of a painting depicting a street corner or a shop or a restaurant showing at least four human figures using pencil, pen & ink, oil pastels, water colour or poster colour or mixed media on paper.

Drawing  (15 marks)
(a) Drawing from architectures (buildings, houses, boxes, almirah etc) showing perspectives with soft pencil on paper.
(b) Drawing from nature, landscapes, people, animals, birds, flowers etc with soft pencil on paper.

Practical / Group B

Sculpture  (20 marks)
(a) Bas relief composition with moulding and casting in plaster of paris.

OR

Design/ Creative Handicrafts  (20 marks)
(a) Decorative design for various motifs in colour for textile.
(b) Batick design on cloth
(c) Painting pottery with poster colour.
## subject wise Marks Division for Class XI and XII (New Syllabus)
### 2014-16 session

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