

Computer Applications

Class X

Syllabus

Mid term:

1. Revision of Class IX Syllabus
 - (i) Introduction to Object Oriented Programming concepts
 - (ii) Elementary Concept of Objects and Classes
 - (iii) Values and Data types
 - (iv) Operators in Java
 - (v) Input in Java
 - (vi) Mathematical Library Methods
 - (vii) Conditional construct in Java
 - (viii) Iteration construct in Java
 - (ix) Nested for loops
2. Class as the Basis of all Computation
3. User- defined Methods
4. Constructor
5. String handling

Note: Contents of the Chapters as per the ICSE reduced syllabus 2021.

MID-TERM SYALLABUS (2020)

CLASS: 10th

SUBJECT- HINDI

हिंदी व्याकरण :

- 1) पर्यायवाची शब्द
- 2) विशेषण
- 3) विलोम शब्द
- 4) भाववाचक संज्ञा
- 5) मुहावरे
- 6) निर्देशानुसार वाक्य परिवर्तन
- 7) निबंध
- 8) पत्र

हिंदी साहित्य

गद्य भाग :

- 1 - बड़े घर की बेटी
- 2 - भेड़ें और भेड़िए
- 3 - भीड़ में खोया आदमी

पद्य भाग :

- 1- सूरदास के पद
- 2- विनय के पद
- 3 - चलना हमारा काम है

HINDI MID-TERM PROJECT

हिंदी व्याकरण : (Word limit: 250-300)

1. प्रदूषण ने मानव जीवन को कई रूपों में प्रभावित किया है । प्रदूषण के कारणों, दुष्परिणामों तथा इस पर नियंत्रण के उपायों पर अपने विचार प्रकट कीजिए ।
2. एक मौलिक कहानी लिखिए जिसका उक्ति निम्न हो- ' अब पछताए होत क्या जब चिड़िया चुग गई खेत ' ।

हिंदी पद्य भाग

1. " बड़े घर की बेटी "कहानी का कथानक (कहानी) संक्षेप में लिखिए।
2. 'सूरदास का बाल वर्णन बेजोड़ है ' – उदाहरण सहित उत्तर दीजिए ।

Class - 10 COMMERCIAL STUDIES

Class 10

Commercial Studies

Mid-term syllabus:-

1-Stakeholders in commercial organisations

2-Marketing and sales

3-Advertising and sales promotion

4-Consumer Protection

5-E-commerce

6-Capital & Revenue expenditure/income

7-Final accounts of sole proprietorship

*Project Work - 1

From a daily newspaper which your family buys or from television or radio or magazine select any advertisement of a popular product. Analyse the advertisement and prepare a brief report on it answering the following questions:

i. What first catches your eye in that advertisement?

ii. List the informations the advertisement provides about the product.

iii. Who is the target audience of the product being advertised?

iv. What is it an advertisement for?

vi. What information do you think has been left out of this advertisement ?

vi. Did the advertisement convince you to buy the product? if yes then why?

Note :-the project should be of 10 to 15 pages only

(To be completed by 31 August 2020)

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BIOLOGY MID TERM SYLLABUS (2020-21)

- 1. Cell cycle and cell division**
- 2. Structure of chromosome**
- 3. Genetics**
- 4. Absorption by roots and rise of water up to xylem**
- 5. Transpiration**
- 6. Circulatory system**
- 7. Excretory system**

- (i) Cell Cycle and Cell Division. Cell cycle – Interphase (G₁, S, G₂) and Mitotic phase. Cell Division: • Mitosis and its stages. • A basic understanding of Meiosis as a reduction division (stages not required). • A brief idea of homologous chromosomes and crossing over leading to variations. • Significance and major differences between mitotic and meiotic division. (ii) Structure of chromosome. Basic structure of chromosome with elementary understanding of terms such as chromatin, chromatid, gene structure of DNA and centromere. (iii) Genetics: Mendel's laws of inheritance and sex-linked inheritance of diseases. • The three laws of Mendel. • Monohybrid cross – phenotype and genotype. • Dihybrid cross – Only phenotype. • The following terms to be covered: gene, allele, heterozygous, homozygous, dominant, recessive, mutation, variation, phenotype, genotype. • Sex determination in human beings. Sex linked inheritance of diseases to include only X-linked like haemophilia and colour blindness.
- (ii) (i) Absorption by roots, imbibition, diffusion and osmosis; osmotic pressure, root pressure; turgidity and flaccidity; plasmolysis and deplasmolysis; the absorption of water and minerals; active and passive transport (in brief); The rise of water up to the xylem; Forces responsible for ascent of sap. • Understanding of the processes related to absorption of water by the roots. • Characteristics of roots, which make them suitable for absorbing water. • Structure of a single full-grown root hair. • A general idea of Cohesive, Adhesive forces and transpirational pull. • Experiments to show the conduction of water through the xylem. (ii) Transpiration - process and significance. Ganong's potometer and its limitations. The factors affecting rate of transpiration. Experiments on transpiration. A brief idea of guttation and bleeding. • Concept of transpiration and its importance to plants • Experiments related to transpiration: (a) Loss in weight of a potted plant or a leafy shoot in a test tube as a result of transpiration. (b) Use of cobalt chloride paper to demonstrate unequal rate of transpiration in a dorsiventral leaf. • Mechanism of stomatal transpiration on the basis of potassium ion exchange theory. • Adaptations in plants to reduce transpiration. • A brief idea of guttation and bleeding.
- (iii) Circulatory System: Blood and lymph, the structure and working of the heart, blood vessels, circulation of blood (only names of the main blood vessels entering and leaving the heart, liver and kidney will be required). Lymphatic system. • Composition of blood (structure and functions of RBC, WBC and platelets). • Brief idea of tissue fluid and lymph. • Increase in efficiency of mammalian red blood cells due to absence of certain organelles; reasons for the same.

- (iv) A brief idea of blood coagulation. • Structure and working of the heart along with names of the main blood vessels entering and leaving the heart, the liver and the kidney. • Concept of systole and diastole; concept of double circulation. • Brief idea of pulse and blood pressure. • Blood vessels: artery, vein and capillary to be explained with the help of diagrams to bring out the relationship between their structure and function. • Brief idea of the lymphatic organs: spleen and tonsils. • ABO blood group system, Rh factor. • Significance of the hepatic portal system. (ii) Excretory System: A brief introduction to the excretory organs; parts of the urinary system; structure and function of the kidneys; blood vessels associated with kidneys; structure and function of nephron • A brief idea of different excretory organs in the human body. • External and internal structure of the kidney. • Parts of the urinary system along with the blood vessels entering and leaving the kidney; functions of various parts of the urinary system (emphasis on diagram with correct labelling). A general idea of the structure of a kidney tubule/ nephron. • A brief idea of ultra-filtration (emphasis on the diagram of malpighian capsule); selective reabsorption and tubular secretion in relation to the composition of blood plasma and urine formed.

BIOLOGY PROJECT TOPICS

NOTE: Choose any one topic from the topics given below

1. Air pollution – causes and effects
2. Water pollution – causes and effects
3. Soil pollution – causes and effects
4. Population explosion and methods of population control
5. Different endocrine glands in human beings
6. Mendel and his laws of inheritance
7. Mitosis – Different stages and significance

BIOLOGY PRACTICAL WORK

NOTE: Draw well labeled diagrams and write important comments of each of the following

1. Internal structure of Heart
2. Human excretory system
3. L.S. Human kidney
4. Internal structure of Human brain
5. Internal structure of Human ear

ECONOMICS SYLLABUS FOR MID TERM

Class X

Chapter 1. Factors of Production
Chapter 2. Elementary Theory of Demand
Chapter 3. Elasticity of Demand
Chapter 4. Theory of supply
Chapter 13. Inflation
Chapter 14. Consumer Awareness

PROJECT WORK

Topic - CONSUMER AWARENESS

1- Introduction
2- Meaning of Consumer Exploitation
3-Forms of Consumer Exploitation
4-Reasons for Exploitation of consumers in India
5-Consumer Awareness
6- Consumer Rights & Duties
7-Conclude with the Technical and Administrative Measures for Consumer Protection in India

Mid-Term Syllabus 2020

History & Civics

Class 10th

History

1. The First War of Independence, 1857
2. Factors Promoting Growth of Nationalism, Foundation of the Indian National Congress
3. First Phase of the Indian Nationalist Movement (1885-1907)
4. a) Second Phase of the Indian National Movement (1905-1916)
b) Second Phase of the Indian National Movement (1905-1916)

Civics

1. The Union Legislature: The Rajya Sabha and the Lok Sabha
2. The Union Executive: a) The President
3. The Union Executive: b) The Prime Minister and the Council of Ministers

History & Civics

Class 10 th

Project

Any ***ONE** project/ assignment related to the syllabus

1. Present a life sketch and contributions of any one of the following Presidents of India:

- a) Dr. Rajendra Prasad
- b) Dr. S. Radhakrishnan
- c) Dr. A. P. J. Abdul Kalam

2. Present a book review of any one of the following works:

- a) Dadabhai Naoroji's 'Poverty and un-British rule in India'
- b) Gandhi's 'The Story of my Experiments with Truth'
- c) Nehru's 'Discovery of India'
- d) Bhagat Singh's 'Why I am an Atheist?'

3. Discuss the relevance of any one of the following films to understand the history of 20th Century Europe:

- a) Gandhi (Richard Attenborough)
- b) Netaji Subhas Chandra Bose- The Forgotten Hero (Shyam Benegal)

4. Make a power point presentation on India's Independence and Partition
5. Prepare a report on the contributions of any one of the following agencies of the United Nations:
 - a) UNESCO
 - b) WHO
 - c) UNICEF
 - d) ILO
 - e) FAO
6. Compare the Parliamentary and Presidential forms of Government with reference to India and the U.S.A.

Choose any **ONE** topic for the project

CLASS 10
ENGLISH LITERATURE
MID-TERM SYLLABUS

Merchant of Venice

(Drama)

Act 3 scene 2, 3, 4 & 5

Act 4 scene 1.

Treasure trove

(Prose)

1-The Little Match Girl

2-My Greatest Olympic Prize

(Poetry)

1-The Patriot

2-Abou Ben Adhem

Please note that the entire English literature syllabus of class 9 is also included in your mid term syllabus...

PROJECT WORK

Merchant of Venice

i-Referring closely to the play, discuss the character of Antonio.

ii-Compare and contrast the characters of Portia and Jessica.

Treasure trove

Prose Long answer questions

i-'The Little Match Girl' is one of the saddest fairy tales of Anderson. Discuss.

ii-How did Jesse Owens win a gold medal in the 1936 Olympics? Elaborate.

Poetry

i-Discuss Robert Browning's The Patriot as a dramatic monologue.

ii-What makes the poem 'Abou Ben Adhem' seem as if it belonged to the realm of the supernatural?

Please note that your project should not exceed 1500 words...

(To be completed by 10th September, 2020)

MID TERM SYLLABUS

[2020 – 21]

Subject – Mathematics

Class – X

Commercial Mathematics

1. Goods and Service Tax
2. Banking

Algebra

1. Linear Inequations in one variable
2. Quadratic Equations
3. Factorisation
4. Ratio and Proportion

Reflection and Coordinate Geometry

1. Reflection
2. Section Formula

Geometry

1. Similarity
2. Angle Properties of a Circle
3. Cyclic Properties of a Circle

Mensuration

1. Three - Dimensional Solids

Trigonometry

1. Trigonometric Identities

Statistics and Probability

1. Graphical Representation
2. Measures of Central Tendency

Internal Assessment Topics:

1. Survey of various types of Bank Accounts, Rates of Interest offered
2. Planning a Home Budget

MIDTERM SYLLABUS

(2020-2021)

Class-10th Physical Education (Section-A)

Chapter 1 ~ "Human Growth and Development"

i) Growth and Development
(Meaning of growth and development and difference between the two.

A brief understanding of the Stages: Infancy, Childhood, Adolescence, Adulthood)

ii) Factors that influence Human Growth and Development.
(Hereditary, Environmental, Gender, Nationality, Nutrition.)

Chapter 2 ~ "Physical Education"

i) Meaning of physical Education
ii) Objectives of physical Education
(physical development, psychological development, social development, emotional development.)

Chapter 3 ~ "Body Types"

- i) Endomorph
- ii) Mesomorph
- iii) Ectomorph

Chapter 4 ~ "Physical Fitness"

- i) Meaning of physical fitness and its importance.
- ii) Components of physical fitness- (Cardiovascular/respiratory endurance, Stamina, Strength, Flexibility, Power, Speed, Coordination, Agility, Balance, Accuracy.)
- iii) Factors affecting Physical Fitness.
(Hereditary, Nutrition, Environment, Training(facilities and methods), Illness, Self-motivation, Emotional stability, Lifestyle, Posture.)

(Section - B)

Chapter 1 ~ "Cricket"

- i) Knowledge of the game.
- ii) Rules of the game.
- iii) Fundamental skills and technique
- iv) Associated terminology
- v) National and International governing bodies.
- vi) National and International tournaments.

Chapter 2 ~ "Football"

- i) Knowledge of the game.
- ii) Rules of the game.
- iii) Fundamental skills and technique
- iv) Associated terminology
- v) National and International governing bodies.
- vi) National and International tournaments.

Chapter 3 ~ "Hockey"

- i) Knowledge of the game.
- ii) Rules of the game.
- iii) Fundamental skills and technique
- iv) Associated terminology
- v) National and International governing bodies.
- vi) National and International tournaments.

PROJECT:-

Topic :- Cricket or Football (any one)

A project file comprising of minimum 15 pages is to be made by the students.

It should begin as follows:-

- 1) Index
- 2) Acknowledgement
- 3) Introduction
- 4-15) The main subject matter of the topic chosen.

Note - Students can paste some pictures as per their convenience.

MID-TERM SYLLABUS--2020
CLASS 10th - GEOGRAPHY

- (1) Natural vegetation
- (2) Water Resources
- (3) Mineral and Energy Resources I & II
- (4) Agriculture In India
 - (a) Introduction
 - (b) Food crop

MAP WORK:- As per ICSE syllabus PROJECT :- Prepare a project on Development of Railways in India

Note : - (Previously taught chapters i.e climate of India and soil Resources in India are also included)

Mrs M Deacon

Physics - X

Mid-term syllabus (2020-2021)

- 1 Force
- 2 Work, Power and Energy
3. Machines
- 4 Refraction of Light at plane surfaces
- 5 Refraction through Lenses
6. Calorimetry
7. Current Electricity
8. Spectrum
9. Electrical Power and Household circuits

Internal Assessment of practical work

Write down the following experiments in your physics lab manual:-

- A) To determine the refractive index of glass using a rectangular glass block.
- B) To determine the specific heat capacity of a given metallic bob by method of mixtures.
- C) Verification of Ohm's law. Also , draw the graph and obtain the slope

Note: - To be completed by the third week of September 2020

Chemistry –X

Mid Term Syllabus (2020-2021)

- 1 Periodic table and properties
- 2 Chemical Bonding
- 3 Electrolysis
- 4 Acids, Bases and Salts
- 5 Mole and Stoichiometry
- 6 Analytical chemistry
- 7 Hydrogen chloride and hydrochloric acid
- 8 Ammonia
- 9 Metallurgy

Internal assessment of practical work in your Chemistry Lab Manual (20 marks)

- A) Using NaOH and NH_4OH , write down the tests for the identification of the following **ions** in a tabular form :-
 - i) Cupric , ii) Ferrous, iii) Ferric, iv) Zinc, V) Plumbous , vi) Calcium
- B) Distinction between MnO_2 and CuO
- C) Confirmatory tests for the following gases:-
 - I) Cl_2 , ii) O_2 , iii) NH_3 , iv) CO_2 , v) SO_2 , Vi) NO_2 , Viii) water vapour

Note: - To be completed by the end of September 2020.