Doon School Srinagar

[HMT, Opposite Hokarsar, National Highway 1A, Srinagar, J&K, India]
Ph: +91 9103155601, 9103155603, Email: info@doonsrinagar.com, www.doonsrinagar.com
Affiliated to CBSE New Delhi, Affiliation No. 730082

SYLLABUS BREAKUP – 2025/ 26
[Grade: X]

ENGLISH

MARCH

CHAPTER/TOPIC		TEACHINGPERIODS
		23
1ST WEEK	A Letter to God A Triumph of Surgery	
2ND WEEK	Dust of Snow Fire and Ice	
3RD WEEK	Nelson Mandela –Long Walk to Freedom Formal Letter Writing (Letter to the Editor)	
4TH WEEK	Tenses	

APRIL

CHAPTER/TOPIC		TEACHING PERIODS
		27
1ST WEEK	Two Stories About Flying Part1 Part2	
2ND WEEK	The Thief's Story Subject-Verb Agreement	
3RD WEEK	A Tiger in the Zoo How to Tell Wild Animals	
4TH WEEK	Revision	
5TH WEEK	Pre Mid Examination	

MAY

CHAPTER/TOPIC		TEACHING PERIODS
		26
1ST WEEK	From the Diary of Anne Frank The Ball Poem	
2ND Week	The Midnight Visitor Amanda	
3RD Week	Glimpes of India Part 1, 2	
4TH WEEK	Glimpes of India Part 3 Analytical Paragraph (Map/Chart/Graph/Cues)	

JUNE

CHAPTER/TOPIC		TEACHING PERIODS
		22
1st Week	A Question of Trust Modals	
2ND WEEK	Mijbil, the Otter The Trees	
3RD WEEK	Madam Rides the Bus Fog	
4TH WEEK	Revision	
5th WEEK	MID-TERM EXAMINATION (25 JUNE-5JULY)	

JULY

CHAPTER/TOPIC		TEACHING PERIODS
		27
1ST WEEK	MID-TERM EXAMINATION	
2ND WEEK	The Sermon at Benaras The Tale of Custard, the Dragon	
3RD WEEK	Reported Speech	
4TH WEEK	Reported Speech	
5TH WEEK	(Summer Break)	

AUGUST

CHAPTER/TOPIC		TEACHING PERIODS
		24
1ST WEEK	Footprints Without Feet Determiners	
2ND WEEK	The Proposal	
3RD WEEK	The Making of a Scientist	
4TH WEEK	Letter of Order/Complaint	

SEPTEMBER

CHAPTER/TOPIC		TEACHING PERIODS
		24
1ST WEEK	The Making of a Scientist	
2ND WEEK	For Anne Gregory	
3RD WEEK	Revision	
4TH WEEK	(22nd Sept -27th Sept POST MID EXAMINATION)	

OCTOBER

CHAPTER/TOPIC		TEACHING PERIODS
		23
1ST WEEK	The Necklace	
2ND WEEK	Bholi	
3RD WEEK	The Book that Saved the Earth	

4TH WEEK	Discursive passage & Case-based factual passage

NOVEMBER

CHAPTER/TOPIC		TEACHING PERIODS
		23
1ST WEEK	Integrated Grammar	
2ND WEEK	Revision	
3rd WEEK	FINAL TERM EXAMINATION(24th NOV-6th DECEMBER	
4th WEEK	FINAL TERM EXAMINATION(24th NOV-6th DECEMBER	
5th WEEK		

دون اسکول سرینگر

ایچ ایم ٹی ہو کر سر نیشنل ہائی وے، سرینگر، جموں کشمیر، انڈیا

رابطہ نمبر: +91 9103155601, 9103155603

Affiliated to CBSE New Delhi, Affiliation No. 730082

تقسیم نصاب بابت سال ۲۰۲۴ تا ۲۰۲۵

جماعت: دہم

مضمون: اردو

<u>ماہ مارچ</u>

مطلوبہ دروس	عملی کام: درست تلفظ
	اسباق
پہلا ہفتہ	تعارف: نظم سوانح اور ادبی خدمات (اسماعیل میرٹھی)
دوسرا ہفتہ	نظم: حمد سوانح اور ادبی خدمات (کنھیا لال کپور) تعارف: انشائیہ
تیسرا ہفتہ	سبق: بے تکلفی
چوتھا ہفتہ	قواعد: فعل معروف فعل مجہول (دور پاس: بابا فرید گنج شکر)

ماہ اپریل

مطلوبہ دروس	عملی کام : املاء
اسباق	
پہلا ہفتہ	سوانح اور ادبی خدمات (نظیر اکبرآبادی)
دوسرا ہفتہ	نظم : نیکی اور بدی (دور پاس : ڈائری لکھیے)
تیسرا ہفتہ	تعارف : غزل (غزل : ہستی اپنی حباب کی سی ہے) سوانح اور ادبی خدمات (میر تقی میر)
چوتھا ہفتہ	پری مِڈ ٹرم امتحان

ماہ مئی

مطلوبہ دروس	عملی کام : بلند خوانی
اسباق	
پہلا ہفتہ	سبق : زبانوں کا گھر ہندوستان سوانح اور ادبی خدمات (سید احتشام)
دوسرا ہفتہ	سبق : خدا کے نام خط
تیسرا ہفتہ	متضاد الفاظ ۔ واحد جمع (دور پاس : کاٹھ کے بونے)
چوتھا ہفتہ	قواعد : خطوط نگاری
پانچواں ہفتہ	سبق : ڈاکٹر بھیم راو امبیڈ کر قواعد : فعل ماضی، فعل حال، فعل مستقبل

ماہ جون

مطلوبہ دروس	عملی کام : مشاعرہ	
	اسباق	
پہلا ہفتہ	سبق : آدمی کی کہانی سوانح اور ادبی خدمات (محمد مجیب)	
دوسرا ہفتہ	غزل : کوئی امید بر نہیں آتی	
	سوانح اور ادبی خدمات (مرزا غالب)	
تیسرا ہفتہ	قواعد : رموز اوقاف	
چوتھا ہفتہ	**مڈ ٹرم امتحان**	

ماہ جولائی

مطلوبہ دروس	عملی کام : تحریری مقابلہ	
	اسباق	
پہلا ہفتہ	**مڈ ٹرم امتحان**	
دوسرا ہفتہ	سبق : انٹرنیٹ	

	قواعد : مضمون نگاری (دور پاس : عقلمند مچھیرا)	تیسرا ہفتہ
	سبق : نئی روشنی (تعریف : مکالمہ) (دور پاس : جھوٹ کی پول)	چوتھا ہفتہ
	اسم معرفہ اسم نکرہ (دور پاس : بروٹیاں ، دادا صاحب پھالکے)	پانچواں ہفتہ

ماہ اگست

عملی کام پیشکش	مطلوبہ دروس
اسباق	
نظم : پہاڑ اور گلہری سوانح اور ادبی خدمات (علامہ اقبالؔ)	پہلا ہفتہ
سبق : رضیہ سلطان (میرے غم کی انھیں کس)	دوسرا ہفتہ
سبق : کاٹھ کا گھوڑا سوانح اور ادبی خدمات (رتن سنگھ)	تیسرا ہفتہ
قواعد : سابقہ ، لاحقہ تذکیر و تانیث (دور پاس : گلبدن بیگم)	چوتھا ہفتہ

ماہِ ستمبر

مطلوبہ دروس	عملی کام : مشکل الفاظ کی مشق
اسباق	
پہلا ہفتہ	نظم : اے شریف انسانو سوانح اور ادبی خدمات (ساحر لدھیانوی)
دوسرا ہفتہ	تعارف : ڈراما سوانح اور ادبی خدمات (حبیب تنویر) (دور پاس : نالندہ)
تیسرا ہفتہ	سبق : کارتوس
چوتھا ہفتہ	**پوسٹ مِڈ ٹرم امتحان**

ماہِ اکتوبر

مطلوبہ دروس	عملی کام : اسباق کی پیشکش
اسباق	
پہلا ہفتہ	نظم : قدم بڑھاو دوستو سوانح اور ادبی خدمات (بشر نواز)
دوسرا ہفتہ	(دور پاس : بڑے لوگوں کی دلچسپ باتیں، قرۃ العین حیدر میری پیاری چڑیوا بھی اور گاو)
تیسرا ہفتہ	قواعد : مترادفات، محاورات، کہاوتیں

	چوتھا ہفتہ	(دور پاس : دل نادان تجھے)

<u>ماہ نومبر</u>

مطلوبہ دروس		
	اسباق	
پہلا ہفتہ	اعادہ	
دوسرا ہفتہ	اعادہ	
تیسرا ہفتہ	**سالانہ امتحان**	
چوتھا ہفتہ	**سالانہ امتحان**	

DOON SCHOOL SRINAGAR

HMT, OPP. HOKARSAR NATIONAL HIGHWAY, 1A, SRINAGAR, JAMMU AND KASHMIR 190012

SYLLABUSBREAKUP-2025/26
{Grade-X}

HINDI

MARCH

CHAPTER/TOPIC	TEACHINGPERIODS
क. साखी (कबीर दास)	
ख. बड़े भाई साहब	
अपठित गद्यांश, पदबंध	

1ST WEEK	साखी (कबीर दास)
2ND WEEK	बड़े भाई साहब
3RD WEEK	अपठित गद्यांश, पदबंध
4TH WEEK	Activity (□□□□□□□□□ पढ़ने की प्रतियोगिता)

APRIL

CHAPTER/TOPIC	TEACHINGPERIODS
क. पद (सूरदास)	
ख. मनुष्यता	
ग. मुहावरे और पद बंध□□	
अपठित गद्यांश	
□□□□□□□, मौखिक □□□□	

1ST WEEK	पद (सूरदास), □□□□ □□□□
2ND WEEK	मनुष्यता, मुहावरे
3RD WEEK	Revision
4TH WEEK	Pre Mid Examination
5TH WEEK	

MAY

CHAPTER/TOPIC	TEACHINGPERIODS

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1ST WEEK	पर्वत प्रदेश में पावस
2ND WEEK	▯▯▯, ▯▯▯▯
3RD WEEK	समास
4TH WEEK	त▯▯▯रा वामीरो कथा

JUNE

CHAPTER/TOPIC क. ▯▯ ▯▯▯ ▯▯ ▯▯▯▯ ख. ▯▯▯▯▯ ▯▯ ▯▯ ▯▯▯▯▯ ▯▯▯▯ ▯▯▯ ▯▯▯▯▯▯▯▯ ▯▯▯▯, ▯▯▯▯▯ ▯▯▯▯	TEACHINGPERIODS
1ST WEEK	कर चले हम फिदा, ▯▯▯▯▯ लेखन
2ND WEEK	डायरी का एक पन्ना, ▯▯▯▯▯▯▯▯ ▯▯▯▯
3RD WEEK	Revision
4TH WEEK	Mid Term Examination
5TH WEEK	

JULY

CHAPTER/TOPIC क. ▯▯▯▯▯▯▯▯▯ ख. ▯▯▯▯▯ ▯▯▯▯ ▯▯▯▯ ▯▯▯ ▯▯▯▯▯▯▯▯ ▯▯▯▯, ▯▯▯▯▯ ▯▯▯▯▯	TEACHINGPERIODS
1ST WEEK	Mid Term Examination
2ND WEEK	हरिहर काका
3RD WEEK	विज्ञापन लेखन, आत्मत्राण

4TH WEEK	चित्र वर्णन,Activity(▯▯▯▯▯▯▯▯ लेखन की प्रतियोगिता)

AUGUST

CHAPTER/TOPIC	TEACHINGPERIODS
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1ST WEEK	तीसरी कसम के शिल्पकार शैलेंद्र
2ND WEEK	आप कहां दूसरों के दुख से दुखी होने वाले
3RD WEEK	अपठित गद्यांश
4TH WEEK	लघु कथा लेखन
5TH WEEK	Activity (▯▯▯▯▯▯▯▯▯▯ -नाटक) related to the chapter

SEPTEMBER

CHAPTER/TOPIC	TEACHINGPERIODS
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1ST WEEK	कारतूस
2ND WEEK	ईमेल लेखन
3RD WEEK	Revision
4TH WEEK	Post Mid Examination

OCTOBER

CHAPTER/TOPIC	TEACHINGPERIODS
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1ST WEEK	सपनों के से दिन
2ND WEEK	पतझड़ में टूटी पत्तियां
3RD WEEK	रचना के आधार पर वाक्य रूपांतरण
4TH WEEK	Activity (□□□□ -लेखन की प्रतियोगिता)

NOVEMBER

CHAPTER/TOPIC	TEACHINGPERIODS
□.□□□□ □□□□□□□	
□□□□□ □□□□□□□	
1ST WEEK	टोपी शुक्ला, □□□□□ □□□□□□□
2ND WEEK	Revision
3RD WEEK	Revision
4TH WEEK	Pre Board

DECEMBER

CHAPTER/TOPIC	TEACHINGPERIODS
1ST WEEK	
2ND WEEK	
3RD WEEK	
4TH WEEK	

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SYLLABUS BREAKUP – 2025/ 26
[Grade: X]

MATHEMATICS

MARCH

CHAPTER/ TOPIC chapter 1		TEACHINGPERIODS
		20
1ST WEEK	Real numbers: Introduction to number system, prime & composite numbers, Fundamental theorem of Arithmetic, Prime factorisation, HCF & LCM (related exercise) , HCF(a, b)xLCM(a, b) = product of a & b.	
2ND WEEK	Rational & Irrational numbers, Proofs of √2, √3, √5 related exercise (1.2).	
3RD WEEK	Chapter 2: Polynomials, Types of polynomials, degree of a polynomials, zeros of a polynomial, Geometrical meaning of zero of a polynomial, Relationship between zeros of a polynomial & their coefficients.	
4TH WEEK	Chapter 3: Pair of Linear equations in two variables(Introduction), solution of Linear equations, Graphical method.	

APRIL

CHAPTER/TOPIC		TEACHINGPERIODS
		10
1ST WEEK	Types of equations (Consistency & inconsistency) , Algebraic conditions for number of solutions, (Related exercise)	
2ND WEEK	Solution of a pair of linear equations in two variables by substitution, by elimination Simple situational problems.	
3RD WEEK	**REVISION**	
4TH WEEK	**PRE-MID EXAMINATION**	

MAY

CHAPTER/TOPIC		TEACHING PERIODS
		22
1ST WEEK	Chapter 4 : Quadratic Equations(introduction), Standard form of a quadratic equations, solutions of a quadratic equations (only real roots) by factorisation method, by using quadratic formula.	
2ND WEEK	Relationship between discriminant & nature of roots, situational problems based on quadratic equations related to day to day activities to be incorporated.	
3RD WEEK	Chapter 5: Triangles(Introduction), Basic proportionality Theorem & it's converse (related exercise)	
4TH WEEK	similar Triangles, Various Criteria of similarity of triangles (AAA, SSS, SAS)	
5TH WEEK	Chapter 6:Introduction to Trigonometry, Trigonometric ratios of an acute angle of a right -angled triangle, Values of Trigonometric ratios between 0° to 90°, Trigonometric Identities.	

JUNE

CHAPTER/TOPIC		TEACHING PERIODS
		10
1ST WEEK	Chapter7: Applications of Trigonometry (Introduction)	
2ND WEEK	Exercise based on Application of Trigonometry.	
3RD WEEK	**REVISION**	
4TH WEEK	**MID-TERM EXAMINATION**	

JULY

CHAPTER/TOPIC		TEACHING PERIODS
		10
1ST WEEK	**MID-TERM EXAMINATION**	
2ND WEEK	Chapter 8: Circles (introduction), Tangent to a circle, Point of contact (related exercise) , Lengths of tangents drawn from an external point to a circle are equal.	
3RD WEEK	The tangent at any point of a circle is perpendicular to the radius through the point of contact (related exercise)	
4TH WEEK	Chapter 9: Areas related to Circles, Area of sectors and segments of a circle.	
5th WEEK	**SUMMER BREAKS**	

AUGUST

CHAPTER/TOPIC		TEACHING PERIODS
		18
1ST WEEK	Chapter 10: Surface area and volumes, volumes of combination of cubes, cuboids.	
2ND WEEK	Surface area and volumes, volumes of combination of any two spheres, hemispheres and right circular cylinders / cones.	
3RD WEEK	Exercise bases on Suface area & volumes.	
4TH WEEK	Chapter 11: Arithmetic progression, motivation for studying AP, General form of an AP(related exercise 1)	

SEPTEMBER

CHAPTER/TOPIC		TEACHING PERIODS
		10
1ST WEEK	Derivation of the nth term & sum of the first n terms of an A.P.	
2ND WEEK	Application in solving daily life problems.(related exercise)	
3RD WEEK	**REVISION**	
4TH WEEK	**POST-MID EXAMINATION**	

OCTOBER

CHAPTER/TOPIC		TEACHING PERIODS
		18 + 4
1ST WEEK	Chapter 12: Coordinate Geometry: Distance formula (related exercise)	
2ND WEEK	Section formula (internal division only) (related exercise).	
3RD WEEK	Chapter 13: Statistics, Mean, median (related exercise)	
4TH WEEK	**Mode of grouped data (related exercise).**	

NOVEMBER

CHAPTER/TOPIC		TEACHING PERIODS
1ST WEEK	**Chapter 14: Probability, classical definition of probability, simple problems based on finding the probability of an event.**	
2ND WEEK	**REVISION**	

3RD WEEK	**FINAL TERM EXAMINATION**
4TH WEEK	**FINAL TERM EXAMINATION**

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SYLLABUS BREAKUP – 2025/ 26
[Grade: X]

PHYSICS

MARCH

CHAPTER/TOPIC		TEACHINGPERIODS
1ST WEEK	Reflection of light by curved surfaces; centre of curvature, principal axis, principal focus, focal length	
2ND WEEK	Images formed by spherical mirrors, mirror formula.	
3RD WEEK	Numericals on mirror formula.	
4TH WEEK	Magnification, numericals	

APRIL

CHAPTER/TOPIC		TEACHINGPERIODS
1ST WEEK	Refraction; Laws of refraction, refractive index.	
2ND WEEK	Numericals and competency based questions	
3RD WEEK	**REVISION**	
4TH WEEK	**PRE-MID EXAMINATION**	

MAY

CHAPTER/TOPIC		TEACHING PERIODS
1ST WEEK	Refraction of light by spherical lens;	
2ND WEEK	Image formed by spherical lenses.	
3RD WEEK	Lens formula, numericals	
4TH WEEK	Numericals and competency based questions	
5TH WEEK	Group discussion and doubt clearence	

JUNE

CHAPTER/TOPIC		TEACHING PERIODS
1ST WEEK	Magnification. Power of a lens.	
2ND WEEK	Combination of lenses.	
3RD WEEK	**REVISION**	
4TH WEEK	**MID-TERM EXAMINATION**	

JULY

CHAPTER/TOPIC		TEACHING PERIODS
1ST WEEK	**MID-TERM EXAMINATION**	
2ND WEEK	Functioning of a lens in human eye, defects of vision and their corrections, applications of spherical mirrors and lenses.	
3RD WEEK	Refraction of light through a prism, dispersion of light.	
4TH WEEK	scattering of light, applications in dailylife (excluding colour of the sun at sunrise and sunset).	
5th WEEK	**SUMMER BREAKS**	

AUGUST

CHAPTER/TOPIC		TEACHING PERIODS
1ST WEEK	Effects of Current. Electric current, potential difference and electric current	
2ND WEEK	Ohm's law; Resistance, Resistivity, Factors on which the resistance of a conductor depends.	
3RD WEEK	Series combination of resistors, parallel combination of resistors and its applications in daily life.	
4TH WEEK	Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R.	

SEPTEMBER

CHAPTER/TOPIC		TEACHING PERIODS
1ST WEEK	Numericals and competency based questions	
2ND WEEK	Group Discussion	
3RD WEEK	**REVISION**	
4TH WEEK	**POST-MID EXAMINATION**	

OCTOBER

CHAPTER/TOPIC		TEACHING PERIODS
1ST WEEK	Magnetic effects of current: Magnetic field, field lines, field due to a current carrying conductor,	
2ND WEEK	Field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's Left Hand Rule	
3RD WEEK	Direct current. Alternating current: frequency of AC.	
4TH WEEK	**Advantage of AC over DC.Domestic electric circuits.**	

NOVEMBER

CHAPTER/TOPIC		TEACHING PERIODS
1ST WEEK	**Group discussion and numericals.**	
2ND WEEK	**REVISION**	

3RD WEEK	**FINAL TERM EXAMINATION**
4TH WEEK	**FINAL TERM EXAMINATION**

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CLASS-X
BIOLOGY

MARCH

CHAPTER/TOPIC Chapter 1	TEACHINGPERIODS
	20
1ST WEEK	Unit I: World of Living Life processes: Living Being, Basic concept of nutrition, respiration, t and excretion in plants and animals
2ND WEEK	Respiration in Plants
3RD WEEK	Transportation in Plants
4TH WEEK	Excretion in Plants

APRIL

CHAPTER/TOPIC	TEACHINGPERIODS
	08
1ST WEEK	Respiration in Animals
2ND WEEK	Transportation in Animals
3RD WEEK	**REVISION**
4TH WEEK	**PRE-MID EXAMINATION**

MAY

CHAPTER/TOPIC	TEACHING PERIODS
	22
1ST WEEK	Excretion in Animals
2ND WEEK	Excretion in Animals
3RD WEEK	Unit II:Control and Co-ordination in Plants and Animals
4TH WEEK	Tropic movements in plants; Introduction of plant hormones; and
5TH WEEK	co-ordination in animals

JUNE

CHAPTER/TOPIC	TEACHING PERIODS
	10
1ST WEEK	Nervous system;
2ND WEEK	Voluntary, involuntary and reflex action
3RD WEEK	Chemical co-ordination
4TH WEEK	**MID-TERM EXAMINATION**

JULY

CHAPTER/TOPIC	TEACHING PERIODS
	10
1ST WEEK	**MID-TERM EXAMINATION**
2ND WEEK	Animal hormones.
3RD WEEK	Unit III:Reproduction: How Do Organisms Reproduce?
4TH WEEK	Asexual Reproduction
5th WEEK	**SUMMER BREAKS**

AUGUST

CHAPTER/TOPIC	TEACHING PERIODS
	18
1ST WEEK	sexual Reproduction
2ND WEEK	reproductive health need and methods of family planning
3RD WEEK	Safe sex vs HIV/AIDS
4TH WEEK	Child bearing and women's health.

SEPTEMBER

CHAPTER/TOPIC	TEACHING PERIODS
	08
1ST WEEK	Unit IV: Heredity and Evolution:
2ND WEEK	Heredity; Mendel's contribution-
3RD WEEK	**REVISION**
4TH WEEK	**POST-MID EXAMINATION**

OCTOBER

CHAPTER/TOPIC	TEACHING PERIODS
	13
1ST WEEK	Laws for inheritance of traits:
2ND WEEK	Sex determination:
3RD WEEK	Unit V: Our environment: Eco-system,
4TH WEEK	Environmental problems, Ozone depletion, waste production and their solutions.

NOVEMBER

CHAPTER/TOPIC	TEACHING PERIODS
	04
1ST WEEK	Biodegradable and non-biodegradable substances
2ND WEEK	**REVISION**
3RD WEEK	**FINAL TERM EXAMINATION**
4TH WEEK	**FINAL TERM EXAMINATION**

Doon School Srinagar

[HMT, Opposite Hokarsar, National Highway 1A, Srinagar, J&K, India]
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Affiliated to CBSE New Delhi, Affiliation No. 730082

SYLLABUS BREAKUP – 2024/ 25
[Grade: X]

Chemistry

March

UNIT1: Chemical reactions and equations.	TEACHING PERIODS
	20

1ST WEEK	A brief introduction to elements and their symbols. Definition of chemical reaction/equation.How to write a chemical reaction. Significance of arrows, + sign and physical state in writing a chemical reaction.
2ND WEEK	Balancing of a chemical reaction, methods of balancing of a reaction. Practice problems on balancing chemical reactions.
3RD WEEK	Types of chemical reactions combination, combustion, redox, single displacement rxn, double displacement rxn.
4TH WEEK	Precipitation rxns, Exothermic and endothermic reactions,importance of reactions in everyday life.

April (pre-mid term examination)

UNIT 2: Acids bases and salts:	TEACHING PERIODS
	21

1ST WEEK	Introduction to acids and bases. Classification of acids and bases.
2ND WEEK	Naturally occurring acids. Difference between acids and bases. General properties of acids and bases, examples and uses.
3RD WEEK	Neutralization, PH Concept and PH scale. Acids types on the basis of PH scale.
4TH WEEK	Preparation, properties and uses of sodium hydroxide.

May

UNIT 3: Carbon and it's compounds	TEACHING PERIODS
	12

1ST WEEK	Preparation, properties and uses of bleaching powder, washing soda.
2ND WEEK	preparation,properties and uses of washing soda and P. O. P;
3RD WEEK	REVISION
4TH WEEK	**Pre-MID-TERM EXAMINATION (21-25 April)**
5th WEEK	**MID-TERM EXAMINATION (25 June July)**

UNIT : Carbon and it's compounds:	TEACHING PERIODS
	25

1ST WEEK	**MID-TERM EXAMINATION**
2ND WEEK	**MID-TERM EXAMINATION**
3RD WEEK	Introduction to carbon, types of bonds, covalent bonding in carbon compounds, versatile nature of carbon, homologous series Nomenclature of carbon compounds containing functional groups halogens, alcohol, ketones
4TH WEEK	Aldehydes, alkanes, alkynes, difference between saturated and unsaturated hydrocarbons,

5TH WEEK	Chemical properties of carbon compounds, combustion, oxidation,

SEPTEMBER

	TEACHING PERIODS
	21

1ST WEEK	Addition and substitution reaction
2ND WEEK	Ethanol and Ethanoic acid properties and uses
3RD WEEK	*Soaps and detergents preparation and properties*
4TH WEEK	Cleaning action of soaps, micele and micelle formation.

OCTOBER

Metals and non- metals:	TEACHING PERIODS
	23

1ST WEEK	Properties of metals and non-metals, difference between metals and non-metals,
2ND WEEK	*Reactivity series, Lewis structure, ionic compounds definition*
3RD WEEK	Formation of ionic compounds with examples, properties of ionic compounds
4TH WEEK	Basic metallurgical processes, concentration of ore

NOVEMBER

	TEACHING PERIODS
	15

1ST WEEK	Methods of concentration, extraction of metals methods
2ND WEEK	Refining of metals methods
3RD WEEK	**POST-MID EXAMINATION (16th NOVEMBER-25th NOVEMBER)**
4TH WEEK	**POST-MID EXAMINATION**

DECEMBER

	TEACHING PERIODS
	05

1ST WEEK	Corrosion and it's prevention
2ND WEEK	Revision and exam orientation

Doon School Srinagar

SYLLABUS BREAKUP – 2025/ 2026
[Grade: X]

SOCIAL SCIENCE

MARCH

CHAPTER/TOPIC THE RISE OF NATIONALISM IN EUROPE RESOUECE AND DEVELOPMENT POWER SHARING		TEACHINGPERIODS 30
1ST WEEK	• Federic Sourie Imagination On Statue of Liberty • Overview on Resources • What is Power Sharing?	
2ND WEEK	• Liberalism and its Various aspects • Resource on the basic of Origin • Moral and Prudential reasons of Power Sharing	
3RD WEEK	• Greek war of Independence and treaty of Constantinople • Resource Planning • Forms of Power Sharing	
4TH WEEK	• Soil formation • Importance of Power Sharing • Provisions of Conservatism	

APRIL

CHAPTER/TOPIC THE RISE OF NATIONALISM IN EUROPE FOREST AND WILDLIFE FEDERALISM		TEACHINGPERIODS 28
1ST WEEK	• Unification of Germany • Unification of Italy • Importance of Resources	
2ND WEEK	• Strange case of Britain • Balkan States and nationalist Tension in Balkans	
3RD WEEK	REVISION	
4TH WEEK	PRE-MID EXAMINATION	

MAY

CHAPTER/TOPIC THE RISE OF NATIONALISM IN INDIA FOREST AND WILDLIFE (CONTINUE) POLITICAL PARTIES		TEACHING PERIODS 30
1ST WEEK	• Nationalism and Imperialism • Forests, types and their Importance • Formation of Political parties	
2ND WEEK	• Factors responsible for the rise of Nationalism Across Europe • Functions of Political Parties	

	• Biodiversity and wild life
3RD WEEK	• Reforms to Improve Political parties • Uses and Utility of Forests • Notion of Nation States
4TH WEEK	• Conservation of forests and resources • National parties and regional Parties • World war I and Balkan States
5TH WEEK	• Resource development, resource utility • Types of Soils • Stock and reserve • Role of Opposition and list of various regional and National parties.

JUNE

CHAPTER/TOPIC	TEACHING PERIODS
THE RISE OF NATIONALISM IN INDIA **WATER RESOURCES** **DEVELOPMENT (ECONOMICS)**	25
1ST WEEK	• Factors responsible for the emergence of nationalism In India.
2ND WEEK	• Overview on Water resources, uses of water and Important River Valley Projects.
3RD WEEK	**REVISION**
4TH WEEK	**MID-TERM EXAMINATION**

JULY

CHAPTER/TOPIC	TEACHING PERIODS
THE MAKING OF GLOBAL WORLD **WATER RESOURCES (Continue)** **OUTCOMES OF DEMOCRACY**	20
1ST WEEK	**MID-TERM EXAMINATION**
2ND WEEK	• Globalization and its impact
3RD WEEK	• Factors responsible for making the global world. • Elucidate Various outcomes of democracy
4TH WEEK	• Map practice on important dams of India. • Difference between accountable and legitimate government
5th WEEK	**SUMMER BREAKS**

AUGUST

CHAPTER/TOPIC	TEACHING PERIODS
PRINT CULTURE AND THE MODERN WORLD(Continue) **SECTORS OF INDIAN ECONMY** **AGRICULTURE**	30
1ST WEEK	• Woodblock printing
2ND WEEK	• Marco Polo and Print world • Agriculture and it's Various types • Institutional and Technological reforms
3RD WEEK	• Indian Economy and its Important Sectors • Role of Service Sector
4TH WEEK	• Distinguish between tertiary and Service Sector

SEPTEMBER

CHAPTER/TOPIC	TEACHING PERIODS
PRINT CULTURE AND THE MODERN WORLD(Continue)	20

MONEY AND CREDITS	
1ST WEEK	• Johannes Guttenberg Printing Press
2ND WEEK	• Money as a medium of Exchange • Formal and Informal Sources of Credit • Types of Money • Modern forms of Money
3RD WEEK	**REVISION**
4TH WEEK	**POST-MID EXAMINATION**

OCTOBER

CHAPTER/TOPIC **PRINT CULTURE AND THE MODERN WORLD(Continue)** **MINRALS AND ENERGY RESOUCES** **GENDER CASTE AND REFORMS**	TEACHING PERIODS 30
1ST WEEK	• Spread of Print Culture
2ND WEEK	• Mineral and Energy resources with proper explanation and Difference between Metallic and Non-Metallic minerals. Explanation of coal and Various sources of energy
3RD WEEK	• Gender, caste and reform
4TH WEEK	• Social diversity and Division of society on various grounds

NOVEMBER

CHAPTER/TOPIC **MANUFACTURING INDUSTRIES** **GLOBALIZATION** **LIVELIHOOD AND ECOMNY (Only Map Work)**	TEACHING PERIODS 15
1ST WEEK	• Manufacturing industries and how world has become Global village
2ND WEEK	**REVISION**
3RD WEEK	**FINAL TERM EXAMINATION**
4TH WEEK	**FINAL TERM EXAMINATION**

CBSE | DEPARTMENT OF SKILL EDUCATION

CURRICULUM FOR SESSION 2024-2025

INFORMATION TECHNOLOGY (SUB. CODE – 402)

JOB ROLE: DOMESTIC DATA ENTRY OPERATOR

CLASS – X

COURSE TITLE: DOMESTIC DATA ENTRY OPERATOR

Domestic Data Entry Operator in the IT-ITeS Industry is also known as Data Entry Operator. Individuals are responsible to provide daily work reports and work on daily hour basic. The individual is responsible for electronic entry of data from the client side to the office site or vice-versa. Individual tasks vary depending on the size and structure of the organization. This job requires the individual to have a thorough knowledge of various technology trends and processes as well as have updated knowledge about database management systems and IT initiatives. The individual should have fast and accurate typing/data encoding. This job involves working in a personal computer, and appropriate software to enter accurate data regarding different issues like retrieving data from a computer or to a computer

COURSE OUTCOME:

On completion of the course, students should be able to:
- Apply effective oral and written communication skills to interact with people and customers;
- Identify the principal components of a computer system; Demonstrate the basic skills of using computer;
- Demonstrate self-management skills;
- Demonstrate the ability to provide a self-analysis in context of entrepreneurial skills and abilities;
- Demonstrate the knowledge of the importance of green skills in meeting the challenges of sustainable development and environment protection;
- Work safely on the computer.
- Start the computer.
- Open and use the related software.
- Exit from the software.
- Shut down the computer.
- Use the computer for data entry process.
- Collect all necessary information about the query.
- Log any decision about the query on the data entry tracking form.
- Follow Rules and guidelines for data entry.
- Handle queries.
- Undertake data entry with speed and accuracy.
- Identify and control hazards in the workplace that pose a danger or threat to their safety or health, or that of others.

COURSE OBJECTIVES:

In this course, the students will be introduced to the fundamental concepts of digital documentation, digital spreadsheet, digital presentation, database management and internet security.

The following are the main objectives of this course:
- To familiarize the students with the world of IT and IT enabled services.
- To provide in-depth training in use of data entry, internet and internet tools.
- To develop practical knowledge of digital documentation, spreadsheets and presentation.
- To enable the students to understand database management systems and have updated knowledge about digital record keeping.
- To make the students capable of getting employment in Private Sector, Public Sector, Ministries, Courts, House of Parliament and State Legislative Assemblies.
- To develop the following skills:
  - o Data Entry and Keyboarding skills
  - o The concept of Digital Documentation
  - o The concept of Digital Presentation
  - o The concept of Electronic Spreadsheet
  - o The concept of Databases
  - o Internet Technologies

SALIENT FEATURES:

To be a data entry operator/analyst, one requires a lot of hard work and practical hands-on experience. One should have an intensive knowledge of Office applications, computer operations, and knowledge of clerical, administrative techniques and data analysis. Along with this, as a data entry operator/analyst, you will be expected to have high typing speed, accuracy and efficiency to perform tasks.

As a data entry operator/analyst, one should improve their computer skills, numerical and literacy skills. These skills can help one expand into a new career path in the future.

SCHEME OF UNITS

Total Marks: 100 (Theory-50+Practical-50)

This course is a planned sequence of instructions consisting of units meant for developing employability and vocational competencies of students of Class X opting for skill subject along with other subjects.

The unit-wise distribution of hours and marks for class X is as follows:

INFORMATION TECHNOLOGY (SUBJECT CODE - 402)
CLASS – X (Session 2024-2025)

<table>
<tr><td colspan="2"></td><td>UNITS</td><td>NO. OF HOURS for Theory and Practical</td><td></td><td>MAX. MARKS for Theory and Practical</td></tr>
<tr><td rowspan="7">Part A</td><td colspan="2">Employability Skills</td><td colspan="2"></td><td></td></tr>
<tr><td colspan="2">Unit 1: Communication Skills-II</td><td colspan="2">10</td><td>2</td></tr>
<tr><td colspan="2">Unit 2: Self-Management Skills-II</td><td colspan="2">10</td><td>3</td></tr>
<tr><td colspan="2">Unit 3: ICT Skills-II</td><td colspan="2">10</td><td>1</td></tr>
<tr><td colspan="2">Unit 4: Entrepreneurial Skills-II</td><td colspan="2">15</td><td>3</td></tr>
<tr><td colspan="2">Unit 5: Green Skills-II</td><td colspan="2">05</td><td>1</td></tr>
<tr><td colspan="2" align="right">Total</td><td colspan="2">50</td><td>10</td></tr>
<tr><td rowspan="6">Part B</td><td colspan="2">SUBJECT SPECIFIC SKILLS</td><td>Theory</td><td>Practical</td><td>Marks</td></tr>
<tr><td colspan="2">Unit 1: Digital Documentation (Advanced)</td><td>12</td><td>18</td><td>8</td></tr>
<tr><td colspan="2">Unit 2: Electronic Spreadsheet (Advanced)</td><td>15</td><td>23</td><td>10</td></tr>
<tr><td colspan="2">Unit 3: Database Management System</td><td>18</td><td>27</td><td>12</td></tr>
<tr><td colspan="2">Unit 4: Maintain Health, Safety and Secure Working Environment</td><td>15</td><td>22</td><td>10</td></tr>
<tr><td colspan="2" align="right">Total</td><td>60</td><td>90</td><td>40</td></tr>
<tr><td rowspan="7">Part C</td><td colspan="2">PRACTICAL WORK</td><td colspan="2"></td><td></td></tr>
<tr><td colspan="2">Practical Examination</td><td colspan="2"></td><td rowspan="4">20</td></tr>
<tr><td colspan="2">● Advanced Documentation</td><td colspan="2">5 Marks</td></tr>
<tr><td colspan="2">● Advanced Spreadsheets</td><td colspan="2">5 Marks</td></tr>
<tr><td colspan="2">● Databases</td><td colspan="2">10 Marks</td></tr>
<tr><td colspan="2">● Viva Voce</td><td colspan="2">10 Marks</td><td>10</td></tr>
<tr><td colspan="2" align="right">Total</td><td colspan="2"></td><td>30</td></tr>
<tr><td rowspan="3">Part D</td><td colspan="2">PROJECT WORK/FIELD VISIT
Any Interdisciplinary Real World Case Study to be taken. Summarized data reports of same can be presented in base. Input should be taken using forms and output should be done using reports using base. Documentation of the case study should be presented using writer.</td><td colspan="2"></td><td>10</td></tr>
<tr><td colspan="2">PORTFOLIO/ PRACTICAL FILE:
(Portfolio should contain printouts of the practical done using Writer, Calc and Base with minimum 5 problems of each)</td><td colspan="2"></td><td>10</td></tr>
<tr><td colspan="2" align="right">Total</td><td colspan="2"></td><td>20</td></tr>
<tr><td></td><td colspan="2" align="center">GRAND TOTAL</td><td colspan="2">200</td><td>100</td></tr>
</table>

DETAILED CURRICULUM/ TOPICS:

Part-A: EMPLOYABILITY SKILLS

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-II	10
2.	Unit 2: Self-management Skills-II	10
3.	Unit 3: Information and Communication Technology Skills-II	10
4.	Unit 4: Entrepreneurial Skills-II	15
5.	Unit 5: Green Skills-II	05
	TOTAL	**50**

Note: **The detailed curriculum/ topics to be covered under Part A: Employability Skills can be downloaded from CBSE website**.

Part-B – SUBJECT SPECIFIC SKILLS

- Unit 1: Digital Documentation (Advanced)
- Unit 2: Electronic Spreadsheet (Advanced)
- Unit 3: Database Management System
- Unit 4: Web Applications and Security

UNIT 1: DIGITAL DOCUMENTATION (ADVANCED)

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	ApplyStyles in the document	• Styles/ categories in Writer • Styles and Formatting window • Using Fill Format. • Creating and updating new style from selection • Load style from template or another document. • Creating a new style using drag-and-drop. • Applying styles.	• List style categories in Writer. Select the style from the Styles and Formatting window. • Use Fill Format to apply a style to many different areas quickly. • Create and update a new style from a selection. • Load a style from a template or another document. • Create a new style using drag-and drop.
2.	Insert and use images in document	• Options to insert image to document from various sources. • Options to modify, resize, crop and delete an image. • Creating drawing objects, setting or changing its properties. Resizing and grouping drawing objects. • Positioning image in the text.	• Insert an image to document from various sources. • Modify, resize, crop and delete an image. • Create drawing objects • Set or change the properties of a drawing object • Resize and group drawing objects • Position the image in the text

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Create and use template	• Templates in Writer. • Using predefined templates. • Creating a template. • Set up a custom template. • Using a template • Changing to a different template. • Updating a Document	• Create a template. • Use predefined templates. • Set up a custom default template. • Update a document. • Change to a different template. • Use the Template. • Update the document.
4.	Create table of contents	• Table of contents. Hierarchy of headings. Customization of table of contents. • Character styles. Maintaining a table of contents.	• Create a table of contents. • Definea hierarchy of headings. • Customize a table of contents. • Apply character styles. • Maintain atable of contents.

UNIT 2: ELECTRONIC SPREADSHEET (ADVANCED)

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Analyse data using scenarios and goal seek.	• Using consolidating data. Creating subtotals. • Using "what if" scenarios. Using "what if" tools • Using goal seek and solver.	• Use consolidating data • Create subtotals • Use "what if" scenarios Use "what if" tools • Use goal seek and solver
2.	Link spreadsheets data	• Setting up multiple sheets. Creating reference to other sheets by using keyboard and mouse. • Creating reference to another document by using keyboard and mouse.	• Setup multiple sheets by inserting new sheets. • Create reference to other sheets by using keyboard and mouse. • Create references to other documents by using keyboard and mouse.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL

		• Relative and absolute hyperlinks
		 • Hyperlinks to the sheet.
		    o Linking to external data.
		    o Linking to registered data sources.
			• Create, Edit and Remove hyperlinks to the sheet.
			 • Link to external data.
			 • Link to registered data source.

3.	Share and review a spreadsheet	• Setting up a spreadsheet for sharing. • Opening and saving a shared spreadsheet. • Recording changes. • Add, Edit and Format the comments. • Reviewing changes – view, accept or reject changes. Merging and comparing.	• Set up a spreadsheet for sharing. • Open and save a shared spreadsheet. • Record changes. • Add, Edit and Format the comments. • Review changes – view, accept or reject changes. • Merge and compare sheets.
4.	Use Macros in spreadsheet	• Using the macro recorder. • Creating a simple macro. • Using a macro as a function. • Passing arguments to amacro. • Passing the arguments as values. • Macros to work like built-in functions. • Accessing cells directly. • Sorting the columns using macro.	• Demonstrate the use of a macro recorder. • Create a simple macro. • Use a macro • Pass arguments to a macro • Pass the arguments as values • Write the macros that act like built – in functions • Access cells directly • Sort the columns using macro.

UNIT 3: DATABASE MANAGEMENT SYSTEM

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Appreciate the concept of Database Management System	• Concept and examples of data and information, • Concept of database, • Advantages of database, • Features of database, • Concept and examples of Relational database, • Concept and examples of field, record, table, database, • Concept and examples of Primary key, composite primary key, foreign key, • Database management system (DBMS) software	• Identify the data and information, • Identify the field, record, table in the database, • Prepare the sample table with some standard fields. • Assign the primary key to the field, • Identify the primary key, composite primary key, foreign key.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
		• Relational Data base management system (RDBMS) software.	
2.	Create and edit tables using wizard and SQL commands	• Introduction to LibreOffice Base • Database objects – tables, queries, forms, and reports of the database, • Terms in database – table, field, record, • Steps to create a table using table wizard • Data types in database., • Option to set primary key Table Data View dialog box	• Start the Libre Office Base and observe the parts of mainwindow, • Identify the data base objects • Create the sample table in any category using wizard, • Practice to create different tables from the available list and choosing fields from the available fields. • Assign data types of fields, Setprimary key, • Edit the table in design view, Enter the data in the fields.
3.	Perform operations on table	• Inserting data in the table, • Editing records in the table, • Deleting records from the table, • Sorting data in the table, • Referential integrity, • Creating and editing relationships – one to one, one to many, many to many • Field properties	Demonstrate to: • Insert data in the table, • Edit records in the table, • Delete records from table, • Sort data in the table, • Create and edit relationships - one to one, one to many,many to many, • Enter various field properties.
4.	Retrieve data using query	• Database query, • Defining query, • Query creation using wizard, • Creation of query using design view, • Editing a query, • Applying criteria in query – single field, multiple fields, using wildcard, • Performing calculations, • Grouping of data, • Structured Query Language (SQL).	• Prepare a query for given criteria, • Demonstrate to create query using wizard, and using design view, • Edit a query, • Demonstrate to apply various criteria in query – single field, multiple fields, using wild card, • Performing calculations using query in Base, • Demonstrate to group data, • Use basic SQL commands,

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
5.	Create Forms and Reports using wizard	• Forms in BASE. • Creating form using wizard, • Steps to create form using Form Wizard, • Options to enter or remove data from forms • Modifying form, • Changing label, background, • Searching record using Form, • Inserting and deleting record using Form, • Concept of Report in Base, • Creating Report using wizard, • Steps to create a Report using Wizard.	• Illustrate the various steps to create Form using Form Wizard, • Enter or remove data from Forms, • Demonstrate to modify Forms, • Demonstrate to change label, background, • Search record using Form, • Insert and delete record using Form View, • Illustrate the various steps to create Report using Report Wizard, • Demonstrate various examples of Report.

UNIT 4: MANAGING HEALTH AND SAFETY

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Maintain workplace safety	• Basic safety rules to follow at workplace – Fire safety, • Falls and slips, Electrical safety, Use of first aid. • Case Studies of hazardous situations.	• Practice to follow basic safety rules at workplace to prevent accidents and protect workers – Fire safety, • Falls and slips, Electrical safety, Use of first aid.
2..	Prevent Accidents and Emergencies	• Accidents and emergency, • Types of Accidents, • Handling Accidents • Types of Emergencies.	• Illustrate to handle accidents at workplace, • Demonstrate to follow evacuation plan and procedure in case of an emergency.
3.	Protect Health and Safety at work	• Hazards and sources of hazards, • General evacuation procedures, • Healthy living.	• Identify hazards and sources of hazards, • identify the problems at workplace that could cause accidents, • Practice the general evacuation procedures in case of an emergency.

ORGANISATION OF FIELD VISITS:

In a year, at least 3 field visits/educational tours should be organised for the students to expose them to the activities in the workplace.

Visit a data entry centre and observe the following: Location, Site, Office building, Computer Systems, Tools and Equipment, Printer, Scanner. During the visit, students should obtain the following information from the owner or the supervisor of the Data Centre:

1. Data Entry Centre.

2. Computer Infrastructure.

3. Sitting Posture of data entry operators.

4. Assistive technology.

5. Man power engaged.

6. Total expenditure of Data Entry Centre.

7. Total annual income.

8. Profit/Loss (Annual).

9. Any other information.

LIST OF EQUIPMENT/ MATERIALS:

The list given below is suggestive and an exhaustive list should be compiled from the feedback given by various by the teachers teaching the subject. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

S. No.	ITEM NAME, DESCRIPTION & SPECIFICATION	QUANTITY
A	**HARDWARE**	
1.	Computer with latest configuration or minimum Pentium Processor with minimum 2GB RAM, 512 GB HDD, 17" LED Monitor, NIC Card, 3 button Mouse, 105 keys key board and built-in speakers and mic.	15
2.	Laser Printer - Black	01
3.	Inkjet Printers (Colour and Black & White)	01
4.	Scanner	01
5.	Online UPS 5 KVA	01
6.	16 Port Switches	01
7.	Air Conditioner 1.5 tonne	02
8.	Telephone line (For Internet)	01
9.	Fire extinguisher	01
B	**SOFTWARE**	
1.	Operating System Linux and Windows	
2.	Anti-Virus Latest version	
3.	Productivity Suite, Example – LibreOffice, etc.	
C	**FURNITURE**	
1.	Class room chairs and desks	25
2.	Computer Tables	15
3.	Straight back revolving & adjustable chairs (Computer Chairs)	15
4.	Printer Tables	02
5.	Trainers Table	01
6.	Trainers Chair	01
7.	Steel cupboards drawer type	02
8.	Cabinet with drawer	01
9.	Steel Almira - big size	01
10.	Steel Almira- small size	01

TEACHER'S/ TRAINER'S QUALIFICATIONS:

Qualification and other requirements for appointment of teachers/trainers for teaching this subject, on contractual basis should be decided by the State/ UT. The suggestive qualifications and minimum competencies for the teacher should be as follows:

Qualification	Minimum Competencies	Age Limit
Diploma in Computer Science/ Information Technology **OR** Bachelor Degree in Computer Application/ Science/ Information Technology (BCA, B. Sc. Computer Science/ Information Technology) **OR** Graduate with PGDCA OR DOEACC A Level Certificate. The suggested qualification is the minimum criteria. However higher qualifications will also be acceptable.	• The candidate should have a minimum of 1 year of work experience in the same job role. • S/He should be able to communicate in English and local language. • S/He should have knowledge of equipment, tools, material, Safety, Health & Hygiene.	• 18-37 years (as on Jan. 01 (year)) • Age relaxation to be provided as per Govt. rules

Teachers/Trainers form the backbone of Skill (Vocational) Education being imparted as an integral part of Rashtriya Madhyamik Shiksha *Abhiyan* (RMSA). They are directly involved in teaching of Skill (vocational) subjects and also serve as a link between the industry and the schools for arranging industry visits, On-the-Job Training (OJT) and placement.

These guidelines have been prepared with an aim to help and guide the States in engaging quality Teachers/Trainers in the schools. Various parameters that need to be looked into while engaging the Vocational Teachers/Trainers are mode and procedure of selection of Teachers/ Trainers, Educational Qualifications, Industry Experience and Certification/ Accreditation.

The State may engage Teachers/Trainers in schools approved under the component of scheme of Vocationalisation of Secondary and Higher Secondary Education under RMSA in following ways:

(i)   Directly as per the prescribed qualifications and industry experience suggested by the PSS Central Institute of Vocational Education (PSSCIVE), NCERT or the respective Sector Skill Council (SSC).

OR

(ii)   Through accredited Vocational Training Providers accredited under the National Quality Assurance Framework (NQAF*) approved by the National Skill Qualification Committee on 21.07.2016. If the State is engaging Vocational Teachers/Trainers through the Vocational Training Provider (VTP), it should ensure that VTP should have been accredited at NQAF Level 2 or higher.

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* *The National Quality Assurance Framework (NQAF) provides the benchmarks or quality criteria which the different organizations involved in education and training must meet in order to be accredited by competent bodies to provide government- funded education and training/skills activities. This is applicable to all organizations offering NSQF-compliant qualifications.*

The educational qualifications required for being a Teacher/Trainer for a particular job role are clearly mentioned in the curriculum for the particular NSQF compliant job role. The State should ensure that teachers/ trainers deployed in the schools have relevant technical competencies for the NSQF qualification being delivered. Teachers/Trainers preferably should be certified by the concerned Sector Skill Council for the particular Qualification Pack/Job role which S/he will be teaching. Copies of relevant certificates and/or record of experience of the teacher/trainer in the industry should be kept as record.

To ensure the quality of the Teachers/Trainers, the State should ensure that a standardized procedure for selection of (Vocational) Teachers/Trainers is followed. The selection procedure should consist of the following:

(i)   Written test for the technical/domain specific knowledge related to the sector;
(ii) Interview for assessing the knowledge, interests and aptitude of trainer through a panel of experts from the field and state representatives; and
(iii) Practical test/mock test in classroom/workshop/laboratory.

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The Head Master/Principal of the school where the scheme is being implemented should facilitate and ensure that the (Vocational) Teachers/Trainers:

- Prepare session plans and deliver sessions which have a clear and relevant purpose and which engage the students;

- Deliver education and training activities to students, based on the curriculum to achieve the learning outcomes;

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- Engage students in learning activities, which include a mix of different methodologies, such as project based work, team work, practical and simulation based learning experiences;

- Work with the institution's management to organise skill demonstrations, site visits, on job trainings, and presentations for students in cooperation with industry, enterprises and other workplaces;

- Identify the weaknesses of students and assist them in up-gradation of competency;

- Cater to different learning styles and level of ability of students;

- Assess the learning needs and abilities, when working with students with different abilities

- Identify any additional support the student may need and help to make special arrangements for that support;

- Provide placement assistance

Assessment and evaluation of (Vocational) Teachers/Trainers is very critical for making them aware of their performance and for suggesting corrective actions. The States/UTs should ensure that the performance of the (Vocational) Teachers/Trainers is appraised annually. Performance based appraisal in relation to certain pre-established criteria and objectives should be done periodically to ensure the quality of the (Vocational) Teachers/Trainers.

Following parameters may be considered during the appraisal process:
- Participation in guidance and counseling activities conducted at Institutional, District and State level;
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- Membership of professional society at District, State, Regional, National and International level;
- Development of teaching-learning materials in the subject area;
- Efforts made in developing linkages with the Industry/Establishments;
- Efforts made towards involving the local community in Vocational Education
- Publication of papers in National and International Journals;
- Organisation of activities for promotion of vocational subjects;
- Involvement in placement of students/student support services.

CAREER OPPORTUNITIES:

The job of a data entry operator/ analyst is to work for a wide variety of public and private organisations. A data entry operator/analyst is responsible to input data in a quick and efficient manner, create data storage and should possess knowledge about the methods for recovering useful data when needed, organizing and analyzing data in a clear and effective way, navigating computer and database systems proficiently, editing and preparing reports based on the information they have put into the system. They also help the organisations to keep up with recording and analyzing the abundance of information received on a daily basis.

Some of the top sectors that require a data entry operator/analyst are listed below:
- Banks and Public Sector
- Marketing Companies
- Accounting Companies
- Human Resources
- Corporate Businesses
- MNCs
- Study Centers
- Schools and Universities
- Hospitals or Healthcare Service Providers
- Insurance Firms
- Small-scale Businesses

VERTICAL MOBILITY
- Students can pursue Polytechnic/Diploma/Certificate courses in IT fields.
- Can work as DEO
- Data Entry/Analysis work from home for different companies

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CURRICULUM FOR SESSION 2025-2026

ARTIFICIAL INTELLIGENCE (SUB. CODE 417)
CLASS – X

OBJECTIVES OF THE COURSE:

The objective of this module/curriculum - which combines both Inspire and Acquire modules is to develop a readiness for understanding and appreciating Artificial Intelligence and its application in our lives. This module/curriculum focuses on:

1. Helping learners understand the world of Artificial Intelligence and its applications through games, activities and multi-sensorial learning to become AI-Ready.
2. Introducing the learners to three domains of AI in an age-appropriate manner.
3. Allowing the learners to construct the meaning of AI through interactive participation and engaging hands-on activities.
4. Introducing the learners to the AI Project Cycle.
5. Introducing the learners to programming skills - Basic python coding language.
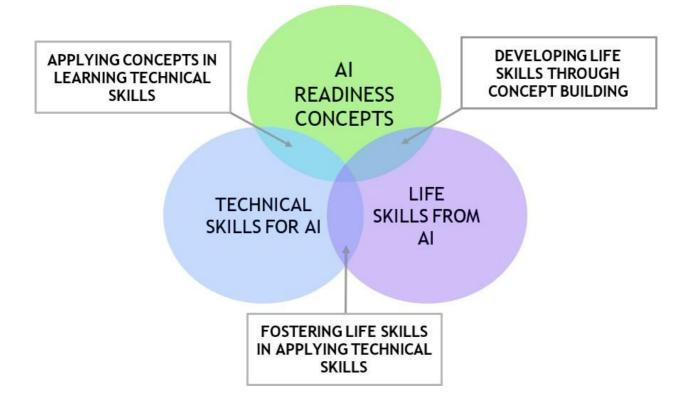6. To equip students with the skills to develop AI solutions addressing societal challenges.

LEARNING OUTCOMES:

Learners will be able to

1. Identify and appreciate Artificial Intelligence and describe its applications in daily life.
2. Relate, apply and reflect on the Human-Machine Interactions to identify and interact with the three domains of AI: Data, Computer Vision and Natural Language Processing and Undergo assessment for analysing their progress towards acquired AI-Readiness skills.
3. Imagine, examine and reflect on the skills required for futuristic job opportunities.
4. Unleash their imagination towards smart homes and build an interactive story around it.
5. Understand the impact of Artificial Intelligence on Sustainable Development Goals to develop responsible citizenship.
6. Research and develop awareness of skills required for jobs of the future.
7. Gain awareness about AI bias and AI access and describe the potential ethical considerations of AI.
8. Develop effective communication and collaborative work skills.
9. Get familiar and motivated towards Artificial Intelligence and Identify the AI Project Cycle framework.
10. Learn problem scoping and ways to set goals for an AI project and understand the iterative nature of problem scoping in the AI project cycle.
11. Brainstorm on the ethical issues involved around the problem selected.

12. Foresee the kind of data required and the kind of analysis to be done, identify data requirements and find reliable sources to obtain relevant data.

13. Use various types of graphs to visualize acquired data.

14. Understand, create and implement the concept of Decision Trees.

15. Understand and visualize the computer's ability to identify alphabets and handwriting.

16. Understand and appreciate the concept of domains through gamification and learn basic programming skills through gamified platforms.

17. Acquire introductory Python programming skills in a very user-friendly format.

18. Empower students to create positive change through AI-driven social impact projects.

SKILLS TO BE DEVELOPED:

SCHEME OF STUDIES:

This course is a planned sequence of instructions consisting of units meant for developing employability and vocational competencies of students of Class X opting for skill subjects along with other education subjects.

The unit-wise distribution of hours and marks for class X is as follows:

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ARTIFICIAL INTELLIGENCE (SUBJECT CODE 417) CLASS – X
(SESSION 2025-2026)

Total Marks: 100 (Theory-50 + Practical-50)

	UNITS	NO. OF HOURS for Theory and Practical		MAX. MARKS for Theory and Practical
PART A	**Employability Skills**			
	Unit 1: Communication Skills-II	10		2
	Unit 2: Self-Management Skills-II	10		2
	Unit 3: ICT Skills-II	10		2
	Unit 4: Entrepreneurial Skills-II	10		2
	Unit 5: Green Skills-II	10		2
	Total	**50**		**10**
PART B	**Subject Specific Skills**	Theory (hours)	Practical (hours)	Marks
	Unit 1: Revisiting AI Project Cycle & Ethical Frameworks for AI	11	4	7
	Unit 2: Advanced Concepts of Modeling in AI	18	7	11
	Unit 3: Evaluating Models	21	4	10
	Unit 4: Statistical Data	–	28	–
	Unit 5: Computer Vision	10	20	4
	Unit 6: Natural Language Processing	20	7	8
	Unit 7: Advance Python		10	–
	Total	**160**		**40**
PART C	**Practical & Project Work:**			Marks
	Practical File with minimum 15 Programs			15
	Practical Examination ● Unit 4: Statistical Data ● Unit 5: Computer Vision ● Unit 6: Natural Language Processing ● Unit 7: Advance Python			15
	Viva Voce			5
	Project Work / Field Visit / Student Portfolio (Anyone to be done)			10
	Viva Voce (related to project work)			5
	Total			**50**
	GRAND TOTAL	**210**		**100**

DETAILED CURRICULUM/TOPICS FOR CLASS X

Part-A: EMPLOYABILITY SKILLS

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-II	10
2.	Unit 2: Self-management Skills-II	10
3.	Unit 3: Information and Communication Technology Skills-II	10
4.	Unit 4: Entrepreneurial Skills-II	10
5.	Unit 5: Green Skills-II	10
	TOTAL	**50**

Note: **The detailed curriculum/ topics to be covered under Part A: Employability Skills can be downloaded from CBSE website**

Part-B – SUBJECT SPECIFIC SKILLS

- ❖ Unit 1: Revisiting AI Project Cycle & Ethical Frameworks for AI
- ❖ Unit 2: Advanced Concepts of Modeling in AI
- ❖ Unit 3: Evaluating Models
- ❖ Unit 4: Statistical Data
- ❖ Unit 5: Computer Vision
- ❖ Unit 6: Natural Language Processing
- ❖ Unit 7: Advance Python

UNIT 1: Revisiting AI Project Cycle & Ethical Frameworks for AI

SUB-UNIT	LEARNING OUTCOMES	ACTIVITY/ PRACTICAL
AI Project Cycle	Understand the stages of the AI Project Cycle.	**Session:** Revisiting AI Project Cycle
Introduction to AI Domains	Understand the concept of Artificial Intelligence (AI) domains and the illustrations of practical applications within each AI domain.	**Session**: The three domains of AI and their applications.

SUB-UNIT	LEARNING OUTCOMES	ACTIVITY/ PRACTICAL
Ethical Frameworks of AI	Learn about the ethical framework for AI and its category. Explore Bioethics, a popular framework that is used in the healthcare industry.	**Session**: Frameworks, Ethical Framework and need of Ethical Frameworks for AI. Activity: My Goodness https://www.my-goodness.net/
		Session: Types of Ethical Frameworks.
		Session: Bioethics and a case study in bioethics.

UNIT 2: Advance Concepts of Modeling in AI

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Revisiting AI, ML, DL	Understand AI, ML and DL	**Session:** Differentiate between AI, ML, and DL
		Session: Common terminologies used with data
Modeling	• Familiarize with supervised, unsupervised and reinforcement learning based approach • Understand subcategories of Supervised, Unsupervised and deep learning models	**Session:** Types of AI Models: Rule Based Approach, Learning Based Approach
		Session: Categories of Machine learning based models: Supervised Learning (https://teachablemachine.withgoogle.com/), Unsupervised Learning (https://experiments.withgoogle.com/ai/drum-machine/view/), Reinforcement Learning
		Session: Subcategories of Supervised Learning Model: Classification Model, Regression Model
		Session: Subcategories of Unsupervised Learning Model: Clustering, Association
		Session: Subcategories of Deep Learning: Artificial Neural networks (ANN), Convolutional Neural Network (CNN)
Artificial Neural Networks	• Understand Neural Networks • Understand how AI makes a decision	**Session:** What is Neural Network?
		Session: How does AI make a Decision?
		Activity: Human Neural Network – The Game
		Suggested Neural Network Activity: https://playground.tensorflow.org/

UNIT 3: Evaluating Models

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Importance of Model Evaluation	Understand the role of evaluation in the development and implementation of AI systems.	**Session:** What is evaluation? **Session:** Need of model evaluation

Splitting the training set data for Evaluation	Understand Train-test split method for evaluating the performance of a machine learning algorithm	**Session:** Train-test split
Accuracy and Error	Understand Accuracy and Error for effectively evaluating and improving AI models	**Session:** Accuracy **Session:** Error **Activity:** Find the accuracy of the AI model
Evaluation metrics for classification	Learn about the different types of evaluation techniques in AI, such as Accuracy, Precision, Recall and F1 Score, and their significance.	**Session:** What is Classification? **Session:** Classification metrics **Activity:** Build the confusion matrix from scratch **Activity:** Calculate the accuracy of the classifier model **Activity:** Decide the appropriate metric to evaluate the AI model
Ethical concerns around model evaluation	Understand ethical concerns around model evaluation	**Session:** Bias, Transparency, Accuracy

UNIT 4: Statistical Data (To be assessed through Practicals)

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Introduction & No code AI tool	Define the concept of Statistical Data and understand its applications in various fields. Define No-Code and Low-Code AI. Identify the differences between Code and No-Code AI concerning Statistical Data.	**Session: No code AI tool** •Introduction to Data Science & its applications •Meaning of No-Code AI • No-Code and Low-Code. • Some no-code tools **Orange Data Mining Tool:** **https://orangedatamining.com/download/**
Statistical Data: Use Case Walk through	Relate AI project stages to the stages of No-Code AI projects Able to use no-code tool Orange Data mining. To perform data exploration, modeling and evaluation with Orange data mining.	**Session** •Important concepts in Statistics. • Orange data mining • AI project cycle in Orange data mining (Palmer penguins case study) **Activity:** MS Excel for Statistical Analysis. Link:**https://docs.google.com/spreadsheets/d/1f5G-JXyP7EV2fy1hax47YVaH5gyq8KZy/edit?usp=drive_link&ouid=109928090180926267402&rtpof=true&sd=true** Case study using Orange data mining (Palmer Penguins). Link: https://drive.google.com/drive/u/0/folders/1fmcRVb-ilTyUhmUv4DWT1BFsaCoQ2BmF

UNIT 5: Computer Vision (To be assessed through Theory)

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Introduction	Define the concept of Computer Vision and understand its applications in various fields.	**Session:** Introduction to Computer Vision
		Session: Applications of CV
Concepts of Computer Vision	Understand the basic concepts of image representation, feature extraction, object detection, and segmentation.	**Session:** Understanding CV Concepts ● Computer Vision Tasks ● Basics of Images-Pixel, Resolution, Pixel value ● Grayscale and RGB images
		Activities: ● Game- Emoji Scavenger Hunt https://emojiscavengerhunt.withgoogle.com/ ● RGB Calculator: https://www.w3schools.com/colors/colors_rgb.asp ● Create your own pixel art: www.piskelapp.com ● Create your own convolutions: http://setosa.io/ev/image-kernels/

UNIT 5: Computer Vision (To be assessed through Practicals)

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
No-Code AI Tools	To demonstrate proficiency in using no-code AI tools for computer vision projects. To deploy models, fine-tune parameters, and interpret results. Skills acquired include data preprocessing, model selection, and project deployment.	**Introduction to Lobe: https://www.lobe.ai/** **Teachable Machine: https://teachablemachine.withgoogle.com/** ● **Activity:** Build a Smart Sorter **Orange Data Mining Tool: https://orangedatamining.com/download/** ● **Activity:** Build a real-world Classification Model: Coral Bleaching (Use Case Walkthrough) ● Link to the steps involved in project development and dataset: https://drive.google.com/drive/folders/1ppJ4d-8yOFJ2G22rHHpjNrK0ejdIAe5Q?usp=sharing
Image Features & Convolution Operator	Apply the convolution operator to process images and extract useful features.	**Session:** Understanding Convolution operator
		Activity: Convolution Operator
Convolution Neural Network	Understand the basic architecture of a CNN and its applications in computer vision and image recognition.	**Session:** Introduction to CNN
		Session: Understanding CNN ● Kernel ● Layers of CNN
		Activity: Testing CNN

UNIT 6: Natural Language Processing (To be assessed through Theory)

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Introduction	Comprehend the complexities of natural languages. and elaborate on the need for NLP techniques for machines to understand various natural languages effectively.	**Session:** Features of natural languages. **Session:** Introduction to Natural Language Processing
Applications of Natural Language Processing	Explore the various applications of NLP in everyday life, such as , voice assistants, auto generated captions, language translation, sentiment analysis, text classification and keyword extraction.	**Session:** Various real-life applications of NLP **Activity:** Keyword Extraction https://cloud.google.com/natural-language
Stages of Natural Language Processing (NLP)	Understand the concepts like lexicon, syntax, semantics, and logical analysis of input text.	**Session:** Explore the various stages of NLP that involve in understanding and processing human language.
Chatbots	Understand the concept of chatbot and the differences between smartbots and script bots.	**Activity:** Play with chatbots Elizabot - https://www.masswerk.at/elizabot/ Mitsuki - https://www.kuki.ai/ Cleverbot - https://www.cleverbot.com/ Singtel - https://www.singtel.com/personal/support **Session:** Script Bot V/s Smart Bot
Concepts of Natural Language Processing: Text Processing	Learn about the Text Normalization technique used in NLP and the popular NLP model - Bag-of-Words	**Session: Text Processing** • Text Normalisation • Bag of Words **Hands-on:** Text processing • Data Processing • Bag of Words • TFIDF

UNIT 6: Natural Language Processing (To be assessed through Practicals)

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Natural Language Processing: Use Case Walkthrough	Explore the sentiment analysis process using real-life datasets with the Orange Data Mining tool.	**Session:** Examples of Code and No-code NLP Tools **Session:** Applications of NLP- Introduction to Sentiment Analysis **Hands-on:** Case Walkthrough – Steps involved in project development Link to steps and dataset: https://drive.google.com/drive/u/2/folders/1geFLXx V5890kfcakMfEg_KsH1LPcS_Iz

UNIT 7: ADVANCE PYTHON (To be assessed through Practicals)

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Recap	Understand to work with Jupyter Notebook, creating virtual environments, installing Python Packages.	**Session:** Jupyter Notebook
	Able to write basic Python programs using fundamental concepts such as variables, data types, operators, and control structures.	**Session:** Introduction to Python
	Able to use Python built-in functions and libraries.	**Session:** Python Basics

PART-C: PRACTICAL & PROJECT WORK

Practical Work:

Suggested Programs List	● Write a program to add the elements of the two lists. ● Write a program to calculate mean, median and mode using Numpy ● Write a program to display line chart from (2,5) to (9,10). ● Write a program to display a scatter chart for the following points (2,5), (9,10),(8,3),(5,7),(6,18). ● Read the csv file saved in your system and display 10 rows. ● Read csv file saved in your system and display its information ● Write a program to read an image and display using Python ● Write a program to read an image and identify its shape using Python
Important Links	Link to AI Activities & steps to AI project development considering real life problem statement along with the required dataset https://docs.google.com/spreadsheets/d/1ZQCTT8RM-I7QfeTzH0n-5wJLBAoiXu7TFM0Pcp31cX0/edit?usp=sharing
Project Work / Field Visit / Student Portfolio *** relate it to Sustainable Development Goals** **Suggested Projects/ Field Visit / Portfolio (any one activity to be one)**	
Sample Projects	AI Project Development Using 1. Statistical Data for AI: Prediction of palmer penguin species 2. Computer Vision: Early detection of coral bleaching 3. Natural Language Processing: Sentiment Analysis
Field Work	Students' participation in the following- ● AI for Youth Bootcamp ● AI Fests/ Exhibition ● Participation in any AI training sessions ● Virtual tours of companies using AI to get acquainted with real-life usage
Student Portfolio (to be continued from class IX)	● Maintaining a record of all AI activities ● Hackathons ● Competitions (CBSE/Inter School) Note: Portfolio should contain minimum 5 activities

LIST OF ITEMS/ EQUIPMENT'S (MINIMUM REQUIREMENTS):

The equipment / materials listed below are required to conduct effective hands-on learning sessions while delivering the AI curriculum to class 10 students. The list below consists of minimal configuration required to execute the AI curriculum for class 10 and create social impact real time solutions/ projects. The quantities mentioned here are recommended for a batch of 20 students keeping the human-machine ratio as 2:1. An exhaustive list may be compiled by the teacher(s) teaching the subject.

S. NO.	ITEM NAME, DESCRIPTION & SPECIFICATION
A	**SYSTEM SPECIFICATIONS**
1	Processor: Intel® Core™ i5-7300U Processor or equivalent with minimum SYSmark® 2018 Rating of 750 or higher
2	Graphic Card: Integrated graphics
3	Form Factor: - USFF (Ultra Small Form factor) System chassis volume less than One Litre
4	RAM: 8GB DDR4 – 2400MHz or above
5	Storage: 500 GB HDD – 7200 rpm
6	Display: 18.5" LED Monitor with HDMI, in-built-speaker,
7	Keyboard: Keyboard with numerical keypad (recommended)
8	Mouse: Optical Mouse
9	Webcam: Full HD Camera
10	Headphones with Mic
11	Dual Band Wireless Connectivity Min 800 Mbps
12	Bluetooth V4.2 or Higher
13	Ports: 4 USB 3.0 ports, dual high-definition display ports (HDMI 2.0/DP/thunderbolt 3.0 ports), High definition 8-channel audio through HDMI interface or through audio jack.
14	VPU: - Integrated or support for VPU - vision processing unit to accelerate AI machine vision applications.
B	**SOFTWARE SPECIFICATIONS**
1	Operating System: Any
2	Anti-Virus Activated
3	Internet Browser: Google Chrome
4	Productivity Suite: Any (Google+ Suite recommended)
5	Anaconda Navigator Distribution (https://bit.ly/AI-installation-guide)
6	Conceptual installations (https://bit.ly/AI-installation-guide)
7	Intel Open VINO tools
8	Python

NOTE: In keeping with the spirit of Recycle, Upcycle and Reuse, it is recommended to make use of any equipment/ devices/ accessories from the existing inventory in school.

TEACHER'S/ TRAINER'S QUALIFICATIONS:

Qualification and other requirements for appointment of teachers/trainers for teaching this subject, on contractual basis should be decided by the State/ UT. The suggestive qualifications and minimum competencies for the teacher should be as follows:

Qualification	Minimum Competencies	Age Limit
Diploma in Computer Science/ Information Technology **OR** Bachelor's Degree in Computer Applications/Science/Information Technology (BCA, B.Sc. Computer Science/ Information Technology) **OR** Graduate with PGDCA **OR** DOEACC A Level Certificate. *The suggested qualification is the minimum criteria. However higher qualifications will also be acceptable.*	● The candidate should have a minimum of 1 year of work experience in the same job role. ● S/He should be able to communicate in English and local language. ● S/He should have knowledge of equipment, tools, material, Safety, Health & Hygiene.	● 18-37 years (as on Jan. 01 (year)) ● Age relaxation to be provided as per Govt. rules

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(i) Directly as per the prescribed qualifications and industry experience suggested by the PSS Central Institute of Vocational Education (PSSCIVE), NCERT or the respective Sector Skill Council (SSC).

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(ii) Through accredited Vocational Training Providers accredited under the National Quality Assurance Framework (NQAF*) approved by the National Skill Qualification Committee on 21.07.2016. If the State is engaging Vocational Teachers/Trainers through the Vocational Training Provider (VTP), it should ensure that VTP should have been accredited at NQAF Level 2 or higher.

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(i)   Written test for the technical/domain specific knowledge related to the sector;

(ii)   Interview for assessing the knowledge, interests and aptitude of trainer through a panel of experts from the field and state representatives; and

(iii)   Practical test/mock test in classroom/workshop/laboratory.

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The Headmaster/Principal of the school where the scheme is being implemented should facilitate and ensure that the (Vocational) Teachers/Trainers:

- Prepare session plans and deliver sessions which have a clear and relevant purpose, and which engage the students;
- Deliver education and training activities to students, based on the curriculum to achieve the learning outcomes;
- Make effective use of learning aids and ICT tools during the classroom sessions;
- Engage students in learning activities, which include a mix of different methodologies, such as project-based work, teamwork, practical and simulation-based learning experiences;
- Work with the institution's management to organise skill demonstrations, site visits, on-job trainings, and presentations for students in cooperation with industry, enterprises and other workplaces;
- Identify the weaknesses of students and assist them in up-gradation of competency;
- Cater to different learning styles and level of ability of students;
- Assess the learning needs and abilities, when working with students with different abilities
- Identify any additional support the student may need and help to make special arrangements for that support;
- Provide placement assistance

Assessment and evaluation of (Vocational) Teachers/Trainers is very critical for making them aware of their performance and for suggesting corrective actions. The States/UTs should ensure that the performance of the (Vocational) Teachers/Trainers is appraised annually. Performance based appraisal in relation to certain pre-established criteria and objectives should be done periodically to ensure the quality of the (Vocational) Teachers/Trainers.

Following parameters may be considered during the appraisal process:
- Participation in guidance and counseling activities conducted at Institutional, District and State level;
- Adoption of innovative teaching and training methods;
- Improvement in result of vocational students of Class X or Class XII;
- Continuous up-gradation of knowledge and skills related to the vocational pedagogy, communication skills and vocational subject;
- Membership of professional society at District, State, Regional, National and International level;
- Development of teaching-learning materials in the subject area;
- Efforts made in developing linkages with the Industry/Establishments;
- Efforts made towards involving the local community in Vocational Education
- Publication of papers in National and International Journals;
- Organisation of activities for promotion of vocational subjects;
- Involvement in placement of students/student support services.