



सत् त्वं पूषन् अपावृणु
केन्द्रीय विद्यालय संगठन

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SPLIT UP SYLLABUS CLASS IX

CLASS-IX TERM-I (APRIL TO SEPTEMBER 2014-15) SOCIAL SCIENCE

| S.NO | MONTH | NAME OF THE LESSONS | No.of Periods | REMARKS |
|------|-----------|--|----------------------|------------|
| 1 | APRIL/MAY | <u>HISTORY</u> :1 THE FRENCH REVOLUTION <u>GEOGRAPHY</u> : 1. INDIA SIZE AND LOCATION <u>POL SC</u> : DEMOCRACY IN THE CONTEMPORARY WORLD | 10 5 7 | COMPULSORY |
| 2 | JUNE/JULY | <u>HISTORY</u> : NAZISM AND THE RISE OF HITLER OR SOCIALISM IN EUROPE AND THE RUSSIAN REVOLUTION. PHYSICAL FEATURES OF INDIA ECONOMICS: THE STORY OF VILLAGE PALAMPUR FA-I | 10 7 10 | ANY ONE |
| 3 | AUGUST | <u>POL SC</u> : WHAT IS DEMOCRACY? WHY DEMOCRACY. <u>GEOGRAPHY</u> : DRAINAGE <u>POL SC</u> : CONSTITUTIONAL DESIGN DISASTER MANAGEMENT CH-1 | 6 8 7 5 | |
| 4 | SEPTEMBER | ECONOMICS: PEOPLE AS RESOURCE DISASTER MANAGEMENT CH-2 REVISION FOR SA-1 | 10 05 | |

CLASS-IX, TERM-II (OCTOBER TO MARCH 2014-15) SOCIAL SCIENCE

| S.NO | MONTH | NAME OF THE LESSONS | No. of Periods | REMARKS |
|------|----------|---|-------------------|---------|
| 1 | OCTOBER | <u>HISTORY</u> : 1.FOREST, SOCIETY & COLONIALISM (OR) PASTORALISTS IN MODERN WORLD (OR) PEASANTS AND FARMERS <u>GEOGRAPHY</u> : 1. CLIMATE | 10 7 | ANY ONE |
| 2 | NOVEMBER | <u>HISTORY</u> : THE STORY OF CRICKET OR CLOTHING:- A SOCIAL HISTORY 2. NATURAL VEGETATION & WILDLIFE <u>ECONOMICS</u> : 1. POVERTY AS A CHALLENGE. | 10 2 10 | ANY ONE |
| 3 | DECEMBER | NATURAL VEGETATION & WILDLIFE <u>POL SC</u> : ELECTORAL POLITICS <u>POL SC</u> : 1. WORKING OF INSTITUTIONS | 5 7 7 | |
| 4 | JANUARY | 2. DEMOCRATIC RIGHTS <u>ECONOMICS</u> : FOOD SECURITY IN INDIA <u>GEOGRAPHY</u> : POPULATION | 6 10 6 | |
| 5 | FEBRUARY | DISASTER MANAGEMENT CH-3 & 4 <u>OPEN TEXT BASED ASSESSMENT</u> <u>REVISION FOR SA-II</u> | 10 | |
| 6 | MARCH | <u>SA-II EXAMS</u> | | |

SPLIT UP SYLLABUS (2014-15) SCIENCE CLASS IX TERM I

| S. No | Month | Branch of Science | Chapter No & Chapter | Detailed Split-up | Periods for class room Teaching | Computer Aided Teaching Periods | Total No.of Periods |
|-------|------------|-------------------|---|--|---------------------------------|---------------------------------|---------------------|
| 1 | April | Physics | 8. Motion | Motion : Distance and displacement, velocity; uniform and non-uniform motion along a straight line; acceleration, distance time and velocity-time graphs for uniform motion and uniformly accelerated motion | 8 | 1 | 9 |
| | | Chemistry | 1. Matter in our surroundings | Definition of matter; solid, liquid and gas; characteristics - shape, volume, density; change of state-melting (absorption of heat),. | 5 | 1 | 6 |
| | | Biology | 5. Fundamental unit of life | Cell - Basic Unit of life : Cell as a basic unit of life; prokaryotic and eukaryotic cells, multicellular organisms; cell membrane and cell wall, cell organelles and cell inclusions; chloroplast, mitochondria, vacuoles, endoplasmic reticulum, Golgi apparatus;nucleus, chromosomes - basic structure, number. | 7 | 2 | 9 |
| 2 | May & June | Physics | 8. Motion (contd.) | equations of motion by graphical method; elementary idea of uniform circular motion. | 3 | 1 | 4 |
| | | Chemistry | 1. Matter in our surroundings(C contd.) | freezing, evaporation (cooling by evaporation), condensation, sublimation | 2 | 0 | 2 |
| | | Biology | 6. Tissues | Tissues, Organs, Organ System, Organism Structure Plant-Tissues meristematic and permanent tissues in plants | 3 | 1 | 4 |
| 3 | July | Physics | 9. Force and laws of motion | Force and Newton's laws: Force and motion, Newton's laws of motion, inertia of a body, inertia and mass, momentum, force and acceleration. | 8 | 1 | 9 |
| | | Chemistry | 2. Is matter around us pure | Nature of matter : Elements, compounds and mixtures | 6 | 1 | 7 |
| | | Biology | 6. Tissues (contd.) | functions of animal and plant tissues (four types in animals Meristematic & permanent tissues in plants) | 7 | 2 | 9 |
| 4 | August | Physics | 9. Force and laws of motion (contd.) | Elementary idea of conservation of momentum, action and reaction forces. | 5 | 1 | 6 |
| | | Physics | 10. Gravitation | | 5 | 0 | 5 |
| | | Chemistry | 2. Is matter around us pure? | Heterogeneous and homogeneous mixtures | 5 | 1 | 6 |
| | | Biology | 15. Improvement in food resources | Plant and animal breeding and selection for quality improvement and management; | 3 | 2 | 5 |
| 5 | September | Physics | 10. Gravitation (contd.) | acceleration due to gravity; mass and weight; free fall | 2 | 1 | 3 |
| | | Chemistry | 2. Is matter around us pure | colloids and suspensions | 1 | 0 | 1 |
| | | Biology | 15. Improvement in food resources(contd.) | use of fertilizers, manures; protection from pests and diseases; organic farming | 4 | 1 | 5 |
| | | Revision for SA 1 | Physics, Chemistry & Biology | Physics, Chemistry & Biology | 6 | | 6 |

SPLIT UP SYLLABUS (2014-15) SCIENCE CLASS IX TERM II

| | | | | | | | |
|----|----------|-----------|---|--|---|---|---|
| 6 | October | Physics | 10. Gravitation | Floatation : Thrust and pressure. Archimedes' principle, buoyancy, elementary idea of relative density | 4 | 1 | 5 |
| | | Chemistry | 3. Atoms & Molecules | Particle nature, basic units : Atoms and molecules. Law of constant proportions. Atomic and molecular masses. | 5 | 1 | 6 |
| | | Biology | 7. Diversity in living organisms | Biological Diversity : Diversity of plants and animals - basic issues in scientific naming, basis of classification. Hierarchy of categories / groups | 4 | 1 | 5 |
| 7 | November | Physics | 11. Work & Energy | Work, energy and power : Work done by a force, energy, power; kinetic and potential energy; law of conservation of energy | 5 | 1 | 6 |
| | | Chemistry | 3. Atoms & Molecules (contd.) | Mole Concept : Relationship of mole to mass of the particles and numbers. Valency. Chemical formula of common compounds | 7 | 1 | 8 |
| | | Biology | 7. Diversity in living organisms (Contd.) | Major groups of plants (salient features) (Bacteria, Thallophyta, Bryophyta, Pteridophyta, Gymnosperms and Angiosperms). Major groups of animals (salient features) (Non-chordates upto phyla and chordates upto classes). | 6 | 2 | 8 |
| 8 | December | Physics | 12. Sound | Sound : Nature of sound and its propagation in various media, speed of sound, range of hearing in humans; ultrasound | 4 | 1 | 5 |
| | | Chemistry | 4. Structure of Atom | Structure of atom : Electrons, | 5 | 1 | 6 |
| | | Biology | 13. Why do we fall ill | Health and Diseases : Health and its failure. Infectious and Non-infectious diseases, their causes and manifestation. | 5 | 1 | 6 |
| 9 | January | Physics | 12. Sound (contd.) | reflection of sound; echo and SONAR. | 5 | 1 | 6 |
| | | Chemistry | 4. Structure of Atom (contd.) | Protons & neutrons | 6 | 1 | 7 |
| | | Biology | 13. Why do we fall ill (Contd.) | Diseases caused by microbes (Virus, Bacteria and Protozoans) and their prevention, Principles of treatment and prevention. Pulse polio programmes. | 4 | 0 | 4 |
| | | Biology | 14. Natural Resources | Physical resources : Air, Water, Soil. Air for respiration, for combustion, for moderating temperatures; movements of air and its role in bringing rains across India. Air, water and soil pollution (brief introduction). Holes in ozone layer and the probable damages. | 7 | 1 | 8 |
| 10 | February | Physics | 12. Sound (contd.) | Structure of the human ear (auditory aspect only) | 2 | 0 | 2 |
| | | Physics | Revision | Revision for SA-II | 6 | | 6 |
| | | Chemistry | 4. Structure of Atom (contd.) | Isotopes & Isobars | 1 | 0 | 1 |
| | | Chemistry | Revision | Revision for SA-II | 6 | | 6 |
| | | Biology | 14. Natural Resources (contd.) | Bio-geo chemical cycles in nature : Water, oxygen, carbon and nitrogen. Revision for SA-II | 6 | 1 | 7 |

CLASS - IX SPLIT-UP SYLLABUS (2014-15) ENGLISH 1st Term

| S.No | Month | Topic | No. of Periods |
|-----------------|------------|--|----------------|
| 1 | April | 1. How I taught my grandmother to read (Prose) | 7 |
| | | 2. The Brook (Poem) | 5 |
| | | 3. People (MCB) | 5 |
| | | 4. Grammar: Verb forms | 3 |
| | | 5. Writing Skills (E-mail, Informal Letter, Description writing) | 4 |
| | | 6. Novel (Three men in a boat) Chapter 1 & 2 | 4 |
| 2 | May & June | 1. The road not taken (Poem) | 5 |
| | | 2. Grammar: Determiners | 3 |
| | | 3. Writing skill (Speech) | 2 |
| | | 4. Novel : (Three men in a boat) 3rd & 4th Chapter | 4 |
| 3 | July | 1. Adventure (MCB) | 6 |
| | | 2. The Solitary Reaper (Poem) | 4 |
| | | 3. A Dog named Duke (Prose) | 7 |
| | | 4. Grammar: Future tense reference | 3 |
| | | 5. Writing Skills (Article writing and Paragraph writing) | 4 |
| | | 6. Novel (Three men in a boat) Chapter 5 & 6 | 5 |
| 4 | August | 1. Villa for sale (Drama) | 7 |
| | | 2. Lord Ullin's Daughter (Poem) | 4 |
| | | 3. Environment (MCB) | 5 |
| | | 4. Grammar: Modals | 3 |
| | | 5. Writing Skills (Report Writing, Formal Letter, Dialogue writing) | 4 |
| | | Novel : Chapter 7 & 8 | 4 |
| 5 | September | 1. Class IX Radio/Video show (MCB) | 5 |
| | | 2. Novel: Chapter 9 & 10 | 4 |
| | | 3. Revision - SA -I | |
| 2nd Term | | | |
| 1 | October | 1. The man who knew too much (Prose) | 8 |
| | | 2. The Seven Ages (Poem) | 3 |
| | | 3. Grammar : Connectors | 2 |
| | | 4. Novel : (Three men in a boat) 11 & 12 Chapter | 3 |
| | | 5. Writing Skills (Paragraph Writing) | 1 |
| 2 | November | 1. Keeping it from Harold (Prose) | 5 |
| | | 2. Oh, I wish I'd looked after me teeth (Poem) | 4 |
| | | 3. Mystery (MCB) | 6 |
| | | 4. Grammar (Passive voice) | 3 |
| | | 5. Writing Skills (Report completion) | 3 |
| | | 6. Novel : Chapter 13 & 14 | 3 |
| 3 | December | 1. The Bishop's Candlesticks (Drama) | 7 |
| | | 2. Children (MCB) | 4 |
| | | 3. Grammar : Reported Speech | 3 |
| | | 4. Writing Skills (Article Writing) | 3 |
| | | 5. Novel: Chapter 15 & 16 | 5 |
| 4 | January | 1. Best Seller (Prose) | 5 |
| | | 2. Song of the Rain (Poem) | 2 |
| | | 3. Sports and Games (MCB) | 5 |
| | | 4. Grammar: (Prepositions) | 2 |
| | | 5. Novel: Chapter 17 & 18 | 5 |
| | | 6. Writing Skills (Biography and biodata writing) | 4 |
| 5 | February | 1. Novel: Chapter 19 | 2 |
| | | Revision | |
| 6 | March | SA -II | |

प्रथम सत्र (अप्रैल से सितम्बर) IX HINDI

(2014 – 2015)

| क्रम. स० | माह | गद्य | पद्य | कृतिका | व्याकरण | कालांश |
|---------------------|-----------|---|--|--|---|--------|
| 1 | अप्रैल | दो बैलों की कथा (7) ल्हासा की ओर (6) | कबीर की सखियाँ और सबद (5) | | उपसर्ग, प्रत्यय, (4) अलंकार (6) | 28 |
| 2 | मई और जून | ----- | ----- | इस जलप्रलय में (5) | निबंध , पत्र , अपठित गद्यांश पद्यांश (6) | 11 |
| 4 | जुलाई | उपभोक्तावाद की संकृति(7) साँवले सपनों की याद (7) | वाख (6) | मेरे संग की औरतें (4) | समास (5) | 29 |
| 3 | अगस्त | | रसखान के सवैये (4) कैदी और कोकिला (6) ग्राम श्री (4) | रीड की हड्डी (6) | वाक्य भेद, (4) अर्थ की दृष्टि से वाक्य भेद) | 24 |
| 4 | सितम्बर | | पुनरावृत्ति | | प्रतिवेदन (4) | 21 |
| द्वितीय सत्र | | | | | | |
| 5 | अक्टूबर | नाना साहब की पुत्री देवी मैना को भस्म कर दिया गया (5) | चन्द्र गहना से लोटती बेर (4) | माटी वाली (4) | उपसर्ग, प्रत्यय, (3) अपठित गद्यांश, पद्यांश | 16 |
| 6 | नवम्बर | प्रेमचंद के फटे जूते (7) मेरे बचपन के दिन (6) | मेघ आए (6) | | वाक्य भेद (अर्थ की दृष्टि से) अलंकार(3) | 22 |
| 7 | दिसम्बर | एक कुत्ता और एक मैना (8) | यमराज की दिशा (6) | | प्रतिवेदन (6) गतिविधियाँ | 24 |
| 8 | जनवरी | | बच्चे काम पर जा रहे हैं (4) | किस तरह मैं आखिरकार हिंदी में आया (8) | मुक्तपाठ अभ्यास (12) | 24 |
| 9 | फरवरी | | पुनरावृत्ति | | | 24 |
| 10 | मार्च | | पुनरावृत्ति एवं सत्रांत परीक्षा | | | |

नोट: कोष्ठक में लिखी हुई संख्याएँ कालांश हैं ।

व्याकरण

| क्रम० स० | पाठ्य पुस्तक व्याकरण | प्रथम सत्र (अप्रैल से सितम्बर) | | | द्वितीय सत्र (अक्तूबर से मार्च) | | |
|-------------|--|-----------------------------------|--------|---------|------------------------------------|--------|----------|
| | | FA 1 10 | FA2 10 | SA I 30 | FA3 10 | FA4 10 | SA II 30 |
| 1 | शब्द निर्माण- उपसर्ग (2 अंक) प्रत्यय (2 अंक) समास (4 अंक) (एस.ए. - में 2 अंक) | ✓ | | ✓ | ✓ | | ✓ |
| 2 | संज्ञा (एस ए-1-3 अंक) (एस ए-2-2 अंक) कारक- 2 अंक | | ✓ | ✓ | ✓ | | ✓ |
| 3 | सर्वनाम (एस ए-1-3 अंक) (एस ए-2-2 अंक) | | ✓ | ✓ | | ✓ | ✓ |
| 4 | मुहावरे (4 अंक) | | ✓ | ✓ | | | |
| 6 | लिंग और वचन का विशेषण पर प्रभाव (2 अंक) परसर्ग 'ने' का क्रिया पर प्रभाव (2 अंक) | | | | ✓ | | ✓ |
| 7 | विलोम शब्द (2 अंक) श्रुतिसमभिन्नार्थक (2 अंक) पर्यायवाची शब्द (2 अंक) | | | | | ✓ | ✓ |
| | अपठित गद्यांश | | | ✓ | | | ✓ |
| | अपठित काव्यांश | | | ✓ | | | ✓ |
| | पत्र लेखन | ✓ | | ✓ | ✓ | | ✓ |
| | अनुच्छेद लेखन | | ✓ | ✓ | | ✓ | ✓ |

संस्कृत पाठ्यक्रम विभाजनम् (संप्रेषणात्मकम्) २०१४-१५ कक्षा – नवमी

| | | विषयः संस्कृतम् | | प्रथम सत्रम् (अप्रैलतः – सितम्बरमासपर्यन्तम्) | | |
|------------|-----------|--|----------------------------------|---|----------------|---|
| मासस्य नाम | कालां शाः | पठित अवबोधनम् | रचनात्मकं कार्यम् | अनुप्रयुक्त व्याकरणम् | अपठित अवबोधनम् | पाठ्यक्रमस्य पूर्णता एवं विवरणं च |
| अप्रैल | २४ | तत्त्वमासि अविवेकः परमापदां पदम् | पत्र लेखनम् चित्राधारितं कार्यम् | वर्ण-उच्चारणस्थानानि ,वर्ण संयोजनम् , वर्ण विभाजनम् दीर्घसन्धिः गुणसन्धिः वृद्धि - यण् सन्धिः धातुरूपाणां (लट्, लृट् एवं लङ् लकारेषु) प्रयोगः एवं अभ्यासश्च । १. परस्मै पदिनः – भू, पठ् , हस्, नम् , अस्, हन् , कृध् , नश् , नृत् , आप्, शक्, इष् , प्रच्छ् , कृ , ज्ञा , भक्ष् , चिन्त् २. आत्मनेपदेनः – सेव् , लभ् , रुच् , मुद् , याच् ३. उभयपदिनः – नी , ह् , भज् , पच् | अपठितगद्यांशः | रचनात्मकं मूल्याङ्कनम् -१ (४० अङ्काः) FA – 1 अप्रैलतः जून् पर्यन्तम्) पाठ्यक्रमः रचनात्मकं मूल्याङ्कनम् -२ FA – 2 |
| मई – जून् | १० | पाथेयम् | पत्रलेखनम् चित्राधारितं कार्यम् | म् स्थाने अनुस्वारः , णत्वविधानम् वर्गीयप्रथमाक्षराणां तृतीय वर्णे परिवर्तनम् त् स्थाने च् , र् पूर्वस्य रेफस्य लोपः दीर्घ स्वरत्वं च , त् स्थाने ल् | अपठितगद्यांशः | संकलात्मकं मूल्याङ्कनम् – १ SA -1 (अप्रैलतः अगस्त पर्यन्तम्) |
| जलाई | २५ | स्वस्थ वृत्तम् भ्रातृस्नेहस्तु दुर्लभः | पत्रलेखनम् चित्राधारितं कार्यम् | विसर्गस्य उत्त्व-रुत्व –लोपः , विसर्गस्य स्, श्, ष् अजन्तशब्दानां त्रिषु लिङ्गेषु प्रयोगः अभ्यासश्च । सर्वनामशब्दानां वाक्येषु प्रयोगः यत् . तत् , किम् , इदम् (त्रिषु लिङ्गेषु) अस्मद् , युष्मद् | अपठितगद्यांशः | |
| अगस्त | २२ | विद्यया भान्ति सद्गुणाः | पत्रलेखनम् चित्राधारितं कार्यम् | प्रत्ययाः (तुमुन् , क्त्वा , ल्यप्) उपविभक्तीनां परिचयः द्वि. अभितः , परितः , उभयतः तृतीया सह , किं चतुर्थी -नमः , स्वाहा , सामर्थ्ये पञ्चमी बहिः , विना भी , पूर्वं | अपठितगद्यांशः | |
| सितम्बर | २३ | पुनरावृत्तिः | पुनरावृत्तिः | पुनरावृत्तिः | पुनरावृत्तिः | |

| कक्षा – नवमी | | विषयः संस्कृतम् | | द्वितीय सत्रम् (अक्तूबरतः – मार्चमासपर्यन्तम्) | | |
|--------------|-----------|--------------------------------------|----------------------------------|--|----------------|---|
| मासस्य नाम | कालां शाः | पठित अवबोधनम् | रचनात्मकं कार्यम् | अनुप्रयुक्त व्याकरणम् | अपठित अवबोधनम् | पाठ्यक्रमस्य पूर्णता एवं विवरणं च |
| अक्तूबर | १६ | तरवे नमोऽस्तु कर्मणा याति संसिद्धिम् | पत्र लेखनम् चित्राधारितं कार्यम् | हलन्त शब्दानां – राजन् , भवत् , आत्मन् , विद्वस् , गच्छत् संख्यावाचक शब्दानां – एक , द्वि , त्रि , चतुर् , पञ्चन् आदि शब्दानां वाक्येषु प्रयोगः । | अपठितगद्यांशः | रचनात्मकं मूल्याङ्कनम् - ३ (४० अङ्काः) FA – 3 |
| नवम्बर | २२ | विजयतां स्वदेशः कोऽहं वदतु सांप्रतम् | पत्रलेखनम् चित्राधारितं कार्यम् | धातुरूपाणां (लोट् विधिलिङ् लकारयोः) प्रयोगः एवं अभ्यासश्च । १. परस्मै पदिनः – भू, पठ् , हस्, नम् , अस्, हन् , क्रुध् , नश् , नृत् , आप्, शक्, इष् , प्रच्छ् , कृ , ज्ञा , भक्ष् , चिन्त् २. आत्मनेपदेनः – सेव् , लभ् , रुच् , मुद् , याच् ३. उभयपदिनः – नी , ह् , भज् , पच् | अपठितगद्यांशः | अक्तूबरतः दिसम्बर पर्यन्तम्) पाठ्यक्रमः रचनात्मकं मूल्याङ्कनम् – ४ FA – 4 संकलात्मकं मूल्याङ्कनम् – १ SA -2 |
| दिसम्बर | १९ | न धर्मवृद्धेषु वयः समीक्ष्यते | पत्रलेखनम् चित्राधारितं कार्यम् | उपपदविभक्तीनां परिचयः – द्वितीया - समया , निकषा, प्रति, धिक् , विना , तृतीया – विना अलं, हीनः , प्रयोजनम् , चतुर्थी – अलं (सामर्थ्ये) | अपठितगद्यांशः | (अक्तूबरतः मार्च पर्यन्तम्) |
| जनवरी | २४ | कवयामि वयामि यामि भारतीयं विज्ञानम् | पत्रलेखनम् चित्राधारितं कार्यम् | पञ्चमी – आरभ् , प्र + मद् , परः , अनन्तरम् , षष्ठी – निर्धारणे, वामतः , दक्षिणतः , अनादरे सप्तमी – भावे , विश्वस् , अनु – रज् , स्निह् | अपठितगद्यांशः | |
| फरवरी | २२ | भारते नास्ति मे जीवनं जीवनम् | पुनरावृत्तिः | प्रत्ययाः – क्त . क्तवतु , शतृ , शानच् | पुनरावृत्तिः | |
| मार्च | १२ | पुनरावृत्तिः | पुनरावृत्तिः | पुनरावृत्तिः | पुनरावृत्तिः | |

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| | JULY | <p>1. INTRODUCTION TO EUCLID'S GEOMETRY</p> <p>2. LINES AND ANGLES</p> <p>3. COORDINATE GEOMETRY</p> | <p>1. INTRODUCTION TO EUCLID'S GEOMETRY (6) Periods History - Geometry in India and Euclid's geometry. Euclid's method of formalizing observed phenomenon into rigorous mathematics with definitions, common/obvious notions, axioms/postulates and theorems. The five postulates of Euclid. Equivalent versions of the fifth postulate. Showing the relationship between axiom and theorem, for example: (Axiom) 1. Given two distinct points, there exists one and only one line through them. (Theorem) 2. (Prove) Two distinct lines cannot have more than one point in common.</p> <p>2. LINES AND ANGLES (10) Periods 1. (Motivate) If a ray stands on a line, then the sum of the two adjacent angles so formed is 180° and the converse. 2. (Prove) If two lines intersect, the vertically opposite angles are equal. 3. (Motivate) Results on corresponding angles, alternate angles, interior angles when a transversal intersects two parallel lines. 4. (Motivate) Lines which are parallel to a given line are parallel. 5. (Prove) The sum of the angles of a triangle is 180°. 6. (Motivate) If a side of a triangle is produced, the exterior angle so formed is equal to the sum of the two interior opposite angles</p> <p>3. COORDINATE GEOMETRY (9) Periods The Cartesian plane, coordinates of a point, names and terms associated with the coordinate plane, notations, plotting Points in the plane, graph of linear equations as examples; focus on linear equations of the type $ax + by + c = 0$ by writing it as $y = mx + c$.</p> <p>Two skill based Math's Lab activities / Project</p> | 6 10 9 |
| 3 | AUGUST | <p>1. AREAS</p> <p>2. TRIANGLES</p> | <p>1. AREAS (4) Periods Area of a triangle using Hero's formula (without proof) and its application in finding the area of a quadrilateral</p> <p>2. TRIANGLES (20) Periods 1. (Motivate) Two triangles are congruent if any two sides and the included angle of one triangle is equal to any two sides and the included angle of the other triangle (SAS Congruence). 2. (Prove) Two triangles are congruent if any two angles and the included side of one triangle is equal to any two angles and the included side of the other triangle (ASA Congruence). 3. (Motivate) Two triangles are congruent if the three sides of one triangle are equal to three sides of the other triangle (SSS Congruence). 4. (Motivate) Two right triangles are congruent if the hypotenuse and a side of one triangle are equal (respectively) to the hypotenuse and a side of the other triangle.</p> <p>Two skill based Math's Lab activities / Project</p> | 4 15 |
| 4 | SEPTEMBER | <p>1. TRIANGLES (contd.)</p> <p>Revision for Summative Assessment -1</p> | <p>1. TRIANGLES (20) Periods contd.</p> <p>5. (Prove) The angles opposite to equal sides of a triangle are equal. 6. (Motivate) The sides opposite to equal angles of a triangle are equal 7. (Motivate) Triangle inequalities and relation between 'angle and facing side' inequalities in triangles</p> <p>Revision for Summative Assessment – I</p> | 5 8 |

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| | November | 3. CIRCLES | <p>CIRCLES (15) Periods Through examples, arrive at definitions of circle related concepts, radius, circumference, diameter, chord, arc, subtended angle. 1. (Prove) Equal chords of a circle subtend equal angles at the center and (motivate) its converse. 2. (Motivate) The perpendicular from the center of a circle to a chord bisects the chord and conversely, the line drawn through the center of a circle to bisect a chord is perpendicular to the chord. 3. (Motivate) There is one and only one circle passing through three given non-collinear points. 4. (Motivate) Equal chords of a circle (or of congruent circles) are equidistant from the center(s) and conversely. 5. (Prove) The angle subtended by an arc at the center is double the angle subtended by it at any point on the remaining part of the circle. 6. (Motivate) Angles in the same segment of a circle are equal. 7. (Motivate) If a line segment joining two points subtends equal angle at two other points lying on the same side of the line containing the segment, the four points lie on a circle. 8. (Motivate) The sum of the either pair of the opposite angles of a cyclic quadrilateral is 180° and its converse. Two skill based Math's Lab activities / Project</p> | 15 |
| | DECEMBER | 1.PROBABILI TY | <p>1. PROBABILITY (12) Periods History, Repeated experiments and observed frequency approach to probability. Focus is on empirical probability. (A large amount of time to be devoted to group and to individual activities to motivate the concept; the experiments to be drawn from real - life situations, and from examples used in the chapter on statistics). 2. SURFACE AREAS AND VOLUMES (12) Periods Surface areas and volumes of cubes, cuboids, spheres (including hemispheres) and right circular cylinders/cones Two skill based Math's Lab activities / Project</p> | 12 |
| | JANUARY | 2. SURFACE AREAS AND VOLUMES | | 5 |
| | JANUARY | 1.SURFACE AREAS AND VOLUMES(co ntd.) | <p>1. SURFACE AREAS AND VOLUMES (12) Periods Surface areas and volumes of cubes, cuboids, spheres (including hemispheres) and right circular cylinders/cones</p> | 7 |
| | JANUARY | STATISTIC S | <p>1. STATISTICS (13) Periods Introduction to Statistics : Collection of data, presentation of data — tabular form, ungrouped / grouped, bar graphs, histograms (with varying base lengths), frequency polygons, qualitative analysis of data to choose the correct form of Presentation for the collected data. Mean, median, mode of ungrouped data Two skill based Math's Lab activities / Project</p> | 13 |
| | FEB | OTBA REVISION FOR SA2 | OTBA REVISION FOR SA2 | |
| | MARC H | SA 2 | SA 2 | |