

**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

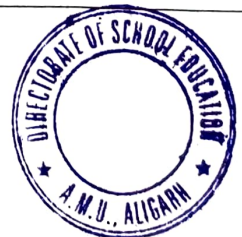
**Complete Syllabus
Class XII
2022-23**



Contents

1. Accountancy (Theory) – Subject Code: 12AC04	3
2. Arabic (Theory) – Subject Code: 12AR04	11
3. Botany (Theory) – Subject Code: 12BT04	13
4. Zoology (Theory) – Subject Code: 12ZY04	15
5. Business Studies (Theory) – Subject Code: 12BS04	17
6. Chemistry (Theory) – Subject Code: 12CH04	25
7. Computer Science (Theory) – Subject Code: 12CS04	31
8. Economics (Theory) – Subject Code: 12EC04	34
9. Elective English (Theory) – Subject Code: 12EO04	38
10. English Core (Theory) – Subject Code: 12EN04	41
11. Entrepreneurship (Theory) – Subject Code: 12EP04	44
12. Environmental Science (Theory) – Subject Code: 12ES04	48
13. Fine Arts (Theory) – Subject Code: 12FA04	54
14. Geography (Theory) – Subject Code: 12GG04	58
15. Elective Hindi (Theory) – Subject Code: 12HN04	62
16. History (Theory) – Subject Code: 12HS04	65
17. Home Science (Theory) – Subject Code: 12HM04	73
18. Mathematics (Theory) – Subject Code: 12MM04	82
19. Persian (Theory) – Subject Code: 11PR04	86
20. Physical Education (Theory) – Subject Code: 12PE04	88
21. Physics (Theory) – Subject Code: 12PH04	91
22. Political Science (Theory) – Subject Code: 12PL04	97
23. Psychology (Theory) – Subject Code: 12PS04	99
24. Sociology (Theory) – Subject Code: 12SO04	103
25. Elective Urdu (Theory) – Subject Code: 12UR04	106

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**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Accountancy (Theory) – Subject Code: 12AC04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

Unit Test: 25

Units		Periods	Marks
Part A	Accounting for Partnership Firms and Companies		
	Unit 1. Accounting for Partnership Firms	85	25
	Unit 2. Accounting for Companies	40	25
Part B	Financial Statement Analysis		
	Unit 3. Analysis of Financial Statements	25	19
	Unit 4. Cash Flow Statement	20	6
Part C	Project Work + Viva-voce (Part of Internal Assessment)	10	25
	Total	180	100

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Part A: Accounting for Partnership Firms and Companies

Unit 1: Accounting for Partnership Firms

Units/Topics	Learning Outcomes
<ul style="list-style-type: none"> • Partnership: features, Partnership Deed. • Provisions of the Indian Partnership Act 1932 in the absence of partnership deed. • Fixed v/s fluctuating capital accounts. Preparation of Profit and Loss Appropriation account- division of profit among partners, guarantee of profits. • Past adjustments (relating to interest on capital, interest on drawing, salary and profit sharing ratio). • Goodwill: meaning, nature, factors affecting and methods of valuation - average profit, super profit and capitalization. <p>Note: Interest on partner's loan is to be treated as a charge against profits.</p> <p>Goodwill: meaning, factors affecting, need for valuation, methods for calculation (average profits, super profits and capitalization), adjusted through partners capital/ current account or by raising and writing off goodwill (AS 26)</p> <p>Accounting for Partnership firms - Reconstitution and Dissolution.</p> <ul style="list-style-type: none"> • Change in the Profit Sharing Ratio among the existing partners - sacrificing ratio, gaining ratio, accounting for 	<p>After going through this Unit, the students will be able to:</p> <ul style="list-style-type: none"> • state the meaning of partnership, partnership firm and partnership deed. • describe the characteristic features of partnership and the contents of partnership deed. • discuss the significance of provision of Partnership Act in the absence of partnership deed. • differentiate between fixed and fluctuating capital, outline the process and develop the understanding and skill of preparation of Profit and Loss Appropriation Account. • develop the understanding and skill of preparation of profit and loss appropriation account involving guarantee of profits. • develop the understanding and skill of making past adjustments. • state the meaning, nature and factors affecting goodwill • develop the understanding and skill of valuation of goodwill using different methods. • state the meaning of sacrificing ratio, gaining ratio and the change in profit sharing ratio among existing partners.

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<p>reevaluation of assets and reassessment of liabilities and treatment of reserves, accumulated profits and losses.</p> <p>Preparation of revaluation account and balance sheet.</p> <ul style="list-style-type: none"> • Admission of a partner - effect of admission of a partner on change in the profit sharing ratio, treatment of goodwill (as per AS 26), treatment for revaluation of assets and re-assessment of liabilities, treatment of reserves, accumulated profits and losses, adjustment of capital accounts and preparation of capital, current account and balance sheet. 	<ul style="list-style-type: none"> • develop the understanding of accounting treatment of revaluation assets and reassessment of liabilities and treatment of reserves and accumulated profits by preparing revaluation account and balance sheet. • explain the effect of change in profit sharing ratio on admission of a new partner. • develop the understanding and skill of
<ul style="list-style-type: none"> • Retirement and death of a partner: effect of retirement / death of a partner on change in profit sharing ratio, treatment of goodwill (as per AS 26), treatment for revaluation of assets and reassessment of liabilities, adjustment of accumulated profits, losses and reserves, adjustment of capital accounts and preparation of capital, current account and balance sheet. Preparation of loan account of the retiring partner. • Calculation of deceased partner's share of profit till the date of death. Preparation of deceased partner's capital account and his executor's account. • Dissolution of a partnership firm: meaning of dissolution of partnership and partnership firm, types of dissolution of a 	<p>treatment of goodwill as per AS-26, treatment of revaluation of assets and re-assessment of liabilities, treatment of reserves and accumulated profits, adjustment of capital accounts and preparation of capital, current account and balance sheet of the new firm.</p> <ul style="list-style-type: none"> • explain the effect of retirement / death of a partner on change in profit sharing ratio. • develop the understanding of accounting treatment of goodwill, revaluation of assets and re-assessment of liabilities and adjustment of accumulated profits, losses and reserves on retirement / death of a partner and capital adjustment. • develop the skill of calculation of deceased partner's share till the time of his death and prepare deceased partner's and executor's account. • discuss the preparation of the capital accounts of the remaining partners and

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firm. Settlement of accounts - preparation of realization account, and other related accounts: capital accounts of partners and cash/bank a/c (excluding piecemeal distribution, sale to a company and insolvency of partner(s)).

Note:

(i) If the realized value of tangible assets is not given it should be considered as realized at book value itself.

(ii) If the realized value of intangible assets is not given it should be considered as nil (zero value).

(ii) In case, the realization expenses are borne by a partner, clear indication should be given regarding the payment thereof.

the balance sheet of the firm after retirement / death of a partner.

- understand the situations under which a partnership firm can be dissolved.
- develop the understanding of preparation of realization account and other related accounts.

Unit-3 Accounting for Companies

Units/Topics

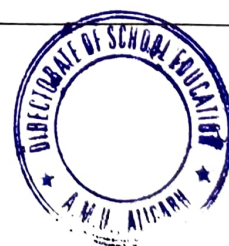
Accounting for Share Capital

- Features and types of companies
- Share and share capital: nature and types.
- Accounting for share capital: issue and allotment of equity and preference shares. Public subscription of shares - over subscription and under subscription of shares; issue at par and at premium, calls in advance and arrears (excluding interest), issue of shares for consideration other than cash.

Learning Outcomes

After going through this Unit, the students will be able to:

- state the meaning of share and share capital and differentiate between equity shares and preference shares and different types of share capital.
- understand the meaning of private placement of shares and Employee Stock Option Plan.
- explain the accounting treatment of share capital transactions regarding issue of shares.



- Concept of Private Placement and Employee Stock Option Plan (ESOP), Sweat Equity.
- Accounting treatment of forfeiture and re-issue of shares.
- Disclosure of share capital in the Balance Sheet of a company.

Accounting for Debentures

- Debentures: Meaning, types, Issue of debentures at par, at a premium and at a discount. Issue of debentures for consideration other than cash; Issue of debentures with terms of redemption; debentures as collateral security- concept, interest on debentures. Writing off discount / loss on issue of debentures.

Note: Discount or loss on issue of debentures to be written off in the year debentures are allotted from Security Premium Reserve (if it exists) and then from Statement of Profit and Loss as Financial Cost (AS

16)

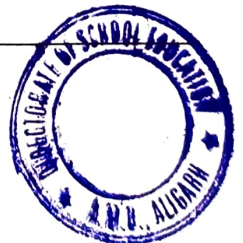
- develop the understanding of accounting treatment of forfeiture and re-issue of forfeited shares.
- describe the presentation of share capital in the balance sheet of the company as per schedule III part I of the Companies Act 2013.
- explain the accounting treatment of different categories of transactions related to issue of debentures.
- develop the understanding and skill of writing off discount / loss on issue of debentures.
- understand the concept of collateral security and its presentation in balance sheet.
- develop the skill of calculating interest on debentures and its accounting treatment.
- state the meaning of redemption of debentures.



Part B: Financial Statement Analysis

Unit 4: Analysis of Financial Statements

Units/Topics	Learning Outcomes
<p>Financial statements of a Company: Meaning, Nature, Uses and importance of financialStatement. Statement of Profit and Loss and Balance Sheet in prescribed form with major headings and sub headings (as per Schedule III to the Companies Act,2013)</p> <p>Note: <i>Exceptional items, extraordinary items and profit (loss) from discontinued operations are excluded.</i></p> <ul style="list-style-type: none">• Financial Statement Analysis: Meaning,Significance Objectives, importance and limitations.• Tools for Financial Statement Analysis: Cash flow analysis, ratio analysis.• Accounting Ratios: Meaning, Objectives, Advantages, classification and computation.• Liquidity Ratios: Current ratio and Quickratio.• Solvency Ratios: Debt to Equity Ratio, TotalAsset to Debt Ratio, Proprietary Ratio and Interest Coverage Ratio. Debt to Capital Employed Ratio.	<p>After going through this Unit, the students will be able to:</p> <ul style="list-style-type: none">• develop the understanding of major headings and sub-headings (as per Schedule III to the Companies Act, 2013) of balance sheet as per the prescribed norms / formats.• state the meaning, objectives and limitations of financial statement analysis.• discuss the meaning of different tools of 'financial statements analysis'.• state the meaning, objectives and significance of different types of ratios.• develop the understanding of computation of current ratio and quick ratio.• develop the skill of computation of debt equity ratio, total asset to debt ratio, proprietary ratio and interest coverage ratio.



<ul style="list-style-type: none"> • Activity Ratios: Inventory Turnover Ratio, Trade Receivables Turnover Ratio, Trade Payables Turnover Ratio, Fixed Asset Turnover Ratio, Net Asset Turnover Ratio and Working Capital Turnover Ratio. • Profitability Ratios: Gross Profit Ratio, Operating Ratio, Operating Profit Ratio, Net Profit Ratio and Return on Investment. 	<ul style="list-style-type: none"> • develop the skill of computation of inventory turnover ratio, trade receivables and trade payables ratio and working capital turnover ratio and others. • develop the skill of computation of gross profit ratio, operating ratio, operating profit ratio, net profit ratio and return on investment.
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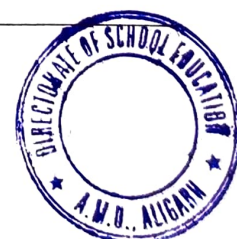
Note: Net Profit Ratio is to be calculated on the basis of profit before and after tax.

Unit 5: Cash Flow Statement

Units/Topics	Learning Outcomes
<ul style="list-style-type: none"> • Meaning, objectives Benefits, Cash and Cash Equivalents, Classification of Activities and preparation (as per AS 3 (Revised) (Indirect Method only) 	<p>After going through this Unit, the students will be able to:</p> <ul style="list-style-type: none"> • state the meaning and objectives of cash flow statement. • develop the understanding of preparation of
<p>Note:</p> <p>(i) Adjustments relating to depreciation and amortization, profit or loss on sale of assets including investments, dividend (both final and interim) and tax.</p> <p>(ii) Bank overdraft and cash credit to be treated as short term borrowings.</p> <p>(iii) Current Investments to be taken as Marketable securities unless otherwise specified.</p>	<p>Cash Flow Statement using indirect method as per AS 3 with given adjustments.</p>

Note: Previous years' Proposed Dividend to be given effect, as prescribed in AS-4, Events occurring after the Balance Sheet date. Current years' Proposed Dividend will be accounted for in the next year after it is declared by the shareholders.

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Prescribed Books:

Financial Accounting -I	Class XI	NCERT Publication
Accountancy -II	Class XI	NCERT Publication
Accountancy -I	Class XII	NCERT Publication
Accountancy -II	Class XII	NCERT Publication
Accountancy – Computerised Accounting System	Class XII	NCERT Publication

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2

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Class XII 2022-23

Arabic (Theory) – Subject Code: 12AR04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

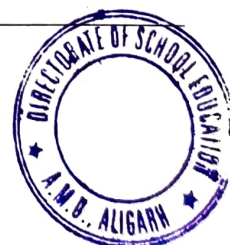
Theory: 75

Unit Test: 25

Unit/Areas of Learning	Marks	Periods
A. Advanced Reading Skills	05	25
B. Effective Writing Skills	15	30
C. Grammar	15	40
D. Literature	40	85
Unit Test (Internal Assessment)	25	-
Total	100	180

Topics	Marks	Suggested Periods
Section – A: Advanced Reading Skills	05	2 5
1. An unseen passage of 150 words followed by 3-4 short questions(2 marks each) to test comprehension. 2 marks maybe allocated for providing a suitable heading.		
Section – B: Effective Writing Skills	15	3 0
In this section various questions on given input will be asked as under :		
(S) Letter writing on a given topic (1mark for address + 4 marks for content) However format to be taken care of.	05	1 1
(ii) Summary of lesson from Text-book (about 60 words)	05	1 1
(iii) Writing a longer composition such as an essay, or speech/story read/ heard/experienced of about 150 words	05	2 3
Section – C: Grammar (Theory and Application)	15	4 0

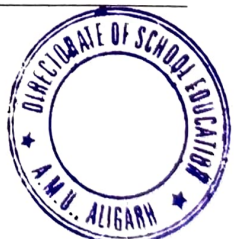
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Variety of questions as listed below will be included involving the application of grammar items in syllabus:		
a) Definition and examples of the following (Theory of Grammar) (i) I'laal (In Mithaal, Ajwaf and Naaqis) (ii) Ibdal- (MahmoozulFaa, wal- 'Ainwal – Laam) (iii) Murakkab 'Adadi (Adad and Ma'dood), 1 + 100 (iv) Use of Asmaa'-Mausoolah (v) Khasiyat-Abwaab Al- MazidFih (If'aal, Taf'eel, Mufaa'alah, Tafa'ul, Istif'aal) (vi) JumlaShartiyyah (vii) JumlaNidaaiyah	10	
b) Applied Grammar (any two of the following) i) Correction of sentences ii) Fill in the blanks iii) Roots of the verbs iv) Formation of active participle and passive participle(All verb patterns) v) Choose nouns, verbs and prepositions	5+5	
Section – D: Literature	40	85
Prose : Text (Translation of any 2 out of 3 given passages in about 75 words ofeach)	20	
Diacritical marking of any text passages Poetry:	5	
(Explanation of any four of 6-7 the given verses with reference to thecontext) (8 + 2)	10	

Prescribed Books: *Minhaj al Ta'leem al Thanavi al' Ali Lil Lughat al Arabiyan, CBSE, Delhi, 2011*

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Class XII 2022-23

Botany (Theory) – Subject Code: 12BT04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time (Theory & Practical) : 1 hours 30 mins each.

Max Marks: 50
Theory: 30
Practical: 12
Unit Test: 08

Units	Title	Periods	Marks
vi	Reproduction	13	05
vii	Genetics and Evolution	24	11
viii	Biology and Human Welfare	15	04
ix	Biotechnology and its Applications	10	06
x	Ecology and Environment	18	04
	Practical	-	12
	Unit Test (Internal Assessment)	-	08
	Total	80	50

Unit – VI Reproduction 13 Periods 05 Marks

Chapter-2: Sexual Reproduction in Flowering Plants

Flower structure; development of male and female gametophytes; pollination – types, agencies and examples; out breeding devices; pollen-pistil interaction; double fertilization; post fertilization events – development of endosperm and embryo, development of seed and formation of fruit; special modes- 12abeling, parthenocarpy, polyembryony; Significance of seed dispersal and fruit formation.

Unit- VII Genetics and Evolution 24 Periods 11 Marks

Chapter-5: Principles of Inheritance and Variation

Heredity and variation: Mendelian inheritance; deviations from Mendelism – incomplete dominance, co-dominance, and pleiotropy; chromosome theory of inheritance; chromosomes and genes.

Chapter-6: Molecular Basis of Inheritance

Search for genetic material and DNA as genetic material; Structure of DNA and RNA; DNA packaging; DNA replication; Central Dogma; transcription, genetic code, translation; gene expression and regulation – lac operon.

Unit- VIII Biology and Human Welfare 15 Periods 04 Marks

Chapter-10: Microbes in Human Welfare

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Microbes in food processing, industrial production, sewage treatment, energy generation and microbes as bio-control agents and bio-fertilizers. Antibiotics; production and judicious use.

Unit- IX Biotechnology and its Applications 10 Periods 06 Marks

Chapter-12: Biotechnology and its Applications

Application of biotechnology in health and agriculture: Human insulin and vaccine production, stem cell technology, gene therapy; genetically modified organisms – Bt crops; transgenic animals; biosafety issues, biopiracy and patents.

Unit- X Ecology and Environment 18 Periods 04 Marks

Chapter-14: Ecosystem

Ecosystems: Patterns, components; productivity and decomposition; energy flow; pyramids of number, biomass, energy (Topics excluded: Ecological Succession and Nutrient Cycles)

Practicals

A. List of Experiments

1. Prepare a temporary mount to observe pollen germination.
2. Study the plant population density by quadrat method.
3. Study the plant population frequency by quadrat method.
4. Prepare a temporary mount of onion root tip to study mitosis.
5. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc.

B. Study and observe the following (Spotting):

1. Flowers adapted to pollination by different agencies (wind, insects, birds).
2. Pollen germination on stigma through a permanent slide.
3. Meiosis in onion bud cell or through permanent slides.
4. Mendelian inheritance using seeds of different colour/sizes of any plant.
5. Controlled pollination – emasculation, tagging and bagging.
6. Models specimen showing symbiotic association in root nodules of leguminous plants, Cuscuta on host, lichens.

Prescribed Books:

1. Biology, Class-XII, Published by NCERT
2. Other related books and manuals brought out by NCERT (consider multimedia also)
3. Biology Supplementary Material (Revised). Available on CBSE website.

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Class XII 2022-23

Zoology (Theory) – Subject Code: 12ZY04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time (Theory & Practical) : 1 hours 30 mins each.

Max Marks: 50
Theory: 30
Practical: 13
Unit Test: 07

Units	Title	Periods	Marks
VI	Reproduction	15	06
VII	Genetics and Evolution	20	09
VIII	Biology in Human Welfare	20	06
IX	Biotechnology	10	03
X	Ecology and Environment	15	06
	Practical	-	13
	Unit Test (Internal Assessment)	-	07
	Total	80	50

Unit-VI Reproduction 15 Periods 06 Marks

Chapter-3: Human Reproduction

Male and female reproductive systems; microscopic anatomy of testis and ovary; gametogenesis – spermatogenesis and oogenesis; menstrual cycle; 14labeling14ion14, embryo development upto blastocyst formation, implantation; pregnancy and placenta formation (elementary idea); parturition (elementary idea); lactation (elementary idea).

Chapter-4: Reproductive Health

Need for reproductive health and prevention of Sexually Transmitted Diseases (STDs); birth control – need and methods, contraception and medical termination of pregnancy (MTP); amniocentesis; infertility and assisted reproductive technologies – IVF, ZIFT, GIFT (elementary idea for general awareness).

Unit-VII Genetics and Evolution 20 Periods 09 Marks

Chapter-5: Principles of Inheritance and Variation

Heredity and variation: Co-dominance, multiple alleles and inheritance of blood groups, elementary idea of polygenic inheritance; Sex determination – in humans, birds and honey bee; linkage and crossing over; sex linked inheritance – haemophilia, colour blindness; Mendelian disorders in humans – thalassemia; chromosomal disorders in humans; Down’s syndrome, Turner’s and Klinefelter’s syndromes.

Chapter-6: Molecular Basis of Inheritance

Genome, Human and rice genome projects; DNA fingerprinting.

Chapter-7: Evolution

Based on CBSE Syllabus



Origin of life; biological evolution and evidences for biological evolution (paleontology, comparative anatomy, embryology and molecular evidences); Darwin's contribution, modern synthetic theory of evolution; mechanism of evolution – variation (mutation and recombination) and natural selection with examples, types of natural selection; Gene flow and genetic drift; Hardy – Weinberg's principle; adaptive radiation; human evolution.

Unit-VIII Biology and Human Welfare 20 Periods 06 Marks

Chapter-8: Human Health and Diseases

Pathogens; parasites causing human diseases (malaria, dengue, chikungunya, filariasis, ascariasis, typhoid, pneumonia, common cold, amoebiasis, ring worm) and their control; Basic concepts of immunology – vaccines; cancer, HIV and AIDS; Adolescence – drug and alcohol abuse.

Unit-IX Biotechnology and its Applications 10 Periods 03 Marks

Chapter-11: Biotechnology – Principles and Processes

Genetic Engineering (Recombinant DNA Technology).

Unit-X Ecology and Environment 15 Periods 06 Marks

Chapter-13: Organisms and Populations Population interactions – mutualism, competition, predation, parasitism; population attributes – growth, birth rate and death rate, age distribution. (Topics excluded: Organism and its Environment, Major Abiotic Factors, Responses to Abiotic Factors, Adaptations)

Chapter-15: Biodiversity and its Conservation

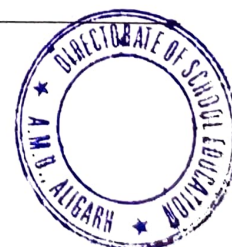
Biodiversity-Concept, patterns, importance; loss of biodiversity; biodiversity conservation; hotspots, endangered organisms, extinction, Red Data Book, Sacred Groves, biosphere reserves, national parks, wildlife, sanctuaries and Ramsar sites.

PRACTICALS

Class – XII

Study and observe the following (Spotting):

1. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (mammalian).
2. T.S. of blastula through permanent slides (amphibian).
3. Common disease causing organisms like Entamoeba, Plasmodium, Taenia, Ascaris through permanent slides, models or virtual images or specimens. Comment on symptoms of diseases that they cause.
4. Human Skeleton.
5. Test for presence of glucose in urine.
6. Test for presence of Protein in urine.



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Class XII 2022-23

Business Studies (Theory) – Subject Code: 12BS04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

Unit Test: 25

Units		Periods	Marks
Part A	Principles and Functions of Management		
1.	Nature and Significance of Management	10	18
2	Principles of Management	12	
3	Business Environment	10	
4	Planning	12	13
5	Organising	14	
6	Staffing	15	19
7	Directing	12	
8	Controlling	10	
Part B	Business Finance and Marketing		
9	Financial Management	15	12
10	Financial Markets	15	
11	Marketing Management	25	13
12	Consumer Protection	10	
Part C	Project Work + Viva-voce - (Part of internal assessment)	20	25
	Total	180	100

Part A: Principles and Functions of Management Unit 1: Nature and

Significance of Management

Concept	After going through this unit, the student/ learner would be able to:
Management – concept, objectives, and importance	<ul style="list-style-type: none"> Understand the concept of management. Explain the meaning of 'Effectiveness and Efficiency. Discuss the objectives of management. Describe the importance of management.
Management as Science, Art and Profession	<ul style="list-style-type: none"> Examine the nature of management as a science, art and profession.

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Levels of Management	<ul style="list-style-type: none"> Understand the role of top, middle and lower levels of management
Management functions-planning, organizing, staffing, directing and controlling	<ul style="list-style-type: none"> Explain the functions of management
Coordination- concept and importance	<ul style="list-style-type: none"> Discuss the concept and characteristics of coordination.
	<ul style="list-style-type: none"> Explain the importance of coordination.

Unit 2: Principles of Management

Principles of Management- concept and significance	<ul style="list-style-type: none"> Understand the concept of principles of management. Explain the significance of management principles.
Fayol's principles of management	<ul style="list-style-type: none"> Discuss the principles of management developed by Fayol.
Taylor's Scientific management- principles and techniques	<ul style="list-style-type: none"> Explain the principles and techniques of 'Scientific Management'. Compare the contributions of Fayol and Taylor.

Unit 3: Business Environment

Business Environment- concept and importance	<ul style="list-style-type: none"> Understand the concept of 'Business Environment'. Describe the importance of business environment
Dimensions of Business Environment- Economic, Social, Technological, Political and Legal	<ul style="list-style-type: none"> Describe the various dimensions of 'Business Environment'. Understand the concept of demonetization
Demonetization – concept and features	

Unit 4: Planning

Concept, importance and limitation	<ul style="list-style-type: none"> Understand the concept of planning. Describe the importance of planning. Understand the limitations of planning.
Planning process	<ul style="list-style-type: none"> Describe the steps in the process of planning.
Single use and standing plans. Objectives, Strategy, Policy, Procedure, method Rule, budget and Programme	<ul style="list-style-type: none"> Develop an understanding of single use and standing plans Describe objectives, policies, strategy, procedure, method, rule, budget and programme as types of plans.

Unit 5: Organising

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Concept and importance

- Understand the concept of organizing as a structure and as a



	<p>process.</p> <ul style="list-style-type: none"> • Explain the importance of 19abeling19i.
Organising Process	<ul style="list-style-type: none"> • Describe the steps in the process of organizing
Structure of 19abeling19ion- functional and divisional concept. Formal and informal 19abeling19ion- concept	<ul style="list-style-type: none"> • Describe functional and divisional structures of 19abeling19ion. • Explain the advantages, disadvantages and suitability of functional and divisional structure. • Understand the concept of formal and informal 19abeling19ion. • Discuss the advantages, disadvantages of formal and informal 19abeling19ion.
Delegation: concept, elements and importance	<ul style="list-style-type: none"> • Understand the concept of delegation. • Describe the elements of delegation. • Appreciate the importance of Delegation.
Decentralization: concept and importance	<ul style="list-style-type: none"> • Understand the concept of 19abeling19ion19ion. • Explain the importance of 19abeling19ion19ion. • Differentiate between delegation and 19abeling19ion19ion.

Unit 6: Staffing

Concept and importance of staffing	<ul style="list-style-type: none"> • Understand the concept of staffing. • Explain the importance of staffing
Staffing as a part of Human Resource Management concept	<ul style="list-style-type: none"> • Understand the specialized duties and activities performed by Human Resource Management
Staffing process	<ul style="list-style-type: none"> • Describe the steps in the process of staffing
Recruitment process	<ul style="list-style-type: none"> • Understand the meaning of recruitment. • Discuss the sources of recruitment. • Explain the merits and demerits of internal and external sources of recruitment.
Selection – process	<ul style="list-style-type: none"> • Understand the meaning of selection. • Describe the steps involved in the process of selection.
Training and Development – Concept and importance, Methods of training – on the	<ul style="list-style-type: none"> • Understand the concept of training and development.



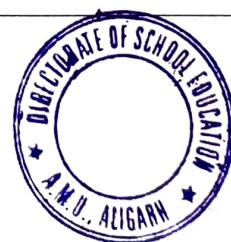
Job and off the job – vestibule training, apprenticeship training and internship training	<ul style="list-style-type: none"> • Appreciate the importance of training to the organization and to the employees. • Discuss the meaning of induction training, vestibule training, apprenticeship training and internship training. • Differentiate between training and development. • Discuss on the job and off the job methods of training.
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Unit 7: Directing

Concept and importance	<ul style="list-style-type: none"> • Describe the concept of directing. • Discuss the importance of directing
Elements of Directing	<ul style="list-style-type: none"> • Describe the various elements of directing
Motivation – concept, Maslow’s hierarchy of needs, Financial and non-financial incentives	<ul style="list-style-type: none"> • Understand the concept of motivation. • Develop an understanding of Maslow’s Hierarchy of needs. • Discuss the various financial and non-financial incentives.
Leadership – concept, styles – authoritative, democratic and laissez faire	<ul style="list-style-type: none"> • Understand the concept of leadership. • Understand the various styles of leadership.
Communication – concept, formal and informal communication; barriers to effective communication, how to overcome the barriers	<ul style="list-style-type: none"> • Understand the concept of communication • Understand the elements of the communication process. • Discuss the concept of formal and informal communication. • Discuss the various barriers to effective communication. • Suggest measures to overcome barriers to communication.

Unit 8: Controlling

Controlling – Concept and importance	<ul style="list-style-type: none"> • Understand the concept of controlling. • Explain the importance of controlling.
Relationship between planning and controlling	<ul style="list-style-type: none"> • Describe the relationship between planning and controlling
Steps in process of control	<ul style="list-style-type: none"> • Discuss the steps in the process of controlling.



Part B: Business Finance and Marketing Unit 9: Financial

Management

Concept, role and objectives of Financial Management	<ul style="list-style-type: none">• Understand the concept of financial management.• Explain the role of financial management in an organization.• Discuss the objectives of financial management
Financial decisions: investment, financing and dividend- Meaning and factors affecting	<ul style="list-style-type: none">• Discuss the three financial decisions and the factors affecting them.
Financial Planning – concept and importance	<ul style="list-style-type: none">• Describe the concept of financial planning and its objectives.• Explain the importance of financial planning.
Capital Structure – concept and factors affecting capital structure	<ul style="list-style-type: none">• Understand the concept of capital structure.• Describe the factors determining the choice of an appropriate capital structure of a company.
Fixed and Working Capital – Concept and factors affecting their requirements	<ul style="list-style-type: none">• Understand the concept of fixed and working capital.• Describe the factors determining the requirements of fixed and working capital.

Unit 10: Financial Markets

Financial Markets: Concept	<ul style="list-style-type: none">• Understand the concept of financial market.
Money Market: Concept	<ul style="list-style-type: none">• Understand the concept of money market.
Capital market and its types (primary and secondary)	<ul style="list-style-type: none">• Discuss the concept of capital market.• Explain primary and secondary markets as types of capital market.• Differentiate between capital market and money market.• Distinguish between primary and secondary markets.
Stock Exchange – Functions and trading procedure	<ul style="list-style-type: none">• Give the meaning of a stock exchange.• Explain the functions of a stock exchange.• Discuss the trading procedure in a stock exchange.



	<ul style="list-style-type: none"> • Give the meaning of depository services and demat account as used in the trading procedure of securities.
Securities and Exchange Board of India (SEBI) – objectives and functions	<ul style="list-style-type: none"> • State the objectives of SEBI. • Explain the functions of SEBI.

Unit 11: Marketing

Marketing – Concept, functions and philosophies	<ul style="list-style-type: none"> • Understand the concept of marketing. • Explain the features of marketing. • Discuss the functions of marketing. • Explain the marketing philosophies.
Marketing Mix – Concept and elements	<ul style="list-style-type: none"> • Understand the concept of marketing mix. • Describe the elements of marketing mix.
Product – branding, labeling and packaging – Concept	<ul style="list-style-type: none"> • Understand the concept of product as an element of marketing mix. • Understand the concept of branding, labeling and packaging.
Price – Concept, Factors determining price	<ul style="list-style-type: none"> • Understand the concept of price as an element of marketing mix. • Describe the factors determining price of a product.
Physical Distribution – concept, components and channels of distribution	<ul style="list-style-type: none"> • Understand the concept of physical distribution. • Explain the components of physical distribution. • Describe the various channels of distribution.
Promotion – Concept and elements; Advertising, Personal Selling, Sales Promotion and Public Relations	<ul style="list-style-type: none"> • Understand the concept of promotion as an element of marketing mix. • Describe the elements of promotion mix. • Understand the concept of advertising. • Understand the concept of sales promotion. • Discuss the concept of public relations.

Unit 12: Consumer Protection

Concept and importance of consumer protection	<ul style="list-style-type: none"> • Understand the concept of consumer protection. • Describe the importance of
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Based on CBSE Syllabus



	<p>consumer protection.</p> <ul style="list-style-type: none"> • Discuss the scope of Consumer Protection Act, 2019
<p>The Consumer Protection Act, 2019: <i>Source:</i> http://egazette.nic.in/WriteReadData/2019/210422.pdf</p> <p>Meaning of consumer Rights and responsibilities of consumers Who can file a complaint? Redressal machinery Remedies available</p>	<ul style="list-style-type: none"> • Understand the concept of a consumer according to the Consumer Protection Act, 2019. • Explain the consumer rights • Understand the responsibilities of consumers • Understand who can file a complaint and against whom? • Discuss the legal redressal machinery under Consumer Protection Act, 2019. • Examine the remedies available to the consumer under Consumer Protection Act, 2019.
<p>Consumer awareness – Role of consumer organizations and Non-Governmental Organizations (NGOs)</p>	<ul style="list-style-type: none"> • Describe the role of consumer organizations and NGOs in protecting consumers' interests.

Unit 13: Project Work



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Chemistry (Theory) – Subject Code: 12CH04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time (Theory & Practical) : 3 hours each.

Max Marks: 100
Theory: 60
Practical: 25
Unit Test: 15

S.No.	Title	No. of Periods	Marks
1	Solutions	15	6
2	Electrochemistry	18	8
3	Chemical Kinetics	15	6
4	d –and f –Block Elements	18	6
5	Coordination Compounds	18	6
6	Haloalkanes and Haloarenes	15	5
7	Alcohols, Phenols and Ethers	14	5
8	Aldehydes, Ketones and Carboxylic Acids	15	7
9	Amines	14	5
10	Biomolecules	18	6
	Practical	-	25
	Unit Test (Internal Assessment)	-	15
	Total	160	100

Unit II: Solutions

15 Periods

Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, Raoult's law, colligative properties - relative lowering of vapour pressure, elevation of boiling point, depression of freezing point, osmotic pressure, determination of molecular masses using colligative properties, abnormal molecular mass, Van't Hoff factor.

Unit III: Electrochemistry

18 Periods

Redox reactions, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relation between Gibbs energy change and EMF of a cell, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis and law of electrolysis (elementary idea), dry cell-electrolytic cells and Galvanic cells, lead accumulator, fuel cells, corrosion.

Unit IV: Chemical Kinetics

15 Periods

Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half-life (only for zero and first order reactions), concept of collision

Based on CBSE Syllabus



theory (elementary idea, no mathematical treatment), activation energy, Arrhenius equation.

18 Periods

Unit VIII: d and f Block Elements

General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first-row transition metals – metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic

properties, interstitial compounds, alloy formation, preparation and properties of $K_2Cr_2O_7$ and $KMnO_4$.

Lanthanoids –

Electronic configuration, oxidation states, chemical reactivity and lanthanoid contraction and its consequences.

Actinoids - Electronic configuration, oxidation states and comparison with lanthanoids.

18 Periods

Unit IX: Coordination Compounds

Coordination compounds - Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT, and CFT; structure and stereoisomerism, the importance of coordination compounds (in qualitative analysis, extraction of metals and biological system).

15 Periods

Unit X: Haloalkanes and Haloarenes.

Haloalkanes: Nomenclature, nature of C–X bond, physical and chemical properties, optical rotation mechanism of substitution reactions.

Haloarenes: Nature of C–X bond, substitution reactions (Directive influence of halogen in monosubstituted compounds only). Uses and environmental effects of - dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.

14 Periods

Unit XI: Alcohols, Phenols and Ethers

Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), identification of primary, secondary and tertiary alcohols, mechanism of dehydration, uses with special reference to methanol and ethanol.

Phenols: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols.

Ethers: Nomenclature, methods of preparation, physical and chemical properties, uses.

15 Periods

Unit XII: Aldehydes, Ketones and Carboxylic Acids

Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes, uses.

Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses.

Unit XIII: Amines

14 Periods

Based on CBSE Syllabus



Amines: Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines.

Based on CBSE Syllabus



Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry.

Unit XIV: Biomolecules

18 Periods

Carbohydrates - Classification (aldoses and ketoses), monosaccharides (glucose and fructose), D-L configuration oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); Importance of carbohydrates.

Proteins -Elementary idea of - amino acids, peptide bond, polypeptides, proteins, structure of proteins - primary, secondary, tertiary structure and quaternary structures (qualitative idea only), denaturation of proteins; enzymes. Hormones - Elementary idea excluding structure.

Vitamins - Classification and functions.

Nucleic Acids: DNA and RNA.

Note:

The content indicated in NCERT textbooks as excluded for the year 2022-23 is not to be tested by schools.

PRACTICALS 3 HOURS/ 25 MARKS

Evaluation Scheme for Examination	Marks
Qualitative Analysis	07
Quantitative Analysis	08
Class record / practical file	05
Viva-voce	05
Total	25

PRACTICAL SYLLABUS

60 Periods

Micro-chemical methods are available for several of practical experiments. Wherever possible, such techniques should be used.

A. Surface Chemistry

- (a) Preparation of one lyophilic and one lyophobic sol

Lyophilic sol - starch, egg albumin and gum

Lyophobic sol - aluminium hydroxide, ferric hydroxide, arsenous sulphide.

- (b) Dialysis of sol-prepared in (a) above.
(c) Study of the role of emulsifying agents in stabilizing the emulsion of different oils.

B. Chemical Kinetics

- (a) Effect of concentration and temperature on the rate of reaction between Sodium Thiosulphate and Hydrochloric acid.
(b) Study of reaction rates of any one of the following:
(i) Reaction of Iodide ion with Hydrogen Peroxide at room temperature using different concentrations of Iodide ions.
(ii) Reaction between Potassium Iodate, (KIO_3) and Sodium Sulphite: (Na_2SO_3) using starch solution as an indicator (clock reaction).

C. Thermochemistry

Any one of the following experiments

- (a) Enthalpy of dissolution of Copper Sulphate or Potassium Nitrate.

Based on CBSE Syllabus



- (b) Enthalpy of neutralization of strong acid (HCl) and strong base (NaOH).
 (c) Determination of enthalpy change during interaction (Hydrogen bond formation) between Acetone and Chloroform.

D. Electrochemistry

Variation of cell potential in $Zn/Zn^{2+} || Cu^{2+}/Cu$ with change in concentration of electrolytes ($CuSO_4$ or $ZnSO_4$) at room temperature.

E. Chromatography

- (a) Separation of pigments from extracts of leaves and flowers by paper chromatography and determination of R_f values.
 (b) Separation of constituents present in an inorganic mixture containing two cations only (constituents having large difference in R_f values to be provided).

F. Preparation of Inorganic Compounds

Preparation of double salt of Ferrous Ammonium Sulphate or Potash Alum.
 Preparation of Potassium Ferric Oxalate.

G. Preparation of Organic Compounds

Preparation of any one of the following compounds

- i) Acetanilide ii) Di-benzalacetone iii) p-Nitroacetanilide iv) Aniline yellow or 2-Naphthol Aniline dye.

H. Tests for the functional groups present in organic compounds:

Unsaturation, alcoholic, phenolic, aldehydic, ketonic, carboxylic and amino (Primary) groups.

I. Characteristic tests of carbohydrates, fats and proteins in pure samples and their detection in given foodstuffs.

J. Determination of concentration/ molarity of $KMnO_4$ solution by titrating it against a standard solution of:

- (a) Oxalic acid,
 (b) Ferrous Ammonium Sulphate

(Students will be required to prepare standard solutions by weighing themselves).

K. Qualitative analysis

Determination of one anion and one cation in a given salt

Cation:

$Pb^{2+}, Cu^{2+}, As^{3+}, Al^{3+}, Fe^{3+}, Mn^{2+}, Zn^{2+}, Ni^{2+}, Ca^{2+}, Sr^{2+}, Ba^{2+}, Mg^{2+}, NH_4^+$

Anions:

$(CO_3)^{2-}, S^{2-}, (SO_3)^{2-}, (NO_2)^-, (SO_4)^{2-}, Cl^-, Br^-, I^-, (PO_4)^{3-}, (C_2O_4)^{2-}, CH_3COO^-, NO^-$

(Note: Insoluble salts excluded)

3

L Quantitative analysis

- (1) (a) Preparation of the standard solution of Oxalic acid of a given volume
 (b) Determination of molarity of $KMnO_4$ solution by titrating it against a standard solution of Oxalic acid.
 (2) The above exercise [F 1 (a) and (b)] to be conducted using Ferrous ammonium sulphate (Mohr's salt)

Note: The above practical may be carried out in an experiential manner rather than recording observations.

Based on CBSE Syllabus



PRESCRIBED BOOKS

1. Chemistry Part -I, Class-XII, Published by NCERT.
2. Chemistry Part -II, Class-XII, Published by NCERT.
3. Laboratory Manual of Chemistry, Class XI Published by NCERT
4. Other related books and manuals of NCERT including multimedia and onlinesources

Based on CBSE Syllabus



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Computer Science (Theory) – Subject Code: 12CS04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time (Theory & Practical) : 3 hours each.

Max Marks: 100

Theory: 60

Practical: 25

Unit Test: 15

Distribution of Marks:

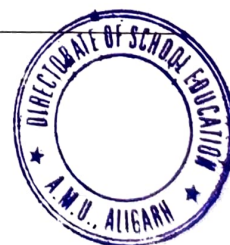
Unit No.	Unit Name	Marks	Periods	
			Theory	Practical
I	Computational Thinking and Programming - 2	40	70	50
II	Computer Networks	15	20	---
III	Database Management	15	20	20
	Practical	25	-	70
	Unit Test (Internal Assessment)	15	-	-
	Total	100	110	70
	Grand Total	100	110+70=180	

Unit wise Syllabus

Unit I: Computational Thinking and Programming – 2

- Revision of Python topics covered in Class XI.
- Functions: types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)
- Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths
- Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of data in a text file
- Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file
- CSV file: import csv module, open / close csv file, write into a csv file using csv.writer() and read

Based on CBSE Syllabus



from a csv file using csv.reader()

- Data Structure: Stack, operations on stack (push & pop), implementation of stack using list.

Unit II: Computer Networks

- Evolution of networking: introduction to computer networks, evolution of networking (ARPANET, NSFNET, INTERNET)
- Data communication terminologies: concept of communication, components of data communication (sender, receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching)
- Transmission media: Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves)
- Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card)
- Network topologies and Network types: types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree)
- Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP
- Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting

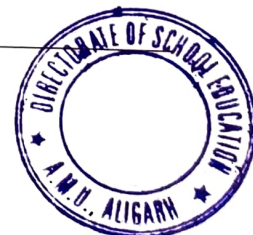
Unit III: Database Management

- Database concepts: introduction to database concepts and its need
- Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key)
- Structured Query Language: introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause, joins: cartesian product on two tables, equi-join and natural join
- Interface of python with an SQL database: connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using fetchone(), fetchall(), rowcount, creating database connectivity applications **(For Practical Only)**

1. Practical

S.No	Unit Name	Marks (Total=25)
.		

Based on CBSE Syllabus



1	Lab Test:	
	1. Python program (60% logic + 20% documentation + 20% code quality)	8
	2. A stub program with Python SQL connectivity must be provided with blanks (4 blanks) to be filled by the student with the desired SQL query.	6
2	Report file: <ul style="list-style-type: none"> • Minimum 15 Python programs. • SQL Queries – Minimum 5 sets using one table / two tables. • Minimum 4 programs based on Python - SQL connectivity 	6
4	Viva voce	5

2. Suggested Practical List:

Python Programming

- Read a text file line by line and display each word separated by a #.
- Read a text file and display the number of vowels/consonants/uppercase/lowercase characters in the file.
- Remove all the lines that contain the character 'a' in a file and write it to another file.
- Create a binary file with name and roll number. Search for a given roll number and display the name, if not found display appropriate message.
- Create a binary file with roll number, name and marks. Input a roll number and update the marks.
- Write a random number generator that generates random numbers between 1 and 6 (simulates a dice).
- Write a Python program to implement a stack using list.
- Create a CSV file by entering user-id and password, read and search the password for given user-id.

Database Management

- Create a student table and insert data. Implement the following SQL commands on the student table:
 - ALTER table to add new attributes / modify data type / drop attribute
 - UPDATE table to modify data
 - ORDER BY to display data in ascending / descending order
 - DELETE to remove tuple(s)
 - GROUP BY and find the min, max, sum, count and average
- Similar exercise may be framed for other cases.
- Integrate SQL with Python by importing suitable module.

3. Suggested Reading Material

- NCERT Textbook for COMPUTER SCIENCE (Class XII)

Based on CBSE Syllabus



- Support Materials on the CBSE website.

**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Economics (Theory) – Subject Code: 12EC04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

Unit Test: 25

Units		Marks	Periods
Part A	Introductory Macroeconomics		
	National Income and Related Aggregates	12	25
	Money and Banking	06	10
	Determination of Income and Employment	10	20
	Government Budget and the Economy	05	12
	Balance of Payments	05	10
Part B	Indian Economic Development		
	Development Experience (1947-90) and Economic Reforms since 1991	20	23
	Current Challenges facing Indian Economy	14	30
	Development Experience of India – A Comparison with Neighbours	03	10
Part C	Project Work+Viva-voce – (Part of internal assessment)	25	30
	Total	100	170

Part A: Introductory Macroeconomics

Unit 1: National Income and Related Aggregates

25 Periods

What is Macroeconomics?

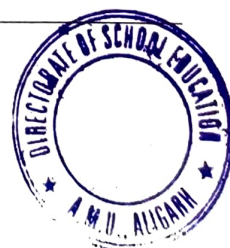
Basic concepts in macroeconomics: consumption goods, capital goods, final goods, intermediate goods; stocks and flows; gross investment and depreciation.

Circular flow of income (two sector model); Methods of calculating National Income - Value Added or Product method, Expenditure method, Income method.

Aggregates related to National Income:

Gross National Product (GNP), Net National Product (NNP), Gross Domestic Product (GDP) and Net

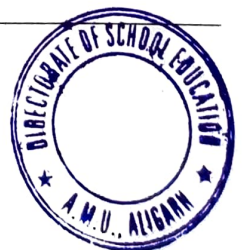
Based on CBSE Syllabus



Domestic Product (NDP) - at market price, at factor cost; Real and Nominal GDP.

GDP and Welfare

Based on CBSE Syllabus



Unit 2: Money and Banking

10 Periods

Money – meaning and functions, supply of money - Currency held by the public and net demand deposits held by commercial banks.

Money creation by the commercial banking system.

Central bank and its functions (example of the Reserve Bank of India): Bank of issue, Govt. Bank, Banker's Bank, Control of Credit through Bank Rate, CRR, SLR, Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.

Unit 3: Determination of Income and Employment

20 Periods

Aggregate demand and its components.

Propensity to consume and propensity to save (average and marginal). Short-run equilibrium output; investment multiplier and its mechanism. Meaning of full employment and involuntary unemployment.

Problems of excess demand and deficient demand; measures to correct them - changes in government spending, taxes and money supply.

Unit 4: Government Budget and the Economy

12 Periods

Government budget - meaning, objectives and components. Classification of

receipts - revenue receipts and capital receipts;

Classification of expenditure – revenue expenditure and capital expenditure. Balanced,

Surplus and Deficit Budget – measures of government deficit.

Unit 5: Balance of Payments

10 Periods

Balance of payments account - meaning and components; Balance of payments – Surplus and Deficit

Foreign exchange rate - meaning of fixed and flexible rates and managed floating. Determination of exchange rate in a free market, Merits and demerits of flexible and fixed exchange rate.

Managed Floating exchange rate system

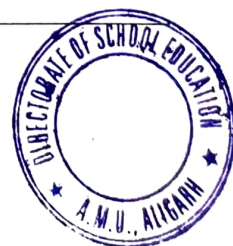
Part B: Indian Economic Development

Unit 6: Development Experience (1947-90) and Economic Reforms since 1991:

23 Periods

A brief introduction of the state of Indian economy on the eve of independence. Indian economic system and common goals of Five Year Plans.

Based on CBSE Syllabus



Main features, problems and policies of agriculture (institutional aspects and new agricultural strategy), industry (IPR 1956; SSI – role & importance) and foreign trade.

Economic Reforms since 1991:

Features and appraisals of liberalisation, globalisation and privatisation (LPG policy); Concepts of demonetization and GST

Unit 7: Current challenges facing Indian Economy

30 Periods

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

Rural development: Key issues - credit and marketing - role of cooperatives; agricultural diversification; alternative farming - organic farming

Employment: Growth and changes in work force participation rate in formal and informal sectors; problems and policies

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

Unit 8: Development Experience of India:

10 Periods

A comparison with neighbours India and

Pakistan

India and China

Issues: economic growth, population, sectoral development and other Human Development Indicators

Part C: Project in Economics

30 Periods

Prescribed Books:

1. Statistics for Economics, NCERT
2. Indian Economic Development, NCERT
3. Introductory Microeconomics, NCERT
4. Macroeconomics, NCERT
5. Supplementary Reading Material in Economics, CBSE

Note: The above publications are also available in Hindi Medium.



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Elective English (Theory) – Subject Code: 12E004
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

Unit Test: 25

Section - A	Periods	Marks
1. Reading Comprehension	10	20
Section - B		
1. Grammar	10	05
Section - C		
1. Writing Skills	20	20
Section - D		
1. Literature (Text Books)	90	20
2. A Tiger for Malgudi (Fiction)	30	10
Unit Test (Internal Assessment)	-	25
Total	160	100

Section A Periods: 10

READING

20 MARKS

This section will have two unseen passages and a poem:

1. 12 Multiple Choice Questions / Objective Type Questions out of 15 from a literary or discursive passage of about 950-1000 words. **(1 X 12 =12 Marks)**
2. 4 out of 5 multiple choice questions / Objective Type Questions to test interpretation and appreciation of a poem of about 10-12 lines. **(1x4=4 Marks)**
3. 4 out of 5 multiple choice questions / Objective Type Questions from a case-based factual passage (with visual input- statistical data, chart etc.) of 100-120 words to test interpretation. **(1 X 4= 4 Marks)**

Section B Periods: 10

GRAMMAR

5 Marks

4. 8 multiple choice questions / Objective Type Questions out of 10 involving transformation of sentences. **(1x8 =8 Marks)**



Based on CBSE Syllabus

Section C Periods: 20

Writing

20 Marks

5. Three Long Writing Task out of Four to be answered in 120-150 words each: A discursive and interpretative writing. **(5x3=15 Marks)**
6. One Long Writing Task out of two to be answered in 120-150 words: An essay on an argumentative/discursive topic such as an article/report/speech. Contemporary topics/issues to be a part of Article, Report and Speech Writing. **(5x1=5 Marks)**

Section D Periods: 90

LITERATURE

20 Marks

This section will have variety of assessment items including Multiple Choice Questions, Objective Type Questions, Short Answer Type Questions and Long Answer Type Questions to assess comprehension, analysis, interpretation and extrapolation beyond the text.

7. Reference to the Context

- i. One Prose extract out of two to assess literary appreciation and analysis **(5x1= 5 Marks)**
- ii. One Poetry extract out of two to assess literary appreciation and analysis **(5x1= 5 Marks)**

8. One Short Answer Question out of two to be answered in 30-40 words to assess understanding analysis and critical appreciation. Questions should elicit inferential responses through critical thinking. **(2x1=2 Marks)**

9. One Short Answer Question out of two to be answered in 40-50 words to assess understanding analysis and critical appreciation. Questions should elicit inferential responses through critical thinking and drawing inferences in poetry and prose.

(3X1=3 Marks)

10. One Long Answer Question out of two to be answered in 120-150 words each to assess deeper understanding, interpretation, appreciation and drawing inferences. Questions to elicit creative responses and assess ability to form opinions.

(5x1=5 Marks)

Fiction Periods: 30

10 Marks

11. One Short Answer Question out of two to be answered in 30-40 words to test understanding and appreciation and seek comments, interpretation, evaluation and appreciation of characters, events, episodes and interpersonal relationships.

(2x1=2 Marks)

12. One Short Answer Question out of two to be answered in 40-50 words to test understanding and appreciation and seek comments, interpretation, evaluation and appreciation of characters, events, episodes and interpersonal relationships.

(3 x1=3 Marks)

13. One Long Answer Question out of two to be answered in 120-150 words to test deeper (in depth) understanding, interpretation, appreciation and drawing global inferences of the given text with reference to characters /events/ incidents and episodes, leading to creative rendering, forming and defending opinions.



Prescribed Books:

1. **Kaleidoscope** – Text book published by NCERT
2. **Fiction: A Tiger for Malgudi or The Financial Expert** by R.K. Narayan (Novel)

Book- Kaleidoscope-Short Stories

- I Sell my Dreams
- Eveline
- A Wedding in Brownsville

Book- Kaleidoscope-Poetry

- A Lecture Upon the Shadow
- Poems by Milton
- Poems by Blake
- Kubla Khan
- Trees
- The Wild Swans of Coole
- Time and Time Again

Book- Kaleidoscope- Non fiction

- Freedom
- The Mark on the Wall
- Film-making
- Why the Novel Matters
- The Argumentative Indian

Book- Kaleidoscope-Drama

1. Chandalika- RABINDRANATH TAGOR



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

English Core (Theory) – Subject Code: 12EN04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

Unit Test: 25

Section – A	Periods	Marks
1. Reading Comprehension	20	15
Section – B		
1. Creative writing skills	30	20
Section – C		
1. Literature	110	40
Unit Test (Internal Assessment)	-	25
Total	160	100

Section A
Reading Skills (Periods: 20)

Reading Comprehension through Unseen Passage
Marks

15

I. One unseen passage to assess comprehension, interpretation and inference.
Vocabulary and inference of meaning will also be assessed. The passage may be factual, descriptive or literary.

(8x1=8 Marks)

II. One unseen **case-based** passage with verbal/visual inputs like statistical data, charts etc.

(7x1=7
Marks)

Note: The combined word limit for both the passages will be 700-750 words.

Multiple Choice Questions / Objective Type Questions will be asked.

Section B Periods: 30

III. Creative Writing Skills

20 Marks

The section has Short and Long writing tasks.

i. Notice up to 50 words. One out of the two given questions to be answered. (5

Marks: Format :1 / Organisation of Ideas: 1/Content : 2 / Accuracy of Spelling and

Based on CBSE Syllabus



- Grammar : 1).
- ii. Formal/Informal Invitation and Reply up to 50 words. One out of the two given questions to be answered. **(5 Marks: Format : 1 / Organisation of Ideas: 1/Content : 2 / Accuracy of Spelling and Grammar :1).**
 - iii. Letters based on verbal/visual input, to be answered in approximately 120-150 words. Letter types include application for a job with bio data or resume. Letters to the editor (giving suggestions or opinion on issues of public interest) . One out of the two given questions to be answered . **(5 Marks: Format : 1 / Organisation of Ideas: 1/Content : 2 / Accuracy of Spelling and Grammar :1).**
 - iv. Article/ Report Writing, descriptive and analytical in nature, based on verbal inputs, to be answered in 120-150 words. One out of the two given questions to be . **(5 Marks: Format : 1 /Organisation of Ideas: 1/Content : 2 / Accuracy of Spelling and Grammar :1).**

Section C Periods: 110

This section will have variety of assessment items including Multiple Choice Questions, Objective Type Questions, Short Answer Type Questions and Long Answer Type Questions to assess comprehension, analysis, interpretation and extrapolation beyond the text.

IV. Reference to the Context

40 Marks

- i. One Poetry extract out of two from the book **Flamingo** to assess comprehension, interpretation, analysis and appreciation.
(6x1=6 Marks)
- ii. One Prose extract out of two from the book **Vistas** to assess comprehension, interpretation, analysis and appreciation.
(4x1=4 Marks)
- iii. One prose extract out of two from the book **Flamingo** to assess comprehension, interpretation and analysis.
(6x1=6Marks)
- V. Short answer type question (**from Prose and Poetry from the book Flamingo**), to be answered in 40-50 words. Questions should elicit inferential responses through critical thinking. Five questions out of the six given are to be answered.
(5x2=10 Marks)
- VI. Short answer type question, from **Prose (Vistas)**, to be answered in 40- 50 words. Questions should elicit inferential responses through critical thinking. Any 2 out of 3 questions to be done.
(2x2=4 Marks)
- VII. One Long answer type question, from **Prose/Poetry (Flamingo)**, to be answered in 120-150 words. Questions can be based on incident / theme / passage / extract / event as reference points to assess extrapolation beyond and across the text. The question will elicit analytical and evaluative response from student. Any 1 out of 2 questions to be done. **(1x5=5 Marks)**
- VIII. One Long answer type question, based on the chapters from the book **Vistas**, to



be answered in 120-150 words to assess global comprehension and extrapolation beyond the text. Questions to provide evaluative and analytical responses using incidents, events, themes as reference points. Any 1 out of 2 questions to be done.

(1x5=5 Marks)

Prescribed Books

1. **Flamingo:** English Reader published by National Council of Education Research and Training, New Delhi

(Prose)

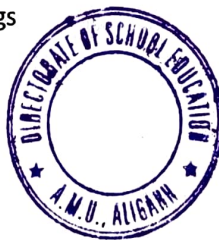
- The Last Lesson
- Lost Spring
- Deep Water
- The Rattrap
- Indigo
- Poets and Pancakes
- The Interview
- Going Places

(Poetry)

- My Mother at Sixty-Six
- Keeping Quiet
- A Thing of Beauty
- A Roadside Stand
- Aunt Jennifer's Tigers

2. **Vistas:** Supplementary Reader published by National Council of Education Research and Training, New Delhi

- The Third Level
- The Tiger King
- Journey to the end of the Earth
- The Enemy
- On the Face of It
- Memories of Childhood
 - The Cutting of My Long Hair
 - We Too are Human Beings



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Entrepreneurship (Theory) – Subject Code: 12EP04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

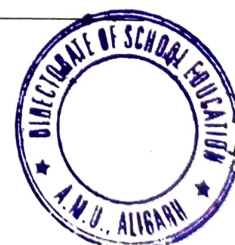
Unit Test: 25

S.No.	Unit	No. of Periods	Marks
Unit 1	Entrepreneurial Opportunity	30	13
Unit 2	Entrepreneurial Planning	30	12
Unit 3	Enterprise Marketing	30	13
Unit 4	Enterprise Growth Strategies	15	12
Unit 5	Business Arithmetic	30	15
Unit 6	Resource Mobilization	15	10
	Project Work + Viva-voce – (Part of internal assessment)	30	25
	Total	180	100

COURSE CONTENT

Unit 1: Entrepreneurial Opportunity		30 Periods
Competencies: Scanning the environment; Analytical and logical thinking; Innovation and creativity; Decision making; self-confidence.		
Contents	Learning Outcomes	
<ul style="list-style-type: none">• Sensing Entrepreneurial Opportunities• Environment Scanning• Problem Identification• Idea fields• Spotting Trends• Creativity and Innovation• Selecting the Right Opportunity	After going through this unit, the student/ learner would be able to: <ul style="list-style-type: none">• Comprehend the concept and elements of business opportunity• Discuss the process of sensing opportunities• Understand the need to scan the environment• Enlist the various forces affecting business environment• Identify the different idea field	

Based on CBSE Syllabus



	<ul style="list-style-type: none"> • Understand the concept of opportunity and market assessment • Appreciate the ways in which trends can be spotted • Understand the process of creativity and innovation • Transform ideas into business opportunities
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Unit 2: Entrepreneurial Planning

30 Periods

Competencies: Analytical and critical thinking; personal responsibility; determination; Resourceful; collaboration

Contents	Learning Outcomes
<ul style="list-style-type: none"> • Forms of business organization- Sole proprietorship, Partnership, Company • Business Plan: concept, format. • Components: Organisational plan; Operational plan; Production plan; Financial plan; Marketing plan; Human Resource plan 	<p>After going through this unit, the student/ learner would be able to:</p> <ul style="list-style-type: none"> • Recall the meaning of the various forms of business organization • Understand the characteristics of the various forms of business organization • Understand the difference between a Public and Private Company • Appreciate the reasons for a private company being more desirable • Appreciate the concept and importance of a Business Plan • Describe the various components of Business plan • Differentiate among the various components of Business plan • Develop a Business Plan

Unit 3: Enterprise Marketing

30 Periods

Competencies: Persistence, Negotiation, Collaboration, Ethical behavior, team spirit;

Contents	Learning Outcomes
<ul style="list-style-type: none"> • Marketing and Sales Strategy • Branding, Logo, Tagline • Promotion Strategy 	<p>After going through this unit, the student/ learner would be able to:</p> <ul style="list-style-type: none"> • Discuss the various marketing strategies used in a business • Explain Marketing Mix. • Understand the concept of Branding,

Based on CBSE Syllabus



	Packaging and Labeling <ul style="list-style-type: none"> • Describe the various methods of Pricing • Discuss the various factors affecting • Understand the concept and types of sales strategy • Discuss different tools of promotion • Appreciate the objectives and different modes of Advertising • Understand the concept of personal selling, sales promotion, public relations • Discuss the various techniques of sales promotion
Unit 4: Enterprise Growth Strategies	
15 Periods	
Competencies: Need for achievement, Initiative, Analytical thinking, risk vs reward, collaboration, synergy, leadership,	
Contents	Learning Outcomes
<ul style="list-style-type: none"> • Franchising: Concept and types • Franchising: Advantages and limitations to franchisor and franchisee. • Mergers and Acquisition: Concept, reasons and types. • Reasons for mergers and acquisitions 	<p>After going through this unit, the student/ learner would be able to:</p> <ul style="list-style-type: none"> • Understand the concept of growth & development of an enterprise • Discuss the concept, types, advantages and limitations of franchising • Appreciate growth of business through mergers and acquisitions • Discuss the different types of mergers and acquisitions • Discuss the reasons for mergers and acquisitions
Unit 5: Business Arithmetic	
30 Periods	
Competencies: Arithmetic skills, critical analysis, decision making, self-confidence, problem solving.	
Contents	Learning Outcomes
<ul style="list-style-type: none"> • Unit of Sale, Unit Cost for multiple products or services • Break even Analysis for multiple products or services • Computation of Working Capital • Inventory Control and EOQ • Return on Investment (ROI) and Return on Equity (ROE) 	<p>After going through this unit, the student/ learner would be able to:</p> <ul style="list-style-type: none"> • Understand the concept of Unit Cost and Unit Price • Calculate Break-even point for Multiple products and services. • Understand the concept of Inventory Control • Compute the working capital of a business. • Calculate Return on Investment; Return on Equity and Economic Order Quantity
Unit 6: Resource Mobilization	
15 Periods	
Competencies: Risk taking, Communication, Persuasion, Networking, Ethical behavior	

Based on CBSE Syllabus



Contents	Learning Outcomes
<ul style="list-style-type: none">• Capital Market: Concept• Primary market: Concept, methods of issue• Angel Investor: Features• Venture Capital: Features, funding.	<p>After going through this unit, the student/ learner would be able to:</p> <ul style="list-style-type: none">• Understand the need of finance in Business• Discuss the various sources of funds required for a firm• Understand the ways of raising funds in primary market• Appreciate the Angel Investors and Venture Capitalists as a source of business finance.

Based on CBSE Syllabus



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Environmental Science (Theory) – Subject Code: 12ES04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

Unit Test: 25

Section	Chapter	No. of Periods	Marks
A	1. Human Beings and Nature	20	10
	2. Population and Conservation Ecology	40	12
	3. Monitoring Pollution	24	10
B	4. Third World Development	30	11
	5. Sustainable Agriculture	27	12
C	6. Environmental and Natural Resource Economics	12	08
	7. International Relations and the Environment	27	12
D	Unit Test (Internal Assessment)	-	25
	Total	180	100

Class XII – Environmental Science

SECTION A

1. Human Beings and Nature

- (i) **Modern schools of ecological thought.**
- (ii) Deep ecology (Gary Snyder, Earth First) vs. shallow ecology.
- (iii) **Stewardship of land (e.g. Wendell Berry).**
- (iv) Social ecology [Marxist environmentalism and socialist ecology (Barry Commoner)].
- (v) **Feminism.**
- (vi) Green Politics (e.g. Germany and England).
- (vii) **Sustainable Development.**

Modern schools of ecological thought; definition and basic understanding of Deep Ecology as opposed to Shallow Ecology; Stewardship, Social Ecology - Marxist environmentalism and Socialist Ecology, Eco feminism, Green political movements of Germany and England and Sustainable Development (basic concepts).

Based on ICSE Syllabus



A brief look at the above in terms of definition, origin, basic principles and environmental orientations.

Special reference to principles of Deep Ecology (Gary Snyder) and Laws of Ecology (Barry Commoner)

Gary Snyder, Barry Commoner, Wendell Berry - a short biographical sketch particularly with reference to their work on the environment.

Earth First – a brief understanding of the organization's ethos and work.

World Wide Fund for Nature – organisation, mission, strategy for conservation.

Greenpeace – organisation, mission statement, core values, objectives and strategy.

2. Population and Conservation Ecology

- (i) **Population dynamics: factors causing population change (birth, death, immigration and emigration); relation between the factors; age structure and its significance; population pyramids; survivorship curves; three general shapes r and K strategies.**

Factors causing population change (birth, death, immigration and emigration); relation between the factors; Age structure and its significance; Population Pyramids – interpretation and implications. Rate of change of population – the three general shapes of Survivorship Curves, r and K strategies and differences between the two.

- (ii) **Human populations (Malthusian model and demographic transition).**

Definition of Carrying Capacity; Malthusian view: concept of 'over-population' and shortage of resources; Questioning Malthus. Population Growth vs. Disparate Consumption of resources within and amongst nations. Definition and understanding of Demographic Transition; Factors influencing demographic transition.

- (iii) **Population Regulation: growth without regulation (exponential); simple population regulation (logistic growth curve); factors regulating population size (space, food and water, territories, predators, weather and climate, parasite and diseases, disasters and self-regulation).**

Basic understanding of the Exponential growth curve (J – shaped) and Logistic growth curve (S - shaped); Factors regulating population size (space, food and water, territories, predators, weather and climate, parasite and diseases, disasters and self-regulation).

- (iv) **Human population control: family planning; education; economic growth; status of women.**

Strategies for human population control with emphasis on women's empowerment. (Details of methods of family planning not required.)

- (v) **Threats to the ecosystem: habitat destruction; genetic erosion; loss of diversity; expanding agriculture; impound water; waste from human societies; increasing human consumption.**

Only a brief understanding of the causes and consequences of threats to provisioning and regulatory functions of the ecosystem with suitable examples.

- (vi) **Conservation: importance; the critical state of Indian forests; conflicts surrounding forested areas - populations and tribals and their rights**

- tourism - poaching - roads - development projects - dams; scientific forestry and its limitations; social forestry; the role of the forest department; NGOs; joint forestry management; wild life - sanctuaries, conservation and management in India; Project Tiger as a case study in conservation.

Definition of: Conservation, in situ and ex situ conservation. Importance of Conservation.

In-situ conservation: Wildlife sanctuaries, National parks, Biosphere reserves (definition, objectives, features, advantages and disadvantages).

Ex-situ conservation: zoos, aquaria, plant collection (objectives, features, advantages and disadvantages).

Conflicts in managing and conserving Forests: India's forest cover, issues concerning people living in and around forests with particular reference to tribal rights; threats to forests: poaching, developmental projects like roads and dams, over exploitation of forest resources (direct and indirect).

The role of the forest department and NGOs in managing forests.

Some management measures: scientific forestry, social forestry (various types of social forestry), Joint

Based on ICSE Syllabus



Forestry Management (JFM), ecotourism.

Definition, scope, advantages and disadvantages of each of the above.

Project Tiger as a case study in conservation: Origin, aims, and objectives, successes, failures.

3. Monitoring Pollution

(i) Pollution monitoring.

Primary and secondary pollutants. Importance of monitoring air pollution including Ambient Air Quality Monitoring (gaseous and particulate). Concept of carbon credits and carbon trading in regulating emissions. Causes for excessive vehicular pollution and various steps taken to regulate pollution- emission standards for new vehicles, implementation of CNG programme, inspection & maintenance programme for in-use vehicles, phasing out of old commercial vehicles and promotion of public transport.

(ii) Monitoring the atmosphere: techniques.

Monitoring at emission source and of ambient air quality, criteria for monitoring stations, types of stations, number of stations, frequency of data collection, characteristics of ambient air sampling, basic consideration for sampling (to be dealt with in brief). Classification of techniques- manual and instrumental. Manual-Passive samplers, High Volume Samplers and Bubbler Systems. Instrumental- photometric techniques-NDIR, Chemiluminescence - principle and use.

(iii) International and national air quality standards.

National Ambient Air Quality Monitoring (NAAQM); the main functions of the Central Pollution Control Board and the State

Pollution Control Board, objectives of air quality standards, New name of NAAQM, National Air Monitoring Programme (NAMP) objectives of the NAMP.

Definition of air quality standards and importance; National air quality standards for gases/particulate matter covered under WHO guidelines.

(iv) Water testing: indicators of water quality.

Indicators (electrical conductivity, turbidity, pH, dissolved oxygen, faecal waste, temperature, hardness, nitrates and sulphates) the significance of each and their interpretations. B.O.D. and C.O.D., theoretical concept only (**lab work for better understanding and not for testing**)

(v) Soil testing: indicators of soil type and quality and laboratory work.

Soil indicators- the characteristics of a good soil indicator, the three basic types of soil indicators- biological, physical and chemical, **two** examples of each. The information provided by each of these types of indicators. Definitions, effects and experiments to find out soil respiration, soil pH, soil aggregate, infiltration rate and simple methods of controlling each of these.

SECTION B

4. Third World Development

(i) Urban-rural divide: urbanisation - push and pull factors; consequences on rural and urban sectors; future trends and projections.

Causes of migration - push and pull factors, consequences on rural and urban areas and ways to reduce migration. Future trends and projections.

(ii) A critical appraisal of conventional paradigm of development from the viewpoints of sustainability, environmental impact and equity.

Definition of Development.

Based on ICSE Syllabus



An understanding that development has become synonymous with growth. This approach has the following impacts on the environment: (a) Ignoring negative

=environmental impacts; (b) Changing patterns of resource use due to market pressures; (c) Overuse and exploitation of resources; (d) Diversion of scarce resources to luxury goods; (e) Disparate access to resources; (f) Increasing wastes and pollution.

The above to be explained with suitable examples.

(iii) A case study of Gandhian approach in terms of its aims and processes.

Local self-governance – basic principles behind village policy, Antodaya, Sarvodaya, Panchayati Raj; local self-sufficiency, local markets and environmental sustainability. Village as the basis of development; promotion of cottage industries and intermediate technologies; focus on employment.

The above to be contrasted with today's paradigm of growth.

(iv) Urban environmental planning and management: problems of sanitation; water management; transport; energy; air quality; housing; constraints (economic, political) in tackling the problems; inapplicability of solutions that have worked in the First World and the need for indigenous approach to urban environment.

A basic understanding of the following urban environmental problems: problems of sanitation, water management, transport, energy; air quality and housing.

Awareness of some indigenous solutions: Rainwater harvesting, garbage segregation, composting, energy from solid and liquid wastes, sewage management (dry toilets, Decentralized Water Management System (DEWATS))

Features of new urbanism, goals of smart growth. The following examples of urban planning and management from the third world to be studied:

- *Bogota – Bolivia (Traffic Management);*
- *Cuba (Urban agriculture using organic methods);*
- *Curitiba – Brazil (Traffic planning and urban renewal using innovative measures);*
- *Cochabamba – (Water management and protests against privatisation of water supply).*

5. Sustainable Agriculture

(i) Traditional Agriculture in India: irrigation systems; crop varieties; techniques for maintaining soil fertility; impact of colonialism; Indian agriculture at independence - food scarcity - food import - need for increasing production - the need for land reform; green revolution - HYVs - fertilizers - pesticides - large irrigation projects (dams); critical appraisal of the green revolution from the viewpoints of agro-bio diversity; soil health; ecological impact of pesticides; energy (petroleum and petrochemicals); ability to reach the poorer sections of the rural communities; sustainability - need for sustainable agriculture - characteristics for sustainable agriculture; techniques of water soil and pest management.

Definition of the following terms: traditional agriculture, natural farming, organic agriculture, modern agriculture (use of hybrid seeds, high yielding varieties, chemical fertilizers and pesticides), gene revolution (genetically modified seeds) and sustainable agriculture.

Irrigation systems:

Macro vs micro irrigation systems - canal irrigation/dam as compared to sprinkler/ drip/ trickle drip/dug wells. Basic features, advantages and disadvantages of each kind. Traditional rainwater harvesting- tankas, khadins, ahar, pynes, zings, johads and eris (suitability of each type in the particular region).

Features of pre-colonial agriculture in India: growing for sustenance rather than market; multi-cropping, management of soil health, diversity in seed.

Colonial influence: punitive taxation, commercial crops for export and British industry, devaluation of sustainable traditional practices. Bengal famine. Comparative study of pre-colonial, colonial and post-colonial agriculture and their impact.

Green Revolution: Origin (food scarcity - food import - need for increasing production).

Based on ICSE Syllabus



Basic principles of Green Revolution-Development of High Yielding Varieties (HYV); introduction of fertilizers and pesticides; mono cropping.

Environmental, social and economic impacts

-advantages and disadvantages (from the viewpoints of agro-bio diversity; soil health; ecological impact of pesticides; energy use; input costs; benefits to small and medium farmers, community level and household level food security).

Land reform – need, advantages, failures and successes.

Elements of sustainable agriculture: Mixed farming, mixed cropping, inter-cropping, crop rotation, use of sustainable practices of water soil and pest management for improving soil fertility (organic fertilizers, bio-fertilizers, green manure, with two examples) and pest control (bio pesticides). Integrated Pest Management (IPM); eating local foods

Management of agricultural produce: Storage; Food preservation-different methods like use of low temperatures, high temperatures, drying, canning, preservation by salt and sugar. Transportation of Food. Food processing - Definition, food preservation, packaging, grading.

Food adulteration and Food additives- definitions; types of adulteration, harmful effects of adulteration.

Quality Marks - ISI (Indian Standard Institute); AGMARK (Agricultural Marketing); FPO (Fruit Product Order) - a brief explanation only.

(ii) Food: the twin problems of production and access; food situation in the world; integrated and sustainable approach to food security for the Third World. Food Security.

Meaning of Food Security, need for food security. The problems in attaining food security - those of production, storage and access. Integrated and sustainable approach to food security for the Third World including working for environmental sustainability and social and economic sustainability through land reform, credit support to farmers, market support to farmers, inadequacies in the present marketing system, ways to improve marketing system, improving access to food, ownership of seeds.

An understanding that national level food security may not translate into household and community level food security or long term environmental sustainability unless the above factors are addressed. Main features of the Food Security Law 2013.

SECTION C

6. Environmental and Natural Resource Economics

(i) Definition: resources; scarcity and growth; natural resource accounting.

Classification of natural resources - on the basis of origin (abiotic and biotic), on the basis of renewability (renewable and non-renewable), on the basis of development (potential and actual), on the basis of distribution (ubiquitous and localized); scarcity and growth, natural resource accounting.

Classification of resources as renewable and non-renewable.

Definition, basic principles, advantages and disadvantages of Physical accounting.

(ii) GNP vs. other forms of measuring income.

GDP, GNP – definitions, advantages and disadvantages of using them as tools for measuring growth.

(iii) Economic status and welfare (net economic welfare, nature capital, ecological capital, etc.)

A broad overview of the purpose of environmental economics.

Definition and classification: Defensive expenditure (its classification); natural/ ecological capital.

(iv) Externalities: cost benefit analysis (social, ecological).

Externalities – definition, kinds (positive and negative), impacts.

Cost Benefit analysis - Definition, the process in brief, advantages and disadvantages.

EPR (Extended Producer Responsibility) - definition, examples, advantages.

(v) Natural capital regeneration.

What is natural capital? Kinds of natural capital; classification of ecosystem services, causes of degradation (acid deposition, air pollution, deforestation, loss of biodiversity and emission of carbon dioxide), ecological footprint and man's disproportionate use of natural resources, importance of

Based on ICSE Syllabus



preserving and regenerating natural capital.

7. International Relations and the Environment

(i) Trans-national characteristics of environmental issues using case study of Amazonia, Trade in Wildlife and Ozone Depletion.

Case study of Amazonia - causes for exploitation of forests, reasons for acceleration of deforestation, effects of government policies, ecological value of rainforests and possible solutions to the problem.
Case study of ivory trade in Africa - reasons for flourishing trade of ivory in the past, steps taken to curb the trade and the consequences of ban in trade.

Case study of ozone depletion - what is meant by ozone layer and how does it get depleted, (Chapman's cycle), potential effects of ozone depletion, common ozone depleting substances (halons, carbon tetrachloride, CFCs, methyl chloroform, methyl bromide and HCFCs) and their life span in the atmosphere; Ozone hole; steps taken to control ozone depletion.

(ii) Impact of international politics, national sovereignty and interest.

(iii) International trade: a theoretical perspective; free trade vs. protectionism; import barriers; domestic industry vs. free trade; transnational companies - a historical perspective (colonialism and its lasting impact today); trade between the first and the third world - characteristics - terms of trade; India's

international trade - characteristics - major imports and exports - foreign exchange crises

- the export imperative and its impact on the environment; the case study of aquaculture in India; diversion of scarce resource from production of subsistence needs to commercial products; toxic waste trade - extent and impact; Globalisation - trade regimes (WTO, GATT, IPR) and their impact on third world.

Definition, advantages and disadvantages of globalization, free trade, protectionism.

Transnational Companies (TNCs) – definition; TNCs and environment – conflict of interest.

History of third world countries' trade with the developed countries (with special reference to India) with regards to composition and terms of trade (export of primary goods and import of finished goods at higher cost- tapping of primary goods leading to environment degradation- open cast mining, agriculture, aquaculture, etc.).

Case study of aquaculture in India to understand the impact of free trade.

Economic allocation of scarce resources and its impact on environment.

Toxic waste trade – definition, origin, factors sustaining, impact on third world countries (example – health and environmental impacts) and steps to mitigate it (Bamako and Basel Conventions).

GATT – the organization and its metamorphosis into WTO.

Principles and functions of WTO: creating a level playing field for international trade through MFN (Most Favoured Nation), NT (National Treatment) and reduction of import barriers - tariff and non tariff barriers and trading to comparative advantages.

Full forms of and areas addressed in the WTO GATT, TRIPS, TRIMS, Agreement on Agriculture (AOA). A brief understanding of how these agreements impacted India's trade, food security, economic well-being, environmental sustainability.

Definition of IPR and its categories: copyrights, patents, trademarks, industrial design rights, geographical indicators and trade secrets.

A brief understanding of each of the above categories.

(iv) International aid: agencies; advantages; limitations; need for re-orienting aid; aid vs. self-reliance.

International aid – advantages and disadvantages; Types of Aid: Tied and Untied Aid - advantages and limitations of each.



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Fine Arts (Theory) – Subject Code: 12FA04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time (Theory 2 hours & Practical 6 hours)

Max Marks: 100

Theory: 30

Practical: 55

Unit Test: 15

Unit1(a)	Content	Periods	Marks
1	The Rajasthani and Pahari Schools of Miniature Painting	10	10
2	The Mughal and Deccan Schools of Miniature Painting	10	10
3	The Bengal School of Painting and the Modern Trends in Indian Art	20	10
		40	30

(a)	The Rajasthani and Pahari Schools of Miniature Painting (16th Century A.D. to 19th Century A.D.) A brief introduction to Indian Miniature Schools: Western- Indian, Pala, Rajasthani, Mughal, Central India, Deccan and Pahari.	10 Periods
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Unit 1

(a) The Rajasthani School:

1. Origin and Development
2. Sub-Schools-Mewar, Bundi, Jodhpur, Bikaner, Kishangarh and Jaipur
3. Main features of the Rajasthani School
4. Appreciation of the following Rajasthani paintings

Title	Painter	Sub-School
Maru-Ragini	Sahibdin	Mewar
Chaugan Players	Dana	Jodhpur
Krishna on swing	Nuruddin	Bikaner
Radha (Bani- Thani)	Nihal Chand	Kishangarh
Bharat Meets Rama at Chitrakuta	Guman	Jaipur

(b)The Pahari School:

1. Origin and development
2. Sub-Schools-Basohli, Guler, Kangra, Chamba and Garhwal
3. Main features of the Pahari School
4. Appreciation of the following Pahari paintings:

Title	Painter	Sub-School
Krishna with Gopis Nand, Yashoda and	Manaku	Basohli

Based on CBSE Syllabus



Krishna with Kinsmen Going to Vrindavana	Nainsukh	Kangra
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Unit 2

The Mughal and Deccan Schools of Miniature Painting
Periods(16th Century AD to 19th Century A.D.)

10

(a) The Mughal School

1. Origin and development
2. Main features of the Mughal School
3. Appreciation of the following Mughal Paintings:

Title

Painter

Krishna Lifting Mount Govardhana

Miskin

Falcon on a Bird-Rest

Ustad Mansoor

Kabirand Raidas

Ustad Faquirullah Khan

Marriage Procession of Dara Shukoh

Haji Madni

(b) The Deccan School

1. Origin and development
2. Main features of the Deccan School
3. Appreciation of the following Deccan paintings:

Title	Painter	Sub-School
Hazrat Nizamuddin Auliya and Amir Khusro	Unknown	Hyderabad
Chand Bibi Playing Polo (Chaugan)	Unknown	Gol Konda

Unit 3: (a)	The Bengal School of Painting and the Modern trends in Indian Art (About the beginning to mid of the 20th Century)	20 Periods
(i)	National Flag of India and the Symbolic significance of its forms and the colours.	
(ii)	Introduction to the Bengal School of Painting (i) Origin and development of the Bengal School of Painting (ii) Main features of the Bengal School of Painting	
(iii)	Appreciation of the following paintings of the Bengal school: (i) Journey's End – Abanindranath Tagore (ii) Shiv and Sati- Nandla Bose (iv) Radhika - M.A.R.Chughtai (v) Meghdoot - Ram Gopal Vijaivargiya Contribution of Indian artists in the struggle for National Freedom Movement.	
(b)	The Modern Trends in Indian Art Appreciation of the following contemporary (Modern) Indian Art	

Based on CBSE Syllabus



(i)	Paintings: (i) Rama Vanquishing the Pride of the Ocean – Raja Ravi Varma (ii) Mother and child – Jamini Roy (iii) Haldi Grinders - Amrita Sher Gill (iv) Mother Teresa - M.F.Husain	
(ii)	Graphic - prints: (i) Children – Somnath Hore (ii) Devi – Jyoti Bhatt (iii) Of Walls - AnupamSud (iv) Man, Woman and Tree - K. Laxma Goud	
(iii)	Sculptures: (i) Triumph of Labour - D. P. Roychowdhury (ii) Santhal Family - RamkinkarVaij (iii) Cries Un - heard – Amar Nath Sehgal (iv) Ganesha - P.V. Janaki Ram	

The names of artists and titles of their artworks as listed above are only suggestive and in no way exhaustive. Teachers and students should expand this according to their own resources. However, the questions will be set from the above mentioned artworks only.

CLASS-XII (2022-23)
(PRACTICAL)

One Practical Paper

55 Marks

Time: 6 Hours
(3+3)

Unit wise Weightage

Unit	Content	Periods	Marks
1	Nature, and Object Study	40	27
2	Painting Composition	40	28
3	Portfolio Assessment	40	15
Total		120	70

Unit 1	Nature and Object study Studies on the basis of exercises done in class XI with two or three objects and two draperies (in different colours) for background and foreground. Exercises in pencil with light and shade and in full colour from a fixed point of view.	27 marks 40 Periods
Unit 2:	Painting Composition Imaginative painting based on subjects from Life and Nature in water and poster colours with colour values.	28 marks 40 Periods
Unit 3:	Portfolio Assessment	15marks 40 Periods
a)	Record of the entire year's performance from sketch to finished product.	
b)	Four selected nature and object study exercises in any media done during the session	
c)	Two selected works of paintings composition done by the candidate during the year	

Based on CBSE Syllabus



d)	One selected works based on any Indian Folk Art (Painting)	
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These selected works prepared during the course by the candidate and certified by the school authorities as the work done in the school will be placed before the examiners for assessment

Note:

1. The candidates should be given one hour-break after first three hours.
2. The time-table to be so framed as to allow the students to work continuously for minimum of two periods at a stretch.



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ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

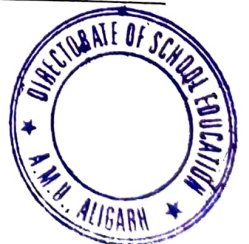
Geography (Theory) – Subject Code: 12GG04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time (Theory & Practical) : 3 hours each.

Max Marks: 100
Theory: 60
Practical: 25
Unit Test: 15

Part	Units	No. of Periods	Marks
A	Fundamentals of Human Geography		
	Unit 1: Human Geography	05	02
	Unit 2: People	15	07
	Unit 3: Human Activities	30	08
	Unit 4: Transport, Communication and Trade	20	13
B	India: People and Economy		
	Unit 6: People	10	03
	Unit 7: Human Settlements	10	03
	Unit 8: Resources and Development	25	09
	Unit 9: Transport, Communication and International Trade	10	10
	Unit 10: Geographical Perspective on selected issues and problems	10	05
C	Practical Work in Geography Part II		
	Unit 1: Processing of Data and Thematic Mapping	25	10
	Unit 2: Spatial Information Technology	15	10
	Practical Record Book and Viva Voce		5
	Unit Test (Internal Assessment)	-	15
	Total	175	100

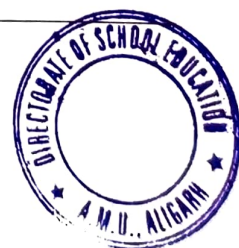
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COURSE CONTENT

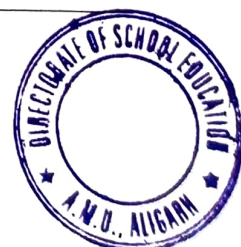
Part A:	Fundamentals of Human Geography	
Unit 1:	Human Geography: Nature and Scope	05 Periods
Unit 2:	<p>People</p> <ul style="list-style-type: none"> ▪ The World Population- distribution, density and growth ▪ Population change – Components of population change, Demographic Transition ▪ Human development - concept; selected indicators, international comparisons 	15 Periods
Unit 3:	<p>Human Activities</p> <ul style="list-style-type: none"> ▪ Primary activities – concept and changing trends; gathering, pastoral, mining, subsistence agriculture, modern agriculture; people engaged in agricultural and allied activities – some examples from selected countries ▪ Secondary activities- concept; manufacturing: types – household, small scale, large scale; agro based and mineral based industries; ▪ Tertiary activities – concept; trade, transport and tourism; services; people engaged in tertiary activities ▪ Quaternary activities- concept; people engaged in quaternary activities – case study from selected countries 	30 Periods
Unit 4:	<p>Transport, Communication and Trade</p> <ul style="list-style-type: none"> ▪ Land transport – roads, railways; trans-continental railways Water transport- inland waterways; major ocean routes ▪ Air transport- Intercontinental air routes Oil and gas pipelines ▪ Satellite communication and cyber space- importance and usage for geographical information; use of GPS ▪ International trade- bases and changing patterns; ports as gateways of international trade; role of WTO in international trade 	20 Periods

Based on CBSE Syllabus



Part B:	India: People and Economy	
Unit 6:	People <ul style="list-style-type: none"> ▪ Population: distribution, density and growth; composition of population – linguistic, religious; sex, rural-urban and occupational-regional variations in growth of population 	12 Periods
Unit 7:	Human Settlements <ul style="list-style-type: none"> ▪ Rural settlements – types and distribution ▪ Urban settlements – types, distribution and functional classification 	08 Periods
Unit 8:	Resources and Development <ul style="list-style-type: none"> ▪ Land resources- general land use; agricultural land use; geographical conditions and distribution of major crops (Wheat, Rice, Tea, Coffee, Cotton, Jute, Sugarcane and Rubber); agricultural development and problems ▪ Water resources-availability and utilization-irrigation, domestic, industrial and other uses; scarcity of water and conservation methods-rain water harvesting and watershed management ▪ Mineral and energy resources- distribution of metallic (Iron ore, Copper, Bauxite, Manganese); non-metallic (Mica, Salt) minerals; conventional (Coal, Petroleum, Natural gas and Hydroelectricity) and non-conventional energy sources (solar, wind, biogas) and conservation ▪ Planning in India- target group area planning (case study); idea of sustainable development (case study) 	25 Periods
Unit 9:	Transport, Communication and International Trade <ul style="list-style-type: none"> ▪ Transport and communication-roads, railways, waterways and airways: oil and gas pipelines; Geographical information and communication net works ▪ International trade- changing pattern of India's foreign trade; sea ports and their hinterland and airports 	10 Periods

Based on CBSE Syllabus



Unit 10:	Geographical Perspective on selected issues and problems <ul style="list-style-type: none"> ▪ Environmental pollution; urban-waste disposal ▪ Urbanization, rural-urban migration; problems of slums ▪ Land degradation 	10 Periods
Part C:	Practical Work in Geography Part II	
Unit 1:	Processing of Data and Thematic Mapping <ul style="list-style-type: none"> ▪ Type and Sources of data: Primary, Secondary and other sources ▪ Tabulating and processing of data; calculation of averages, measures of central tendency ▪ Representation of data- construction of diagrams: bars, circles and flowchart; thematic maps; construction of dot; choropleth and isopleths maps 	25 Periods
Unit 2:	Spatial Information Technology <ul style="list-style-type: none"> ▪ Introduction to GIS; hardware requirements and software modules; data formats; raster and vector data, data input, editing and topology building; data analysis; overlay and buffer. 	15 Periods

Prescribed Books:

1. Fundamentals of Physical Geography, Class XI, Published by NCERT
2. India, Physical Environment, Class XI, Published by NCERT
3. Practical Work in Geography Part I, Class XI, Published by NCERT
4. Fundamentals of Human Geography, Class XII, Published by NCERT
5. India – People and Economy, Class XII, Published by NCERT
6. Practical Work in Geography Part II, Class XII, Published by NCERT

Note:

1. The above textbooks are also available in Hindi medium.
2. Kindly refer to the latest editions of all NCERT Textbooks.



3

**DIRECTORATE OF SCHOOL EDUCATION
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Class XII 2022-23

Elective Hindi (Theory) – Subject Code: 12HN04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

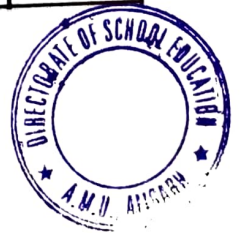
Unit Test: 25

Section - A	Periods	Marks
Reading Comprehension	20	18
Section - B		
Creative writing skills	20	19
Section - C		
Literature:		
1. अंतरा भाग - 2	110	30
2. अंतराल भाग - 2	20	08
Unit Test (Internal Assessment)	--	25
Total	170	100

SECTION - A

Marks 18

1	अपठित गद्यांश	18
अ	एक अपठित गद्यांश (लगभग 300 शब्दों का) बिना किसी विकल्प के (1 अंक x 10 प्रश्न)	10
ब	दो अपठित पद्यांशों में से कोई एक पद्यांश करना होगा। (लगभग 150 शब्दों के) (1 अंक x 8 प्रश्न)	08



Based on CBSE Syllabus

SECTION - B

Marks 19

1	अभिव्यक्ति और माध्यम पुस्तक के आधार पर	19
	इकाई एक - जनसंचार माध्यम और लेखन (पाठ 3,4 और 5) इकाई - दो सृजनात्मक लेखन पाठ 6,7,8 और 13 पर आधारित	
1	इकाई एक - जनसंचार माध्यम और लेखन (पाठ 3,4 और 5) पर आधारित बहुविकल्पात्मक प्रश्न (1 अंक x 5 प्रश्न)	5
2	दिए गए तीन नए और अप्रत्याशित विषयों में से किसी एक विषय पर लगभग 120 शब्दों में रचनात्मक लेखन (4 अंक x 1 प्रश्न)	4
3	कविता/कहानी/नाटक की रचना प्रक्रिया पर आधारित तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर (3 अंक x 2 प्रश्न)	6
4	समाचार लेखन (उल्टा पिरामिड शैली)/फीचर लेखन/आलेख लेखन पर आधारित दो लघुउत्तरीय प्रश्न (2 अंक x 2 प्रश्न)	4

SECTION - C

Marks 38

1	पाठ्यपुस्तक अंतरा भाग - 2	30
1	पठित काव्यांश पर छह बहुविकल्पात्मक प्रश्न (1 अंक x 06 प्रश्न)	06
2	पठित गद्यांश पर छह बहुविकल्पात्मक प्रश्न (1 अंक x 06 प्रश्न)	06
3	काव्य खंड पर आधारित तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर (लगभग 40 शब्दों में) (2 अंक x 2 प्रश्न)	4
4	एक काव्यांश की सप्रसंग व्याख्या (विकल्प सहित) (5 अंक x 1 प्रश्न)	5
5	गद्य खंड पर आधारित तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर (लगभग 40 शब्दों में) (2 अंक x 2 प्रश्न)	4
6	एक गद्यांश की सप्रसंग व्याख्या (5 अंक x 1 प्रश्न)	5

Based on CBSE Syllabus



2	पूरक पाठ्यपुस्तक अंतराल भाग- 2	8
अ	पठित पाठों पर पाँच बहुविकल्पात्मक प्रश्न (1 अंक x 5 प्रश्न)	5
ब	पाठों की विषयवस्तु पर आधारित एक प्रश्न (विकल्प सहित) (3 अंक x 1 प्रश्न)	3

प्रस्तावित पुस्तकें:

1. अंतरा, भाग-2, एन.सी.ई.आर.टी., नई दिल्ली द्वारा प्रकाशित नवीनतम संस्करण
2. अंतराल, भाग-2, एन.सी.ई.आर.टी., नई दिल्ली द्वारा प्रकाशित नवीनतम संस्करण
3. 'अभिव्यक्ति और माध्यम', एन.सी.ई.आर.टी., नई दिल्ली द्वारा प्रकाशित नवीनतम संस्करण

❖ नोट : निम्नलिखित पाठों से प्रश्न नहीं पूछे जाएँगे ।

पाठ्यपुस्तक - अंतरा भाग 2

- 1.सूर्यकांत त्रिपाठी निराला - गीत गाने दो मुझे (घटाया गया पाठ का अंश और उससे संबंधित प्रश्न अभ्यास)
- 2.विष्णु खरे - एक कम, सत्य(पूरा पाठ)
- 3.केशवदास - रामचंद्रिका (पूरा पाठ)
- 4.घनानंद - सवैया (घटाया गया पाठ का अंश और उससे संबंधित प्रश्न अभ्यास)
- 5.ब्रजमोहन व्यास - कच्चा चिट्ठा (पूरा पाठ)
- 6.रामविलास शर्मा - यथास्मै रोचते विश्वम् (पूरा पाठ)

पूरक पाठ्यपुस्तक - अंतराल 2

1. सजीव - आरोहण



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

History (Theory) – Subject Code: 12HS04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

Unit Test: 25

THEMES	Periods	Marks
Themes in Indian History Part-I		
Theme 1 Bricks, Beads and Bones	16	07
Theme 2 Kings, Farmers and Towns	14	06
Theme 3 Kinship, Caste and Class	14	06
Theme 4 Thinkers, Beliefs and Buildings	12	06
Themes In Indian History Part-II		
Theme 5 Through the Eyes of Travellers	12	06
Theme 6 Bhakti –Sufi Traditions	12	06
Theme 7 An Imperial Capital: Vijayanagar	14	06
Theme 8 – Peasants, Zamindars and the State	16	07
Themes In Indian History Part-III		
Theme 10 Colonialism and The Countryside	14	06
Theme 11 Rebels and the Raj	16	06
Theme 13 Mahatma Gandhi and the Nationalist Movement	18	08
Theme 15 Framing the Constitution	15	05
Unit Test (Internal Assessment)	-	25
Total	173	100

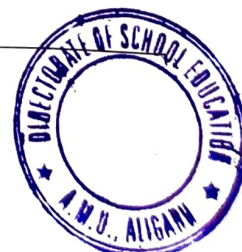


Based on CBSE Syllabus

COURSE CONTENT

Class XII: Themes in Indian History

Themes	<i>NOTE- This is not an exhaustive list. For reflective teaching- learning process, explicit Learning Objectives and Outcomes can be added by teachers during the course-delivery for student's real learning.</i>	
	Learning Objective	Learning Outcomes
<p style="text-align: center;">Part-I</p> <p>BRICKS, BEADS AND BONES The Harappan Civilization: Broad overview: Early urban centers Story of discovery: Harappan civilization Excerpt: Archaeological report on a major site Discussion: How it has been utilized by archaeologists/ historians</p>	<ul style="list-style-type: none"> ● Familiarize the learner with early urban centers as economic and social institution. ● Introduce the ways in which new data can lead to a revision of existing notions of history. 	<p>At the completion of this unit students will be able to:</p> <ul style="list-style-type: none"> ● State and deduce the multi-lateral aspects of Harappan civilization in order to understand the first civilization of the world. ● Develop an ability to use and analyze socio- economic, political aspects of Harappa <ul style="list-style-type: none"> ● Investigate and interpret historical and contemporary sources and viewpoints of ASI and historians on Harappa.
<p>KINGS, FARMERS AND TOWNS: Early States and Economies (c. 600 BCE-600 CE) Broad overview: Political and economic History from the Mauryan to the Gupta period Story of discovery: Inscriptions and the Decipherment of the script. Shifts in the Understanding of political and economic history. Excerpt: Ashokan inscription and Gupta period land grant Discussion: Interpretation of inscriptions by historians.</p>	<ul style="list-style-type: none"> ● Familiarize the learner with major trends in the political and economic history Of the subcontinent. ● Introduce inscrip tional analysis and the ways in which these have shaped the understanding of political and economic processes. 	<p>At the completion of this unit students will be able to:</p> <ul style="list-style-type: none"> ● Explain major trends in the 6th century BCE in order to understand the political and economic history of the subcontinent. ● Analyze inscrip tional evidences and the ways in which these have shaped the understanding of political and economic processes.
<p>KINSHIP, CASTE AND CLASS Early Society Societies (C. 600 BCE-600 CE) Broad overview: Social Histories: Using the</p>	<ul style="list-style-type: none"> ● Familiarize the learners with issues in social history. ● Introduce the 	<p>At the completion of this unit students will be able to</p> <ul style="list-style-type: none"> ● Analyze social norms in order to understand the perspectives of society given in the scriptures of



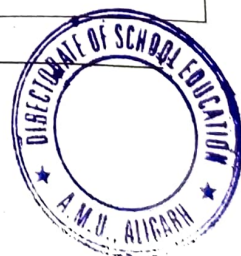
<p>Mahabharata Issues in social history, including caste, class, kinship and gender Story of discovery: Transmission and publications of the Mahabharat Excerpt: from the Mahabharata, illustrating how it has been used by historians. Discussion: Other sources for reconstructing social history.</p>	<p>Strategies of textual analysis and their use in reconstructing social history.</p>	<p>Ancient India.</p> <ul style="list-style-type: none"> ● Examine the varied dimensions explored by historians in order to understand dynamic approach of Mahabharata.
<p>THINKERS, BELIEFS AND BUILDINGS Cultural Developments(c. 600 BCE – 600 CE) Broad overview: A History of Buddhism: Sanchi Stupa A brief review of religious histories of Vedic religion, Jainism, Vaishnavism, Shaivism (Puranic Hinduism) D) Focus on Buddhism. Story of discovery: Sanchistupa. Excerpt: Reproduction of sculptures from Sanchi. Discussion: Ways in which sculpture has been interpreted by historians, other sources for reconstructing the history of Buddhism.</p>	<ul style="list-style-type: none"> ● Discuss the major religious developments in early India. ● Introduce strategies of visual analysis and their use in reconstructing the theories of religion. 	<p>At the completion of this unit students will be able to:</p> <ul style="list-style-type: none"> ● Compare the distinct religious facets in order to understand the religious developments in ancient India ● Elucidate the rich religious sculpture and infer the stories hidden in it.
<p>Part-II THROUGH THE EYES OF TRAVELLERS Perceptions of Society (c. tenth to seventeenth century)</p>	<ul style="list-style-type: none"> ● Familiarize the learner with the salient features of social histories described by the travellers. 	<p>At the completion of this unit students will be able to:</p> <ul style="list-style-type: none"> ● Identify the accounts of foreign travellers in order to



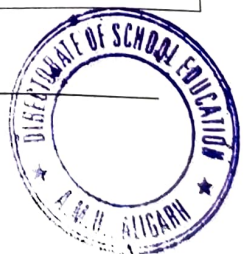
<p>Broad Overview: outlines of social and cultural life as they appear in traveller's account.</p> <p>Story of their writings: A discussion of where they travelled, what they wrote and for whom they wrote.</p> <p>Excerpts: from Al Biruni, Ibn Battuta, Francois Bernier.</p> <p>Discussion: What these travel accounts can tell us and how they have been interpreted by historians.</p>	<ul style="list-style-type: none"> • Discuss how traveller's accounts can be used as sources of social history. 	<p>Understand the social political and economic life during the tenure of different rulers in the medieval period</p> <ul style="list-style-type: none"> • Compare and contrast the perspectives of Al Biruni, Ibn Battuta and Bernier towards Indian society.
<p>BHAKTI –SUFITRADITIONS:</p> <p>Changes in Religious Beliefs and Devotional Texts (c. eighth to eighteenth centuries)</p> <p>Broad overview:</p> <ol style="list-style-type: none"> Outline of religious developments during this period saints. Ideas and practices of the Bhakti-Sufi <p>Story of Transmission: How Bhakti-Sufi compositions have been preserved.</p> <p>Excerpt: Extracts from selected Bhakti-Sufi works.</p> <p>Discussion: Ways in which these have been interpreted by historians.</p>	<ul style="list-style-type: none"> • Familiarize the learner with the religious developments. • Discuss ways of analyzing devotional literature as sources of history. 	<p>At the completion of this unit students will be able to:</p> <ul style="list-style-type: none"> • Summarize the philosophies of different Bhakti and Sufi saints to understand the religious developments during medieval period. • Comprehend the religious movement in order to establish unity, peace, harmony and brotherhood in society.
<p>AN IMPERIAL CAPITAL: VIJAYANAGARA (c. fourteenth to sixteenth centuries)</p> <p>Broad Over View: New Architecture: Hampi</p> <ol style="list-style-type: none"> Outline of new buildings 	<ul style="list-style-type: none"> • Familiarize the learner with the new buildings that were built during the time. Discuss the ways in 	<p>At the completion of this unit students will be able to:</p>



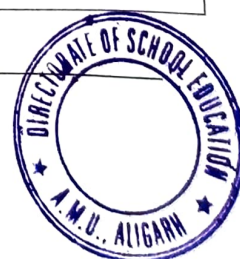
<p>during Vijayanagar period-temples, forts, irrigation facilities.</p> <p>D. Relationship between architecture and the political system Story of Discovery: Account of how Hampi was found.</p> <p>Excerpt: Visuals of buildings at Hampi Discussion: Ways in which historians have analyzed and interpreted these structures.</p>	<p>Which architecture can be analyzed to reconstruct history.</p>	<ul style="list-style-type: none"> • Classify the distinctive architectural contributions of the Vijayanagar empire to comprehend the richness of mingled cultures of deccan India • Analyze accounts of foreign traveller's on Vijayanagar in order to interpret political, social and cultural life of the city.
<p>PEASANTS, ZAMINDARS AND THE STATE:</p> <p>Agrarian Society and the Mughal Empire (c. sixteenth-seventeenth centuries)</p> <p>Broad overview: The Ain-i-Akbari</p> <ol style="list-style-type: none"> Structure of agrarian relations in the 16th and 17th centuries. Patterns of change over the period. <p>Story of Discovery: Account of the compilation and translation of Ain I Akbari</p> <p>Excerpt: from the Ain-i-Akbari.</p> <p>Discussion: Ways in which historians have used texts to reconstruct history.</p>	<ul style="list-style-type: none"> • Discuss the developments in agrarian relations. • Discuss how to supplement official documents with other sources. 	<p>At the completion of this unit students will be able to:</p> <ul style="list-style-type: none"> • Comprehend the facets of agrarian developments in order to understand the relationship between the state and the agriculture during Mughal period. <p>Compare and contrast the agrarian changes occurred during sixteenth and seventeenth centuries.</p>



Part-III		
<p>COLONIALISM AND THE COUNTRYSIDE: Exploring Official Archives</p> <p>Broad overview:</p> <p>Colonialism and Rural Society: Evidence from Official Reports</p> <p>a) Life of zamindars, peasants and artisans in the late 18th century</p> <p>b). Permanent Settlement, Santhals and Paharias Story of official records: An account of why official investigations in rural societies were undertaken and the types of records and reports produced.</p> <p>Excerpts: From Fifth Report</p> <p>Discussion: What the official records tell and do not tell, and how they have been used by historians.</p>	<ul style="list-style-type: none"> ● Discuss how colonialism affected zamindars, peasants and artisans. ● Comprehend the problems and limits of using official sources for understanding the lives of the people 	<p>At the completion of this unit students will be able to:</p> <ul style="list-style-type: none"> ● Compare and contrast the revenue systems introduced by the British in order to understand the economic aspects of colonization in India. ● Analyze the colonial official records & reports in order to understand the divergent interest of British and Indians.
<p>REBELS AND THE RAJ: 1857 Revolt and its Representations- Broad overview:</p> <p>a. The events of 1857-58.</p> <p>b. Vision of Unity</p> <p>c. How these events were recorded and narrated.</p> <p>Focus: Lucknow Excerpts: Pictures of 1857. Extracts from contemporary accounts.</p> <p>Discussion: How the pictures of 1857 shaped British opinion of what had happened.</p>	<ul style="list-style-type: none"> ● Discuss how the events of 1857 are being interpreted. ● Discuss how visual material can be used by historians. 	<p>At the completion of this unit students will be able to:</p> <p>Correlate the Planning and coordination of the rebels of 1857 to infer its domains and nature.</p> <ul style="list-style-type: none"> ● Examine the momentum of the revolt to understand its spread. ● Analyze how revolt created vision of unity amongst Indians. ● Identify and interpret visual images to understand the emotions portrayed by the nationalist and British



<p>MAHATMA GANDHI AND THE NATIONALIST MOVEMENT: Civil Disobedience and Beyond</p> <p>Broad overview:</p> <ol style="list-style-type: none"> The Nationalist Movement 1918 -48. The nature of Gandhian politics and leadership. <p>Focus: Mahatma Gandhi and the three movements and his last days as “finest hours”</p> <p>Excerpts: Reports from English and Indian language newspapers and other contemporary writings.</p> <p>Discussion: How newspapers can be a source of history.</p>	<ul style="list-style-type: none"> Familiarize the learner with significant elements of the Nationalist movement and the nature of Gandhian leadership. Discuss how Gandhi was perceived by different groups. Discuss how historians need to read and interpret newspapers diaries and letters as a historical source 	<p>At the completion of this unit students will be able to:</p> <ul style="list-style-type: none"> Correlate the significant elements of the nationalist movement and the nature of ideas, individuals, and institutions under the Gandhian leadership. Analyze the significant contributions of Gandhiji to understand his mass appeal for nationalism. Analyze the perceptions and contributions of different communities towards the Gandhian movement. Analyze the ways of interpreting historical source such as newspapers, biographies and auto-biographies diaries and letters.
<p>FRAMING THE CONSTITUTION: The Beginning of a New Era</p> <p>Broad overview: The Making of the Constitution an overview:</p> <ol style="list-style-type: none"> Independence and then new nation state. The making of the Constitution <p>Focus: The Constituent Assembly Debates</p> <p>Excerpts: from the debates</p> <p>Discussion: What such debates reveal and how they can be analyzed.</p>	<ul style="list-style-type: none"> Discuss how the founding ideals of the new nation state were debated and formulated. Understand how such debates and discussions can be read by historians. 	<p>At the completion of this unit students will be able to:</p> <ul style="list-style-type: none"> Highlight the role of Constituent Assembly to understand functionaries in framing the constitution of India. Analyze how debates and discussions around important issues in the Constituent Assembly shaped our Constitution.



LIST OF MAPS

Book 1		
1	Page 2	Mature Harappan sites: <ul style="list-style-type: none">• Harappa, Banawali, Kalibangan, Balakot, Rakhigarhi, Dholavira, Nageshwar, Lothal, Mohenjodaro, Chanhudaro, KotDiji.
Book 2		
2	Page 214	Territories under Babur, Akbar and Aurangzeb: <ul style="list-style-type: none">• Delhi, Agra, Panipat, Amber, Ajmer, Lahore, Goa.
Book 3		
3	Page 305	Main centres of the Revolt of 1857: Delhi, Meerut, Jhansi, Lucknow, Kanpur, Azamgarh, Calcutta, Benaras, Gwalior, Jabalpur, Agra, Awadh.



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Home Science (Theory) – Subject Code: 12HM04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time (Theory & Practical) : 3 hours each.

Max Marks: 100

Theory: 60

Practical: 25

Unit Test: 15

No.	Units	Marks	No. of Periods
1	Work, Livelihood and Career	05	10
2	Nutrition, Food Science and Technology	18	40
3	Human Development and Family Studies	08	20
4	Fabric and Apparel	14	26
5	Resource Management	10	22
6	Communication and Extension	05	08
	THEORY	60	126
	PRACTICAL	25	34
	Unit Test (Internal Assessment)	15	-
	TOTAL	100	160

CLASS XII

THEORY: 70 Marks

UNIT I: Work, livelihood and Career

Ch. Work, livelihood and Career

UNIT II: Nutrition, Food Science and Technology

Ch. Clinical Nutrition and Dietetics
Ch. Public

Nutrition and Health

Ch. Food Processing and Technology
Ch. Food Quality

and Food Safety

UNIT III: Human Development and Family Studies

Ch. Early Childhood Care and Education

Ch. Management of Support Services, Institutions and Programmes for Children, Youth and Elderly

UNIT IV: Fabric and Apparel

Ch. Design for Fabric and Apparel

Based on CBSE Syllabus



Ch. Fashion Design and Merchandising

Ch. Care and Maintenance of Fabrics in Institutions

UNIT V: Resource management

Ch. Hospitality Management

Ch. Consumer Education and Protection

UNIT VI: Communication and Extension

Ch. Development Communication and Journalism

Prescribed textbook: Human Ecology and Family Sciences(For Class XII): Part I andPart II

CLASS XII HOME SCIENCE

REFERENCE POINTS

UNIT I WORK ,LIVELIHOOD AND CAREER Chapter: WORK

,LIVELIHOOD AND CAREER

- Introduction
 - Work and meaningful work
 - Work, careers and livelihood
- Traditional occupation in India
 - Agriculture
 - Handicrafts
 - Indian cuisine
 - Visual arts
- Work ,Age and Gender
 - Gender issues in relation to work
 - Issues and concerns related to women and work
 - ✓ KGBV
 - ✓ Beti bachao ,Beti Padhao Yojana
- Attitudes and approaches to work and life skills for livelihood
 - Attitudes and approaches to work
 - Lifeskills for livelihood
 - Essential soft skills at workplace

Based on CBSE Syllabus



- Ergonomics
 - Definition and need for ergonomics
 - Benefits of Ergonomics
- Entrepreneurship
 - Definition and characteristics

UNIT II NUTRITION, FOOD SCIENCE AND TECHNOLOGY

Chapter: CLINICAL NUTRITION AND DIETETICS

- Introduction
 - Nutrition
 - Clinical Nutrition
- Significance
- Basic concepts
 - Diet therapy
- Types of diets: Regular Diet and Modified diets
 - Changes in consistency
 - Feeding routes
 - Prevention of chronic diseases
- Preparing for career
- Scope

Chapter: PUBLIC NUTRITION AND HEALTH

- Introduction
- Significance
- Basic concept
 - Public health nutrition
 - Nutritional Problems of India
 - Protein energy malnutrition
 - Micronutrient deficiencies
 - Iron deficiency anemia
 - Vitamin A deficiency
 - Iodine deficiency disorders
- Strategies/Intervention to tackle Nutritional problems
 - Diet or food based strategies
 - Nutrient based strategies
- Nutrition programmes operating in India
 - ICDS
 - Nutrient Deficiency Control Programmes



- Food Supplementation Programmes
- Food Security Programme
- Health Care
- Scope

Chapter: FOOD PROCESSING AND TECHNOLOGY

- Introduction
- Significance
- Basic Concepts
 - Food Science
 - Food Processing
 - Food Technology
 - Food Manufacturing
- Development of food processing and technology
- Importance of Food processing and Preservation
- Classification of food on the basis of extent and type of processing
- Preparing for a career
- Scope

Chapter: FOOD QUALITY AND FOOD SAFETY

- Introduction
- Significance
- Basic Concepts
 - Food safety (Toxicity & Hazard)
 - Hazards (Physical, chemical and biological)
 - Food infection
 - Food poisoning
 - Food quality
- Food standards regulation in India-FSSA (2006)
- International Organization and agreements in the area of Food Standards, Quality, Research and Trade
 - Codex Alimentarius Commission
 - International Organization for Standardisation
 - World Trade Organization
- Food Safety Management Systems
 - Good manufacturing practices (GMP)
 - Good handling practices (GHP)
 - Hazard Analysis Critical Control Points (HACCP)
- Scope

Based on CBSE Syllabus



UNIT III HUMAN DEVELOPMENT AND FAMILY STUDIES

Chapter: Early Childhood Care and Education

- Significance
- Basic concepts
- Preparing for a career
- Scope

Chapter: Management of support services, Institutions and programmes for children, youth and elderly

- Significance
- Basic concepts
- Why are children vulnerable?
- Institutions, programmes and initiatives for children
 - ICDS
 - SOS Children's Village
 - Children's Homes run by the Government
 - Adoption
- Why are Youth vulnerable?
- Youth programmes in India
- Why are the elderly vulnerable?
- Some programmes for the elderly
- Preparing for a career
- Scope

UNIT IV FABRIC AND APPAREL

Chapter: Design for Fabric and Apparel

- Introduction
- Basic concepts (Design: Structural & Applied)
- Elements of design
 - Colour
 - Texture
 - Line
 - Shapes or form
- Principles of Design
 - Proportion
 - Balance

Based on CBSE Syllabus



- Emphasis
- Rhythm
- Harmony
- Preparing for career
- Scope

Chapter: Fashion Design and Merchandising

- Introduction
- Significance
- Basic Concepts
 - Fashion terminology –Fashion ,fads, style, classic
- Fashion Development
 - France-The centre of fashion
 - Fashion Evolution
- Fashion Merchandising
- Fashion Retail Organization
- Preparing For a career
- Scope

Chapter: Care and maintenance of fabrics in Institution

- Introduction
- Basic concepts
 - Washing equipment
 - Drying equipment
 - Ironing/pressing equipment
- Institutions
- Preparing for a career
- Scope

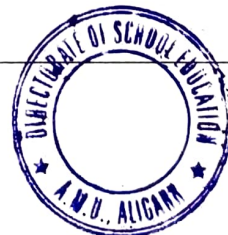
UNIT V RESOURCE MANAGEMENT

Chapter: Hospitality Management

- Introduction
- Significance
- Basic concepts
- Departments involved in hospitality management of an organization
- Scope

Chapter: Consumer Education and Protection

Based on CBSE Syllabus



- Introduction
- Significance of consumer education and protection
- Basic concepts
 - Consumer product
 - Consumer safety
 - Consumer forum
 - Consumer footfalls
 - Consumer problems
 - Consumer rights
 - Standardized marks (ISI, Wool Mark, Hall Mark, Silk Mark)
 - Protection Councils
 - Consumer Responsibilities
- Scope

UNIT VI COMMUNICATION AND EXTENSION

Chapter: Development communication and Journalism

- Introduction
- Significance
- Basic concepts
 - Development
 - Development journalism
 - Development Communication
- Methods of communication
 - Campaign
 - Radio and television
 - Print media
 - Information and communication technologies
- Knowledge and skills required for a career in this field
- Scope and career avenues in development communication



PRACTICALS FOR CLASS XII

UNIT II NUTRITION, FOOD SCIENCE AND TECHNOLOGY

1. Modification of normal diet to soft diet for elderly person.
2. Development and preparation of supplementary foods for nutrition programme.
3. Planning a menu for a school canteen or mid-day meal in school for a week.
4. Design, prepare and evaluate a processed food product.
5. Qualitative test for food adulteration in: pure ghee, tea leaves, whole blackpepper, turmeric powder, milk, 79safetida.

UNIT III HUMAN DEVELOPMENT AND FAMILY STUDIES

6. Preparation and use of any one teaching aid to communicate socially relevant messages for children/ adolescents /adults in the community.

OR

Preparation of any one toy for children (age appropriate) using locally available and indigenous material

UNIT IV FABRIC AND APPAREL

7. Preparation of any one article using applied textile design techniques; tie and dye/batik/block printing.
8. Remove different types of stains from white cotton cloth –Ball pen, curry, grease, ink, lipstick, tea and coffee.

UNIT V RESOURCE MANAGEMENT

9. Evaluate any one advertisement for any job position.
10. Develop a leaflet/pamphlet for Consumer Education and Protection on any one of the following-
 - a) Consumer Protection Act (CPA)
 - b) Consumer responsibilities
 - c) Consumer organization
 - d) Consumer Problem



PROJECT

ANY ONE OF THE FOLLOWING PROJECT MAY BE UNDERTAKEN ANDEVALUATED-

Profile any two person (child/adult) with special needs to find out their diet, clothing, activities, physical and psychological needs.

OR

Planning any five messages for nutrition, health and life skills using different modes of communication for different focal groups.

SCHEME FOR PRACTICAL EXAMINATION

25 Marks

1. Modification of any one family meal for elderly person. Preparing any one of the modified dish.
(5 marks)

OR

Development and preparation of any one supplementary food for pre-schooler (2-6 years) nutrition programme.

OR

Planning a menu for school canteen and preparing any one nutritious dish.

2. Identify adulterant using chemical test in any one of the following- pureghee, tea leaves, whole black pepper, turmeric powder, milk, 80safetida.

(2 marks)

3. Prepare a sample using applied textile design techniques tie and dye/batik/block printing.
(4 marks)

4. Remove any one of the stain from white cotton cloth –Ball pen, curry, grease, ink, lipstick, tea, coffee.
(2 marks)

5. Develop a leaflet/pamphlet for Consumer Education and Protection on anyone of the following-
(5 marks)

- a) Consumer Protection Act (CPA)
- b) Consumer responsibilities
- c) Consumer organization
- d) Consumer Problems

6. File

(5 marks)

7. Viva

(2 marks)



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Mathematics (Theory) – Subject Code: 12MM04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

Unit Test: 25

No.	Units	No. of Periods	Marks
I.	Relations and Functions	30	08
II.	Algebra	45	10
III.	Calculus	70	31
IV.	Vectors and Three – Dimensional Geometry	25	14
V.	Linear Programming	15	06
VI.	Probability	25	06
VII.	Unit Test (Internal Assessment)	-	25
	Total	210	100

Unit-I: Relations and Functions

1. Relations and Functions

15 Periods

Types of relations: reflexive, symmetric, transitive and equivalence relations. One to one and onto functions.

2. Inverse Trigonometric Functions

15 Periods

Definition, range, domain, principal value branch. Graphs of inverse trigonometric functions.

Unit-II: Algebra

1. Matrices

25 Periods

Concept, notation, order, equality, types of matrices, zero and identity matrix, transpose of a matrix, symmetric and skew symmetric matrices. Operation on matrices: Addition and multiplication and

Based on CBSE Syllabus





multiplication with a scalar. Simple properties of addition, multiplication and scalar multiplication. Non-commutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (restrict to square matrices of order 2). Invertible matrices and proof of the uniqueness of inverse, if it exists; (Here all matrices will have real entries).

2. Determinants

20 Periods

Determinant of a square matrix (up to 3 x 3 matrices), minors, co-factors and applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix. Consistency, inconsistency and number of solutions of system of linear equations by examples, solving system of linear equations in two or three variables (having unique solution) using inverse of a matrix.

Unit-III: Calculus

1. Continuity and Differentiability

15 Periods

Continuity and differentiability, chain rule, derivative of inverse trigonometric functions, like $\sin^{-1} x$, $\cos^{-1} x$ and $\tan^{-1} x$, derivative of implicit functions. Concept of exponential and logarithmic functions. Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of function expressed in parametric forms. Second order derivatives.

2. Applications of Derivatives

10 Periods

Applications of derivatives: rate of change of bodies, increasing/decreasing functions, maxima and minima (first derivative test motivated geometrically and second derivative test given as a provable tool). Simple problems (that illustrate basic principles and understanding of the subject as well as real-life situations).

3. Integrals

15 Periods

Integration as inverse process of differentiation. Integration of a variety of functions by substitution, by partial fractions and by parts, Evaluation of simple integrals of the following types and problems based on them.

$$\int \frac{dx}{x^2 \pm a^2}, \int \frac{dx}{\sqrt{x^2 \pm a^2}}, \int \frac{dx}{\sqrt{a^2 - x^2}}, \int \frac{dx}{ax^2 + bx + c}, \int \sqrt{\frac{dx}{ax^2 + bx + c}}$$

$$\int \frac{px + q}{ax^2 + bx + c} dx, \int \frac{px + q}{\sqrt{ax^2 + bx + c}} dx, \int \sqrt{a^2 \pm x^2} dx, \int \sqrt{x^2 - a^2} dx$$

$$\int \sqrt{ax^2 + bx + c} dx,$$

Fundamental Theorem of Calculus (without proof). Basic properties of definite integrals and evaluation of definite integrals.

4. Applications of the Integrals

15 Periods

Applications in finding the area under simple curves, especially lines, circles/ parabolas/ellipses (in standard form only)

Based on CBSE Syllabus



5. Differential Equations

15 Periods

Definition, order and degree, general and particular solutions of a differential equation. Solution of differential equations by method of separation of variables, solutions of homogeneous differential equations of first order and first degree. Solutions of linear differential equation of the type:

$$\frac{dy}{dx} + py = q, \text{ where } p \text{ and } q \text{ are functions of } x \text{ or constants.}$$

$$\frac{dx}{dy} + px = q, \text{ where } p \text{ and } q \text{ are functions of } y \text{ or constants.}$$

Unit-IV: Vectors and Three-Dimensional Geometry

1. Vectors

13 Periods

Vectors and scalars, magnitude and direction of a vector. Direction cosines and direction ratios of a vector. Types of vectors (equal, unit, zero, parallel and collinear vectors), position vector of a point, negative of a vector, components of a vector, addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Definition, Geometrical Interpretation, properties and application of scalar (dot) product of vectors, vector (cross) product of vectors.

2. Three – dimensional Geometry

12 Periods

Direction cosines and direction ratios of a line joining two points. Cartesian equation and vector equation of a line, skew lines, shortest distance between two lines. Angle between two lines.

Unit-V: Linear Programming

1. Linear Programming

15 Periods

Introduction, related terminology such as constraints, objective function, optimization, graphical method of solution for problems in two variables, feasible and infeasible regions (bounded or unbounded), feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints).

Unit-VI: Probability

1. Probability

25 Periods

Conditional probability, multiplication theorem on probability, independent events, total probability, Bayes' theorem, Random variable and its probability distribution, mean of random variable.



Prescribed Books:

- 1) Mathematics Textbook for Class XI, NCERT Publications
- 2) Mathematics Part I – Textbook for Class XII, NCERT Publication
- 3) Mathematics Part II – Textbook for Class XII, NCERT Publication
- 4) Mathematics Exemplar Problem for Class XI, Published by NCERT
- 5) Mathematics Exemplar Problem for Class XII, Published by NCERT
- 6) Mathematics Lab Manual class XI, published by NCERT
- 7) Mathematics Lab Manual class XII, published by NCERT



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XI 2022-23

Persian (Theory) – Subject Code: 11PR04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

Unit Test: 25

Unit/Area of Learning	Marks	Periods
A. Reading Comprehension	10	30
B. Writing Skills	15	40
c. Applied Grammar	15	40
D. Literature	35	70
Unit Test (Internal Assessment)	25	-
Total	100	180

Language	Marks	Suggested Periods
Section -A: Reading Comprehension	10	30
An unseen passage of 150 words followed by 3-4 short questions to test comprehension. 2marks may be allocated for testing vocabulary. 1mark may be allocated for providing a suitable heading. (7+2+1)		
Section - B: Writing Skills: Questions will be asked on given subjects.	15	40
(i) Letter writing /Essay Writing	05	10
(ii) Objective type questions will be asked from prescribed textbook	05	10
(iii) Summarizing of prescribed lesson into Urdu/English/Hindi/Persian	05	20
Section - C: Applied Grammar	15	40
1. Definition of the following with examples:	05	
i. Pronoun ضمیر		
ii. Preposition حروف اضافہ		
iii. Verb فعل		
2. Word formations from infinitive مصدر سے لفظ کی تشکیل	05	
i. Imperatives فعل امر و نہی		
ii. Aorists (Muzare) and Conjugation مضارع و گزشتہ		
3. <i>lsm-e-Fail, lsm-e-Mafool</i> , Adjectives Singular/Plural اسم نکرہ و جمع، صفت جمع	05	

Section - D: Literature (Lessons to be studied) :Farsi-wa-Dastoor Part I, Kitab-e-Awwal (1977) by Dr. Zahrae-Khanlari, published by Idarah-e-Adabiyat-e-Dilli, 2009 Qasimjan Street, Delhi-110006
Based on CBSE Syllabus



Prose and Poetry:		35	75
1. <i>Qissa-e-Kodak Moosa (Part-II)</i> قصه کودک موسی-حصه دوم	2. <i>Shaban-wa-Gusfand</i> شبان گوسفند ندا		
3. <i>Qissa-e-Gule Khandan-wa-Durr-e-Giryān-Part I, II,</i> قصه گل خندان و درگزیان - حصه ۱-۲	4. <i>Guwahi-e-Darakht</i> گواهی و درخت		
5. <i>Dastur e Zaban-e-Farsi Wabastah-e Ajzai Jumla Muzaf Ileh</i> دستور زبان فارسی وابسته اجزای جملة (مضاف اول)	6. <i>Dastur e Zaban-e-Farsi Wabastah-e-Fail(Qaid)</i> دستور زبان فارسی وابسته (نهی کتبی)		
7. <i>Mazandaran(Poem)</i> مازندران (نظم)	8. <i>Nageen-e-Angushtri (Poem)</i> نگین انگشتری (نظم)		
Amoozish-e-Zaban-e-Farsi Book IV by Dr. Yadullah Samareh Published by Intesharat-e-BenuilMillali Al-Hoda, available at Iran Culture House, 18, TilakMarg, New Delhi.			
1. <i>Waqti Ke Ishq Neest(Poem)</i> وقتی که عشق نیست (نظم)	2. <i>Nohomeen Ijlasi-ye Saran</i> نهمین اجلاس سران		
3. <i>Gandhi Khastar-e-Aghaz-e-Naw-dar Rawabit-e-Chin wa Hind Shod</i> گاندھی خواستار آغاز نو در روابط چین و هند شد	4. <i>Deeruz Imruz Wa Farda</i> دیروز، امروز و فردا		



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Physical Education (Theory) – Subject Code: 12PE04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time (Theory & Practical) : 3 hours each.

Max Marks: 100

Theory: 60

Practical: 25

Unit Test: 15

Units	Content	Periods	Marks
I	Management of Sporting Events	15	06
II	Children & Women in Sports	13	05
III	Yoga as Preventive measure for Lifestyle Disease	13	06
IV	Physical Education & Sports for CWSN (Children with Special Needs - <i>Divyang</i>)	13	06
V	Sports & Nutrition	13	05
VI	Test & Measurement in Sports	14	07
VII	Physiology & Injuries in Sports	15	06
VIII	Biomechanics & Sports	14	06
IX	Psychology & Sports	14	06
X	Training in Sports	16	07
XI	Practical	30	25
XII	Unit Test (Internal Assessment)	-	15
	Total	170	100

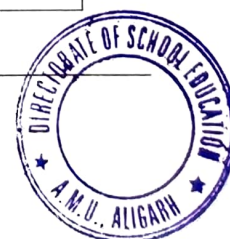
Theory	Periods	Marks
Unit I Management of Sporting Events <ul style="list-style-type: none"> ● Functions of Sports Events Management (Planning, Organising, Staffing, Directing & Controlling) ● Various Committees & their Responsibilities (pre; during & post) ● Fixtures and its Procedures – Knock-Out (Bye & Seeding) & League (Staircase & Cyclic) 	15	06
Unit II Children & Women in Sports <ul style="list-style-type: none"> ● Common Postural Deformities - Knock Knee; Bow Legs; Flat Foot; Round Shoulders; Lordosis, Kyphosis, and Scoliosis and their corrective measures ● Special consideration (Menarche & Menstrual Dysfunction) ● Female Athletes Triad (Osteoporosis, Amenorrhea, Eating Disorders) 	13	05
Unit III Yoga as Preventive measure for Lifestyle Disease	13	06

Based on CBSE Syllabus



<ul style="list-style-type: none"> • Obesity: Procedure, Benefits & Contraindications for Tadasana, Katichakrasana, Pavanmuktasana, Matsayasana, Halasana, Pachimottansana, Ardha – Matsyendrasana, Dhanurasana, Ushtrasana, Suryabedhan pranayama. • Diabetes: Procedure, Benefits & Contraindications for Katichakrasana, Pavanmuktasana, Bhujangasana, Shalabhasana, Dhanurasana, Supta-vajarasana, Paschimottanasana, Ardha-Mastendrasana, Mandukasana, Gomukasana, Yogmudra, Ushtrasana, Kapalabhati. • Asthma: Procedure, Benefits & Contraindications for Tadasana, Urdhwahastottansana, UttanMandukasana, Bhujangasana, Dhanurasana, Ushtrasana, Vakrasana, Kapalabhati, Gomukhasana Matsyaasana, Anuloma-Viloma. • Hypertension: Procedure, Benefits & Contraindications for Tadasana, Katichakrasana, Uttanpadasana, Ardha Halasana, Sarala Matyasana, Gomukhasana, UttanMandukasana, Vakrasana, Bhujangasana, Makarasana, Shavasana, Nadi-shodhanapranayam, Sitlipranayam. 		
<p>Unit IV Physical Education & Sports for CWSN (Children with Special Needs - Divyang)</p> <ul style="list-style-type: none"> • Organizations promoting Disability Sports (Special Olympics; Paralympics; Deaflympics) • Advantages of Physical Activities for children with special needs. • Strategies to make Physical Activities assessable for children with special needs. 	13	06
<p>Unit V Sports & Nutrition</p> <ul style="list-style-type: none"> • Concept of balance diet and nutrition • Macro and Micro Nutrients: Food sources & functions • Nutritive & Non-Nutritive Components of Diet 	13	05
<p>Unit VI Test & Measurement in Sports</p> <ul style="list-style-type: none"> • Fitness Test – SAI Khelo India Fitness Test in school: <ul style="list-style-type: none"> ○ Age group 5-8 yrs/ class 1-3: BMI, Flamingo Balance Test, Plate Tapping Test ○ Age group 9-18yrs/ class 4-12: BMI, 50mt Speed test, 600mt Run/Walk, Sit & Reach flexibility test, Strength Test (Abdominal Partial Curl Up, Push-Ups for boys, Modified Push-Ups for girls). • Computing Basal Metabolic Rate (BMR) • Rikli & Jones - Senior Citizen Fitness Test <ol style="list-style-type: none"> Chair Stand Test for lower body strength Arm Curl Test for upper body strength Chair Sit & Reach Test for lower body flexibility Back Scratch Test for upper body flexibility Eight Foot Up & Go Test for agility Six Minute Walk Test for Aerobic Endurance 	14	07

Based on CBSE Syllabus



<p style="text-align: center;">Unit VII Physiology & Injuries in Sports</p> <ul style="list-style-type: none"> ● Physiological factors determining components of physical fitness ● Effect of exercise on Muscular System ● Effect of exercise on Cardio-Respiratory System ● Sports injuries: Classification (Soft Tissue Injuries -Abrasion, Contusion, Laceration, Incision, Sprain & Strain; Bone & Joint Injuries - Dislocation, Fractures - Green Stick, Comminuted, Transverse Oblique & Impacted) 	15	06
<p style="text-align: center;">Unit VIII Biomechanics & Sports</p> <ul style="list-style-type: none"> ● Newton's Law of Motion & its application in sports ● Equilibrium – Dynamic & Static and Centre of Gravity and its application in sports ● Friction & Sports ● Projectile in Sports 	14	06
<p style="text-align: center;">Unit IX Psychology & Sports</p> <ul style="list-style-type: none"> ● Personality; its definition & types (Jung Classification & Big Five Theory) ● Meaning, Concept & Types of Aggressions in Sports ● Psychological Attributes in Sports – Self Esteem, Mental Imagery, Self Talk, Goal Setting 	14	06
<p style="text-align: center;">Unit X Training in Sports</p> <ul style="list-style-type: none"> ● Concept of Talent Identification and Talent Development in Sports ● Introduction to Sports Training Cycle – Micro, Meso, Macro Cycle. ● Types & Method to Develop – Strength, Endurance and Speed ● Types & Method to Develop – Flexibility and Coordinative Ability 	16	07

Practical: No. of periods: 30

Max. Marks 25

- | | |
|--|---------|
| 01. Physical Fitness Test: SAI Khelo India Test, Brockport Physical Fitness Test (BPFT)* 5 Marks | |
| 02. Proficiency in Games and Sports
(Skill of any one IOA recognised Sport/Game of Choice)** | 5 Marks |
| 03. Yogic Practices | 5 Marks |
| 04. Record File *** | 5 Marks |
| 05. Viva Voce (Health/ Games & Sports/ Yoga) | 5 Marks |

Note: For PE (048) Curriculum, Handbooks are already available at Board's website. However, the revised version of these Handbooks would soon be available that include following topics at Board's Academic website www.cbseacademic.nic.in



Based on CBSE Syllabus

**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Physics (Theory) – Subject Code: 12PH04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time (Theory & Practical) : 3 hours each.

Max Marks: 100

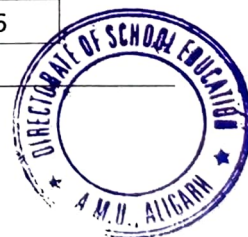
Theory: 60

Practical: 25

Unit Test: 15

		No. of Periods	Marks
Unit-I	Electrostatics		
	Chapter-1: Electric Charges and Fields	26	07
	Chapter-2: Electrostatic Potential and Capacitance		
Unit-II	Current Electricity	18	06
	Chapter-3: Current Electricity		
Unit-III	Magnetic Effects of Current and Magnetism		
	Chapter-4: Moving Charges and Magnetism	25	09
	Chapter-5: Magnetism and Matter		
Unit-IV	Electromagnetic Induction and Alternating Currents	24	07
	Chapter-6: Electromagnetic Induction		
	Chapter-7: Alternating Current		
Unit-V	Electromagnetic Waves	04	02
	Chapter-8: Electromagnetic Waves		
Unit-VI	Optics		
	Chapter-9: Ray Optics and Optical Instruments	30	15
	Chapter-10: Wave Optics		
Unit-VII	Dual Nature of Radiation and Matter	08	03
	Chapter-11: Dual Nature of Radiation and Matter		
Unit-VIII	Atoms and Nuclei		
	Chapter-12: Atoms	15	05
	Chapter-13: Nuclei		
Unit-IX	Electronic Devices		06

Based on CBSE Syllabus



	Chapter–14: Semiconductor Electronics: Materials, Devices and Simple Circuits	10	
	Practical		25
	Unit Test (Internal Assessment)		15
Total		160	100

Unit I: Electrostatics

26 Periods

Chapter–1: Electric Charges and Fields

Electric charges, Conservation of charge, Coulomb's law-force between two-point charges, forces between multiple charges; superposition principle and continuous charge distribution.

Electric field, electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field.

Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside).

Chapter–2: Electrostatic Potential and Capacitance

Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, electrical potential energy of a system of two-point charges and of electric dipole in an electrostatic field.

Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarization, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor (no derivation, formulae only).

Unit II: Current Electricity

18 Periods

Chapter–3: Current Electricity

Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity, temperature dependence of resistance, Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel, Kirchhoff's rules, Wheatstone bridge.



Chapter-4: Moving Charges and Magnetism

Concept of magnetic field, Oersted's experiment.

Biot - Savart law and its application to current carrying circular loop.
Ampere's law and its applications to infinitely long straight wire. Straight solenoid (only qualitative treatment), force on a moving charge in uniform magnetic and electric fields.

Force on a current-carrying conductor in a uniform magnetic field, force between two parallel current-carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer-its current sensitivity and conversion to ammeter and voltmeter.

Chapter-5: Magnetism and Matter

Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only), torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only), magnetic field lines.

Magnetic properties of materials- Para-, dia- and ferro - magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties.

Unit IV: Electromagnetic Induction and Alternating Currents**24 Periods****Chapter-6: Electromagnetic Induction**

Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction.

Chapter-7: Alternating Current

Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LCR series circuit (phasors only), resonance, power in AC circuits, power factor, wattless current.

AC generator, Transformer.

Unit V: Electromagnetic waves**04 Periods****Chapter-8: Electromagnetic Waves**

Basic idea of displacement current, Electromagnetic waves, their characteristics, their transverse nature (qualitative idea only).

Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses.

Unit VI: Optics

30 Periods

Chapter–9: Ray Optics and Optical Instruments

Ray Optics: Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and optical fibers, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction of light through a prism.

Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.

Chapter–10: Wave Optics

Wave optics: Wave front and Huygen's principle, reflection and refraction of plane wave at a plane surface using wave fronts. Proof of laws of reflection and refraction using Huygen's principle. Interference, Young's double slit experiment and expression for fringe width (No derivation final expression only), coherent sources and sustained interference of light, diffraction due to a single slit, width of central maxima (qualitative treatment only).

Unit VII: Dual Nature of Radiation and Matter

08 Periods

Chapter–11: Dual Nature of Radiation and Matter

Dual nature of radiation, Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation-particle nature of light.

Experimental study of photoelectric effect

Matter waves-wave nature of particles, de-Broglie relation.

Unit VIII: Atoms and Nuclei

15 Periods

Chapter–12: Atoms

Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model of hydrogen atom, Expression for radius of nth possible orbit, velocity and energy of electron in his orbit, of hydrogen line spectra (qualitative treatment only).

Based on CBSE Syllabus



Chapter–13: Nuclei

Composition and size of nucleus, nuclear force

Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.

Unit IX: Electronic Devices

10 Periods

Chapter–14: Semiconductor Electronics: Materials, Devices and Simple Circuits

Energy bands in conductors, semiconductors and insulators (qualitative ideas only) Intrinsic and extrinsic semiconductors- p and n type, p-n junction

Semiconductor diode - I-V characteristics in forward and reverse bias, application of junction diode - diode as a rectifier.

PRACTICALS

The record to be submitted by the students at the time of their annual examination has to include:

- Record of at least 8 Experiments [with 4 from each section], to be performed by the students.

Evaluation Scheme

Max. Marks: 25

Time 3 hours

Two experiments one from each section	7+7 Marks
Practical record [experiments and activities]	6 Marks
Viva on experiments, activities and project	5 Marks
Total	25 marks

Experiments

SECTION–A

- To determine resistivity of two / three wires by plotting a graph for potential difference versus current.
- To find resistance of a given wire / standard resistor using metre bridge.
- To determine resistance of a galvanometer by half-deflection method and to find its figure of

Based on CBSE Syllabus



merit.

4. To find the frequency of AC mains with a sonometer.

SECTION-B

Experiments

1. To find the value of v for different values of u in case of a concave mirror and to find the focal length.
2. To find the focal length of a convex mirror, using a convex lens.
3. To find the focal length of a convex lens by plotting graphs between u and v or between $1/u$ and $1/v$.
4. To find the focal length of a concave lens, using a convex lens.
5. To draw the I-V characteristic curve for a p-n junction diode in forward and reverse bias.

Prescribed Books:

1. Physics, Class XII, Part -I and II, Published by NCERT.
2. Laboratory Manual of Physics for class XII Published by NCERT.
3. The list of other related books and manuals brought out by NCERT (consider multimedia also).

Note:

The content indicated in NCERT textbooks as excluded for the year 2022-23 is not to be tested by schools and will not be assessed in the Board examinations 2022-23



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Political Science (Theory) – Subject Code: 12PL04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

Unit Test: 25

Part A: Contemporary World Politics

Units	Contents	Periods	Marks
1	The End of Bipolarity	15	08
2	New Centres of Power	15	12
3	Contemporary South Asia	11	
4	United Nations and its Organizations	11	10
5	Security in Contemporary World	13	
6	Environment and Natural Resources	10	10
7	Globalization	13	

Part B: Politics in India since Independence

Units	Contents	Periods	Marks
1	Challenges of Nation-Building	14	08
2	Planned Development	12	
3	India's Foreign Policy	12	07
4	Parties and Party System in India	12	10
5	Democratic Resurgence	12	
6	Regional Aspirations	12	10
7	Indian Politics: Recent Trends and Development	11	
	Unit Test (Internal Assessment)	-	25
	Total	173	100

COURSE CONTENTS

Part A: Contemporary World Politics		
1.	The End of Bipolarity Disintegration of Soviet Union, Unipolar World, Middle East Crisis – Afghanistan, Gulf War, Democratic Politics and Democratization – CIS and the 21 st Century (Arab Spring).	15 Periods
2.	New Centres of Power Organizations: European Union, ASEAN, SAARC, BRICS. Nations: Russia, China, Israel, India, Japan and South Korea.	15 Periods

Based on CBSE Syllabus



3	Contemporary South Asia Conflicts and efforts for Peace Democratization in South Asia: Pakistan, Nepal, Bangladesh, Sri Lanka, Maldives.	11 Periods
4	United Nations and its Organizations Principal Organs, Key Agencies: UNESCO, UNICEF, WHO, ILO, Security Council and the Need for its Expansion.	11 Periods
5	Security in Contemporary World Security: Meaning and Type; Terrorism.	13 Periods
6	Environment and Natural Resources Environmental Movements, Global Warming and Climate Change, Conservation of Natural Resources.	10 Periods
7	Globalization Globalization: Meaning, Manifestation and Debates.	13 Periods
Part B: Politics in India since Independence		
1	Challenges of Nation-Building Nation and Nation Building. Sardar Vallabh Bhai Patel and Integration of States. Nehru's approach to nation-building; Legacy of partition: challenge of 'refugee' Resettlement, the Kashmir problem. Political conflicts over language. Linguistic Organisation of States.	14 Periods
2	Planned Development Changing nature of India's Economic Development Planning Commission and Five Year Plans, National Development Council, NITI Aayog.	12 Periods
3	India's Foreign Policy Principles of Foreign Policy; India's Changing Relations with Other Nations: US, Russia, China, Israel; India's Relations with its Neighbours: Pakistan, Bangladesh, Bhutan, Nepal, Sri Lanka and Myanmar; India's Nuclear Programme.	12 Periods
4	Parties and Party System in India One Party Dominance, Bi-Party System, Multi-Party Coalition System.	12 Periods
5	Democratic Resurgence Jaya Prakash Narayan and Total Revolution, Ram Manohar Lohia and Socialism, Pandit Deendayal Upadhyaya and Integral Humanism, National Emergency, Democratic Upsurges – Participation of the Adults, Backwards and Youth.	12 Periods
6	Regional Aspirations Rise of regional parties. Punjab Crisis. The Kashmir Issue, Movements for Autonomy.	12 Periods
7	Indian Politics: Recent Trends and Development Era of Coalitions, National Front, United Front, United Progressive Alliance (UPA) – I & II, National Democratic Alliance (NDA) I, II, III & IV, Issues of Development and Governance.	11 Periods

Prescribed Books:

1. Contemporary World Politics, Class XII, Published by NCERT
2. Politics in India since Independence, Class XII, Published by NCERT
3. Reference Material available with this document.

Note:

- The above textbooks are also available in Hindi and Urdu versions.



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Psychology (Theory) – Subject Code: 12PS04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time (Theory & Practical) : 3 hours each.

Max Marks: 100

Theory: 60

Practical: 25

Unit Test: 15

Units	Topics	No. of periods	Marks
I	Variations in Psychological Attributes	30	10
II	Self and Personality	32	12
III	Meeting Life Challenges	23	07
IV	Psychological Disorders	30	10
V	Therapeutic Approaches	25	08
VI	Attitude and Social Cognition	16	07
VII	Social Influence and Group Processes	14	06
	Practical	-	25
	Unit Test (Internal Assessment)	-	15
	Total	170	100

COURSE CONTENT

Unit I	Variations in Psychological Attributes	30 Periods
	<p><i>The topics in this unit are:</i></p> <ol style="list-style-type: none">1. Introduction2. Individual Differences in Human Functioning3. Assessment of Psychological Attributes4. Intelligence5. Psychometric Theories of Intelligence, Information Processing Theory: Planning, Attention-arousal and Simultaneous successive Model of Intelligence, Triarchic Theory of Intelligence; Theory of MultipleIntelligences.6. Individual Differences in Intelligence7. Culture and Intelligence8. Emotional Intelligence9. Special Abilities: Aptitude: Nature and Measurement10. Creativity	

Based on CBSE Syllabus



Unit II	Self and Personality <i>The topics in this unit are:</i> <ol style="list-style-type: none"> 1. Introduction 2. Self and Personality 3. Concept of Self 4. Cognitive and Behavioural aspects of Self 	32 Periods
	<ol style="list-style-type: none"> 5. Culture and Self 6. Concept of Personality 7. Major Approaches to the Study of Personality <ul style="list-style-type: none"> • Type Approaches • Trait Approaches • Psychodynamic Approach and Post Freudian Approaches • Behavioural Approach • Cultural Approach • Humanistic Approach 8. Assessment of Personality <ul style="list-style-type: none"> • Self-report Measures • Projective Techniques • Behavioural Analysis 	
Unit III	Meeting Life Challenges <i>The topics in this unit are:</i> <ol style="list-style-type: none"> 1. Introduction 2. Nature, Types and Sources of Stress 3. Effects of Stress on Psychological Functioning and Health <ul style="list-style-type: none"> • Stress and Health • General Adaptation Syndrome • Stress and Immune System • Lifestyle 4. Coping with Stress <ul style="list-style-type: none"> • Stress Management Techniques 5. Promoting Positive Health and Well-being <ul style="list-style-type: none"> • Life Skills • Positive Health 	23 periods
Unit IV	Psychological Disorders <i>The topics in this unit are:</i> <ol style="list-style-type: none"> 1. Introduction 2. Concepts of Abnormality and Psychological Disorders <ul style="list-style-type: none"> • Historical Background 3. Classification of Psychological Disorders 4. Factors Underlying Abnormal Behaviour 5. Major Psychological Disorders 	30 Periods

Based on CBSE Syllabus



	<ul style="list-style-type: none"> • Anxiety Disorders • Obsessive-Compulsive and Related Disorders • Trauma-and Stressor-Related Disorders • Somatic Symptom and Related Disorders • Dissociative Disorders • Depressive Disorder • Bipolar and Related Disorders • Schizophrenia Spectrum and Other Psychotic Disorders • Neurodevelopmental Disorders • Disruptive, Impulse-Control and Conduct Disorders • Feeding and Eating Disorders • Substance Related and Addictive Disorders 	
Unit V	<p>Therapeutic Approaches</p> <p><i>The topics in this unit are:</i></p> <ol style="list-style-type: none"> 1. Nature and Process of psychotherapy <ul style="list-style-type: none"> • Therapeutic relationship 2. Types of Therapies <ul style="list-style-type: none"> • Behaviour Therapy • Cognitive Therapy • Humanistic-Existential Therapy • Alternative Therapies • Factors contributing to healing in Psychotherapy • Ethics in Psychotherapy 3. Rehabilitation of the Mentally Ill 	25 Periods
Unit VI	<p>Attitude and Social Cognition</p> <p><i>The topics in this unit are:</i></p> <ol style="list-style-type: none"> 1. Introduction 2. Explaining Social Behaviour 3. Nature and Components of Attitudes 4. Attitude Formation and Change <ul style="list-style-type: none"> • Attitude Formation • Attitude Change • Attitude-Behaviour Relationship 5. Prejudice and Discrimination 6. Strategies for Handling Prejudice 	16 Periods

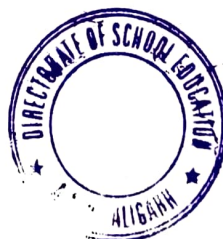


Unit VII	Social Influence and Group Processes <i>The topics in this unit are:</i> <ol style="list-style-type: none"> 1. Introduction 2. Nature and Formation of Groups 3. Type of Groups 4. Influence of Group on Individual Behaviour <ul style="list-style-type: none"> • Social Loafing • Group Polarisation 	14 Periods
Practical 30 Marks		60 Periods
Distribution of Marks:		
<ul style="list-style-type: none"> • Practical File and Case Profile 	05 Marks	
<ul style="list-style-type: none"> • Viva Voce (Case Profile & Two Practicals) 	05 Marks	
<ul style="list-style-type: none"> • Two Practicals (5 marks for conduct of practicals and 10 marks for reporting) 	15 Marks	
Total	25 Marks	

Prescribed Books:

1. Psychology, Class XI, Published by NCERT
2. Psychology, Class XII, Published by NCERT

Note: The above textbooks are also available in Hindi medium.



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Sociology (Theory) – Subject Code: 12SO04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

Unit Test: 25

Units		No. of periods	Marks
A	Indian Society		
	1. Introducing Indian Society	04	10
	2. The Demographic Structure of Indian Society	12	
	3. Social Institutions: Continuity and Change	14	10
	4. Patterns of Social Inequality and Exclusion	18	10
	5. The Challenges of Cultural Diversity	20	09
B	Social Change and Development in India		
	6. Structural Change	12	05
	7. Cultural Change	15	05
	8. Change and Development in Rural Society	20	08
	9. Change and Development in Industrial Society	15	08
	10. Social Movements	20	10
	Project Work+Viva-voce (Part of internal assessment)	20	25
	Total	170	100

COURSE CONTENT

A.	INDIAN SOCIETY	
Unit 1	Introducing Indian Society • Colonialism, Nationalism, Class and Community (Non-evaluative)	04 Periods
Unit 2	The Demographic Structure of the Indian Society • Theories and concepts in demography • Rural-Urban Linkages and Divisions • Population Policy in India	12 Periods

Based on CBSE Syllabus



Unit 3	Social Institutions: Continuity and Change <ul style="list-style-type: none"> • Caste and the Caste System • Tribal Communities • Family and Kinship 	14 Periods
Unit 5	Patterns of Social Inequality and Exclusion <ul style="list-style-type: none"> • Social Inequality and Social Exclusion • Systems justifying and perpetuating Inequality - Caste, Tribe, the Other Backward Classes • Adivasi Struggles • The Struggle for Women's Equality and Rights • The struggles of the Differently Abled 	18 Periods
Unit 6	The Challenges of Cultural Diversity <ul style="list-style-type: none"> • Cultural communities and the nation state • Regionalism in the Indian context • The Nation state and religion related issues and identities • Communalism, secularism and the nation state • State and Civil Society 	20 Periods
B.	SOCIAL CHANGE AND DEVELOPMENT IN INDIA	
Unit 7	Structural Change <ul style="list-style-type: none"> • Understanding Colonialism, Industrialization, Urbanization 	12 Periods
Unit 8	Cultural Change <ul style="list-style-type: none"> • Social Reform Movements • Different Kinds of Social Change: Sanskritisation, Westernization, Modernization, Secularization 	15 Periods
Unit 9	Change and Development in Rural Society <ul style="list-style-type: none"> • Agrarian Structure : Caste & class in Rural India • Land Reforms, Green Revolution and Emerging Agrarian society • Green revolution and its social consequences • Transformation in Rural Society • Circulation of labour • Globalization, Liberalization and Rural Society 	20 Periods



Unit 10	Change and Development in Industrial Society <ul style="list-style-type: none"> • From Planned Industrialization to Liberalization • How people find Jobs • Work Processes: How work is carried out, working conditions, home based work, Strikes and Unions 	15 Periods
Unit 11	Social Movements <ul style="list-style-type: none"> • Concept of Social Movements • Theories and Classification of Social Movements • Environmental Movements • Class-Based Movements: Workers, Peasants • Caste-Based Movements: Dalit Movement, Backward Class/Castes, Trends in Upper Caste Responses • Tribal Movements • Women's Movements in Independent India 	20 Periods

Prescribed Books:

1. Introducing Sociology, Class XI, Published by NCERT
2. Understanding Society, Class XI, Published by NCERT
3. Indian Society, Class XII, Published by NCERT
4. Social Change and Development in India, Class XII, published by NCERT



**DIRECTORATE OF SCHOOL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH**

Class XII 2022-23

Elective Urdu (Theory) – Subject Code: 12UR04
(Course Structure, Teaching Schedule & Distribution of Marks)

Time : 3 hours

Max Marks: 100

Theory: 75

Unit Test: 25

Part - A	Periods	Marks
1. Reading Comprehension	20	10
Part - B		
1. Writing skills	40	16
Section - C		
1. Literature	110	49
Unit Test (Internal Assessment)	--	25
Total	170	100

PART A Marks 10

Reading and Comprehension

حصہ (الف) عبارتِ فہمی اور شعرِ فہمی

☆ چار غیر درسی اقتباس (دو نثری اور دو شعری) دئے جائیں گے ایک نثری اور ایک شعری اقتباس کرے ہوں گے دونوں اقتباس پانچ پانچ نمبر کے ہوں گے۔

$$1 \times 5 + 1 \times 5 = 10$$

☆ ہر اقتباس میں عبارتِ فہمی اور شعرِ فہمی سے متعلق ایک جملے پر مشتمل جواب والے سوالات دئے جائیں گے۔



Based on CBSE Syllabus

PART B**Marks 16****(Writing Skill)**

حصہ (ب) تحریری مہارت

☆ اردو ادب کی تاریخ

08

فورٹ ولیم کالج اور دہلی کالج کی اور دبستان لکھنؤ کی خصوصیات

اردو زبان کا آغاز و ارتقاء

8

☆ ادبی تحریکات (سرسید تحریک اور ترقی پسند تحریک)

اردو ادب کی تاریخ پر مختصر سوالات پوچھے جائیں گے۔

PART C**(Literature)****Marks 49**

☆ درسی کتاب سے کثیر انتخابی کے سوالات دئے جائیں یہ سوالات ایک ایک نمبر کے ہوں گے جن میں سے سولہ سوالوں کے جواب دینے ہوں گے۔ جن

 $1 \times 15 = 15$

کے سوالوں کے مجموعی تعداد ۲۵ ہوگی۔ 50% اضافی سوالوں کے ساتھ۔

☆ دو درسی اقتباسات (Seen Passage) ایک نثری اور ایک شعری دئے جائیں گے دونوں اقتباسات پانچ پانچ نمبر کے ہوں گے۔ نثری

اقتباس 150 سے 200 الفاظ پر مشتمل ہوگا اور شعری اقتباس میں دو بندر اشعار دئے جائیں گے ہر اقتباس میں عبارت فہمی سے متعلق سوالات دئے

 $1 \times 5 + 1 \times 5 = 10$

جائیں گے۔



☆ درسی کتاب سے کثیر انتخابی کے سوالات دئے جائیں گے یہ سوالات ایک ایک نمبر کے ہوں گے آٹھ اضافی سوالوں کے ساتھ جن میں سے چار سوالوں

$$1 \times 4 = 4$$

کے جواب دیئے ہوں گے۔

☆ درسی کتاب اور اردو کی معاون درسی کتاب سے متعلق سوالات پوچھے جائیں گے یہ سوالات ۲ نمبر اور تین نمبر کے ہوں گے اضافی سوالوں کے ساتھ جن

میں سے دو نمبر کے چار سوالات کرنے ہوں اور ان کی مجموعی تعداد ہوگی۔ اور تین نمبر کے سوالات دو کرنے ہوں گے۔ جن کی مجموعی تعداد چھ سوالات پر مشتمل ہوگا۔

14

☆ اصناف

ناول، ڈراما، کہانیاں

انشائیہ، مکتوب نگاری

تقدیری مضمون

مختصر افسانہ

یادیں

غزل

نظم

6

☆ چار اصناف دے کر کسی ایک پر نوٹ لکھوایا جائیگا۔



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بارہویں جماعت کے لئے

اردو کی درسی کتاب

مندرجہ ذیل اسباق سے سوالات نہیں پوچھے جائیں گے۔

مرزا غالب خط نمبر ۱ (مشی ہر گوپال تفت کے نام)

مرزا غالب خط نمبر ۲ (مشی نبی بخش حقیر کے نام)

☆ غزل

☆ مختصر افسانہ

☆ آرزو لکھنوی

☆ بلونت سنگھ لہے

☆ راجندر چند ابانی

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نزل درما (جلتی جھازی)

مطالع کے مجوزہ کتابیں

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☆ اردو قواعد شائع کردہ NCERT New Delhi

