Detailed syllabus of class XIth Biology 2019-20

Month	No. of	Chapter/ Topic	Portion to be taught	Portion
	working days			for U.T.
June	<u>uays</u> 18	Ch.1 The living World Ch.2 Biological Classification Ch.3 Plant kingdom	What is living? Biodiversity; Need for classification; three domains of life; taxonomy and systematics; concept of species and taxonomical hierarchy; binomial nomenclature; tools for study of taxonomy- museums, zoological parks, herbaria, botanical gardens.Five kingdom classification; Salient features and classification of Monera, Protista and Fungi into major groups: Lichens, Viruses and Viroids. Salient features and classification of plants into major groups - Algae, 	Ch.1 & 2
July	27	Ch.4 Animal kingdom Ch.5 Morphology of flowering plants Ch.6 Anatomy of flowering plants	Salient features and classification of animals non-chordates up to phyla level and chordates up to class level (three to five salient features and at least two examples of each category). Morphology and modifications: Internal Morphology of different parts of flowering plants: root, stem, leaf, inflorescence, flower, fruit and seed Anatomy and functions of different tissues.	
August	24	Ch.7 Structural organization in animals Ch.9 Biomolecules Ch.10 Cell cycle and cell division	Animal tissues; Morphology, anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of an insect (cockroach). Chemical constituents of living cells: biomolecules, structure and function of proteins, carbohydrates, lipids, nucleic acids; Enzymes- types, properties, enzyme action. Cell cycle, mitosis, meiosis and their significance	Ch.3,4,5
September	24	Ch.8 Cell- The unit of life Ch.11 Transport in plants	Cell theory and cell as the basic unit of life: Structure of prokaryotic and eukaryotic cells; Plant cell and animal cell; cell envelope; cell membrane, cell wall; cell organelles - structure and function;	Ch. 1,2,3,4,5,6, 7,9,10

			endomembrane system, endoplasmic	
			reticulum, golgi bodies, lysosomes,	
			vacuoles; mitochondria,	
			ribosomes, plastids, microbodies;	
			cytoskeleton, cilia, flagella, centrioles	
			(ultrastructure and function);	
			nucleus.	
			Movement of water, gases and	
			nutrients; cell to cell transport,	
			diffusion, facilitated diffusion, active	
			transport; plant-water relations,	
			imbibition, water potential, osmosis,	
			plasmolysis; long distance	
			transport of water - Absorption,	
			apoplast, symplast, transpiration pull,	
			root pressure and guttation;	
			transpiration, opening and closing of	
			stomata; Uptake and translocation of	
			mineral nutrients - Transport	
			of food, phloem transport, massflow	
			hypothesis.	
October	12	Ch.12 Mineral nutrition	Essential minerals, macro- and	
			micronutrients and their role; deficiency	
			symptoms; mineral toxicity;	
			elementary idea of hydroponics as a	
			method to study mineral nutrition;	
			nitrogen metabolism, nitrogen	
			cycle, biological nitrogen fixation.	
November	26	Ch.13 Photosynthesis in higher	Photosynthesis as a means of	Ch.8,11,12
		plants	autotrophic nutrition; site of	
		•		
		Ch.14 Respiration in plants	photosynthesis, pigments involved in	
		Ch.14 Respiration in plants Ch.15 Plant growth and	photosynthesis, pigments involved in photosynthesis (elementary idea);	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation;	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis;	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways;	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis.	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration -	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic),	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways;	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient.	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant growth and plant growth rate;	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation,	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation;	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell; growth regulators - auxin,	
		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell; growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA;	
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		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell; growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA; seed dormancy; vernalisation; photoperiodism.	
Descrit		Ch.14 Respiration in plants Ch.15 Plant growth and development	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell; growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA; seed dormancy; vernalisation; photoperiodism.	
December	23	Ch.14 Respiration in plants Ch.15 Plant growth and development Ch.16 Digestion and absorption Ch.16 Digestion and absorption	 photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell; growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA; seed dormancy; vernalisation; photoperiodism. 	
December	23	Ch.14 Respiration in plants Ch.15 Plant growth and development Ch.16 Digestion and absorption Ch.17 Breathing and exchange	 photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell; growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA; seed dormancy; vernalisation; photoperiodism. 	
December	23	Ch.14 Respiration in plants Ch.15 Plant growth and development Ch.16 Digestion and absorption Ch.16 Digestion and absorption Ch.17 Breathing and exchange of gases Ch.18 Pody fluida and	 photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell; growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA; seed dormancy; vernalisation; photoperiodism. Alimentary canal and digestive glands, role of digestive enzymes and gastrointestinal hormones; Daristolais, digestion absention and secretion and gastrointestinal hormones; 	
December	23	Ch.14 Respiration in plants Ch.15 Plant growth and development Ch.16 Digestion and absorption Ch.16 Digestion and absorption Ch.17 Breathing and exchange of gases Ch.18 Body fluids and circulation	photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell; growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA; seed dormancy; vernalisation; photoperiodism.	

			and fats; calorific values of	
			proteins, carbohydrates and fats;	
			egestion; nutritional and digestive	
			disorders - PEM, indigestion,	
			constipation, vomiting, jaundice,	
			diarrhoea.	
			Respiratory organs in animals (recall	
			only); Respiratory system in humans;	
			mechanism of breathing and	
			its regulation in humans - exchange of	
			gases, transport of gases and regulation	
			of respiration, respiratory	
			volume; disorders related to respiration	
			- asthma, emphysema, occupational	
			respiratory disorders.	
			Composition of blood, blood groups,	
			coagulation of blood; composition of	
			lymph and its function; human	
			circulatory system - Structure of human	
			heart and blood vessels; cardiac cycle,	
			cardiac output, ECG;	
			double circulation; regulation of cardiac	
			activity; disorders of circulatory system	
			- hypertension, coronary	
			artery disease, angina pectoris, heart	
			failure.	
January	23	Ch.19 Excretory products and	Modes of excretion - ammonotelism,	Ch.13,14,15
		their elimination	ureotelism, uricotelism; human	,16
		Ch.20 Locomotion and	excretory system – structure and	
		movement	function; urine formation,	
		Ch.21 Neural control and	osmoregulation; regulation of kidney	
		coordination	nutriumetic factor ADU and diabates	
			insinidus: role of other organs in	
			averation: disorders urganis	
			renal failure renal calculi nenhritis:	
			dialysis and artificial kidney kidney	
			transplant	
			Types of movement - ciliary flagellar	
			muscular: skeletal muscle- contractile	
			proteins and muscle	
			contraction: skeletal system and its	
			functions; joints; disorders of muscular	
			and skeletal system -	
			myasthenia gravis, tetany, muscular	
			dystrophy, arthritis, osteoporosis, gout.	
			Neuron and nerves; Nervous system in	
			humans - central nervous system;	
			peripheral nervous system and	
			visceral nervous system; generation and	
			conduction of nerve impulse; reflex	
			action; sensory perception;	
			sense organs; elementary structure and	
			tunctions of eye and ear	
February	23	Ch.22 Chemical coordination	Endocrine glands and hormones; human	
		and integration	endocrine system - hypothalamus,	
			pituitary, pineal, thyroid,	
			paratnyroid, adrenal, pancreas, gonads;	
			inechanism of normone action	
			(elementary idea); role of	

		hormones as messengers and regulators, hypo - and hyperactivity and related disorders; dwarfism, acromegaly, cretinism, goiter, exophthalmic goiter, diabetes, Addison's disease.	
March	Annual Exam		Ch.1 to 22

		PHYSICAL EDUCATION	
Mont hs	No. of working days	Chapter / Topic	Portion to be taught
June	18	Unit I Changing Trends & Career In Physical Education	Meaning & definition of Physical Education Aims & Objectives of Physical Education Changing trends in Physical Education Various Physical Education Courses available in India Career Options in Physical Education Soft skills required for different careers
July	27	Unit II Olympic Movement Unit III Physical Fitness, Wellness & Lifestyle	Ancient & Modern Olympics (Summer & Winter) Olympic Symbols, Ideals, Objectives & Values International Olympic Committee Indian Olympic Association Dronacharya Award, Arjuna Award & Rajiv Gandhi Khel Ratna Award Organisational set-up of CBSE Sports & Chacha Nehru Sports Award Meaning & Importance Of Physical Fitness, Wellness & Lifestyle Components of physical fitness Components of Health related fitness Components of wellness Preventing Health Threats Through Lifestyle Change Concept of Positive Lifestyle

Aug.	23	Unit IV Physical Education & Sports for CWSN (Children With Special Needs- Divyang Unit V Yoga	Aims & objectives of Adaptive Physical Education Organizatio n promoting Adaptive Sports (Special Olympics Bharat; Paralympics ; Deaflympic s) Concept and need of Integrated Physical Education Concept of Inclusion, its need and Implementation Role of various professionals for children with special needs (Counsellor, Occupational Therapist, Physical Education Teacher, Speech Therapist & special Educator) Meaning & Importance of Yoga Elements of Yoga Introduction - Asanas, Pranayam, Meditation & Yogic Kriyas Yoga for concentration & related Asanas (Sukhasana; Tadasana; Padmasana & Shashankasana) Relaxation Techniques for improving concentration – Yog- nidra

Sept.	24	Unit VI Physical Activity & Leadership Training	Concept of Physical Activity & Inactivity Leadership Qualities & Role of a Leader Behaviour change stages for physical activity (Pre- contemplation ; Contemplatio n; Planning; Active; Maintenance) Creating leaders through Physical Education Meaning, objectives & types of Adventure Sports (Rock Climbing, Tracking, River Rafting, Mountaineering, Surfing and Para Gliding Safety measures during physical activity and adventure sports
Octob er	12	Unit VII Test, Measurement & Evaluation Unit VIII Fundamentals Of Anatomy & Physiology	Define Test, Measurement & Evaluation Importance Of Test, Measurement & Evaluation In Sports Calculation Of BMI & Waist - Hip Ratio Somato Types (Endomorphy, Mesomorphy & Ectomorphy) Procedures Of Anthropomatric Measurement – Height, Weight, Arm & Leg Length Define Anatomy, Physiology & Its Importance Function Of Skeleton System, Classification of Bones & Types of Joints Properties of Muscles

			Function & Structure Of Muscles Function & Structure Of Respiratory System, Mechanism of Respiration Structure Of Heart & Introduction to Circulatory System Oxygen debt, second-wind
Nov.	26	Unit IX Kinesiology, Biomechanics & Sports	Meaning & Importance of Kinesiology & Biomechanics in Phy. Edu. & Sports Concept of Musculoskeletal System Joints – Articulation of Bones (Neck, Shoulder, Elbow, Hip and Knees) Major Muscles around the Joints (Neck, Shoulder, Elbow, Hip and Knees) Levers & Its Types and its application in sports Equilibrium – Dynamic & Static And Centre of Gravity and its application in sports
Dec.	23	Unit X Psychology & Sports Unit XI Training In Sports	Definition & Importance of Psychology in Phy. Edu. & Sports Define & Differentiate Between Growth & Development Developmental Characteristics At Different Stage of Development Adolescent Problems & Their Management Define Learning, Laws Of Learning (Law of Readiness; Law of Effect & Law of Effect & Law of Exercise) & Transfer of Learning Emotion: Concept, Type & Controlling of emotion Meaning & Concept of Sports

			Training Principles of Sports Training Warming up & limbering down Load, Symptoms of Over-load, Adaptation & Recovery Skill, Technique & Style Role of Free-play in the development of Motor Component
Jan.	23	Unit XII Doping	Concept & classification of doping Prohibited Substances & Methods Athletes Responsibilities Side Effects Of Prohibited Substances Ergogenic aids & doping in sports Doping control procedure
Feb.	24	REVISION	
March	23	REVISION	

ज्ञानोदय सीनियर सेकेण्डरीस्कूल,खुरई कक्षा - ग्यारहवीं पाठ्यक्रम-विभाजन

माह	कार्य	आरोह	आरोह	पूरक पुस्तक	अपठित बोध एवं
	दिव	भाग -1	भाग -1	वितान	रचनात्मक लेखन
	स	{गद्य	{पद्य	भाग -2	
		खण्ड}	खण्ड}		
जून	18	.नमक का	हम तो एक-एक		कार्यालयी पत्र की पद्धति और
		दरोगा-	करि जाना		नमूने
		प्रेमचंद	संतो देखत जग		अपठित बोध
			बौराना – कबीर		
जुलाई	27	1.मियाँ	.(क)मेरे तो	भारतीय	जनसंचार माध्यम और
		नसीरूद्दीन	गिरधर	गायिकाओं	पत्रकारिता के विविध आयाम
		-कृष्णा	गोपाल,दूसरो न	में बेजोड़ लता	5.समाचार लेखन
		सोबती	कोई	मंगेशकर –	
		2	(ख) पग घुंघरू	कुमार	
		3. 4	बांधि मीरा नाची	गन्धर्व	
			– मीरा बाई		
अगस्त	23	विदाई	वे आँखे-	राजस्थान की	रोजगार सम्बन्धी पत्र
		संभाषण-	सुमित्रानंदन पंत	रजत बूँदें-	अपठित बोध- अपठित गद्यांश /
		बालमुकंद		अनुपम मिश्र	अपठित पद्यांश .निबंध-
		गुप्त			समसामयिक
		गलत			
		लोहा-			
		शेखर			
		जोशी			

सितंबर	24	स्पीती में	घर की याद-	राजस्थान की	विभिन्न
		बारिश-	भवानी प्रसाद	रजत बूँदें-	विभागों(पानी,बिजली,टेलीफ़ोन,संपा
		कृष्णनाथ	मिश्र	अनुपम मिश्र	दक,परिवहन आदि)से सम्बंधित
					समस्याओं के बारे में
					अधिकारियो को लिखे जाने वाले
					पत्रों के नमूने
					साहित्यिक विषयों पर निबंध
अक्टू	14	रजनी-	चंपा काले-काले		जनसंचार,संचार माध्यम(प्रिंट
म्बर		मन्नू	अक्षर नहीं		माध्यम)
		भंडारी	चीन्हती-त्रिलोचन		
नंम्बर	26	जाम्न का	गज़ल –दुष्यन्त	आलो आधारी-	
		पेड़-	् क्मार	बेबी हालदार	
		कृश्नचंदर	् (क)हे भूख मत		
		Ŭ	मचल		
			(ख)हे मेरे जूही		
			के फूल – अक्क		
			महादेवी		
<u> </u>	24				* 0 0
ादसंबर	24	भारत		2.आलो आधा	गैर पारम्परिक एवम् अप्रत्याशित
		माता-		रा – बबा	विषयों पर निबंध के नमून
		नहरु		हालदार	फाचर लखन
जनवरी	23		सबसे खतरनाक-		5.सास्कृतिक/नैतिक/विज्ञान
			पाश		सम्बन्धी निबंध
			3.आओ मिलकर		6.भाषण,उद्घोषित,स्वागत
			बचाएँ- निमर्ला		भाषण,संगोष्ठी,संचालन आदि के
			पुतुल		लिए प्रभावी सम्प्रेष्ण हेतु
			-		शब्दावली
फरवरी	24	पुनरावृत्ति			

	Class- XI (Physics)				
Months	No. of working days	Chapter / Topic	Portion to be taught	Portion for unit test	
April					
June	18	Chapter–1: Physical World Chapter–2: Units and Measurements	Chapter–1: Physical World Physics-scope and excitement; nature of physical laws; Physics, technology and society. Chapter–2: Units and Measurements Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. Length, mass and time measurements; accuracy and precision of measuring instruments; errors in measurement; significant figures. Dimensions of physical quantities, dimensional analysis and its applications.	TU-1	
July	27	Chapter–3: Motion in a Straight Line Chapter–4: Motion in a Plane	 Frame of reference, Motion in a straight line: Position-time graph, speed and velocity. Elementary concepts of differentiation and integration for describing motion, uniform and non-uniform motion, average speed and instantaneous velocity, uniformly accelerated motion, velocity - time and position-time graphs. Relations for uniformly accelerated motion (graphical treatment). Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors, relative velocity, Unit vector; resolution of a vector in a plane, rectangular components, Scalar and Vector product of vectors. Motion in a plane, cases of uniform velocity and uniform acceleration-projectile motion, uniform circular motion. 		

Aug.	23	Chapter–5: Laws of Motion Chapter–6: Work, Engery and Power	Chapter–5: Laws of Motion Intuitive concept of force, Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion. Law of conservation of linear momentum and its applications. Equilibrium of concurrent forces, Static and kinetic friction, laws of friction, rolling friction, lubrication. Dynamics of uniform circular motion: Centripetal force, examples of circular motion (vehicle on a level circular road, vehicle on a banked road). Chapter–6: Work, Engery and Power Work done by a constant force and a variable force; kinetic energy, work-energy theorem, power. Notion of potential energy, potential energy of a spring, conservative forces: conservation of mechanical energy (kinetic and potential energies); non-conservative forces: motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.	UT-2
Sept.	ot. 24 Chapter–7: System of Particles and Rotational Motion		Chapter–7: System of Particles and Rotational Motion Centre of mass of a two-particle system, momentum conservation and centre of mass motion. Centre of mass of a rigid body; centre of mass of a uniform rod. Moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications. Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions. Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects (no derivation). Statement of parallel and perpendicular axes theorems and their applications.	
October 12 Chapter–8: Gravitation		Chapter–8: Gravitation	Chapter–8: Gravitation Kepler's laws of planetary motion, universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth. Gravitational potential energy and gravitational potential, escape velocity, orbital velocity of a satellite, Geo-stationary satellites.	

Nov.	26	Chapter–9: Mechanical Properties of Solids Chapter–10: Mechanical Properties of Fluids	Chapter–9: Mechanical Properties of Solids Elastic behaviour, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear modulus of rigidity, Poisson's ratio; elastic energy. Chapter–10: Mechanical Properties of Fluids Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes), effect of gravity on fluid pressure. Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity, Bernoulli's theorem and its applications. Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise.	UT-3
Dec.	Dec. 23 Chapter–11: Thermal Properties of Matter		Chapter–11: Thermal Properties of Matter Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; Cp, Cv - calorimetry; change of state - latent heat capacity. Heat transfer-conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law, Green house effect.	

Feb.	23	Chapter-1 to Chapter- 15	Revision	
Jan.	23	Chapter–13: Kinetic Theory Chapter–14: Oscillations and Waves Chapter–15: RAY OPTICS	Thermal equilibrium and definition of temperature (zeroth law of thermodynamics), heat, work and internal energy. First law of thermodynamics, isothermal and adiabatic processes. Second law of thermodynamics: reversible and irreversible processes, Heat engine and refrigerator. Chapter–13: Kinetic Theory Equation of state of a perfect gas, work done in compressing a gas. Kinetic theory of gases - assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of freedom, law of equi-partition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number. Chapter–14: Oscillations and Waves Periodic motion - time period, frequency, displacement as a function of time, periodic functions. Simple harmonic motion (S.H.M) and its equation; phase; oscillations of a loaded spring- restoring force and force constant; energy in S.H.M. Kinetic and potential energies; simple pendulum derivation of expression for its time period. Free, forced and damped oscillations (qualitative ideas only), resonance. Wave motion: Transverse and longitudinal waves, speed of wave motion, displacement relation for a progressive wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats, Doppler effect. Ray Optics: Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and its applications, optical fibres, refraction at spherical	UT-4
			Charten 12: The sume demonstration	

CLASS : XI (HORNBILL & SNAPSHOTS)

MONTH	DETAILED SYLLABUS			
June	Hornbill: L-1 Portrait of A Lady, P-1 A Photograph			
	Writing skills – Classified advertisement			
	Grammar: Tense, Subject – Verb agreement			
July	Hornbill: L-2 We 're Not Afraid to Die, L-3 Discovering Tut: the Saga Continues,			
	Snapshots: L-1The Summer of a Beautiful White Horse, L-2The Address			
	Grammar: Active Passive, Error Correction			
	Writing skills – Display Advertisement / Poster making, Notice Writing			
August	Hornbill:L-4 Landscape of the Soul, P-2 The Laburnum Top			
	Snapshots: L-3 Ranga's Marriage, L-4 Albert Einstein at school			
	Grammar: Determiners, Prepositions, Clauses, Error Correction			
	Writing Skills: Letter to Editor, Office Letter			
September	mber Hornbill: P-3 Voice of the Rain, L-5 The Ailing Planet: the Green Movement's			
	Role, L-6 The Browning Version			
	Snapshots: L-5 Mother's Day, L-6 Ghat of the only world			
	Grammar: Direct and Indirect Speech			
	Writing Skills: advertisement, Job Application.			
October	Hornbill: P-4 Childhood, L-7 The adventure			
	Snapshots: L-7 Birth			
	Grammar: Degree, Missing Words, Rearranging words			
	Writing Skills: Business Letter (Placing order & Reply)			
November	Hornbill: L-8 Silk Road, P-5 Father to Son			
	Snapshots: L-8 The Tale of Melon City			
	Grammar: Error Correction, Missing Words, Rearranging Words			
	Writing Skills: Article, Report Writing			
December	Hornbill: Revision- Discovering Tut, Landscape of the Soul, Browning Version			
	Snapshots: Revision – Mother's Day, The Ghat of the Only World			
	Grammar: Missing words, Error Correction, Rearranging Words			
	Reading: Note Making			
	Writing Skills: Debate and Speech			
January	Hornbill: Revision and Doubt clearance			
2020	Snapshots: Revision and Doubt clearance			
	Grammar: Practice			
	Writing Skills: Practice			
February	Hornbill: Revision and Doubt clearance			
2020	Snapshots: Revision and Doubt clearance			
	Grammar: Practice			
	Writing Skills: Practice			

(SUBJECT TEACHER)

	Class- 11th (History)						
Month	No. of days	CHAPTER-No	Portion to be taught	CHAPTER / Portion for UT			
March andApril	16						
June	18	Theme 1- From the beginning of time Theme 2- writing and city life	Evolution of human beings, fossils, primates, hunter and gatherer. Earliest civilisation i.e mesopotamia, life and culture in mesopotamia, time line from 7000-6000 BCE	THEME 1 AND THEME 2			
July	27	Theme 3 - an empire across three continents. Theme 4- The central islamic land.	Time line of roman empire, geographical, cultural, political & economic condition in roman empire. Beginning of islamic religion from 6 C.E. Life and journey of prophet muhammad and his teachings of islam, caliphate of islamic land, crusades,sufism, teachings of quran.	THEME 3 , THEME 4			
August	23	Theme 5- Nomadic empire	Nomadic empires, history of genghis khan, expansion of mongol empire. Ideology of genghis khan, mongol dynasty and their ruling areas	THEME 5			
sep	24	Theme 6- The three orders	The three orders, feudalism, hierarchy system in france, england, work of different orders. Monks and their role in society, condition of peasants in society, modernisation in european countries. Cathedrals towns, structure and design of church.	THEME 6			
Oct.	12	Theme 7- Changing cultural tradition	changing cultural tradition, renaissance period during 14 to 17 century, revival in architecture, invention of printing technology, concepts of science generated. Ideology of martin-luther king on christianity.	THEME 7			

Nov	26	Theme 8- confrontation of cultures Theme 9- The industrial revolution	communities of caribbean islands & brazil, civilisation of america i.e- incas, maya & the Aztecs,voyages by different europeans towards america, slave trade. Revolutionary changes in industries like coal& iron, weaving etc, steam power and invention of trains, canals&railways, condition of women duing industrial revolution	THEME 8 THEME 9
Dec	23	Theme 10- Displacing indigenous people	European imperialism in america, native people of north america and their movement. History of australia and colonies set up by european.	Theme 10
Jan	23	Theme 11- paths to modernisation	History of japan and china. Political system in japan and china, communist party of china, story of taiwan.	Theme 11

	GYANODAYA SR. SEC SCHOOL KHURAI, SAGAR (M.P.) SYLLABUS- GEOGRAPHY CLASS- 11					
SR NO	MONTH	NO. OF WORKIN G DAYS	CHAPTER & TOPICS	PORTION TO BE TOUGHT	SYLLABUS FOR EXAM	
1	JUNE	18	CH-1 GEOGRAPHY AS A DISCIPLINE	Geography as a discipline;geography as an integrating discipline;physical geography and natural sciences; geography and social sciences;branches of geography; branches of geography (based on systematic approach) 1.physical geography 2.human geography 3.biogeography; branches of geography based on regional approach; physical geography and its importance; what is geography?	UNIT TEST	
2	JULY	27	CH- 2 THE ORIGIN AND EVOLUTION OF THE EARTH CH- 3 INTERIOR OF THE EARTH CH-4 DISTRIBUTION OF OCEANS AND CONTINENTS	Ch-2 the origin and evolution of the earth; early theories; origin of the earth; modern theories origin of the universe; the star formation; formation of planets; our solar system; the moon; evolution of earth; evolution of lithosphere, atmosphere, hydrosphere;origion of life. Ch-3 interior of the earth; sources of information; direct source, indirect source;earthquake, earthquake waves; types of earthquake; effect of earthquake; structure of earth: the core, the mental, the crust; volcanoesand volcanic landforms; types of volcanos; intrusive forms. Ch-4 distribution of oceans and continents; continental drift; evidence in supporting of the continental drift; force for drifting post-drift studies; ocean floor configuration; distribution of earthquake and volcanoes; concept of sea floor: spreading plate tectonic: divergentboundries, convergent boundries, transform boundries;rate of plate movement: force for the plate movement; movement of the indian plate.		

3	AUGUST	23	CH-5 MINERALS AND ROCKS CH-6 GEOMORPHIC PROCESSES	Ch-5 minerals and rocks; physical charecteristics; some major mineral & their charecteristics; metalic &non-metalic mineral; rocks; types of rocks:rocks cycle. Ch-6 geomorphic processes;endogenic processes;diastrophism;volcanism;exogenic processes;weathering;chemical weathering processes;physical weathering processes;biological activity and weathering;special effects of weathering; significance of weathering;mass movements;slow movements;rapid movements;landslides;erosion and deposition;soil formation: soil and soil contents;process of soil formation;soil-forming factors.	
4	EPTEMBE	24	CH-7 LANDFORMS AND THEIR EVOLUTION. CH-8 COMPOSITION AND STRUCTURE OF ATMOSPHERE CH-9 SOLAR RADIATION, HEAT BALANCE AND TEMPERATURE	Ch-7 landforms and their evolution;running water;erosional landforms:incised or entrenched meanders;potholes and plunge pools;valleys;depositional landforms; meanders; floodplains, natural levees and point bars;alluvial fans; deltas ;braided channels;groundwater;erosional landforms;pools, sinkholes, lapies and limestone pavement;depositional landforms; stalactites, stalagmites and pillars; glaciers; erosional landforms;moraines; waves and currents:high rocky coasts; ch-8 composition of the atmosphere; gases; water vapour; dust particles: structure of atmosphere; element of weather & climate. Ch-9 solar radiation, heat balance and temperature;solar radiation;variability of insolation at the surface of the earth; heating and cooling of atmosphere;terrestrial radiation;heat budget of the planet earth;temperature;inversion of temperature.	

5	OCTOBER	12	CH-10 ATMOSPHERIC CIRCULATION AND WEATHER SYSTEMS CH-11 WATER IN THE ATMOSPHERE CH-12 WORLD CLIMATE AND CLIMATE CHANGE	CH-10 Atmospheric pressure;Vertical Variation of Pressure;Horizontal Distribution of PressureWorld Distribution of Sea Level Pressure;Forces Affecting the Velocity and Direction of Wind;General circulation of the atmosphere;General Atmospheric Circulation and its Effects on Oceans. CH-11 Water in the atmosphere;Evaporation and condensation;Dew; Frost;Fog& Mist; Cloud;Precipitation; Types of Rainfall;World Distribution of Rainfall. CH-12 World climate and climate change;Koeppen's scheme of classification of climate;Climate change;Climate in the recent past;Causes of Climate Change;Global Warming;	
6	NOV	26	CH-13 WATER (OCEANS) CH-14 MOVEMENTS OF OCEAN WATER CH-15 LIFE ON THE EARTH	CH-13 Water (oceans);Hydrological cycle;Relief of the ocean floor;Divisions of the Ocean Floors;Minor Relief Features;Temperature of ocean waters;Factors Affecting Temperature Distribution;Horizontal and Vertical Distribution of Temperature;Salinity of ocean waters;Horizontal distribution of salinity;Vertical Distribution of Salinit. CH- 14 Movements of ocean water;Waves; Tides;Types of tides:Importance of Tides;Ocean current; Types of Ocean Currents; Characteristics of Ocean Currents. CH-15 Life on the earth;Ecology;Types of Ecosystems;Structure and Functions of Ecosystems;Types of Biomes;Biogeochemical Cycles;Ecological Balance.	

7	DEC	23	CH- 16 BIODIVERSITY AND CONSERVATION CH-1 INDIA CH-2 STRUCTURE AND PHYSIOGRAPHY CH-3 DRAINAGE SYSTEM	CH-16 Biodiversity and conservation;Genetic Diversity;Species Diversity;Ecosystem Diversity;Importance of Biodiversity; Ecological Role of Biodiversity;Economic Role of Biodiversity; Scientific Role of Biodiversity;Loss of biodiversity E ndangered Species;Vulnerable Species;Conservation of biodiversity. CH-1 India – location;Size;India and its neighbours. CH-2 Structure and physiography;The peninsular block;The himalayas and other peninsular mountains;Indo-ganga- brahmaputra plain; physiography; the north and northeastern mountains; the northern plains; the peninsular plateau; the indian desert; the coastal plains; the islands. CH-3 Drainage system; important drainage patterns; drainage systems of india; the himalayan drainage; evolution of the himalayan drainage; the river systems of the himalayan drainage; the indus system;the ganga system; the evolution of peninsular drainage system; river systems of the peninsular drainage; smaller rivers flowing towards the west; small rivers flowing towards the east; river regimes; extent of usability of river water.	
8	JAN	23	CH- 4 CLIMATE CH-5 NATURAL VEGETATION	Climate; unity and diversity in the monsoon climate; factors determining the climate of india; factors related to location and relief; factors related to air pressure and wind; mechanism of weather in the winter seasonMechanism of weather in the summer season; the nature of indian monsoononset of the monsoon; rain-bearing systems and rainfall distribution; ei-nino and the indian monsoon; break in the monsoon; the rhythm of seasons; the cold weather season; understanding the monsoon; the hot weather season; the southwest monsoon season; monsoon winds of the arabian sea; monsoon winds of the bay of bengal; chseason of retreating monsoon; characteristics of monsoonal rainfall; traditional indian seasons; distribution of rainfall; variability of rainfall; climatic regions of india; monsoons and the economic life in india; global warming; CH-5 Natural vegetation; types of forests (i) tropical evergreen and semi evergreen forests (ii) tropical deciduous forests (iii) tropical thorn forests; (iv) montane forests (v) littoral and swamp forests; forest cover in india; forest conservation; farm forestry; wildlife; wildlife conservation in india; biosphere reserves; nilgiri biosphere reserve; panda davi biosphere reserve; inlight biosphere reserve;	

(9 FEB	24	CH-6 SOILS CH-7 NATURAL HAZARDS AND DISASTERS	CH- 6 Soile;Classification of soils; (i) alluvial soils (ii) black soils (iii) red and yellow soils (iv) laterite soils (v) arid soils (vi) saline soils (vii) peaty soils (viii) forest soils; soil degradation; soil erosion; soil conservation. CH-7 Natural hazards and disasters; what is a disaster?; classification of natural disasters; natural disasters and hazards in india; earthquakes; tsunami; tropical cyclone; floods; droughts; landslides; disaster management; disaster management bill, 2005;conclusion;	
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SYLLABUS OF CLASS XI (ACCOUNTANCY)

Months	No. of working days	Chapter / Topic	Portion to be taught	Portion for unit test
JUNE	18	Introduction to Accounting	Concept, objectives, advantage and limitations, types of accounting informations users of accounting information and their needs and accounting terms,	
JULY	27	Theory base of accounting, Recording of Transaction-I	Fundamental accounting assumptions, accounting principles, Double entry system of accounting, Basis of accounting, Analysis of transactions using accounting equation	
AUGUST	23	Recording of Transaction-II	Rules of debit and credit, origin of transactions- source document and supporting vouchers, format and recording journals, cash book single and double column, petty cash book, other books, purchase, sales, purchase return and sales return, ledger	
SEPT.	24	Bank Reconcillation statement, ledger and trial balance, rectification of error	Concept, need, preparation of BRS, Objectives and preparation, Types of errors, detection and rectification of errors, preparation of suspense account,	
OCT.	12	Depreciation, provision and reserve	. concept, need and factor affecting depreciation, method of computation of depreciation -SLM and WDV accounting treatment of depreciation provision and reserve	
NOV.	26	Depreciation continue, Bill of exchange, Financial statement-I	Problems of depreciation, Bill of exchange and promissory note, definition, features, parties, specimen and distinction, terms of bill, due date, days of grace, date of maturity, discounting of bill, endorsement of bill, bill sent for collection, dishonor of bill, noting of bill, retirement and renewal of bill, accounting treatment of bill transactions.	
DEC.	23	Financial statement-I Financial statement- II	Financial statement objectives and importance trading P/L a/c, gross profit, operating profit, net profit. Balance sheet- Need and grouping, adjustments in preparing financial statements preparation of trading, P/L, B/S	

JAN.	23	.Accounting for incomplete records	Incomplete records : uses and Limitations; Ascertainment of profit by using statement of affair method,	
		Computers in accounting	Introduction to operating software, utility software and application software, AIS as a part of MIS, automation of accounting process, stages in automation, kinds of accounting software.	

Months No. of **Chapter / Topic** Portion to be taught **Portion for unit** working test davs JUNE Introduction What is Economics? 18 Meaning, scope, functions and Statistics for importance of statistics in Economics **Economics** Collection of data - sources of data primary and secondary; how basic data is collected, with concepts of Sampling; Collection, Sampling and Non-Sampling errors; **Organisation and** Presentation of methods of collecting data; some important sources of secondary data: data Census of India and National Sample Survey Organisation. Organisation of Data: Meaning and JULY 27 types of variables; Frequency Collection, Organisation and Distribution. Presentation of Presentation of Data: Tabular Presentation and Diagrammatic data 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). Statistical Tools Measures of Central Tendency- mean and Interpretation (simple and weighted), median and mode Statistical Tools AUGUST 23 Measures of Dispersion - absolute and Interpretation dispersion (range, guartile deviation, mean deviation and standard deviation); relative dispersion (co-efficient of range, co-efficient of quartile-deviation, coefficient of mean deviation, co-efficient of variation); Lorenz Curve: Meaning, construction and its application. Correlation - meaning and properties, scatter diagram; Measures of correlation - Karl Pearson's method (two variables ungrouped data) Spearman's rank correlation. SEPT. **Statistical Tools** 24 Introduction to Index Numbers and Interpretation meaning, types - wholesale price index, consumer price index and index of industrial production, uses of index numbers; Inflation and index numbers. Meaning of microeconomics and . Introduction macroeconomics; positive and normative economics; What is an economy? **Microeconomics** Central problems of an economy: what, how and for whom to produce; concepts of production possibility frontier and opportunity cost.

SYLLABUS OF CLASS XI (ECONOMICS)

OCT.	12	Demand	Demand, market demand, determinants of demand, demand schedule, demand curve and its slope, movement along and shifts in the demand curve; price elasticity of demand - factors affecting price elasticity of demand: measurement	
			of price elasticity of demand – percentage-change method.	
NOV.	26	Consumer's Equilibrium and Demand	Consumer's equilibrium - meaning of utility, marginal utility, law of diminishing marginal utility, conditions of consumer's equilibrium using marginal utility analysis. Indifference curve analysis of consumer's equilibrium-the consumer's budget (budget set and budget line), preferences of the consumer (indifference curve, indifference map) and conditions of consumer's equilibrium.	
DEC.	23	Producer Behaviour and Supply	Meaning of Production Function – Short- Run and Long-Run Total Product, Average Product and Marginal Product. Returns to a Factor Cost: Short run costs - total cost, total fixed cost, total variable cost; Average cost; Average fixed cost, average variable cost and marginal cost- meaning and their relationships. Revenue - total, average and marginal revenue - meaning and their relationship. Producer's equilibrium-meaning and its conditions in terms of marginal revenue marginal cost. Supply, market supply, determinants of supply, supply schedule, supply curve and its slope, movements along and shifts in supply curve, price elasticity of supply; measurement of price elasticity of supply - percentage- change method.	
JAN.	23	Forms of Market and Price Determination under Perfect Competition with simple applications.	Perfect competition - Features; Determination of market equilibrium and effects of shifts in demand and supply. Other Market Forms - monopoly, monopolistic competition, oligopoly - their meaning and features. Simple Applications of Demand and Supply: Price ceiling, price floor.	