

SYLLABUS FOR CLASS VIII 2019-20

IITF

- April** - 1 Pressure (Phy) /1 Compound interest and Simple interest, Discount
- May to June** - 2 Refraction of light (Phy) /2 Linear equation and their word problem
- July** - 3 Structure of Atom (Chem)
- Aug to Sept** - 3 Properties of circle, Properties of a triangle 4 Metals and Non metals (Chem)
4 Introduction of graph
- Half Yearly Exam** - **Ch 1 to 4 (Maths and Science)**
- Oct to Nov** - 5 Chemical effects of electric current (Chem) 5 Area and Volume of solid figure, Heron's formula of a triangle 6 Electricity and its effect (Phy)6 Rationalization, Indices and power
- Dec to Jan** - 7 Carbon and its compounds (Chem) 7 Mean, Median, Mode, Pie chart, Bar graph, Ogive Sound (Phy) 8 Linear in equation, Represents number line

MORAL SCIENCE

- April to May** - Ch 1, 2, 3
- Learning Outcome** - Pray and worship God. Accept your short coming and overcome with sustained effort. Patience and perseverance are fruitful virtues which bring contentment and long lasting happiness.
- June to July** - Ch 4, 5, 6, 7
- Learning Outcome** - Health is wealth. Great men are humble in their behavior. Sharing strengthens bonding and affection. Respect everyone and be humble and be thankful to everyone.
- Aug to Sept** - Ch 8, 9
- Learning Outcome** - Little things are important in developing a good personality. Develop the quality of tolerance for peaceful co-existence.
- Half Yearly Exam** - **Portion – Ch 1 to 8**
- Oct to Nov** - Ch 10, 11, 12
- Learning Outcome** - Rules of civil behavior, Courtesy and care for others Success belongs to those who have self-confidence. Forgiveness is a great virtue.
- Dec to Jan** - Ch 13, 14, 15
- Learning Outcome** - More important than physical courage is moral courage. Great person's great words.
- February** - **Final Exam – Portion – Ch 8 to 15 and 2, 5, 6**

COMPUTER SCIENCE

- April to May** - Ch 1, 2 **(1st Periodical Test)**
- Project Work** - Networking, Difference between LAN, WAN, MAN
- Activity** - Lab work on Ms Access to enter data in Ms Access.
- Learning Outcome** - Different types of networking LAN, WAN, MAN, Network security, Database, Field, Primary key.
- June to July** - Ch 3, 4 **(2nd Periodical Test)**
- Activity** - Lab work – To create Table insert, Delete, Sorting, datasheet.
- Learning Outcome** - To create tables, to insert, delete and sort data.
- Aug to Sept** - Ch 5, 6, 7 **(Half Yearly Exam – Ch 1 to 7)**
- Activity** - Lab work on Photoshop, Uses of different tool. Draw and label all the tool used in Photoshop.
- Learning Outcome** - Different tools and their uses, Layers, use of layers
- Oct to Nov** - Ch 8, 9, 10, 11 **(3rd Periodical Test)**
- Activity** - Lab work – Uses of if, than..., else, for ... next, do... while statement write the programs by using different statements, syntax, algorithm.
- Dec to Jan** - Ch 12, 13 and Revision
- Activity-** Lab work – Creating and viewing the html document by using different tags.
- Project Work** - Internet, Advantage of multimedia, Real time communication.
- Learning Outcome** - Using tags to run and view the *html* documents, creating web pages.

February - **Revision, Final Exam**

GENERAL KNOWLEDGE

April to May - Pg No- 1, 7, 8, 20, 31, 41, 42, 51, 62, 75 to 2, 9, 10, 21, 32, 43, 44, 52, 63, 69, 76

June to July - Pg No- 3, 11, 12, 22, 33, 45, 54, 64, 70, 77 to 4, 13, 14, 23, 35, 46, 56, 65, 78

Aug to Sept - Pg No- 5, 15, 24, 36, 47, 57, 66, 71, 79 to Revision + Current Affairs

Oct to Nov - Pg No- 6, 16, 25, 37, 48, 58, 67, 72, 74, 80 to 17, 26, 27, 38, 49, 59, 60, 68, 69, 81, 82

Dec to Jan - Pg No- 18, 28, 30, 39, 40, 50, 83, 84 + Current Affairs, Revision

Half Yearly Exam - **All portion from month April to August**

Final Exam - **All portion from month October to December**

ENGLISH LITERATURE

April to May - 1 You Can No Longer Reach Me, Said The Sky 2 Paying, The Forest Man of India Earth Song (Poem) **1st Unit Test – Ch 1, 2 Poem – Earth Song**

Learning Outcome - Environmental awareness, different types of human culture.

Short biography writing. English around us. Discussion on “Green Energy”. Reading, Hard words, Pronunciation, Synonyms, Antonyms, Poems recitation, Rhyming words, Rhyming scheme etc. **June to July**

- 3 The Giant Mirrors of Rjukan , Wilbur Wright and Orville Wright (Poem) 5 Waiting for the Battle **2nd Unit Test – Ch 3, 4 and poem (Wilbur Wright and Orville Wright)**

Learning Outcome - Remarkable, eco-friendly technological innovations that had the power to change the life of the whole world Smart phone and its uses. Invention of Wright Brothers. Empathy, cowardice and courage and how one has to accept both parts of oneself in order to grow.

Aug to Sept - 6 Alata’s Diary, Exile House (Poem)

Learning Outcome - Impact of a war-torn nation on children, the loss of innocence. Pain of leaving one’s homeland behind.

Half Yearly Exam - **Ch 1 to 6 including poems – Earth Song, Wilbur Wright and Orville Wright, Exile House**

Oct to Nov - 7 The Tempest,8 Raja Ravi Verma, Let There Be One Race (Poem) **Learning Outcome** - Role play. Work and contribution of artists Group discussion on “A comparison of Cultures”.

Dec to Jan - 9 The Scholarship,10 It Couldn’t Be Done (Poem),I Remember, I Remember (Poem)

Learning Outcome -E-mail writing. Optimism and its capacity to help us overcome challengers in life. Helen Keller’s Speech , sentiments of life and childhood

Final Exam - **Portion – Ch 7 to 10 including poems Let There Be one Race, I Remember, I Remember. Portion from Half Yearly Syllabus – 3 The Watery Place and Earth Song (Poem) types of question – Same as Half Yearly questions patterns.**

ENGLISH LANGUAGE

April to May - 1 Nouns, 2 Pronouns,3 Adjectives,4 Determiners,5 Articles,Writing – Formal letters, Article writings. **1st Unit Test – Ch 1 to 5**

Learning Outcome - Parts of speech and their uses and distinguish between them. Determiners , character of a noun , articles .Formal letter and article writing.

June to July - 6 Verbs,7 Agreement of Subject and Verb,8 Non-finite Verbs,9 Modals, 10 The Present Tense,11 The Past tense,12 The Future Tense, Writings – Paragraph writing, Message writing, Report writing. **2nd Unit Test – Ch 6 to 9**

Learning Outcome - Verb. Use correct verb with different subjects. Use infinites, gerund and participles. Differentiate between the modals used for possibility, obligation and necessity. Paragraph and message writing. Use present, past and future tenses with appropriate time makers. Recognize tenses and their progressive forms. Structure of different types of tenses. Report writing.

Aug to Sept - 13 Adverbs,14 Prepositions,15 Conjunctions,16 Direct and Indirect speech

Half Yearly Exam - **Ch 1 to 16 , Types of question – Fill in the blanks, Rearrange the jumble sentence, Change and rewrite etc,Unseen passage – Answer in brief find synonyms antonyms etc.**

Learning Outcome - Adverbs, understand how adverbs enhance a sentence. Prepositions and explain their uses. Conjunctions Different types of conjunctions. Direct to indirect speech

Oct to Nov - 17 Active and Passive voice,18 Phrases and Clauses,19 Relative clauses,20 Sentences,Notice writing, Essay writing,21 Conditional sentences,22 Transformation of sentences

3rd Unit Test - **Ch 17 to 20 – Types of question same as the previous Unit Test.**

Learning Outcome - Structure of passive voice and change from active to passive voice. Recognize the difference between phrases and clauses and also uses of relative clause. Different types of sentences and formation of sentences. Write notice and easy. Use conditional sentences. Change one type of sentence to another.

Dec to Jan - 23 Synthesis of sentences,24 Punctuation,25 Grammar on the 'Go',26 Idioms and Phrasal verbs,27 Words : A Mixed Bag,Writing section – Email writing, Advertisements, Book review

Learning Outcome - Join simple sentences using adverbs forming compound or complex sentences from simple sentences. Different punctuation marks and their uses. Use of for, since, during, while or until. Idioms and phrasal verbs and their meanings and also their uses. Uses of synonyms, antonyms, homophones. Write E-mail, prepare advertisement and book review.

Final Exam - **Ch 17 to 27 include chapters from Half Yearly portion - Ch 7 Agreement of subject and verb, Ch 15 Conjunction, Types of question – Same as Half Yearly portion**

SCIENCE

April to May - 3 Synthetic fibers and Plastic,1 Crop production and Management,2 Microorganisms : Friends and Foe,10 Force and Friction

Activity - Study of absorption of water in fibers. Observe the growth of seedling with manure and fertilizer.Show the presence of microorganisms in soil and water. Show that magnetic force is a non-contact force. **1st Unit Test - Chem - Ch 3, 4, 5 / Bio – Ch 1/Phy - 10**

Learning Outcome - Absorption capacity of different types of fibers and its importance and properties. Various agricultural practices and production and management of crops Identify various kinds of microorganisms and to know their benefits and harmful effects. Effect of force and its types, friction and its types. Advantages and disadvantages of friction, and methods to minimize and increase friction and its importance.

June to July - 4 Metals and Non-metals,8 Cell – Structure and Function,11 Pressure

Activity - Conduction in metals and non-metals. To observe onion peel under a compound microscope. To observe cells from the inner living of cheeks. To study that liquid exert pressure in all direction. **2nd Unit Test – Chem – Ch 5/Bio – Ch 8/Phy – Ch 12)**

Learning Outcome - Physical properties of metal and non-metals, chemical. Properties and uses of metal and non-metals. Explore the structure of cell, its parts and their function and difference between plant and animal cells. Pressure, fluid pressure, atmospheric pressure and applications of pressure.

Aug to Sept - 5 Combustion and Fossil fuels/7 Conservation of Plants and animals/12 Sound **Half Yearly Exam – Chem – Ch 3, 4, 5/Bio – Ch 1, 2, 8/Phy – Ch10, 11, 12**

Activity - Study of a candle flame. A field visit and to make a list of flora and fauna in particular region. Study of human ear.

Learning Outcome - Combustion and its types, different zones of flame, characteristics and types of fuel, fossil fuels and its limitations. Consequences of diversity, destruction and the steps taken to conserve environment. Sound and its types, Propagation of sound, Production and properties of sound. Differentiate between music and noise.

Oct to Nov - 13 Chemical effects and Electric current, 9 Reproduction in Animals,14 Some Natural Phenomena

Activity - Conductors and insulators. Observe the permanent slide of Reproduction in Amoeba and f Hydra . Study of charge. **3rd Unit Test – Chem – 4/Bio – Ch 9/Phy – Ch 15**

Learning Outcome - Conductors of electricity, electrolysis , electroplating and electro refining, dry cell and its importance. Asexual and sexual reproduction and their difference. Electric charge, Detecting of charge, Flow of charge, Lightning conductor and Safety, Protection during lightning, Earthquake and its effects.

December - 18 Pollution of Air and Water,10 Reacting the Age of Adolescence,15 Light,16 The Universe

Activity - Purification of water. Study the average rate of growth in the height of boys and girls with respect to age. Study of human eye. Study of some prominent stars and constellations.

Learning Outcome - Air and water pollution, sources and effects, Prevention of water and air pollution, purification of water and its process. Adolescence and various changes associated with it and conditions for good reproductive health. Human eye and its parts and function, Reflection of light, Laws of reflection, Images formed by a plane mirror, Refraction of light through different medium, and dispersion of light.

Final Exam - **Chem – Ch 4, 13, 18/Bio – Ch 7, 9, 10 Including 8/Phy – Ch 11, 14, 15, 16**

MATHEMATICS

April to May - Ch 1, 2 and 3 **(1st Periodical Test – Ch 1, 2 and 3)**

Activity - Count the number of square on a chessboard by building up a pattern.

Learning Outcome - Properties of rational number representation of rational numbers, Rational numbers between any two rational numbers. Negative integers as exponents. Laws of exponents, decimal number with exponents. Properties of squares of natural numbers, patterns in square, Pythagoras triplets, finding squares.

June to July - Ch 4, 5, 6, 7 **(2nd Periodical Test – Ch 4, 5, 6 and 7)**

Activity - Geometrical interpretation of identify
 $(a + b)^2 = a^2 + 2ab + b^2$

Learning Outcome - introduction to cube number properties of cube numbers, cube root of a number, Rules of divisibility, Maths puzzles, Multiplication of algebraic expressions. Algebraic identities. Factors of algebraic expressions, Algebraic expression in factorized form, Division of Algebraic expression.

Aug to Sept - Ch 8, 9 and 18 **(Half Yearly Exam – Ch 1 to 9 and 18)**

Learning Outcome - Linear equation. More on linear equation. Application of linear equation more about percentage profit and loss. Overhead expenses, Goods and service tax.

Oct to Nov - Ch 10, 11, 12, 13, 14 **(3rd Periodical Test – Ch 10, 11, 12 and 13)**

Activity - Find the dimension of the rectangle made from 12 square piece of side 1 unit and verify that the length of a rectangle varies inversely with the breadth for given fixed area.

Learning Outcome - Compound interest, more transaction involving money. Some other application of the compound interest formula. Dissect proportion, Problem on speed, Distance and time, Inverse proportion, Problems on speed and time with constant distance, Problem on time and work, Polygons, quadrilaterals, special parallelograms synopsis of the properties of the quadrilaterals. Combined 3-D shapes.

Dec to Jan - Ch 15, 16, 17, 19

Learning Outcome - Mapping skills, maps area of rhombus, area of a quadrilateral. Area of polygons, surface area of cuboids and cubes, volume of cubes and cuboids, coterstion planes, graphs, probability, Random experiments, outcome of an experiment, more about probability.

February - **Revision (Final Exam – Ch 10, 11, 12, 13, 14, 15, 17, 19, 4, 6, 7, 8, 9)**

SOCIAL SCIENCE

April to May - Geo- 1 Resources, His- 1 How, when and where, Civ- 1 The constitution

Activity/Project - Prepare a list of the resources which are utilized in your household and indicate which resources renewable , non renewable paste few pictures also.

Learning Outcome - Different types of natural resources and their impact over utilization. The sources of the history of modern India. Role of different personalities in making constitution of India . Fundamental rights and duties.

1st Periodical Test - **Geo- Ch 1, His – Ch 1**

June to July - Geo- 2 Natural Resources – Land, soil water, natural vegetation and wildlife ,His- 2 From trade to territory,Geo- 3 Mineral and Power resources,His- 3 Ruling the country side,4 Tribal's, Dikus and the vision of a Golden Age, Civ- 2 Parliament and The Making of Laws.

Learning Outcome - Land, soil, water and wildlife and methods to conserve it. British empire Conventional and non-conventional source of energy. Different economic policies of British government. Impact of colonization by the British and revolt led by tribals. Framework of Indian government.

2nd Periodical Test - **Geo- Ch 2, His- Ch 2, Civics- Ch 1**

Aug to Sept - His- 5 When people rebel 1857 and after,6 Colonialism and the city,Disaster Management- 1 Earthquakes, Volcanoes and Landslides,Geo- 4 Agriculture,His- 7 Crafts and Industries, Civ- 3 The Judiciary,His- 8 Civilizing the “Native” Education, Disaster Management- 2 Cyclones, Floods and Drought

Learning Outcome - Origin, nature and spread of the revolt of 1857. Different cities in the colonial India and partition of India and its impact on Delhi. Different types of natural disasters. Different types of farming and problems faced by the Indian farmers. Growth of iron and cotton industries. Role played by judiciary in India. Different local schools by the British government and role of Mahatma Gandhi and Rabindranath Tagore in education. Effects of natural disasters on human life.

Half Yearly Exam - **Geo- Ch 1 to 3,His- Ch 1 to 6,Civ- 1 to 3,Disaster Management- Ch 1**

Oct to Nov - Geo- 5 Industries,His- 9 Woman, Caste and Reform, Disaster Management- 3 Manmade disasters/His- 10 The changing world of visual arts,11 The making of the national movement: 1870s – 1947,Civ- 4 Social justice and the marginalized groups,Geo- 6 Human resources

Learning Outcome - Classification and distribution of industries. Issues related to caste, women, widow remarriage, child marriage, social reforms and the laws and policies of colonial administration towards these issues. Different types of manmade disasters. History of ancient arts and new form of imperial arts. Rise of national movement in India and the role of different organized national movements. Different marginalized groups of India, causes and consequences of marginalization faced by disadvantaged sections of one’s own region. Factors affecting distribution of population.

Dec to Jan - His- 12 India after Independence, Civ- 5 Role of government in economic presence of the government

Activity/Project - Collect the pictures of the freedom fighters and mention their role in India’s Independence. (1) Mahatma Gandhi (2) Subhas Chandra Bose (3) C.R.Das (4) Bhagat Singh (5) Khudi Ram Bose (6) Lala Lajpat Rai

Learning Outcome - Different challenges faced by India after independence. Role of government in economic presence providing public facilities of the government and in regulating economic activities.

February - **Revision and Final Exam – Portion for Final Exam – Geo- Ch 4 to 6 and Ch 1, 3,His- Ch 7 to 12 and Ch 3, 4, 5, Civ- Ch 2, 4 and 5, D. Management- Ch 2, 3**