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

[Grade: IX]

ENGLISH

MARCH

CHAPTER/TOPIC		TEACHING PERIODS
1 ST WEEK	The Fun They Had	
2nd Week	___ Work book ____	
3rd Week	The Wind	
4th Week	__ Workbook _____	

APRIL

CHAPTER/TOPIC	TEACHINGPERIODS
1ST WEEK	The Road not taken ,
2ND WEEK	The sound of music
3RD WEEK	The little girl
4TH WEEK	A truly beautiful mind

MAY

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	Modals
2ND WEEK	Rain on the roof
3RD WEEK	PRE-MID EXAMINATION(13TH MAY-18th MAY)
4TH WEEK	The lake Isle of innisfree
5TH WEEK	A legend of the North land

JUNE

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	Determines
2ND WEEK	Iswaran the story teller
3RD WEEK	Reported Speech

4TH WEEK	

JULY

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	
2ND WEEK	In the kingdom of fools
3RD WEEK	REVISION
4TH WEEK	MID-TERM EXAMINATION(27 JULY-07 AUGUST)
5th WEEK	MID-TERM EXAMINATION

AUGUST

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	MID-TERM EXAMINATION
2ND WEEK	MID-TERM EXAMINATION
3RD WEEK	
4TH WEEK	Snake and the mirror
5TH WEEK	My childhood

SEPTEMBER

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	Reach for the top
2ND WEEK	Subject verb concord
3RD WEEK	Kathmandu
4TH WEEK	

OCTOBER

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	No men are foreign
2ND WEEK	On killing a tree
3RD WEEK	Tenses
4TH WEEK	If I were you

NOVEMBER

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	A slumber did my spirit seal
2ND WEEK	Story writing
3RD WEEK	POST-MID EXAMINATION(16th NOVEMBER-25th NOVEMBER)
4TH WEEK	POST-MID EXAMINATION

DECEMBER

@lp look/TOPIC	TEACHING PERIODS
1ST WEEK	
2ND WEEK	

دون اسکول سرینگر

ایچ ایم ٹی ہوکر 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 ۲۰۲۴تا۲۰۲۵

جماعت: نہم

مضمون: اردو

ماہ مارچ

مطلوبہ دروس	
	اسباق
پہلا ہفتہ	اردو زبان کا تعارف (آغاز وارتقاء)
دوسرا ہفتہ	تعارف نظم، سوانح حیات وادبی خدمات: تلوک چند محروم
تیسرا ہفتہ	نظم: ہندو مسلمان۔ قواعد: تعارف اسم
چوتھا ہفتہ	تعارف مضمون: سوانح حیات اور ادبی خدمات: میر باقر علی
پانچواں ہفتہ	تعارف: واحد جمع مع بیس مثالیں

ماہ اپریل

مطلوبہ دروس	عملی کام: نظم ترنم
	اسباق
پہلا ہفتہ	مضمون: بہادر شاہ کا ہاتھی
دوسرا ہفتہ	تعارف کہانی۔ **سوانح حیات اور ادبی خدمات منشی پریم چند**
تیسرا ہفتہ	کہانی: نادان دوست۔ کتاب دور پاس: ترانہ ہندی
چوتھا ہفتہ	**پری مڈ امتحان**

ماہ مئی

مطلوبہ دروس	عملی کام: ایڈسن کا کردار (کرداروں کے ذریعے کہانی کی پیشکش)
	اسباق
پہلا ہفتہ	تعارف گیت۔ **سوانح حیات اور ادبی خدمات اختر شیرانی**
دوسرا ہفتہ	خطوط نگاری: نجی، دفتری، کاروباری
تیسرا ہفتہ	خطوط نگاری: نجی، دفتری، کاروباری۔ ضمیر کی تعریف
چوتھا ہفتہ	گیت: دیہاتی لڑکی کا ایک گیت

پانچواں ہفتہ	کتاب دور پاس: پھل پھول

ماہ جون

مطلوبہ دروس	عملی کام: بلند خوانی
	اسباق
پہلا ہفتہ	سوانح حیات اور ادبی خدمات: سورج نرائن مہر: نظم: بہادر بنو
دوسرا ہفتہ	مضمون نویسی: مختلف مضامین: متضاد الفاظ
تیسرا ہفتہ	سوانح حیات اور ادبی خدمات: ڈاکٹر ذاکر حسین: کہانی احسان کا بدلہ احسان
چوتھا ہفتہ	سوانح حیات اور ادبی خدمات: اسمعیل میرٹھی: نظم ایک پودا اور گھاس

ماہ جولائی

مطلوبہ دروس	عملی کام: نظم کی پیشکش کرداروں کے ذریعے
	اسباق
پہلا ہفتہ	**مڈٹرم امتحان**
دوسرا ہفتہ	سند باد جہازی کا ایک سفر (کتاب دور پاس: کفایت شعاری)

تیسرا ہفتہ	سوانح حیات اور ادبی خدمات: فرقت کاکوری: کہاوتوں کی کہانی
چوتھا ہفتہ	سوانح حیات اور ادبی خدمات: محمد مجیب: تنکا تھوڑی ہوا سی اڑ جاتا ہے

ماہ اگست

مطلوبہ دروس	عملی کام: سبزیوں کا البم
	اسباق
پہلا ہفتہ	سابقہ، لاحقہ، تذکیر و تانیث، تشبیہ،
دوسرا ہفتہ	(کتاب دور پاس: ایک پرانی کہانی: برسات اور پھسلن)
تیسرا ہفتہ	سوانح حیات اور ادبی خدمات: کبیر داس تعارف: صنف دوہے
چوتھا ہفتہ	دوہے: تشریح

ماہ ستمبر

مطلوبہ دروس	عملی کام پیشکش
	اسباق
پہلا ہفتہ	سوانح حیات اور ادبی خدمات: افسر میرٹھی: نظم بہار کے دن

دوسرا ہفتہ	سوانح حیات اور ادبی خدمات: احمد جمال پاشا: ملا نصر الدین
تیسرا ہفتہ	اعادہ: واحد جمع۔ متضاد۔ مترادفات (دور پاس: ایک انوکھا عجائب گھر)
چوتھا ہفتہ	**پوسٹ مڈ ٹرم امتحان**

ماہ اکتوبر

مطلوبہ دروس	عملی کام: ترانہ
	اسباق
پہلا ہفتہ	سوانح حیات اور ادبی خدمات: ڈپٹی نظیر احمد
دوسرا ہفتہ	خطوط نویسی اعادہ (دور پاس جگنو اور بچہ)
تیسرا ہفتہ	مضمون نویسی اعادہ (دور پاس: ہندوستان کی چند مشہور خواتین)
چوتھا ہفتہ	کتاب دور پاس: اردو کی کہانی۔ بالغون کے لیے تیسری کتاب۔ گیت

ماہ نومبر

مطلوبہ دروس	عملی کام: اسباق کی پیشکش
	اسباق

پہلا ہفتہ	دور پاس: زیرو ناٹ آوٹ۔ عالمی حرارت
دوسرا ہفتہ	دور پاس: اے شریف انسانو۔ جلوہ دربار دہلی
تیسرا ہفتہ	اعادہ
چوتھا ہفتہ	**سالانہ امتحان**

ماہ دسمبر

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

DOON SCHOOL SRINAGAR

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

SYLLABUSBREAKUP-2025/26

{Grade-IX}

HINDI

MARCH

CHAPTER/TOPIC □. □□□ □□ □□□□□□ □. □□ □□□□□ □□□□□□□ □□□ □□□□□ □□□□□□□	**TEACHINGPERIODS**
1ST WEEK	दुख का अधिकार
2ND WEEK	प□ -□□□□□
3RD WEEK	अपठित गद्यांश
4TH WEEK	Activity (□□□□□□□□□□- पढ़ने की प्रतियोगिता)

APRIL

CHAPTER/TOPIC □. □□□□□□□: □□□□ □□□□ □□□□□□ □□□□□□□ □□□ □□□□ □□ □□	TEACHINGPERIODS
1ST WEEK	एवरेस्ट: मेरी शिखर यात्रा
2ND WEEK	शब्द और पद
3RD WEEK	Revision
4TH WEEK	Pre Mid Examinaton
5TH WEEK	

MAY

CHAPTER/TOPIC □. □□□ □□ □□□□□,□□□□□ □. □□□□(□□□□) □. □□□□□□□□□ □□□□□ □□ □□□□ :□□□□□□□□□ □□□□□□□□ □□□□□□□ □□□ □□□□□□□□ □ □□□□□□□□, □□□□□□ □□□ □□□□□□□	TEACHINGPERIODS
1ST WEEK	तुम कब जाओगे,अतिथि
2ND WEEK	दोहे(रहीम)
3RD WEEK	अनुस्वार व अनुनासिक, उपसर्ग एवं प्रत्यय
4TH WEEK	Activity (क्रियाकलाप- □□□□□ की प्रतियोगिता)

JUNE

CHAPTER/TOPIC □. □□□ □□□□ □□□□ □□□□	TEACHINGPERIODS
1ST WEEK	गीत □गीत
2ND WEEK	पत्र लेखन
3RD WEEK	Revision
4TH WEEK	Mid Term Examination
5TH WEEK	

JULY

CHAPTER/TOPIC □. □□□□□ □□□□ □□ □□□□ □. □□□□□□ □□□□□□□ □□□ □.□□□□ □□□□ □□□ □. □□□□□□□□ □□□□	TEACHINGPERIODS
1ST WEEK	Mid Term Examination
2ND WEEK	□□ल्लू,□□□□□ □□□□ □□ □□□□

3RD WEEK	संधि, □□□□□□□□ □□□□
4TH WEEK	Activity(क्रियाकलाप -अनुच्छेद लेखन की प्रतियोगिता)

AUGUST

CHAPTER/TOPIC □. □□□□□□□ □. □□□□□□ □□□□□□□ □□□ □□□□□ □□□□□, □□□□□ □□□□	**TEACHINGPERIODS**
1ST WEEK	अग्निपथ
2ND WEEK	स्मृति
3RD WEEK	विराम चिन्ह
4TH WEEK	संवाद लेखन
5TH WEEK	Activity (□□□□□ प्रतियोगिता)

SEPTEMBER

CHAPTER/TOPIC □. □□□□□ □□□□□ □□ □□□□□□□ □□□□□□□ □□□ □□□□□ □□□, □□□□□ □□□□□	**TEACHINGPERIODS**
1ST WEEK	क□□□□ कुमार की उनाकोटी
2ND WEEK	वाक्य भेद, □□□□□ □□□□□
3RD WEEK	Revision
4TH WEEK	Post Mid Examination

OCTOBER

CHAPTER/TOPIC □. □□□□ □□□□ □□ □□□□ □□□□□□□□□ □□□□ □□□□□ □□□□□□□, □□□□ □□□□	**TEACHINGPERIODS**

1ST WEEK	मेरा छोटा सा निजी पुस्तकालय
2ND WEEK	अपठित गद्यांश
3RD WEEK	पत्र लेखन, चित्र वर्णन
4TH WEEK	Activity (□□□□□□□□□□ नाटक) related to the chapter

NOVEMBER

CHAPTER/TOPIC □. □□ □□□□□ □□□ □□□□□ □□□□ □□□ □□□ □□□□ □□□□	**TEACHINGPERIODS**
1ST WEEK	न□ इलाके में खुशबू रचते हैं हाथ
2ND WEEK	Revision
3RD WEEK	Revisions
4TH WEEK	Final Term Examination

DECEMBER

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

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: IX]

MATHEMATICS

MARCH

CHAPTER/TOPIC	TEACHINGPERIODS
1ST WEEK	Chapter 1: Number system (introduction), brief review of numbers, decimal representation of numbers, irrational numbers, representing irrational numbers on the number line.
2ND WEEK	Real numbers & real number line, visualisation of representation of real numbers by using the process of successive magnification.
3RD WEEK	Chapter 2: Polynomials(introduction), types of polynomials, zeros of polynomials, Remainder theorem (related exercis
4TH WEEK	Factor theorem, Factorisation of polynomials by using factor theorem, Expansion of polynomials using Identities.

APRIL

CHAPTER/TOPIC	TEACHINGPERIODS
1ST WEEK	Chapter 3: Coordinate geometry (introduction), Rectangular or Cartesian coordinates of a point, plotting of points.
2ND WEEK	Chapter 4: Introduction to Euclid's Geometry (introduction), Axioms(postulates) & theorems, parallel lines & interesting lines.
3RD WEEK	**REVISION**
4TH WEEK	**PRE-MID EXAMINATION**

MAY

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	Chapter 5: Linear equations in two variables (introduction), solution of a linear equations, graph of a linear equations in two variables, equations of lines parallel to the coordinate axes.
2ND WEEK	Chapter 6: Lines & angles(introduction), Angle, types of angle, Measure of an angles.
3RD WEEK	Angle relations, Angles made by a transversal with two lines.
4TH WEEK	Interesting & non - interesting lines, pair of angles, lines parallel to same line.
5TH WEEK	Chapter 7:Triangles (introduction), congruence of triangles, criteria for congruence.

JUNE

CHAPTER/TOPIC	TEACHING PERIODS

1ST WEEK 2nd WEEK	Some properties of a triangle (related exercise). Chapter 8 : Heron's formula: Area of a triangle by Herons formula.
3RD WEEK	**REVISION**
4TH WEEK	**MID-TERM EXAMINATION**

JULY

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK 2nd WEEK	**MID-TERM EXAMINATION** **Chapter 9: Quadrilaterals: Properties of a parallelogram.**
3RD WEEK	The mid- point theorem)
4TH WEEK	Quadrilaterals (related exercise)
5th WEEK	**SUMMER BREAKS**

AUGUST

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	Chapter 10: Circles(introduction), terms related to a circle, chord & arc properties of circles.
2ND WEEK	Arcs & angles subtended by them, (related exercise)
3RD WEEK	Properties of a cyclic quadrilaterals (related exercise).
4TH WEEK	Chapter 11: Statistics (introduction.

SEPTEMBER

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	Brief introduction of measures of central tendency (mean, mode & median)
2ND WEEK	Graphical representation of data.
3RD WEEK	**REVISION**
4TH WEEK	**POST-MID EXAMINATION**

OCTOBER

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	Chapter 13: Surface area & volumes (introduction), units of measurement of area & volume, surface area of a right circular cone.
2ND WEEK	Surface area of a sphere (related exercise)
3RD WEEK	Volume of a right circular cone(related exercise).
4TH WEEK	**Volume of sphere (related exercise).**

NOVEMBER

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	**Chapter 14: Probability, various approaches to probability (related exercise)**
2ND WEEK	**REVISION**
3RD WEEK	**FINAL TERM EXAMINATION**
4TH WEEK	**FINAL TERM EXAMINATION**

Doon International School

[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

CLASS-X
BIOLOGY

MARCH

CHAPTER/TOPIC Chapter 1	TEACHINGPERIODS 20
1ST WEEK	**Unit I: ORAGANIZATION IN THE LIVING WORLD** Cell as a basic unit of life
2ND WEEK	Prokaryotic and eukaryotic cells
3RD WEEK	Unicellular and multicellular organisms
4TH WEEK	Plant cells and Animal cells

APRIL

CHAPTER/TOPIC	TEACHINGPERIODS 08
1ST WEEK	Cell wall and cell membrane
2ND WEEK	Plasmolysis and deplasmolysis
3RD WEEK	**REVISION**
4TH WEEK	**PRE-MID EXAMINATION**

MAY

CHAPTER/TOPIC	TEACHING PERIODS 22
1ST WEEK	Cell organelles and cell inclusions
2ND WEEK	Nucleus and cytoplasm
3RD WEEK	Chromosomes : Basic structure and number
4TH WEEK	Organelles : Endoplasmic reticulum
5TH WEEK	Mitochondria

JUNE

CHAPTER/TOPIC	TEACHING PERIODS 10
1ST WEEK	Gogi apparatus , Ribosomes
2ND WEEK	Mitochondria
3RD WEEK	Chloroplasts and vacuoles
4TH WEEK	**MID-TERM EXAMINATION**

JULY

CHAPTER/TOPIC	TEACHING PERIODS 10
1ST WEEK	**MID-TERM EXAMINATION**
2ND WEEK	**Unit II: TISSUES** Basic concepts
3RD WEEK	Difference between plant and animal tissues
4TH WEEK	**Plant tissues : Meristematic and permanent tissues**

5th WEEK	**SUMMER BREAKS**

AUGUST

CHAPTER/TOPIC	TEACHING PERIODS
	18
1ST WEEK	Meristematic tissues and its types
2ND WEEK	Permanent tissues and its types
3RD WEEK	Xylem and phloem
4TH WEEK	Animal tissues : Epithelial tissues , Connective tissues

SEPTEMBER

CHAPTER/TOPIC	TEACHING PERIODS
	08
1ST WEEK	Muscular tissues and Nervous tissues
2ND WEEK	**UNIT III: FOOD PRODUCTION** Plant and Animal breeding
3RD WEEK	**REVISION**
4TH WEEK	**POST-MID EXAMINATION**

OCTOBER

CHAPTER/TOPIC	TEACHING PERIODS
	13
1ST WEEK	Selection for quality , improvement and management
2ND WEEK	Use of manures
3RD WEEK	Use of fertilizers
4TH WEEK	Potection from pests and diseases .

NOVEMBER

CHAPTER/TOPIC	TEACHING PERIODS
	04
1ST WEEK	Organic farming
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]
Ph: +91 9103155601, 9103155603, Email: info@doonsrinagar.com, www.doonsrinagar.com
Affiliated to CBSE New Delhi, Affiliation No. 730082

SYLLABUS BREAKUP – 2025/ 26

[Grade: IX]

PHYSICS

MARCH

CHAPTER/TOPIC		TEACHINGPERIODS
1ST WEEK	Motion: Distance and displacement.	
2ND WEEK	velocity; uniform and non-uniform motion along a straight line.	
3RD WEEK	Numericals and competency based questions.	
4TH WEEK	acceleration, distance-time and velocity-time graphs for uniform motion and uniformly accelerated motion.	

APRIL

CHAPTER/TOPIC		TEACHINGPERIODS
1ST WEEK	elementary idea of uniform circular motion.	
2ND WEEK	Numericals and competency based questions.	
3RD WEEK	**REVISION**	
4TH WEEK	**PRE-MID EXAMINATION**	

MAY

CHAPTER/TOPIC		TEACHING PERIODS
1ST WEEK	Force and Motion, concept of inertia.	
2ND WEEK	Newton's 1st law of motion. Concept of momentum,	
3RD WEEK	Newton's 2nd law of motion. Acceleration from Newton's 2nd law,	
4TH WEEK	law of conservation of momentum. Application of the concept.	
5TH WEEK	Newton's 3rd law of motion.	

JUNE

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	Numericals and competency based questions.
2ND WEEK	group discussion.
3RD WEEK	**REVISION**
4TH WEEK	**MID-TERM EXAMINATION**

JULY

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	**MID-TERM EXAMINATION**
2ND WEEK	Gravitation; Universal Law of Gravitation, Force of Gravitation of the earth (gravity).
3RD WEEK	Acceleration due to Gravity; Mass and Weight; Free fall.
4TH WEEK	Numericals.
5th WEEK	**SUMMER BREAKS**

AUGUST

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	Thrust and Pressure. Archimedes' Principle, Buoyancy.
2ND WEEK	Practical
3RD WEEK	Work done by a Force, Energy, power.
4TH WEEK	Kinetic and Potential energy; Law of conservation of energy

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	Nature of sound and its propagation in various media, speed of sound.
2ND WEEK	Range of hearing in humans; ultrasound.
3RD WEEK	Reflection of sound; echo.
4TH WEEK	**Practical.**

NOVEMBER

CHAPTER/TOPIC	TEACHING PERIODS
1ST WEEK	**Group discussion and numericals.**
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]
Ph: +91 9103155601, 9103155603, Email: info@doonsrinagar.com, www.doonsrinagar.com
Affiliated to CBSE New Delhi, Affiliation No. 730082

SYLLABUS BREAKUP – 2025/ 26

[Grade: IX]

Chemistry

MARCH

Unit l : Matter nature and behaviour.	TEACHINGPERIODS
	20
1ST WEEK	A brief introduction of matter. Solid, liquid, gas characteristics : shape, volume, density
2nd WEEK	Change of state melting, freezing, evaporation
3RD WEEK	Condensation, sublimation
4TH WEEK	Numericals and problem solving

APRIL

Nature of matter	TEACHINGPERIODS
	18
1ST WEEK	Elements, compounds and mixtures definitions, properties and differentiation.
2ND WEEK	Heterogeneous and homogeneous mixtures
3RD WEEK	**REVISION**
4TH WEEK	**PRE-MID EXAMINATION**

MAY

	TEACHING PERIODS
	18
1ST WEEK	Colloids and suspensions definition, properties and uses.
2ND WEEK	Physical and chemical changes concept. Examples and difference.
3RD WEEK	
4TH WEEK	
5TH WEEK	

JUNE

particle nature and their basic units	TEACHING PERIODS
	15

1ST WEEK	Concept of atoms and molecules, homoatomic and heteroatomic molecules examples
2ND WEEK	Laws of chemical combination: law of conservation of mass
3RD WEEK	**REVISION**
4TH WEEK	**MID-TERM EXAMINATION**

JULY

CHAPTER/TOPIC	TEACHING PERIODS
	18
1ST WEEK	**MID-TERM EXAMINATION**
2ND WEEK	Law of definite proportion, law of multiple proportion
3RD WEEK	Numericals based on laws of chemical combination
4TH WEEK	Practice problems.
5th WEEK	**SUMMER BREAKS**

AUGUST

	TEACHING PERIODS
	20
1ST WEEK	Elements and symbols, writing chemical formula of common compounds.
2ND WEEK	Method for writing chemical formula.
3RD WEEK	Examples of writing chemical formulas
4TH WEEK	Atomic and molecular masses

SEPTEMBER

Structure of atoms.	TEACHING PERIODS
	14
1ST WEEK	Sub-atomic particles electron, proton and neutrons
2ND WEEK	Parameters of sub atomic particles.
3RD WEEK	**REVISION**
4TH WEEK	**POST-MID EXAMINATION**

OCTOBER

Atomic structure	TEACHING PERIODS
	18
1ST WEEK	Valence electrons, valency, Atomic number, average atomic number, relative mass number.
2ND WEEK	Mass number, molecular mass.
3RD WEEK	Atomic models: Thomsons model and it's drawbacks, Rutherford's model and it's draw backs
4TH WEEK	**Bohrs model advantages and disadvantages. Numericals.**

NOVEMBER

	TEACHING PERIODS
1ST WEEK	**Isobars and isotopes, applications of isotopes.**
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 – IX

COURSE OVERVIEW:

A Data Entry Operator/Analyst is a person who is responsible for entering data into different applications and computer databases, manage and maintain effective record keeping. In addition, S/he is responsible for organizing files, collecting and managing data to be entered into the computer. S/he is also responsible for security of data and safeguard of the computer network.

With every office and organization seeking to become computerized, the demand for data entry operators/analysts is on a rise. Data entry operators/analysts usually work in an indoor, office setting using a computer and other electronic machines. To be in the profession of data entry/analysis, one has to have computer literacy, high typing speed, organization skills, concentration skills, communication skills and an ability to sit for long periods of time entering and computing data.

OBJECTIVES OF THE COURSE:

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 an 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 system 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:
    - Data Entry and Keyboarding skills
    - The concept of Digital Documentation
    - The concept of Digital Presentation
    - The concept of Electronic Spreadsheet
    - The concept of Databases
    - 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 fast 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

This course is a planned sequence of instructions consisting of units meant for developing employability and vocational competencies of students of Class IX opting for skill subject along with other education subjects. The unit-wise distribution of hours and marks for class IX is as follows:

INFORMATION TECHNOLOGY (SUBJECT CODE - 402)

CLASS – IX (Session 2024-2025)

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-I	10		2
	Unit 2 : Self-Management Skills-I	10		3
	Unit 3 : ICT Skills-I	10		1
	Unit 4 : Entrepreneurial Skills-I	15		3
	Unit 5 : Green Skills-I	05		1
	Total	**50**		**10**
Part B	**Subject Specific Skills**	**Theory**	**Practical**	**Marks**
	Unit 1: Introduction to IT- ITeS industry	2	4	4
	Unit 2: Data Entry & Keyboarding Skills	4	10	6
	Unit 3: Digital Documentation	10	26	10
	Unit 4:Electronic Spreadsheet	18	35	10
	Unit 5: Digital Presentation	10	31	10
	Total	**44**	**106**	**40**
Part C	**Practical Work**			
	Practical Examination			15
	Written Test			10
	Viva Voce			10
	Total			**35**
Part D	**Project Work/ Field Visit**			
	Practical File/ Student Portfolio			10
	Viva Voce			05
	Total			**15**
	GRAND TOTAL	**200**		**100**

DETAILED CURRICULUM/TOPICS:

Part-A: EMPLOYABILITY SKILLS

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

NOTE: **Detailed Curriculum/ Topics to be covered under Part A: Employability Skills can be downloaded from CBSE website**.

Part-B – SUBJECT SPECIFIC SKILLS

- Unit 1: Introduction to IT- ITeS industry
- Unit 2: Data Entry & Keyboarding Skills
- Unit 3: Digital Documentation
- Unit 4: Electronic Spreadsheet
- Unit 5: Digital Presentation

UNIT 1: INTRODUCTION TO IT–ITeS INDUSTRY

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1	Appreciate the applications of IT	• Introduction to IT and ITeS, BPO services, • BPM industry in India, • Structure of the IT-BPM industry, • Applications of IT in home computing, everyday life, library, workplace, education, entertainment, communication, business, science and engineering, banking, insurance, marketing, health care, IT in the government and public service	- Identify and list the various IT enabled services, Observe the application of IT in various areas.

UNIT 2: DATA ENTRY AND KEYBOARDING SKILLS

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Use keyboard and mouse for data entry	• Keyboarding Skills, • Types of keys on keyboard, Numeric keypad, • Home keys, Guide keys, • Typing and deleting text, • Typing ergonomics, • Positioning of fingers on the keyboard, Allocation of keys to fingers on four different rows, • Pointing device – Mouse, Mouse operations.	• Identify the keys and its use on the keyboard, • Demonstrate to use various keys on the keyboard, • Demonstrate to type the text, numbers, special character using appropriate keys on the keyboard, • Practice the correct typing ergonomics, • Practice to place fingers on correct key in four different row of keyboard, • Practice various mouse operations.
2.	Use typing software	• Introduction to Rapid Typing Tutor, • Touch typing technique, • User interface of Typing Tutor, • Typing text and interpret results, • Working with lesson editor, • Calculating typing speed, • Typing rhythm.	• Identify the user interface of • typing tutor, • Practice to type text in typing tutor software and interpret the results, • Practice to work in lesson editor, • Calculate the typing speed • Practice to improve typing • Using typing tutor software.

UNIT 3: DIGITAL DOCUMENTATION

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Create a document using a word processor	• Introduction to word processing, • Word processing applications, • Introduction to Word Processing tool • Creating a document, Parts of a Word Processor Window,	• List the available word processing applications. • Introduce with the parts of the main window. • Change document views. • Start a new document. • Open an existing document. • Save a document. • Close a document.
2.	Apply Editing features	• Text editing – Undo and Redo, • Moving and copying text, • Copy and Paste, • Selecting text, • Selection criteria,	• Editing of text in a document • Demonstrate to use undo and redo option, • Use the keyboard and mouse options to select, cut, copy, paste, and move text.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
		• Selecting non-consecutive text items, • Selecting a vertical block of • text, • Find and replace option, • Jumping to the page number, • Non-printing characters, • Checking spelling and grammar, • Using Synonyms and Thesaurus.	• Demonstrate to select nonconsecutive text items, vertical block of text, • Search and replace text in a document. • Jump to the given page number in a document, • Insert non-printing characters in a document, • Apply Spelling and grammar option of document. • Demonstrate to use Synonyms and Thesaurus.
3.	Apply formatting features	• Page style dialog • Formatting text – Removing manual formatting, Common text formatting, Changing text case, Superscript and Subscript • Formatting paragraph – Indenting paragraphs, Aligning paragraphs, Font colour, highlighting, and background colour, Using bullets and numbering, Assigning colour, border and background to paragraph. • Page formatting – setting up basic page layout using styles, Inserting page break, Creating header/footer and page numbers, • Defining borders and backgrounds, Inserting images shapes, special characters in a document, Dividing page into columns, Formatting the shape or image.	• Apply various text formatting options for the text, • Demonstrate to format paragraphs – indent/align paragraphs, assign font colour, highlighting, and background colour, • Assign number or bullets to the lists items • Demonstrate to assign colour, border and background to paragraph • Demonstrate the page formatting – set up basic page layout using styles, • Insert page break, Create header/footer and page numbers • Define borders and backgrounds • Insert images, shapes, special characters in a document • Divide page into columns, • Format the shape or image.
4.	Create and work with tables	• Creating table in Word Processor • Inserting row and column in a table • Deleting rows and columns • Splitting and merging tables • Deleting a table • Copying a table • Moving a table.	• Demonstrate and do the following in Word Processor: • Create table, • Insert and delete rows and column in a table, • Split and merge tables, • Delete a table, • Copy or move from one location to another location of document.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
5.	Use Print Options	• Printing options in Word Processor. • Print preview, • Controlling printing, • Printing all pages, single and multiple pages.	• Demonstrate to print the document, selected pages in the document • Print the document with various options, • Preview pages before printing.
6.	Understand and apply mail merge	• Introduction to mail merge • Concept of data source for mail merge.	• Demonstrate to print the letters using mail merge, • Do the following to achieve • Create a main document, • Create the data source, • Enter data in the fields, • Merge the data source with main document, • Edit individual document, • Print the merged letter, • Save the merged letter.

UNIT 4: ELECTRONIC SPREADSHEET

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Create a Spreadsheet	• Introduction to spreadsheet application • Starting a spreadsheet • Parts of a spreadsheet • Worksheet – Rows and Columns, Cell and Cell Address, • Range of cells – column range, row range, row and column range.	• Start the spreadsheet, • Identify the parts of Calc, • Identify the rows number, column number, cell address, • Define the range of cell, • Identify row range, column range, row & column range
2.	Apply formula and functions in spreadsheet	• Different types of data, • Entering data – Label, Values, Formula • Formula, how to enter formula, • Mathematical operators used in formulae, • Simple calculations using values and operators, • Formulae with cell addresses and operators, • Commonly used basic functions in a spreadsheet – SUM, AVERAGE, MAX, MIN, Count • Use of functions to do calculations.	• Demonstrate to enter the text, numeric data in a cell, • Identify the label, values and formula in the cell, • Demonstrate to enter formula in a cell, • Construct the formula using mathematical operators, • Identify formulae with cell addresses and operators, • Identify the correct syntax of formula, • Use the basic functions to perform calculations on data.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Format data in the spreadsheet	• Formatting tool, • Use of dialog boxes to format values, • Formatting a range of cells with decimal places, • Formatting a range of cells to be seen as labels, • Formatting of a cell range as scientific, • Formatting a range of cells to display times, • Formatting alignment of a cell range, • Speeding up data entry using the fill handle, • Uses of fill handle to copy formulae.	• Identify the formatting tool, • Demonstrate to use of dialog boxes to format values, • Demonstrate to format range of cells with decimal places, • Demonstrate to format a range of cells to labels, • Demonstrate to format of a cell range as scientific, • Demonstrate to format a range of cells to display time, • Demonstrate to align cell data range, • Demonstrate to create • number series using fill handle, • Copy formula by dragging the formula using fill handle.
4.	Understand and apply Referencing	• Concept of referencing, • Relative referencing, • Mixed referencing, • Absolute referencing.	• Demonstrate to use Relative referencing in spreadsheet, • Demonstrate to use Mixed referencing in spreadsheet, • Demonstrate to use Absolute referencing in spreadsheet.
5.	Create and insert different types of charts in a spreadsheet	• Importance of chart in spreadsheet • Types of chart	• Create different types of charts supported by a spreadsheet, • Illustrate the example of chart in a spreadsheet.

UNIT 5: DIGITAL PRESENTATION

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Understand features of an effective presentation	• Concept of presentation, • Elements of presentation, • Characteristics of an effective presentation	• Identify and list the elements of presentation, • List the characteristics of an effective presentation.
2.	Create a presentation	• Introduction to presentation software, • Opening a presentation software • Parts of presentation window, • Closing a presentation • Creating a presentation using template, • Selecting slide layout, • Saving a presentation, • Running a slide show, • Save a presentation in PDF, • Closing a presentation, • Using Help.	• Start the presentation application • various components of main Impress window • Observe the different workspace views. • Create a new presentation using wizard. • Run the presentation, • Save the presentation, • Close the presentation, • Demonstrate to use Help in presentation.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Work with slides	• Inserting a duplicate slide, • Inserting new slides, • Slide layout, • Copying and moving slides, • Deleting and renaming slides • Copying, moving and deleting contents of slide, • View a presentation, • Controlling the size of the view, • Workspace views – Normal, Outline, Notes, Slide sorter view.	• Demonstrate to insert a new slide and duplicate slide in a presentation, • Change the slide layout, • Demonstrate to copy and move slides in the presentation, • Demonstrate to copy, move and delete contents of the slide, • Demonstrate to view a presentation in different views.
4.	Format text and apply animations	• Formatting toolbar, • Various formatting features, • Text alignment, • Bullets and numbering. • Custom Animation	• Identify and list the various options in formatting toolbar, • Apply the appropriate formatting option • Align the text in presentation, • Apply bullets and numbering to the list items in presentation. □ Apply Animation
5.	Create and use tables	• Inserting tables in presentation, • Entering and editing data in a table, • Selecting a cell, row, column, table, • Adjusting column width and row height, • Table borders and background	Demonstrate the following: • Insert table in presentation, • Enter and edit data in a table, • Select a cell, row, column, table, • Adjust column width and row height, • Assign table borders and background.
6.	Insert and format image in presentation	• Inserting an image from a file, • Inserting an image from the gallery, • Formatting images, • Moving images, • Resizing images, • Rotating images, • Formatting using the Image toolbar, • Drawing graphic objects – line, shapes, • Grouping and un-grouping objects	• Demonstrate to insert an image from file, gallery in presentation, • Apply formatting options to image in presentation, • Demonstrate to move, resize and rotate images, • Apply formatting options of Image toolbar, • Drawing line, shapes using graphic objects, Demonstrate to group and ungroup objects.
7.	Work with slide master	• Slide masters, • Creating the slide masters, • Applying the slide masters to all slide, • Adding transitions.	• Create the slide masters, • Apply the slide masters to the • presentation, • Add transitions to presentation.

LIST OF EQUIPMENT/ MATERIALS:

The list given below is suggestive and an exhaustive list should be compiled by the teacher(s) 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 & Black)	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 –Libre Office	
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.

** 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 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.

In case of appointment through VTPs, the selection may be done based on the above procedure by a committee having representatives of both the State Government and the VTP.

The State should ensure that the Teachers/ Trainers who are recruited should undergo induction training of 20 days for understanding the scheme, NSQF framework and Vocational Pedagogy before being deployed in the schools.

The State should ensure that the existing trainers undergo in-service training of 5 days every year to make them aware of the relevant and new techniques/approaches in their sector and understand the latest trends and policy reforms in vocational education.

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;
- 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, 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;
- 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;
- Organization of activities for promotion of vocational subjects;
- Involvement in placement of students/student support services.

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/ 2026

[Grade: IX]

SOCIAL SCIENCE

MARCH

CHAPTER/TOPIC **THE FRENCH REVOLUTION** **INDIA SIZE AND LOCATION** **WHAT IS DEMOCRACY WHY DEMOCRACY**	TEACHINGPERIODS 30
1ST WEEK	✓ French Society during the late 18th century ✓ Outbreak of French revolution ✓ Location and Size of India ✓ Features of Democracy
2ND WEEK	✓ France Abolished Monarchy and Becomes Republic ✓ India and the World ✓ Overview of Democracy ✓ Abolition of Slavery
3RD WEEK	✓ India and its Neighbors ✓ Outcomes of French Revolution
4TH WEEK	✓ The Revolution and Everyday Life ✓ Map Work of India size and Location ✓ Democratic Setup in World

APRIL

CHAPTER/TOPIC **NAZISM AND RISEW OF HITLER** **PHYSICAL FEATURES OF INDIA**	TEACHINGPERIODS 25
1ST WEEK	✓ Rise of Adolf Hitler ✓ Various Physiographic divisions of India ✓ Outbreak of World War I
2ND WEEK	✓ Treaty of Versailles Formation of Northern Plains and Himalayan Mountain's
3RD WEEK	**REVISION**
4TH WEEK	**PRE-MID EXAMINATION**

MAY

CHAPTER/TOPIC **PHYSICAL FEATURES OF INDIA** **CONSTITUTIONAL DESIGN** **NAZISM AND OF HITLER (continue)**	TEACHING PERIODS 30
1ST WEEK	✓ Enabling Act of 1933 ✓ Establishment of Democracy ✓ Making of Indian Constitution ✓ Formation Peninsula Plateau

2ND WEEK	✓ Features of Nazism ✓ Nazi Cult of Motherhood ✓ Apartheid in South Africa ✓ Island groups of India
3RD WEEK	✓ Outbreak of world war II ✓ Making of South African Constitution ✓ Indian Desert
4TH WEEK	✓ Cold War ✓ Difference Between Island and Peninsula Plateau ✓ Ideals of Indian Constitutions
5TH WEEK	✓ Downfall of Adolf Hitler ✓ Map Work ✓ Preamble of India

JUNE

CHAPTER/TOPIC **DRAINAGE** **ELECTORIAL POLITICS** **STORY OF VILLAGE PALAMPUR**	TEACHING PERIODS 18
1ST WEEK	✓ Drainage. Water divide, Types of Drainage in India ✓ Elections and Steps of Election in India ✓ Modern Amenities in Palampur Village
2ND WEEK	✓ Himalayan rivers and Peninsular Rivers of India
3RD WEEK	**REVISION**
4TH WEEK	**MID-TERM EXAMINATION**

JULY

CHAPTER/TOPIC **SOCIALISM IN EUROPE AND RUSSIAN REVOLUTION** **ELECTORIAL POLITICS (Continue)** **DRAINAGE (Continue)**	TEACHING PERIODS 15
1ST WEEK	**MID-TERM EXAMINATION**
2ND WEEK	✓ Causes of Russian Revolution ✓ Prepositional Representation ✓ Map Work
3RD WEEK	✓ February Revolution and October Revolution ✓ Election manifesto ✓ Election petition
4TH WEEK	✓ April Thesis of Lenin ✓ West Flowing Rivers of India
5th WEEK	**SUMMER BREAKS**

AUGUST

CHAPTER/TOPIC **SOCIALISM IN EUROPE AND RUSSIAN REVELOUTION**(Continue) **PEOPLE AS A RESOURCE** **DRAINGE(Continue)**	TEACHING PERIODS 30
1ST WEEK	✓ Provisional Governments ✓ Collectivization of Stalin ✓ West Flowing Rivers of India
2ND WEEK	✓ Human resources ✓ Civil war in Russia

	✓ Map work of Narmada and Godavari River
3RD WEEK	✓ Economic Activities by Men and women ✓ Quality of Population ✓ Formation Of USSR
4TH WEEK	✓ Unemployment and its Types ✓ Overview Of Resources ✓ Introduction Climate and its Difference

SEPTEMBER

CHAPTER/TOPIC **CLIMATE** **POVERTY AS CHALLENGE** **RUSSIAN REVOLUTION**	TEACHING PERIODS 14
1ST WEEK	✓ Global Impact of Russian Revolution ✓ Two typical cases of poverty ✓ Causes of Poverty ✓ Elements of Weather and Climate of India
2ND WEEK	✓ Factors Influencing Indian climate ✓ Cold Weather Season and Hot Weather Season
3RD WEEK	**REVISION**
4TH WEEK	**POST-MID EXAMINATION**

OCTOBER

CHAPTER/TOPIC **NATURAL VEGETATION AND WILDLIFE** **FOREST SOCIETY AND COLONIALISM (PRESENTATION)** **DEMOCTARIC RIGHTS**	TEACHING PERIODS 30
1ST WEEK	✓ Distribution of Natural vegetation of India ✓ Rights In a Democracy ✓ Rights in Indian Constitution ✓ Expanding Scope Of Rights
2ND WEEK	✓ Types of forests ✓ Life without rights ✓ Evergreen forests
3RD WEEK	✓ Tropical evergreen forests of India ✓ Rights and duties ✓ Project on forest society and colonialism
4TH WEEK	✓ Distribution of wildlife of India ✓ Why rights and duties are called the two sides of a coin? ✓ Conservation of natural vegetation and wildlife of India

NOVEMBER

CHAPTER/TOPIC **PROJECT WORK AND PRACTICE OF MAPS**	TEACHING PERIODS 15
1ST WEEK	Map work of India and the world Projects on Various Essentials topics which have National Significance.
2ND WEEK	**REVISION**
3RD WEEK	**FINAL TERM EXAMINATION**
4TH WEEK	**FINAL TERM EXAMINATION**

CBSE | DEPARTMENT OF SKILL EDUCATION

CURRICULUM FOR SESSION 2025-2026

ARTIFICIAL INTELLIGENCE (SUB. CODE 417)

CLASS – IX

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. Revisiting AI domains, project cycle and Ethics
5. Introducing the learners to the importance of Math for AI, data literacy and generative AI
6. Introducing the learners to programming skills - Basic python coding language.

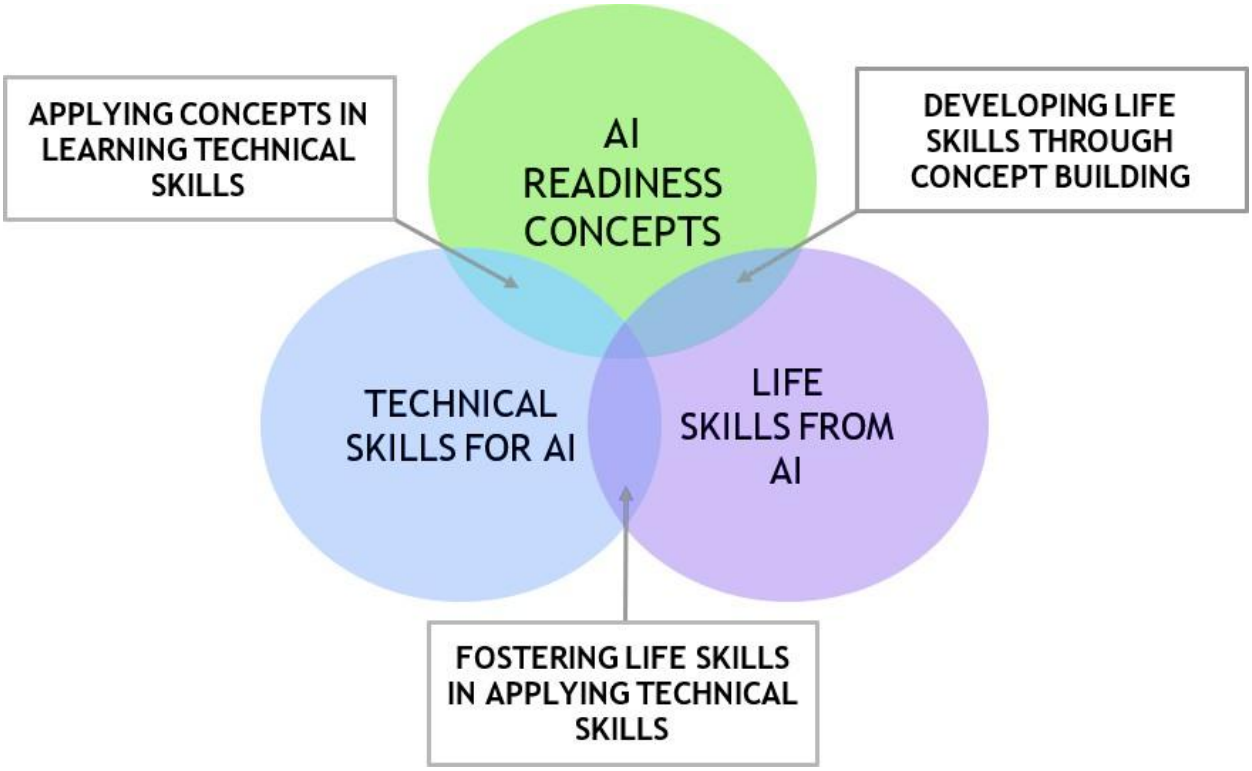
LEARNING OUTCOMES:

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 types of modeling.
15. Understand the importance of Math for AI.
16. Learn the concept of data literacy and generative AI
17. Acquire introductory Python programming skills in a very user-friendly format.

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 IX opting for skill subject along with other education subjects.

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

ARTIFICIAL INTELLIGENCE (SUBJECT CODE 417)

CLASS – IX (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-I	10		2
	Unit 2: Self-Management Skills-I	10		2
	Unit 3: ICT Skills-I	10		2
	Unit 4: Entrepreneurial Skills-I	15		2
	Unit 5: Green Skills-I	05		2
	Total	**50**		**10**
PART B	**Subject Specific Skills**			
		Theory	**Practical**	
	Unit 1: AI Reflection, Project Cycle and Ethics	30	25	10
	Unit 2: Data Literacy	22	28	10
	Unit 3: Math for AI (Statistics & Probability)	12	13	07
	Unit 4: Introduction to Generative AI	08	12	05
	Unit 5: Introduction to Python	01	09	08
	Total	**160**		**40**
PART C	**Practical Work**			
	Unit 5: Introduction to Python **Practical File (minimum 15 programs)**			15
	Practical Examination ● Simple programs using input and output function ● Variables, Arithmetic Operators, Expressions, Data Types ● Flow of control and conditions ● Lists **** Any 3 programs based on the above topics***			15
	Viva Voce			5
	Total			**35**
PART D	**Project Work / Field Visit / Student Portfolio** **** relate it to Sustainable Development Goals***			15
	Total			**15**
	GRAND TOTAL	**210**		**100**

DETAILED CURRICULUM/TOPICS FOR CLASS IX:

PART-A: EMPLOYABILITY SKILLS

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

NOTE: Detailed curriculum/ topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

PART-B – SUBJECT SPECIFIC SKILLS

- Unit 1: AI Reflection, Project Cycle and Ethics
- Unit 2: Data Literacy
- Unit 3: Math for AI (Statistics & Probability)
- Unit 4: Introduction to Generative AI
- Unit 5: Introduction to Python

UNIT 1: AI REFLECTION, PROJECT CYCLE AND ETHICS

SUB-UNIT	LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
AI Reflection	To identify and appreciate Artificial Intelligence and describe its applications in daily life.	Session: Introduction to AI and setting up the context of the curriculum ● Recommended Activity: Make a statement about lighting and LUIS will interpret and adjust the house accordingly https://aidemos.microsoft.com/luis/demo
	To recognize, engage and relate with the three realms of AI: , Computer Vision, Data Statistics and Natural Language Processing.	Recommended Activity: The AI Game ● Learners to participate in three games based on different AI domains. – Game 1: Rock, Paper and Scissors (based on data) https://next.rockpaperscissors.ai/ – Game 2: Semantris (based on Natural Language Processing - NLP) https://research.google.com/semantris/ – Game 3: Quick Draw (based on Computer Vision - CV) https://quickdraw.withgoogle.com/

SUB-UNIT	LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
AI PROJECT CYCLE	Identify the AI Project Cycle framework.	Session: Introduction to AI Project Cycle ● Problem Scoping ● Data Acquisition ● Data Exploration ● Modeling ● Evaluation ● Deployment
	Learn problem scoping and ways to set goals for an AI project.	Session: Problem Scoping Activity: Brainstorm around the theme provided and set a goal for the AI project. • Discuss various topics within the given theme and select one. • Fill in the 4Ws problem canvas and a problem statement to learn more about the problem identified in the community/ society • List down/ Draw a mind map of problems related to the selected topic and choose one problem to be the goal for the project.
	Identify stakeholders involved in the problem scoped. Brainstorm on the ethical issues involved around the problem selected.	• Activity: To set actions around the goal. • List down the stakeholders involved in the problem. • Search on the current actions taken to solve this problem. • Think around the ethics involved in the goal of your project.
	Understand the iterative nature of problem scoping for in the AI project cycle. Foresee the kind of data required and the kind of analysis to be done.	Activity: Data and Analysis • What are the data features needed? • How will the features collected affect the problem? • Where can you get the data? • How frequent do you have to collect the data? • What happens if you don't have enough data? • What kind of analysis needs to be done? • How will it be validated? • How does the analysis inform the action?
	Share what the students have discussed so far.	Presentation: Presenting the goal, actions and data. Teamwork Activity: • Brainstorming solutions for the problem statement.
	Identify data requirements and find reliable sources to obtain relevant data.	Session: Data Acquisition Activity: Introduction to data and its types. • Students work around the scenarios given to them and think of ways to acquire data. Activity: Data Features • Identifying the possible data features affecting the problem. Activity: System Maps • Creating system maps considering data features identified.

SUB-UNIT	LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
	To understand the purpose of Data Visualisation	Session: Data Exploration/ Data Visualisation • Need of visualising data • Ways to visualise data using various types of graphical tools. Quiz Time
	Use various types of graphs to visualise acquired data.	Recommended Activities: Let's use Graphical Tools • Selecting an appropriate graphical format and presenting the graph sketched. • Understanding graphs using https://datavizcatalogue.com/ • Listing of newly learnt data visualization techniques. • Top 10 Song Prediction: Identify the data features, collect the data and convert into graphical representation. • Collect and store data in a spreadsheet and create some graphical representations to understand the data effectively.
	Understand modeling (Rule-based & Learning-based)	Session: Modeling • Introduction to modeling and types of models (Rule-based & Learning-based)
	Understand various evaluation techniques.	Session: Evaluation Learners will understand about new terms • True Positive • False Positive • True Negative • False Negative
	Challenge students to think about how they can apply their knowledge of deployment in future AI projects and encourage them to continue exploring different deployment methods.	Session: Deployment Recommended Case Study: Preventable Blindness. Activity: Implementation of AI project cycle to develop an AI Model for Personalized Education.
	To understand and reflect on the ethical issues around AI.	Session: Ethics Video Session: Discussing about AI Ethics Recommended Activity: Ethics Awareness ● Students play the role of major stakeholders, and they have to decide what is ethical and what is not for a given scenario. ● Students to explore Moral Machine (https://www.moralmachine.net/) to understand more about the impact of ethical concerns
	To gain awareness around AI bias and AI access.	Session: AI Bias and AI Access ● Discussing about the possible bias in data collection ● Discussing about the implications of AI technology

SUB-UNIT	LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
	To let the students analyse the advantages and disadvantages of Artificial Intelligence.	Recommended Activity: Balloon Debate ● Students divide in teams of 3 and 2 teams are given same theme. One team goes in affirmation to AI for their section while the other one goes against it. ● They have to come up with their points as to why AI is beneficial/ harmful for the society.

UNIT 2: DATA LITERACY:

SUB-UNIT	LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
Basics of data literacy	• Define data literacy and recognize its importance Understand how data literacy enables informed decision-making and critical thinking • Apply the Data Literacy Process Framework to analyze and interpret data effectively • Differentiate between Data Privacy and Security • Identify potential risks associated with data breaches and unauthorized access. • Learn measures to protect data privacy and enhance data security	Session: Basics of data literacy ● Introduction to Data Literacy ● Impact of data Literacy ● How to become Data Literate? ● What are data security and privacy? How are they related to AI? ● Best Practices for Cyber Security Recommended Activity: Impact of News Articles Reference Videos: • https://www.youtube.com/watch?v=yhO_t-c3yJY • https://www.youtube.com/watch?v=aO858HyFbKI • https://www.cbse.gov.in/cbsenew/documents/Cyber%20Safety.pdf
Acquiring Data, Processing, and Interpreting Data	• Determine the best methods to acquire data. • Classify different types of data and enlist different methodologies to acquire it. • Define and describe data interpretation. • Enlist and explain the different methods of data interpretation. • Recognize the types of data interpretation. • Realize the importance of data interpretation	Session: Acquiring Data, Processing, and Interpreting Data ● Types of data ● Data Acquisition/Acquiring Data ● Best Practices for Acquiring Data ● Features of data and Data Preprocessing ● Data Processing and Data Interpretation ● Types of Data Interpretation ● Importance of Data Interpretation Recommended Activities: ● Trend analysis ● Visualize and Interpret Data
Project Interactive Data Dashboard & Presentation	• Recognize the importance of data visualization • Discover different methods of data visualization	Session: Project Interactive Data Dashboard & Presentation ● Data visualization Using Tableau Reference Links ● https://public.tableau.com/en-us/s/download ● https://www.datawrapper.de/ Video Links: ● https://www.youtube.com/watch?v=NLCzpPRCc7U ● https://www.youtube.com/watch?v=_M8BnosAD78

UNIT 3: MATH FOR AI (Statistics & Probability)

SUB-UNIT	LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
Importance of Math for AI	Analyzing the data in the form of numbers/images and find the relation/pattern between the them. Use of Math in AI.	Session: Importance of Math for AI ● Finding Patterns in Numbers and images. ● Uses of Math - ○ Statistics ○ Linear Algebra ○ Probability ○ Calculus
	Number Patterns Picture Analogy	Activity: ● observe the number pattern and find the missing number. ● To find connections between sets of images and use that to solve problems,
Statistics	Understand the concept of Statistics in real life.	Session : ⧫ Definition of Statistics ⧫ Applications ○ Disaster Management ○ Sports ○ Diseases Prediction ○ Weather Forecast
	Application in various real life scenarios	Activity: Uses of Statistics in daily life ● Students will explore the applications of statistics in real life .They collect data and can apply various statistical measures to analyze the data. Activity:Car Spotting and Tabulating Purpose:To implement the concept of data collection , analysis and interpretation. Activity Introduction: ⧫ In this activity, Students will be engaged in data collection and tabulation. ⧫ Data collection plays a key role in Artificial Intelligence as it forms the basis of statistics and interpretation by AI. ⧫ This activity will also require students to answer a set of questions based on the recorded data.
Probability	Understand the concept of Probability in real life and explore various types of events.	Session: Introduction to Probability ● How to calculate the probability of an event ● Types of events ● understand the concept of Probability using a relatable example. Exercise: Identify the type of event.
	Application in various real-life scenarios	Session: Applications of Probability ⧫ Sports ⧫ Weather Forecast ⧫ Traffic Estimation Exercise: Revision time

UNIT 4: INTRODUCTION TO GENERATIVE AI:

LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
Students will be able to define Generative AI & classify different kinds.	Recommended Activity: ● Activity: Guess the Real Image vs. the AI-generated image
⧫ Students will be able to explain how Generative AI works and recognize how it learns.	Session: ● Introduction to Generative AI ● Generative AI vs Conventional AI
	Session: ● Types of Generative AI ● Examples of Generative AI
	Session: ● Benefits of using Generative AI ● Limitations of using Generative AI
⧫ Applying Generative AI tools to create content. ⧫ Understanding the ethical considerations of using Generative AI.	Recommended Activities: ● Hands-on Activity: GAN Paint ● Generative AI tools
	Session: ● Ethical considerations of using Generative AI

UNIT 5: INTRODUCTION TO PYTHON:

LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
Learn basic programming skills through gamified platforms.	Recommended Activity: ● Introduction to programming using Online Gaming portals like Code Combat.
Acquire introductory Python programming skills in a very user-friendly format.	Session: ● Introduction to Python language ● Introducing python programming and its applications
	Theory + Practical: Python Basics ● Students go through lessons on Python Basics (Variables, Arithmetic Operators, Expressions, Comparison Operators, logical operators, Assignment Operators, Data Types - integer, float, strings, type conversion, using print() and input() functions) ● Students will try some simple problem-solving exercises on Python Compiler.
	Practical: Flow of control and conditions 1. Students go through lessons on conditional and iterative statements (if, for and while) 2. Students will try some basic problem-solving exercises using conditional and iterative statements on Python Compiler.
	Practical: Python Lists 3. Students go through lessons on Python Lists (Simple operations using list) 4. Students will try some basic problem-solving exercises using lists on Python Compiler.

PART-C: PRACTICAL WORK

UNIT 5: INTRODUCTION TO PYTHON: Suggested Program List	
PRINT	● To print personal information like Name, Father's Name, Class, School Name. ● To print the following patterns using multiple print commands-  ● To find square of number 7 ● To find the sum of two numbers 15 and 20. ● To convert length given in kilometers into meters. ● To print the table of 5 up to five terms. ● To calculate Simple Interest if the principle_amount = 2000 rate_of_interest = 4.5 time = 10
INPUT	● To calculate Area and Perimeter of a rectangle ● To calculate Area of a triangle with Base and Height ● To calculating average marks of 3 subjects ● To calculate discounted amount with discount % ● To calculate Surface Area and Volume of a Cuboid
LIST	● Create a list in Python of children selected for science quiz with following names- Arjun, Sonakshi, Vikram, Sandhya, Sonal, Isha, Kartik Perform the following tasks on the list in sequence- ◦ Print the whole list ◦ Delete the name "Vikram" from the list ◦ Add the name "Jay" at the end ◦ Remove the item which is at the second position. ● Create a list num=[23,12,5,9,65,44] ◦ print the length of the list ◦ print the elements from second to fourth position using positive indexing ◦ print the elements from position third to fifth using negative indexing ● Create a list of first 10 even numbers, add 1 to each list item and print the final list. ● Create a list List_1=[10,20,30,40]. Add the elements [14,15,12] using extend function. Now sort the final list in ascending order and print it.

IF, FOR, WHILE	• Program to check if a person can vote • To check the grade of a student • Input a number and check if the number is positive, negative or zero and display an appropriate message • To print first 10 natural numbers • To print first 10 even numbers • To print odd numbers from 1 to n • To print sum of first 10 natural numbers • Program to find the sum of all numbers stored in a list
Important Links	• https://cbseacademic.nic.in/web_material/Curriculum21/publication/secondary/Python_Content_Manual.pdf • https://drive.google.com/drive/folders/1qRAckDculA5i164OUFDlilxb8mT65MMb

PART-D: Project Work / Field Visit / Student Portfolio

*** relate it to Sustainable Development Goals**

Suggested Projects/ Field Visit / Portfolio (Any one has to be done)

Suggested Projects	1. Create an AI Model using tools like- ◦ Teachable Machine (https://teachablemachine.withgoogle.com/) ◦ Machine Learning For Kids (https://machinelearningforkids.co.uk/) 2. Choose an issue that pertains to the objectives of sustainable development and carry out the actions listed below. ◦ To understand more about the problem identified, create a 4Ws problem canvas. ◦ Identify the data features and create a system map to understand relationship between them ◦ Visualize the data collected graphically (Spreadsheet software to be used store and visualize the data) ◦ Suggest an AI enabled solution to it (Prototype/Research Work)
Suggested Field Visit	Visit to an industry or IT company or any other place that is creating or using AI applications and present the report for the same. Visit can be on physical or virtual mode.
Suggested Student Portfolio	Maintaining a record of all AI activities and projects (For Example Letter to Future self, Smart Home Floor Plan, Future Job Advertisement, Research Work on AI for SDGs and AI in Different Sectors, 4Ws canvas, System Map). (Minimum 5 Activities)

LIST OF ITEMS/ EQUIPMENTS (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

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.

** 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 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.

In case of appointment through VTPs, the selection may be done based on the above procedure by a committee having representatives of both the State Government and the VTP.

The State should ensure that the Teachers/ Trainers who are recruited should undergo induction training of 20 days for understanding the scheme, NSQF framework and Vocational Pedagogy before being deployed in the schools.

The State should ensure that the existing trainers undergo in-service training of 5 days every year to make them aware of the relevant and new techniques/approaches in their sector and understand the latest trends and policy reforms in vocational education.

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 & 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 & 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;
- Organization of activities for promotion of vocational subjects;
- Involvement in placement of students/student support services