

ANNUAL
CURRICULUM
PLAN

CLASS XI
COMMERCE

(SESSION: 2016-17)

Abraham Lincoln's letter to his son's teacher

*My son will have to learn, I know,
That all men are not just,
all men are not true.
But teach him also that
for every scoundrel there is a hero;
that for every selfish politician,
there is a dedicated leader.*

*Teach him for every enemy there is a friend.
Teach him to learn to lose and also enjoy winning.
Steer him away from envy, if you can.
Teach him the secret of quiet laughter.*

*Let him learn early that
the bullies are the easiest to lick.
Teach him, if you can,
the wonder of books...
but also give him quiet time
to ponder the eternal mystery of birds in the sky,
bees in the sun, and the flowers on a green hillside.*

*In school teach him
it is far more honourable to fail than to cheat.
Teach him to have faith in his own ideas,
even if everyone tells him they are wrong.
Teach him to be gentle with gentle people,
and tough with the tough.*

*Try to give my son
the strength not to follow the crowd
when everyone is getting on the band wagon.
Teach him to listen to all men
but teach him also to filter all he hears on a screen of truth,
and take only the good that comes through.*

*Teach him if you can,
how to laugh when he is sad.
Teach him there is no shame in tears.
Teach him to scoff at cynics
and to beware of too much sweetness.
Teach him to sell his brawn
and brain to the highest bidders but never to put a price-tag
on his heart and soul.*

*Teach him to close his ears
to a howling mob,
and to stand and fight if he thinks he's right.
Treat him gently; but do not cuddle him,
because only the test of fire makes fine steel.*

*Let him have the courage to be impatient;
let him have the patience to be brave.
Teach him always to have sublime faith in himself,
because then he will have sublime faith in mankind.*

*This is a big order;
but see what you can do.
He is such a fine little fellow, my son!*

Abraham Lincoln

SCHOOL CURRICULUM GOALS

The Curriculum will adopt the following goals:

- To create a connect between learners' spiritual, ethical, social, cognitive, mental and physical growth and development;
- To nurture individuality and thus enhance one's innate potentials;
- To foster constitutional literacy and tolerance for different cultures;
- To develop scientific outlook and transformative competences, in order to meet the demands of changing society. The aim of education is not just to let learners obtain basic knowledge but to make them life-long learners. It is to nurture future citizens who are mentally and physically robust, assertive, confident, empathetic and helpful to the community, intellectually inquisitive and reflective, tolerant and with creative vision and global perspective. Schools will accomplish such standards through the promotion of value based learning activities which emphasize humanity, practicality, individuality, inclusiveness and modernity. Such activities involve collaborations between oneself and others, individuals and the community, as well as humans and nature.

To achieve this, we must guide our learners to achieve the following curriculum goals:

- To enhance self-awareness and explore innate potential;
- To develop creativity and the ability to appreciate art and showcase one's own talents;
- To promote capabilities related to goal setting, decision making and lifelong learning;
- To nurture assertive communication and interpersonal skills;
- To learn to be empathetic towards others, display dignity and respect to the opposite gender, to contribute for the community and focus on preserving environment;
- To foster cultural learning and international understanding in an interdependent society;
- To strengthen knowledge and attitude related to livelihood skills;
- To acquire the ability to utilize technology and information for the betterment of humankind;
- To inspire the attitude of functional and participatory learning; and
- To develop abilities related to thinking skills and problem solving.

Main Pedagogical Outcomes for Curriculum Learning Areas:

- Learners use language to comprehend, acquire and communicate ideas and information and to interact with others.
- Learners identify, integrate and apply numerical and spatial concepts and techniques. They have clarity of concepts and are able to connect them to the real world.
- Learners understand and appreciate the physical, biological and technological world and have the knowledge, attitude, skills and values to make rational decisions in relation to it.

- Learners understand their cultural, geographical and historical milieus and have the knowledge, attitude, skills and values necessary to bring about transformation for a better India.
- Learners recognize the requirement of information, locate and resource it from a range of data available and evaluate, use and collaborate it with others.
- Learners identify, select, use technologies and are able to synthesize, innovate and discover newer technologies as required.
- Learners rationalize and reason about pre-defined arrangements, norms and relationships in order to comprehend, decode, validate and develop more relevant patterns.
- Learners think laterally, critically, identify opportunity, challenge their potential and are open to challenges. They are aware of consequences and take ownership of their deeds.
- Learners interact harmoniously with people and cultures from across the globe and are tolerant and empathetic towards others.
- Learners involve themselves in cultural pursuits as well as appreciate, respect and acknowledge the artistic, cultural and intellectual work of others.
- Learners value and engage in practices that promote personal, physical as well as mental and cognitive development and well-being.

EXAMINATION SCHEDULE

AUGUST EXAMINATION SCHEDULE

Date	Subject
02.08.2016	Physical Education Practical
08.08.2016	Accountancy
10.08.2016	Maths
12.08.2016	Physical Education
16.08.2016	Economics
19.08.2016	English
22.08.2016	Business Studies

DECEMBER EXAMINATION SCHEDULE

Date	Subject
05.12.2016	Physical Education Practical
13.12.2016	Accountancy
15.12.2016	Maths
17.12.2016	Physical Education
19.12.2016	Economics
21.12.2016	English
23.12.2016	Business Studies

ANNUAL EXAMINATION SCHEDULE

Date	Subject
20.02.2017	Physical Education Practical
27.02.2017	Accountancy
01.03.2017	Maths
03.03.2017	Physical Education
06.03.2017	Economics
08.03.2017	English
10.03.2017	Business Studies

DETAILED SYLLABUS OF ENGLISH

OBJECTIVES

The general objectives at this stage are:

- To listen and comprehend live as well as record in writing oral presentations on a variety of topics.
- To develop greater confidence and proficiency in the use of language skills necessary for social and academic purpose.
- To participate in group discussions, interviews by making short oral presentation on given topics.
- To perceive the overall meaning and organisation of the text (i.e., the relationships of the different “chunks” in the text to each other)
- To identify the central/main point and supporting details, etc., to build communicative competence in various registers of English
- To promote advanced language skills with an aim to develop the skills of reasoning, drawing inferences, etc. through meaningful activities
- To translate texts from mother tongue(s) into English and vice versa
- To develop ability and knowledge required in order to engage in independent reflection and enquiry

At the end of this stage learners will be able to do the following:

- Read and comprehend extended texts (prescribed and non-prescribed) in the following genres: science fiction, drama, poetry, biography, autobiography, travel and sports literature, etc.
- text-based writing (i.e., writing in response to questions or tasks based on prescribed or unseen texts)
- Understand and respond to lectures, speeches, etc.
- Write expository / argumentative essays, explaining or developing a topic, arguing a case, etc.
- Write formal/informal letters and applications for different purposes
- Write items related to the workplace (minutes, memoranda, notices, summaries, reports etc. filling up of forms, preparing CV, e mail messages, making notes from reference materials, recorded talks etc. The core course should draw upon the language items suggested for class IX-X and delve deeper into their usage and functions. Particular attention may, however, be given to the following areas of grammar: The use of passive forms in scientific and innovative writings. Converting one kind of sentence/clause into a different kind of structure as well as other items to exemplify stylistic variations in different discourses modal auxiliaries-uses based on semantic considerations.

Specific Objectives of Reading:

Students are expected to develop the following study skills:

- a. Refer to dictionaries, encyclopedia, thesaurus and academic reference material
- b. Select and extract relevant information, using reading skills of skimming and scanning
- c. Understand the writer's attitude and bias
- d. Comprehend the difference between what is said and what is implied
- e. Understand the language of propaganda and persuasion
- f. Differentiate between claims and realities, facts and opinions
- g. Form business opinions on the basis of latest trends available
- h. Comprehend technical language as required in computer related fields
- i. Arrive at personal conclusion and comment on a given text specifically
- j. Develop the ability to be original and creative in interpreting opinion
- k. Develop the ability to be logically persuasive in defending one's opinion
- l. Making notes based on a text Develop literary skills as enumerated below:
 - Personally respond to literary texts
 - Appreciate and analyze special features of languages that differentiate literary texts from non-literary ones
 - Explore and evaluate features of character, plot, setting, etc.
 - Understand and appreciate the oral, mobile and visual elements of drama
 - Identify the elements of style such as humour, pathos, satire and irony, etc.
 - Make notes from various resources for the purpose of developing the extracted ideas into sustained pieces of writing

Specific Objectives of Writing

- To write letters to friends, pen friends, relatives, etc.
- To write business and official letters.
- To send faxes, e-mails [formal].
- To open accounts in post offices and banks.
- To fill in railway/airline reservation forms.
- To write on various issues to institutions seeking relevant information, lodge complaints, express thanks or tender apology.
- To write applications, fill in application forms; prepare a personal bio-data for admission into colleges, universities, entrance tests and jobs.
- To write informal reports as part of personal letters on functions, programmes and activities held in school (morning assembly, annual day, sports day etc.)
- To write formal reports for school magazines / events / processes / or in local newspapers about events or occasions.
- To express opinions, facts, arguments in the form a speech or debates.
- To draft papers to be presented in symposia.
- To take down notes from talks and lectures.
- To write examination answers according to the requirement of various subjects.
- To summarize a text.

ENGLISH CORE

SECTION-A

Reading Comprehension

- **Very short answer and MCQ type questions:**

Two unseen passages (including poems) with a variety of questions including 04 marks for vocabulary such as word formation and inferring meaning. The total range of the 2 passages including a poem or a stanza should be around 900-1000 words.

1. 550-600 words in length(for note-making and summarising) **8M**
2. 350-400 words in length(to test comprehension , interpretation and inference) **12 M**

An unseen poem of about 28-35 lines.

The passages could be of any one of the following types:

- Factual passages e.g. illustrations, description, reports
- Discursive passages involving opinion, e.g. argumentative, persuasive
- Literary passages e.g. extracts from fiction, biography, autobiography, travelogue, etc.
- In the case of a poem, the text may be shorter than the prescribed word limit.

SECTION B

Writing Skills and Grammar

WRITING

- **Short Answer Questions:** Based on notice/poster/advertisement/ invitation/reply **4M**
- **Long Answer Questions:** Letters based on verbal / visual input. It would cover all types of letters. **6M**

Letter types may include:

- a) Business or official letters(for making enquiries, registering complaints , asking for and giving information, placing orders and sending replies)
 - b) Letters to the editor (giving suggestions on an issue)
 - c) Application for a job with a bio-data or resume
 - d) Letter to the school or college authorities, regarding admissions, school issues, requirements/suitability of courses, etc.
- **Very Long Answer Question:** Composition in the form of article, speech, report writing or a narrative. **10 M**

Grammar

- Different grammatical structures in meaningful contexts will be tested. Item types will include gap filling, sentence re-ordering, dialogue completion and sentence transformation. The grammar syllabus will include determiners, tenses, clauses, modals and change of Voice. These grammar areas will be tested using the following short answer type and MCQ type questions:
 - Error Correction, editing tasks.
 - Re-ordering of sentences,
 - Transformation of sentences

SECTION C

Literature and Long Reading Texts

Questions to test comprehension at different levels: literals, inferential and evaluative

1. **Hornbill** : Textbook published by NCERT, New Delhi
2. **Snapshots**: Supplementary Reader published by NCERT, New Delhi

The following have been deleted:

Textbooks	Name of the lessons deleted
Hornbill	1. Landscape of the soul 2. The Adventure 3. Silk Road
Snapshots	4. The Laburnum Top (Poetry) 5. The Ghat of the only World

- **Very Short Answer Questions**-Based on an extract from poetry to test reference to context comprehension and appreciation. **4M**
- **Short Answer Questions**-Based on prose, poetry and plays from both the texts. **2M**
- **Long Answer Question**-Based on prescribed texts to test global comprehension and extrapolation beyond the texts to bring out the key messages and values. **6M**
- **Long Answer Questions**- Based on theme, plot, incidents or event from the prescribed novels. **6M**
- **Long Answer Questions**-Based on understanding appreciation, analysis and interpretation of the characters. **6M**

Note: Values –based questions may be given as long answer in the writing or literature sections.

Long Reading Texts (Any one)

With a view to inculcate the habit of reading among the students, CBSE has introduced compulsory reading of a Long Reading Text -Novel in the English Core Course and will be evaluated in the Term end Assessments. Schools can opt for either one of the texts.

NOVEL

AUTHOR

The Canterville Ghost

Oscar Wilde (Unabridged 1906 Edition)

Up from Slavery

Booker T. Washington (unabridged 2000 Edition)

QUESTION PAPER DESIGN

CLASS-XI

ENGLISH CORE

CODE-301

Typology	Typology of questions/learning outcomes	MCQ 1 mark	VSAQ 1 mark	Short answer Question 3 marks	Short answer Question 4 marks	Long Answer-I 80-100 words 5 marks	Long Answer-2 Question 120-150 words 6 marks	Very long answer 150-200 words (HOTS) 10 marks	Total Marks	Over all %
Reading Skills	Conceptual understanding, decoding, analysing, inferring, interpreting appreciating. Literary conventions and vocabulary, summarising and using appropriate format/s	6	6	1	---	1	---	---	20	20
Writing Skills and Grammar	Reasoning, appropriacy of style and tone, using appropriate format and fluency inference, analysis, evaluation and creativity, appreciation applying of language conventions, comprehension using structures with accuracy and fluency.	--	10	---	01	---	01	1	30	30
Literary Text books And long reading text	Recalling, reasoning , appreciating a literary convention, inference, analysis, evaluation, creativity with fluency	3	---	3	---	---	3	---	30	30
Assessment of speaking and Listening Skills	Interaction , reasoning, diction, articulation, clarity, pronunciation and overall fluency		---		---	10+10 (L + S)			20	20
TOTAL		9x1=9	16x1=16	4x3=12	1x4=4	1x5=5	4x6=24	1x10=10	80	100

ANNUAL SYLLABUS BREAK UP

APRIL

S. No.	Name of the Books	Topics
1	Horn Bill	Lesson 1: The Portrait of a Lady
2	The Snapshots	Lesson 1: The Summer of the Beautiful White Horse
3	Writing Skills	Report (for Newspaper & School Magazines)
4	Grammar	Tenses
5	Novel (The Canterville Ghost)	Introduction & Discussion of Plot, Theme, Settings and main characters, Lesson 1
6	Reading Skills	Unseen Passage

MAY

S. No.	Name of the Books	Topics
1	Horn Bill	Poem 1: A Photograph
2	The Snapshots	Lesson 2: The Address
3	Writing Skills	Letters (Formal)
4	Grammar	Determiners
5	Novel	Discussion of Lesson 2
6	Reading Skills	Unseen Passage / Note Making

JUNE

S. No.	Name of the Books	Chapters
1	Horn Bill	Lesson 2: We're Not Afraid to die...If We Can all Be Together
2	Reading Skills	Note Making

JULY

S. No.	Name of the Books	Topics
1	Horn Bill	Lesson 3: Discovering Tut: the Saga Continues Poem 2: The Voice of the Rain
2	Writing Skills	Article, Notice, Advertisement
3	Grammar	Active & Passive Voice
4	Novel	Discussion of Lesson 3

AUGUST

REVISION FOR AUGUST EXAMINATION

SEPTEMBER

S. No.	Name of the Books	Topics
1	The Snapshots	Lesson 3: Ranga's Marriage
2	Horn Bill	Poem 3: Childhood
3	Writing Skills	Speech
4	Grammar	Clauses
5	Novel	Discussion of Lesson 4
6	Reading Skills	Unseen Passage

OCTOBER

S. No.	Name of the Books	Topics
1	Horn Bill	Lesson 5: The Ailing Planet: the Green Movement's Role.
2	The Snapshots	Lesson 4: Albert Einstein at School
3	Writing Skills	Debate
4	Grammar	Modals
5	Novel	Discussion of Lesson 5 and Lesson 6
6	Reading Skills	Unseen Passage / Note Making

NOVEMBER

S.NO.	Name of the Books	Topics
1	Horn Bill	Lesson 5: Father to Son
2	Grammar	Editing, Gap Filling
3	Novel	Discussion of Lesson 7
4	Grammar	1.Omitting 2. Sentence Transformation

DECEMBER

S.NO.	Name of the Books	Topics
1	Horn Bill	Lesson 6: The Browning Version
2	Snapshots	Lesson 5: Mother's Day
3	Novel	Discussion of Entire Novel

JANUARY

S.NO.	Name of the Books	Topics
1	Snapshots	Lesson 7: Birth Lesson 8: The Tale of Melon City
2	Writing Skills	Situational Description

EXAMINATION SYLLABUS

AUGUST EXAMINATION

Hornbill:

The Portrait of a Lady
A Photograph
We're Not Afraid to die... If We Can all Be Together
Discovering Tut: the Saga Continues

Snapshots:

The Summer of the Beautiful White Horse
The Address
Ranga's Marriage

Poetry:

The Voice of the Rain
Childhood

Novel:

The Canterville Ghost (Lesson 1, 2, and 3).

Writing Skills:

Report (for Newspaper & School Magazines)
Letters (Formal)
Article, Notice, Advertisement

Grammar:

Tenses
Determiners
Active & Passive Voice

Reading Skills:

Unseen Passage
Note Making

DECEMBER EXAMINATION

FULL SYLLABUS

FEBRUARY EXAMINATION

FULL SYLLABUS

NOTE: There will be a class test and an assignment after every lesson.

Movie on the Novel (The Canterville Ghost) to be shown to the students.

DETAILED SYLLABUS OF MATHEMATICS

OBJECTIVES

The broad objectives of teaching Mathematics at senior school stage intend to help the students:

- To acquire knowledge and critical understanding, particularly by way of motivation and visualization, of basic concepts, terms, principles, symbols and mastery of underlying processes and skills.
- To feel the flow of reasons while proving a result or solving a problem.
- To apply the knowledge and skills acquired to solve problems and wherever possible, by more than one method.
- To develop positive attitude to think, analyze and articulate logically.
- To develop interest in the subject by participating in related competitions.
- To acquaint students with different aspects of Mathematics used in daily life.
- To develop an interest in students to study Mathematics as a discipline.
- To develop awareness of the need for national integration, protection of environment, observance of small
- Family norms, removal of social barriers, elimination of gender biases.
- To develop reverence and respect towards great Mathematicians for their contributions to the field of Mathematics.

COURSE STRUCTURE

One Paper

Three Hours

Max.Marks:100

Units		Marks	No. of Periods
I.	Sets and Functions	29	60
II.	Algebra	37	70
III.	Coordinate Geometry	13	40
IV.	Calculus	06	30
V.	Mathematical Reasoning	03	10
VI.	Statistics and Probability	12	30
	Total	100	240

QUESTION PAPER DESIGN

S.No.	Typology of questions	Learning Outcomes and Testing Competencies	Very Short Answer (1 mark)	Long Answer I (4 Marks)	Long Answer II (6 marks)	Marks	% Weightage
1	Remembering- (Knowledge based simple recall questions, to know specific facts, terms, concepts, principles, or theories, Identify, define, or recite, information)	<ul style="list-style-type: none"> • Reasoning • Analytical Skills • Critical thinking • Derivative 	2	3	1	20	20%
2	Understanding- (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase information)		2	2	1	16	16%
3	Application (Use abstract information in concrete situation, to apply knowledge to new situations, Use given content to interpret a situation, provide an example, or solve a problem)		1	3	2	25	25%
4	High Order Thinking skills (Analysis & Synthesis- Classify , compare, contrast or differentiate between different pieces of information, Organize and /or integrate unique pieces of information from a variety of sources)		1	2	2	21	21%
5	Evaluation and Multi-Disciplinary- (Appraise, judge, and / or justify the value or worth of a decision or outcome, or to predict outcomes based on values)		--	2+1 (Values based)	1	18	18%
	TOTAL		6x1=6	13x4=52	7x6=42	100	100%

ANNUAL SYLLABUS BREAK UP

APRIL

Chapter 1: Sets

Sets and their representations. Empty set. Finite and Infinite sets. Equal sets. Subsets. Subsets of a set of real numbers especially intervals (with notations). Power set. Universal set. Venn diagrams. Union and Intersection of sets. Difference of sets. Complement of a set. Properties of Complement Sets. Practical Problems based on sets.

Chapter 2: Relations and Functions

Ordered pairs, Cartesian product of sets. Number of elements in the Cartesian product of two finite sets. Cartesian product of the sets of real (upto $\mathbb{R} \times \mathbb{R}$). Definition of relation, pictorial diagrams, domain, co-domain and range of a relation. Function as a special kind of relation from one set to another. Pictorial representation of a function, domain, co-domain and range of a function. Real valued functions, domain and range of these functions: constant, identity, polynomial, rational, modulus, signum and greatest integer functions, with their graphs. Sum, difference, product and quotients of functions.

Video on 'Relations and Functions'

Chapter 12: Introduction to 3D Geometry

Coordinate axes and coordinate planes in three dimensions. Coordinates of a point in space. Distance between two points and section formula.

Video on '3D Geometry'

MAY

Chapter 3: Trigonometric Functions

Positive and negative angles. Measuring angles in radians and in degrees and conversion of one into other. Definition of trigonometric functions with the help of unit circle. Truth of the $\sin^2 x + \cos^2 x = 1$, for all x . Signs of trigonometric functions. Domain and range of trigonometric functions and their graphs. Expressing $\sin(x \pm y)$ and $\cos(x \pm y)$ in terms of $\sin x$, $\sin y$, $\cos x$ & $\cos y$ and their simple application. Deducing identities like the following:

$$\tan(x \pm y) = \frac{\tan x \pm \tan y}{1 \mp \tan x \tan y}, \cot(x \pm y) = \frac{\cot x \cot y \mp 1}{\cot y \pm \cot x}$$

$$\sin x + \sin y = 2 \sin \frac{x+y}{2} \cos \frac{x-y}{2}, \cos x + \cos y = 2 \cos \frac{x+y}{2} \cos \frac{x-y}{2},$$

$$\sin x - \sin y = 2 \cos \frac{x+y}{2} \sin \frac{x-y}{2}, \cos x - \cos y = -2 \sin \frac{x+y}{2} \sin \frac{x-y}{2}$$

Identities related to $\sin 2x$, $\cos 2x$, $\tan 2x$, $\sin 3x$, $\cos 3x$ and $\tan 3x$. General solution of trigonometric equations of the type $\sin q = \sin a$, $\cos y = \cos a$ and $\tan q = \tan a$. Proof applications of sine and cosine formulae.

Chapter 4: Mathematical Induction

Process of the proof by induction, motivating the application of the method by looking at natural numbers as the least inductive subset of real numbers. The principle of mathematical induction and simple applications.

JUNE

Chapter 16: Probability

Random experiments, outcomes, sample spaces (set representation). Events, occurrence of events, 'not', 'and' and 'or' events, exhaustive events, mutually exclusive events, Axiomatic (set theoretic) probability, connections with the theories of earlier classes. Probability of an event, probability of 'not', 'and' and 'or' events.

Video on 'Probability'

JULY

Chapter 5: Complex Numbers and quadratic Equations

Need for complex numbers, especially $\sqrt{-1}$, to be motivated by inability to solve some of the quadratic equations. Algebraic properties of complex numbers. Arg and plane and polar representation of complex numbers. Statement of Fundamental Theorem of Algebra, solution of quadratic equations in the complex number system. Square root of a complex number.

Chapter 6: Linear Inequalities

Linear in equalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line. Graphical solution of linear inequalities in two variables. Graphical solution of system of linear inequalities in two variables.

Video on 'Linear Equations'

Chapter 7: Permutation and combination

Fundamental principle of counting. Factorial n . ($n!$) Permutations and combinations, derivation of formulae and their connections, simple applications.

AUGUST

REVISION FOR AUGUST EXAMINATION

SEPTEMBER

Chapter 8: Binomial Theorem

History, statement and proof of the binomial theorem for positive integral indices.

Pascal's triangle, General and middle term in binomial expansion, simple applications

Chapter 9: Sequences and Series

Sequence and Series. Arithmetic Progression (A.P.). Arithmetic Mean (A.M.) Geometric Progression (G.P.), general term of a G.P., sum of n terms of a G.P., Arithmetic and Geometric series infinite G.P. and its sum, geometric mean (G.M.), relation between A.M. and G.M. Sum to n terms of the special series.

$$\sum_{k=1}^n k, \sum_{k=1}^n k^2 \text{ and } \sum_{k=1}^n k^3$$

OCTOBER

Chapter 10: Straight Lines

Brief recall of two dimensional geometry from earlier classes. Shifting of origin. Slope of a line and angle between two lines. Various forms of equations of a line: parallel to axis, point-slope form, slope-intercept form, two-point form, intercept form and normal form. General equation of a line. Equation of family of lines passing through the point of intersection of two lines. Distance of a point from a line.

Video on 'Straight Lines'

Chapter 14: Mathematical Reasoning

Mathematically acceptable statements. Connecting words/ phrases - consolidating the understanding of "if and only if (necessary and sufficient) condition", "implies", "and/or", "implied by", "and", "or", "there exists" and their use through variety of examples related to

real life and Mathematics. Validating the statements involving the connecting words difference between contradiction, converse and contrapositive.

NOVEMBER

Chapter 11: Conic Sections

Sections of a cone: circles, ellipse, parabola, hyperbola; a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section. Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle.

Video on ‘Conic Sections’

Chapter 13: Limits and Derivatives

Derivative introduced as rate of change, both as that of distance function and geometrically. Intuitive idea of limit. Limits of polynomials and rational functions, trigonometric, exponential and logarithmic functions. Definition of derivative, relate it to slope of tangent of a curve, derivative of sum, difference, product and quotient of functions. The derivative of polynomial and trigonometric functions.

DECEMBER

REVISION FOR DECEMBER EXAMINATION

JANUARY

Chapter 15: Statistics

Measures of dispersion; mean deviation, variance and standard deviation of ungrouped/grouped data. Analysis of frequency distributions with equal means but different variances.

Revision

EXAMINATION SYLLABUS

AUGUST EXAMINATION

Chapters 1 to 7, 12 and 16.

DECEMBER EXAMINATION

Chapters 1 to 14 and 16.

FEBRUARY EXAMINATION

Full Syllabus

NOTE: There will be a class test and assignment after every chapter.

DETAILED SYLLABUS OF ACCOUNTANCY

OBJECTIVES

- To familiarize the students with accounting as an information system;
- To acquaint the students with basic concepts of accounting and accounting standards;
- To develop the skills of using accounting equation in processing business transactions;
- To develop an understanding about recording of business transactions and preparation of Financial statements;
- To enable the students with accounting for reconstitution and dissolution of partnership firms;
- To enable the students to understand and analyse the financial statements; and
- To familiarize students with the fundamentals of computerized system of accounting

ACCOUNTANCY (CODE 055)

Course Structure

One Paper

90 marks

3 Hours

Units	Marks	Periods
Part A: Financial Accounting-I		
Unit 1: Theoretical Framework	15	25
Unit 2: Accounting Process and Special Accounting Treatment	35	95
	50	120
Part B: Financial Accounting-II		
Unit 3: Financial Statements of Sole Proprietorship: from Complete and Incomplete Records	15	40
Unit 4: Financial Statements of Not-for-Profit Organisations	15	30
Unit 5: Computers in Accounting	10	20
	40	90
Part C: Project Work	10	30

QUESTION PAPER DESIGN

Time 3 Hours

ACCOUNTANCY (CODE- 055)

Max. Marks: 90

S.No.	Typology of questions	Very Short Answer (VSA) I mark	Short Answer-I 3 marks	Short Answer-II (SA-I) 4 marks	Long Answer I 6 marks	Long Answer II (8 marks)	Total marks	%
1	Remembering- (Knowledge based simple recall questions, to know specific facts, terms, concepts, principles, or theories, Identify, define, or recite , information	2	2	2	1	-	22	25
2	Understanding- (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase information)	-	1	-	2	1	23	25
3	Application (Use abstract information in concrete situation, to apply knowledge to new situations, Use given content to interpret a situation, provide an example, or solve a problem)	-	-	1	1	1	18	20
4	High Order Thinking skills(Analysis & Synthesis -Classify, compare, contrast or differentiate between different pieces of information, Organize and/or integrate unique pieces of information from a variety of sources	2	2	1	1	-	18	20
5	Evaluation and Multi-Disciplinary- (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on value	2	1	1	-	-	9	10
	TOTAL	6x1=6	6x3=18	5x4=20	5x6=30	2x8=16	90(24) 100%	100

ANNUAL SYLLABUS BREAK UP

APRIL

Chapter 1: Introduction to Accounting

- Accounting- objectives, advantages and limitations, types of accounting information; users of accounting information and their needs.
- Basic accounting terms: business transaction, account, capital, drawings, liability (Non - current and current); asset (Non - current; Fixed Assets: tangible and intangible assets and current assets), receipts (capital and revenue), expenditure (capital, revenue and deferred), expense, income, profits, gains and losses, purchases, purchases returns, sales, sales returns, stock, trade receivables (debtors and bills receivable), trade payables (creditors and bills payable), goods, cost, vouchers, discount - trade and cash.

Chapter 2: Theory Base of Accounting

- Fundamental accounting assumptions: going concern, consistency and accrual.
- Accounting principles: accounting entity, money measurement, accounting period, full disclosure, materiality, prudence, cost concept, matching concept and dual aspect.
- Bases of accounting - cash basis and accrual basis.
- Accounting Standards and IFRS (International Financial Reporting Standards): Concept and Objectives.

Chapter 11: Computers in Accounting

- Introduction to Computer and Accounting Information System {AIS}: Introduction to computers (Elements, Capabilities, Limitations of Computer system),
- Introduction to operating software, utility software and application software.
- Introduction to Accounting Information System (AIS), as a part of MIS
- Automation of Accounting Process.
- Meaning Stages in automation:
 - a) Accounting process in a computerised environment (Comparison between manual accounting process and computerised accounting process.)
 - b) Sourcing of accounting Software (Kinds of software: readymade software; customized software and tailor-made software; Generic considerations before sourcing accounting software).
 - c) Creation of Account groups and hierarchy.
 - d) Generation of reports - Trial balance, Profit and Loss account and Balance Sheet.

MAY

Chapter 3: Recording of Transactions

- Accounting equation: analysis of transactions using accounting equation.
- Rules of debit and credit: for assets, liabilities, capital, revenue and expenses.
- Origin of transactions- source documents (invoice, cash memo, pay in slip, cheque), preparation of vouchers - cash (debit and credit) and non cash (transfer).
- Books of original entry: format and recording - Journal.
- Cash Book: Simple Cash Book, Cash Book with Discount Column and Cash Book with Bank and Discount Columns, Petty Cash Book.
- Other books: purchases book, sales book, purchases returns book, sales returns book and journal proper.

JUNE

Chapter 4: Preparation of Ledger

- Ledger - format, posting from journal, cash book and other special purpose books, balancing of accounts.

JULY

Chapter 4: Trial Balance, Bank Reconciliation Statement

- Bank Reconciliation Statement- calculating bank balance at an accounting date: need and preparation. Corrected cash book balance.
- Trial balance: objectives and preparation.

Chapter 5: Depreciation, Provisions and Reserves

- Depreciation: concept, need and factors affecting depreciation; methods of computation of depreciation: straight line method, written down value method (excluding change in method)
- Accounting treatment of depreciation: by charging to asset account, by creating provision for depreciation/ accumulated depreciation account, treatment of disposal of asset.
- Provisions and reserves: concept, objectives and difference between provisions and reserves; types of reserves- revenue reserve, capital reserve, general reserve and specific reserves.

AUGUST

REVISION FOR AUGUST EXAMINATION

AUGUST

Chapter 7: Rectification of Errors

- Errors: types-errors of omission, commission, principles, and compensating; their effect on Trial Balance.
- Detection and rectification of errors; preparation of suspense account.

SEPTEMBER

Chapter 6: Bills of exchange

- Bills of exchange and promissory note: definition, features, parties, specimen and distinction.
- Important terms : term of bill, due date, days of grace, date of maturity, discounting of bill, endorsement of bill, bill sent for collection, dishonour of bill, noting of bill , retirement and renewal of a bill.
- Accounting treatment of bill transactions.

OCTOBER

Chapter 8: Financial statements

- Financial Statements: objective and importance.
- Profit and loss account: gross profit, operating profit and net profit.
- Balance Sheet: need, grouping, marshalling of assets and liabilities.

Chapter 9: Financial statement with adjustments

- Adjustments in preparation of financial statements : with respect to closing stock, outstanding expenses, prepaid expenses, accrued income, income received in advance, depreciation, bad debts, provision for doubtful debts, provision for discount on debtors, manager's commission, abnormal loss, goods taken for personal use and goods distributed as free samples.

- Preparation of Trading and Profit and Loss Account and Balance Sheet of sole proprietorship.

NOVEMBER

Chapter 10: Accounts from Incomplete Records

- Incomplete records: uses and limitations. Ascertainment of profit/loss by Statement of Affairs method.

Chapter 11: Financial statements from NPOs

- Not-for-profit organizations: concept.
- Receipts and Payment account: features.
- Income and Expenditure account: features. Preparation of Income and Expenditure account and Balance Sheet from the given Receipts and Payments account with additional information.

DECEMBER

REVISION FOR DECEMBER EXAMINATION

JANUARY

1. Project Work
2. Revision

EXAMINATION SYLLABUS

AUGUST EXAMINATION

Chapters 1 to 5 and 11.

DECEMBER EXAMINATION

Chapters 1 to 11.

FEBRUARY EXAMINATION

Full Syllabus

NOTE: There will be a class test and assignment after every chapter.

DETAILED SYLLABUS OF BUSINESS STUDIES

OBJECTIVES

- To develop students with an understanding of the processes of business and its environment.
- To acquaint students with the dynamic nature and inter-dependent aspects of business;
- To develop an interest in the theory and practice of business, trade and industry.
- To familiarize students with theoretical foundations of the process of organizing and managing the operations of a business firm.
- To help students appreciate the economic and social significance of business activity and the social cost and benefits arising there from.
- To acquaint students with the practice of managing the operations and resources of business.
- To enable students to act more effectively and responsibly as consumers, employers, employees and citizens.
- To develop a business attitude and skills in students.
- To inculcate appropriate attitude and develop skills among students to pursue higher education, world of work including self-employment.

COURSE STRUCTURE

One Paper	100 Marks	3 Hours
Units	Marks	Periods
Part A: Foundations of Business		
1. Nature and Purpose of Business	20	22
2. Forms of Business Organisations	18	26
3. Public, Private and Global Enterprises	18	22
4. Business Services	12	22
5. Emerging Modes of Business	12	12
6. Social Responsibility of Business and Business Ethics	16	12
	50	120
Part B: Finance and Trade		
7. Sources of Business Finance	20	30
8. Small Business	20	16
9. Internal Trade	20	30
10. International Business	10	14
11. Project Work	10	30
	50	120

QUESTION PAPER DESIGN

Business Studies (CODE-054)

Time 3 Hours

Max. Marks :90

S.No.	Typology of questions	Learning outcomes & Testing Skills	Very Short Answer (VSA) 1 mark	Short Answer-I 3 marks	Short Answer-II (SA-I) 4 marks	Long Answer I 5 marks	Essay Type (6marks)	Total marks	%
1	Remembering- (Knowledge based simple recall questions, to know specific facts, terms, concepts, principles, or theories, Identify, define, or recite, information	Reasoning Analytical Skills Critical thinking	2	1	1	1	-	14	16
2	Understanding- (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase information)		2	2	1	-	1	18	20
3	Application (Use abstract information in concrete situation, to apply knowledge to new situations, Use given content to interpret a situation, provide an example, or solve a problem)		2	1	1	1	2	26	29
4	High Order Thinking skills (Analysis & Synthesis- Classify, compare, contrast or differentiate between different pieces of information, Organize and/or integrate unique pieces of information from a variety of sources		2	1	1	1	1	20	22
5	Evaluation and Multi-Disciplinary- (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on value				1	1 (Value Based)	1	-	12
	TOTAL		8x1=8	6x3=18	5x4=20	4x5=20	4x6=24	90 (27) Project (10)	100
	Estimated Time (in minutes)		8 min	27 min	30 min	40 min	60 min	165 min+ 15 min for revision	

ANNUAL SYLLABUS BREAK UP

APRIL

Unit I: Nature & Purpose of Business

- Concept and characteristics of business.
- Business, profession and employment -Meaning and their distinctive features.
- Objectives of business - Economic and social, role of profit in business
- Classification of business activities: Industry and Commerce.
- Industry - types: primary, secondary, tertiary - Meaning and sub types
- Commerce - trade: types (internal, external, wholesale and retail; and auxiliaries to trade: banking, insurance, transportation, warehousing, communication, and advertising.
- Business risks - Meaning, nature and causes.

Unit II: Forms of Business Organisation

- Sole Proprietorship- meaning, features, merits and limitations.
- Partnership- Features, types, merits and limitations of partnership and partners, registration of a partnership firm, partnership deed. Type of partners.
- Hindu Undivided Family Business: features.
- Cooperative Societies- features, types, merits and limitations.
- Company: private and public company -features, merits and limitations.
- Formation of a company- four stages, important document (Memorandum of
- Association, Articles of Association, relevance of certificate of incorporation and certificate of commencement.)
- Starting a business - Basic factors.

Video on 'Formation of a company'

MAY

Unit IV: Business Services

- Banking: Types of bank accounts- savings, current, recurring, fixed deposit and multiple option deposit account.
- Banking services with particular reference to issue of bank draft, banker's cheque (pay order), Real Time Gross Settlement (RTGS), National Electronic Funds Transfer (NEFT), bank overdraft, cash credits and e- banking.

Video on 'NEFT and RTGS'

JUNE

Unit IV: Business Services (contd.)

- Insurance: principles, concept of life, health, fire and marine insurance.
- Postal and telecom services: mail Under Postal Certificate (UPC), registered post, parcel, speed post and courier) and other services.

JULY

Unit III: Public, Private & Global Enterprises

- Private sector and public sector enterprises.
- Forms of public sector enterprises: features, merits and limitations of departmental undertakings, statutory corporation and Government Company.
- Changing role of public sector enterprises.
- Global enterprises, Joint ventures, public private partnership – Meaning and Features

Video on 'Public Private partnership'

Unit V: Emerging modes of Business

- E-business - scope and benefits, resources required for successful e-business implementation, online transactions, payment mechanism, security and safety of business transactions.
- Outsourcing-concept, need and scope of Business Process Outsourcing (BPO) and Knowledge Process Outsourcing (KPO).
- Smart cards and ATM's meaning and utility

Video on 'E-banking'

Unit VI: Social Responsibility of Business & Business Ethics

- Concept of social responsibility
- Case for social responsibility
- Responsibility towards owners, investors, consumers, employees, government and community
- Environment protection and business.

AUGUST

REVISION FOR AUGUST EXAMINATION

AUGUST

Unit VII: Sources of Business Finance

- Concept of business finance.
- Owner's funds - equity shares, preference share, Global Depository Receipt (GDR), American Depository Receipt (ADR), International Depository Receipt (IDR) and retained earnings.

Video on 'ADR' and 'GDR'

SEPTEMBER

Unit VII: Sources of Business Finance (contd.)

- Borrowed funds: debentures and bonds, loan from financial institution, loans from commercial banks, public deposits, trade credit, Inter Corporate Deposits (ICD).

OCTOBER

Unit VIII: Small Business

- Small scale enterprise as defined by MSMED Act 2006 (Micro, Small and Medium Enterprise Development Act).
- Role of small business in India with special reference to rural areas.
- Government schemes and agencies for small scale industries: (National Small Industries Corporation) and District Industrial Center (DIC) with special reference to rural, backward and hilly areas.

Video on 'Small Business'

Unit IX: Internal Trade

- Services rendered by a wholesaler and a retailer
- Types of retail -trade - Itinerant and small scale fixed shops
- Large scale retailers - Departmental stores, chain stores, mail order business
Concept of automatic vending machine

- Chambers of Commerce and Industry: Basic functions
- Main documents used in internal trade: Performa invoice, invoice, debit note, credit note.
- Lorry receipt(LR) and Railway Receipt (RR)
- Terms of Trade: Cash on Delivery (COD) , Free on Board (FOB), Cost, Insurance and Freight (CIF), Errors and Omissions Excepted (E&OE)

NOVEMBER

Unit X : International Business

- Meaning, difference between internal trade and external trade: Meaning and characteristics of international trade.
- Problems of international trade: Advantages and disadvantages of international trade.
- Export Trade - Meaning, objective and procedure of Export Trade.
- Import Trade - Meaning, objective and procedure: Meaning and functions of import trade; purpose and procedure.
- Documents involved in International Trade; documents involved in export trade, indent, letter of credit, shipping order, shipping bills, mate's receipt, bill of lading, certificate of origin, consular invoice, documentary bill of exchange (DA/DP), specimen, importance.
- World Trade Organization (WTO) meaning and objectives

Videos on 'Export Procedure' and 'Import Procedure'

DECEMBER

REVISION FOR DECEMBER EXAMINATION

JANUARY

1. Project Work
2. Revision

EXAMINATION SYLLABUS

AUGUST EXAMINATION

Units 1 to 6.

DECEMBER EXAMINATION

Units 1 to 10.

FEBRUARY EXAMINATION

Full Syllabus

NOTE: There will be a class test and assignment after every chapter.

DETAILED SYLLABUS OF ECONOMICS

OBJECTIVES

- Understanding of some basic economic concepts and development of economic reasoning which the learners can apply in their day-to-day life as citizens, workers and consumers.
- Realization of learners' role in nation building and sensitivity to the economic issues that the nation is facing today.
- Equipment with basic tools of economics and statistics to analyse economic issues. This is pertinent for even those who may not pursue this course beyond senior secondary stage.
- Development of understanding that there can be more than one view on any economic issue and necessary skills to argue logically with reasoning.

COURSE STRUCTURE

Time: 3 Hours

Paper 1

M.M: 90 Marks

Units	Marks	Periods
Part A: Statistics for Economics		
1. Introduction	} 13	7
2. Collection , Organisation and Presentation of Data		27
3. Statistical Tools and Interpretation	27	66
	40	100
Part B: Indian Economic Development		
4: Development Experience(1947-90) and Economic Reforms since 1991	13	18
	12	16
5: Current Challenges facing Indian Economy	15	60
6: Development experience of India-A Comparison with neighbours	10	14
	50	108
Part C: Project Work	10	12

QUESTION PAPER DESIGN

Economics (CODE-030)

Time 3 Hours

Max. Marks :90

S.No.	Typology of questions	Very Short Answer (VSA) 1 mark	Short Answer-I 3 marks	Short Answer-II (SA-II) 4 marks	Long Answer I 6 marks	Total marks	%
1	Remembering- (Knowledge based simple recall questions, to know specific facts, terms, concepts, principles, or theories, Identify, define, or recite, information	-	2	1	2	22	25
2	Understanding- (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase information)	1	2	1	2	23	25
3	Application (Use abstract information in concrete situation, to apply knowledge to new situations, Use given content to interpret a situation, provide an example, or solve a problem)	2	2	1	1	18	20
4	High Order Thinking skills (Analysis & Synthesis- Classify, compare, contrast or differentiate between different pieces of information, Organize and /or integrate unique pieces of information from a variety of sources	2	2	1	1	18	20
5	Evaluation and Multi-Disciplinary- (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on value	0	1	-	1	9	10
	TOTAL	5x1=5	9x3=27	4x4=16	7x6=42	90(25)+10 project = 100 marks	100

Note: The question paper will include a Section on Open Text Book– Questions on two case studies, each from Part A ad Part B of 8 marks, a total of 16 marks. The case studies will be supplied to students in advance. These case studies are designed to test the analytical and higher order thinking skills of students.

ANNUAL SYLLABUS BREAK UP

APRIL-MAY

Unit 1: Introduction

- What is Economics?
- Meaning, scope and importance of statistics in Economics.

Video on : Micro vs Macro Economics : <https://www.youtube.com/watch?v=DJG-liA19eY>

Unit 2: Collection, Organisation and Presentation of data

- Collection of data - sources of data - primary and secondary; how basic data is collected.
- Methods of collecting data; some important sources of secondary data: Census of India and National Sample Survey Organisation.
- Organisation of Data: Meaning and types of variables.
- Frequency Distribution.
- Presentation of Data: Tabular Presentation and Diagrammatic Presentation of Data:
 - (i) Geometric forms (bar diagrams and pie diagrams),
 - (ii) Frequency diagrams (histogram, polygon and ogive) and
 - (iii) Arithmetic line graphs (time series graph).

Video on : Data collection methods : https://www.youtube.com/watch?v=YJ-YX_AcomU

Video on : Sampling: Simple Random, Convenience, systematic, cluster, stratified - Statistics Help

<https://www.youtube.com/watch?v=be9e-Q-jC-0>

JUNE

Unit 4: Development Experience (1947-90):

- A brief introduction of the state of Indian economy on the eve of independence.
- Common goals of Five Year Plans.
- Main features, problems and policies of agriculture (institutional aspects and new agricultural strategy, etc.), industry (industrial licensing, etc.) and foreign trade.

Video on India, British rule and Independence :
<https://www.youtube.com/watch?v=UBI8-eHkxg>

Video on five year plans : <https://www.youtube.com/watch?v=ihI1rt9Zumg>

Video on Indian agriculture scenario : What has been the problem ?

https://www.youtube.com/watch?v=0_9XVHdIayg

JULY

Unit 5: Economic Reforms since 1991:

- Need and main features - liberalisation, globalisation and privatization.
- An appraisal of LPG policies.

Video on Sector-wise Reforms in India :

https://www.youtube.com/watch?v=l2wvvLzRXCI&index=5&list=PL_MPyZVkgEW-nk271X-Rm7kaSf0vi6pva

• **Video on Critical Analysis of globalization :**

https://www.youtube.com/watch?v=Al6j32g3_V4&list=PL_MPyZVkgEW-nk271X-Rm7kaSf0vi6pva&index=9

AUGUST

REVISION FOR AUGUST EXAMINATION

AUGUST

UNIT6: Current challenges facing Indian Economy:

- Poverty- absolute and relative; Main programmes for poverty alleviation: A critical assessment.
- Rural development: Key issues - credit and marketing - role of cooperatives; agricultural diversification; alternative farming - organic farming
- **Video on Absolute and Relative Poverty:**
<https://www.youtube.com/watch?v=OrUSzNigFSA> ,
- **Video on : Dealing with poverty**
https://www.youtube.com/watch?v=0vCJDEghEoY&index=12&list=PL_MPyZVkgEW-nk271X-Rm7kaSf0vi6pva
- **Video on Rural development :** https://www.youtube.com/watch?v=yO-AYyPa_Rk

SEPTEMBER

UNIT6: Current challenges facing Indian Economy (Contd.):

- Human Capital Formation: How people become resource; Role of human capital in economic development; Growth of Education Sector in India. Employment: Formal and informal, growth and other issues: Problems and policies.
- Inflation: Problems and Policies.
- Infrastructure: Meaning and Types: Case Studies: Energy and Health: Problems and Policies- A critical assessment;. Sustainable Economic Development: Meaning, Effects of Economic Development on Resources and Environment, including global warming.

Video on Human capital : <https://www.youtube.com/watch?v=ivy1QmWUtQI>

Video on : employment and related terms

https://www.youtube.com/watch?v=jF3oZjQSxB0&list=PL_MPyZVkgEW-nk271X-Rm7kaSf0vi6pva&index=15

Video on inflation : <https://www.youtube.com/watch?v=AaR1mPrdbTc>

Video on Indian infrastructure : https://www.youtube.com/watch?v=qb2z4Dq9i_M

OCTOBER

Unit 7: Development Experience of India:

- A comparison with neighbours
- India and Pakistan & India and China

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

Video on -Development Strategies - India and Its Neighbours and its Comparison :

<https://www.youtube.com/watch?v=-fIWIPZSIIdg>

Unit 3: Statistical Tools and Interpretation

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

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

Video on : Measures of central tendency

<https://www.youtube.com/watch?v=JJLOiUUOhFg>

NOVEMBER

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

Video on : Measures of Dispersion :Range, variance and standard deviation as measures of dispersion

<https://www.youtube.com/watch?v=E4HAYd0QnRc>

DECEMBER

REVISION FOR DECEMBER EXAMINATION

JANUARY

Meaning and its application. Correlation - meaning, scatter diagram; Measures of correlation - Karl Pearson's method (two variable ungrouped data) Spearman's rank correlation.

Introduction to Index Numbers - meaning, types - wholesale price index, consumer price index and index of industrial production, uses of index numbers; Inflation and index numbers. Some Mathematical tools used in Economics: Equation of a line, slope of a line, slope of a curve.

Video on : Correlation coefficient : https://www.youtube.com/watch?v=ugd4k3dC_8Y

Video on Inflation and price indexes :

<https://www.youtube.com/watch?v=SmOMp8gycMA>

EXAMINATION SYLLABUS

AUGUST EXAMINATION

Units 1, 2, 4 and 5.

DECEMBER EXAMINATION

Units 1 to 6.

FEBRUARY EXAMINATION

Full Syllabus

NOTE: There will be a class test and assignment after every Chapter.

DETAILED SYLLABUS OF PHYSICAL EDUCATION

THEORY

MM 70

- Unit 1:** Physical Fitness, Wellness and Life Style
- Unit 2:** Changing Trends and Career in Physical Education
- Unit 3:** Olympic Movement
- Unit 4:** Yoga
- Unit 5:** Doping
- Unit 6:** Management of Injuries
- Unit 7:** Test and Measurement in Sports
- Unit 8:** Fundamentals of Anatomy and Physiology
- Unit 9:** Biomechanics and Sports
- Unit 10:** Psychology and Sports
- Unit 11:** Training in Sports

PRACTICAL

MM: 30

1. Physical Fitness [5 marks]
2. Athletics – any two events – Sprints and Jumps [5 marks]
3. Health and fitness activities – Medicine Ball/Thera tube/Pilates/Rope Skipping
(any one) [5 marks]
4. Skill on any one individual game of choice from given list- Badminton, Judo,
Swimming, Table Tennis, Taekwondo and Tennis [5 marks]
5. Viva [5 marks]
6. Record file [5 marks]

ANNUAL SYLLABUS BREAK UP

APRIL

CHAPTER 1: PHYSICAL FITNESS, WELLNESS AND LIFESTYLE

- Meaning and importance of Physical Fitness, Wellness and Lifestyle
- Factors affecting Physical Fitness and Wellness
- **{Video on the topic factors affecting physical fitness and wellness}**
- Indicators of Health - Physical and Psychological
- Preventing Health Threats through Lifestyle Change
- Components of positive lifestyle

MAY –JUNE

CHAPTER 2: CHANGING TRENDS AND CAREER IN PHYSICAL EDUCATION

- Define Physical Education, its Aims and Objectives
- Development of Physical Education - Post Independence
- Concept and Principles of Integrated Physical Education
- Concept and Principles of Adaptive Physical Education
- Career Options in Physical Education
- **{Video on the topic career options in physical education}**

CHAPTER 3: OLYMPIC MOVEMENT

- Ancient and Modern Olympics
- **{Video on the topic origin of modern and ancient olympic games}**
- Olympic Symbols, Ideals, Objectives and Values
- International Olympic Committee
- Indian Olympic Association
- Dronacharya Award, Arjuna Award and Rajiv Gandhi Khel Ratna Award
- Organisational set-up of CBSE Sports and Chacha Nehru Sports Award

JULY

CHAPTER 4: YOGA

- Meaning and Importance of Yoga
- Yoga as an Indian Heritage
- **{video on the topic History of yoga in India}**
- Elements of Yoga
- Introduction to - Asanas, Pranayam, Meditation and Yogic Kriyas
- Prevention and Management of Common Lifestyle Diseases; Obesity, Diabetes, Hyper- Tension and Back-Pain

CHAPTER 5: DOPING

- Meaning and types of Doping
- **{Video on the topic meaning and types of doping}**
- Prohibited substances and methods
- Athletes responsibilities
- Testing - in competition and Out-of-Competition

- Side effects of prohibited substances

AUGUST
REVISION FOR AUGUST EXAMINATION

SEPTEMBER

CHAPTER 6: MANAGEMENT OF INJURIES

- Common sports injuries of soft Tissues, Joints and Bones
- First-Aid in Common Sports Injuries
- **{video on the topic :Contusion ,strain ,sprain ,abrasion}**
- Prevention of Sports injuries
- Rehabilitation through Massage and Exercise

CHAPTER 7: TEST AND MEASUREMENT IN SPORTS

- Define Test and Measurement
- Importance of Test and Measurement in Sports
- Calculation of BMI and Waist - Hip Ratio
- **{video on the topic BMI and Waist – Hip Ratio}**
- Somato Types (Endomorphy, Merasiosomorphy and Ectomorphy)
- Procedures of Anthropometric Measurement - Height, Weight, Arm and Leg Length and Skin Fold

OCTOBER

CHAPTER 8: FUNDAMENTALS OF ANATOMY AND PHYSIOLOGY

- Define Anatomy, Physiology and its importance
- Function of skeleton system, Classification of bones and types of joints
- Function and structure of muscles
- Function and structure of Respiratory System
- Structure of Heart and introduction to Circulatory System
- **{Video on the topic structure and function of the heart}**

NOVEMBER

CHAPTER 9 : BIOMECHANICS AND SPORTS

- Meaning and Importance of Biomechanics in Physical Education and Sports
- Newton's Law of Motion and its application in sports
- Levers and its types and its application in Sports
- Equilibrium - Dynamic and Static and Centre of Gravity and its application in sports
- Force - Centrifugal and Centripetal and its application in Sports
- **{Video on the topic Centrifugal ad centripetal force}**

DECEMBER

REVISION FOR DECEMBER EXAMINATION

DECEMBER

CHAPTER 10: PSYCHOLOGY AND SPORTS

- Definition and importance of Psychology in Physical Education and Sports
- Define and differentiate between 'Growth and Development'
- Developmental characteristics at different stage of development
- Adolescent problems and their management
- **{Video on the topic : Adolescent problems and their management}**
- Define Learning, Laws of Learning and transfer of Learning

JANUARY

CHAPTER 11: TRAINING IN SPORTS

- Meaning and Concept of Sports Training
- Principles of Sports Training
- Warming up and limbering down
- **{Video on the topic Importance of warming up and cooling down in physical education}**
- Load, Adaptation and Recovery
- Skill, Technique and Style.

EXAMINATION SYLLABUS

AUGUST EXAMINATION

Chapters 1 to 5

DECEMBER EXAMINATION

Chapters 1 to 10

FEBRUARY EXAMINATION

Full Syllabus

NOTE: There will be a class test and assignment after every chapter.