

Marking Scheme
Strictly Confidential
(For Internal and Restricted use only)
Senior Secondary School Examination, 2026 (XIIth)
SUBJECT NAME : Artificial Intelligence (Q.P. CODE 843/367)

General Instructions: -

1	You are aware that evaluation is the most important process in the actual and correct assessment of the candidates. A small mistake in evaluation may lead to serious problems which may affect the future of the candidates, education system and teaching profession. To avoid mistakes, it is requested that before starting evaluation, you must read and understand the spot evaluation guidelines carefully.
2	“Evaluation policy is a confidential policy as it is related to the confidentiality of the examinations conducted, evaluation done and several other aspects. Its leakage to public in any manner could lead to derailment of the examination system and affect the life and future of millions of candidates. Sharing this policy/document to anyone, publishing in any magazine and printing in Newspaper/Website, etc. may invite action under various rules of the Board and IPC.”
3	Evaluation is to be done as per instructions provided in the Marking Scheme. It should not be done according to one’s own interpretation or any other consideration. Marking Scheme should be strictly adhered to and religiously followed. However, while evaluating, answers which are based on latest information or knowledge and/or are innovative, they may be assessed for their correctness otherwise and due marks be awarded to them. In Class-XII, while evaluating two competency-based questions, please try to understand given answer and even if reply is not from marking scheme but correct competency is enumerated by the candidate, due marks should be awarded.
4	The Marking scheme carries only suggested value points for the answers. These are in the nature of Guidelines only and do not constitute the complete answer. The students can have their own expression and if the expression is correct, the due marks should be awarded accordingly.
5	The Head-Examiner must go through the first five answer books evaluated by each evaluator on the first day, to ensure that evaluation has been carried out as per the instructions given in the Marking Scheme. If there is any variation, the same should be zero after deliberation and discussion. The remaining answer books meant for evaluation shall be given only after ensuring that there is no significant variation in the marking of individual evaluators.
6	Evaluators will mark (✓) wherever answer is correct. For wrong answer CROSS ‘X’ be marked. Evaluators will not put right (✓) while evaluating which gives an impression that answer is correct and no marks are awarded. This is most common mistake which evaluators are committing.
7	If a question has parts, please award marks on the right-hand side for each part. Marks awarded for different parts of the question should then be totalled up and written in the left hand margin and encircled. This may be followed strictly.
8	If a question does not have any parts, marks must be awarded in the left-hand margin and encircled. This may also be followed strictly.

9	If a student has attempted an extra question, answer of the question deserving more marks should be retained and the other answer scored out with a note " Extra Question "
10	No marks to be deducted for the cumulative effect of an error. It should be penalized only once.
11	A full scale of marks _____ (example 0 to 80/70/60/50/40/30 marks as given in Question Paper) has to be used. Please do not hesitate to award full marks if the answer deserves it.
12	Every examiner has to necessarily do evaluation work for full working hours i.e., 8 hours every day and evaluate 20 answer books per day in main subjects and 25 answer books per day in other subjects (Details are given in Spot Guidelines). This is in view of the reduced syllabus and number of questions in question paper.
13	Ensure that you do not make the following common types of errors committed by the Examiner in the past :- • Leaving answer or part thereof unassessed in an answer book. • Giving more marks for an answer than assigned to it. • Wrong totalling or marks awarded on an answer. • Wrong transfer of marks from the inside pages of the answer book to the title page. • Wrong question wise totalling on the title page. • Wrong totalling of marks of the two columns on the title page. • Wrong grand total. • Marks in words and figures not tallying/not same. • Wrong transfer of marks from the answer book to online award list. • Answers marked as correct, but marks not awarded. (Ensure that the right tick mark is correctly and clearly indicated. It should merely be a line. Same is with the X for incorrect answer.) • Half or a part of answer marked correct and the rest as wrong, but no marks awarded.
14	While evaluating the answer books if the answer is found to be totally incorrect, it should be marked as cross (X) and awarded zero (0) Marks.
15	Any unassessed portion, non-carrying over of marks to the title page, or totalling error detected by the candidate shall damage the prestige of all the personnel engaged in the evaluation work as also as the Board. Hence, in order to upload the prestige of all concerned, it is again reiterated that the instructions be followed meticulously and judiciously.
16	The Examiners should acquaint themselves with the guidelines given in the " Guidelines for Spot Evaluation " before starting the actual evaluation.
17	Every examiner shall also ensure that all the answers are evaluated, marks carried over to the title page, correctly totalled and written in figures and words.
18	The candidates are entitled to obtain photocopy of the Answer Book on request on payment of the prescribed processing fee. All Examiners/Additional Head Examiners/Head Examiners are once again reminded that they must ensure that evaluation is carried out strictly as per value points for each answer as given in the Marking Scheme.

MARKING SCHEME
Artificial Intelligence (Subject Code - 843)
(PAPER CODE : 367) (P3670843)

Q.No.	EXPECTED ANSWER/VALUE POINTS	Marks
	SECTION – A खण्ड - अ	
1.	Answer any 4 out of the given 6 questions on Employability Skills. रोजगार कौशल पर दिए गए 6 प्रश्नों में से किन्हीं 4 के उत्तर दीजिए।	(4x1=4)
(i)	(B) A group of words that communicates as complete thought or meaning.	U-1 Pg 9 1
(ii)	Stress is a state of feeling upset, annoyed and hopeless. (Or any other valid definition)	U-2 Pg 26 1
(iii)	(A) Suspicious.	U-2 Pg 34 1
(iv)	(B) Information and communication Technology.	U-3 Pg 39 1
(v)	(D) Work area	U-3 Pg 42 1
(vi)	'Start up India'	U-5 Pg 42 1
2.	Answer any 5 out of the given 6 questions. दिए गए 6 प्रश्नों में से किन्हीं 5 के उत्तर दीजिए।	(5x1=5)
(i)	Answer : (D) Define the analytical approach to solve the problem (1 mark for correct answer)	CBSE BOOK U-2 Pg-20 1
(ii)	Answer : (B) Removing unwanted elements such as blurriness, random spots or distortions. (1 mark for correct answer)	CBSE BOOK U-3 Pg-49 1
(iii)	Answer : (C) Both Statement-I and Statement-II are True. (1 mark for correct answer)	CBSE BOOK U-5 Pg-93 1
(iv)	Answer : (B) Strength of connections between neurons (1 mark for correct answer)	CBSE BOOK U-6 Pg-105 1
(v)	Answer : False (1 mark for correct answer)	CBSE BOOK U-7 Pg-130 1
(vi)	Answer : (B) Communicate findings and observations to stakeholders (1 mark for correct answer)	CBSE BOOK U-8 Pg-149, 150 1
3.	Answer any 5 out of the given 6 questions. दिए गए 6 प्रश्नों में से किन्हीं 5 के उत्तर दीजिए।	(5x1=5)
(i)	Answer : (D) Statement-1 is false, but Statement-2 is true. (1 mark for correct answer)	CBSE BOOK U-2 Pg-21 1
(ii)	Answer : False (1 mark for correct answer)	CBSE BOOK U-2 Pg-33 1
(iii)	Answer : (A) Text summarization (1 mark for correct answer)	CBSE BOOK U-3 Pg-44 1
(iv)	Answer : (D) Data, Big data (1 mark for correct answer)	CBSE BOOK U-5 Pg-92 1

	(v)	Answer : (B) To add non-linearities, allowing the network to understand complex patterns in data (1 mark for correct answer)	CBSE BOOK U-6 Pg-105	1
	(vi)	Answer : (A) Both Statement-I and Statement-II are true. (1 mark for correct answer)	CBSE BOOK U-8 Pg-149	1
4.		Answer any 5 out of the given 6 questions. दिए गए 6 प्रश्नों में से किन्हीं 5 के उत्तर दीजिए।		5x1=5
	(i)	Answer : False (1 mark for correct answer)	CBSE BOOK U-2 Pg-24	1
	(ii)	Answer : (D) Statement-1 is false and Statement-2 is true. (1 mark for correct answer)	CBSE BOOK U-3 Pg-49-50	1
	(iii)	Answer : (D) Variability (1 mark for correct answer)	CBSE BOOK U-5 Pg-91	1
	(iv)	Answer : (B) Statement-I is true, but Statement-II is false. (1 mark for correct answer)	CBSE BOOK U-6 Pg-105	1
	(v)	Answer : (B) Neurons (1 mark for correct answer)	CBSE BOOK U-6 Pg-105	1
	(vi)	Answer : (C) Large Language Model (1 mark for correct answer)	CBSE BOOK U-7 Pg-128	1
5.		Answer any 5 out of the given 6 questions. दिए गए 6 प्रश्नों में से किन्हीं 5 के उत्तर दीजिए।		5x1=5
	(i)	Answer : (A) Precision, Recall (1 mark for correct answer)	CBSE BOOK U-2 Pg-35	1
	(ii)	Answer : (B) KNN for supervised, K-means clustering for unsupervised (1 mark for correct answer)	CBSE BOOK U-3 Pg-52	1
	(iii)	Answer : (D) High-Level Processing (1 mark for correct answer)	CBSE BOOK U-3 Pg-54	1
	(iv)	Answer : (C) input layer; output layer (1 mark for correct answer)	CBSE BOOK U-6 Pg-104	1
	(v)	Answer : False (1 mark for correct answer)	CBSE BOOK U-7 Pg-125	1
	(vi)	Answer : (B) Pie Chart; FacetGrid (1 mark for correct answer)	CBSE BOOK U-8 Pg-	1

		SECTION – B खण्ड - ब		
		Answer any 3 out of the given 5 questions on Employability Skills in 20-30 words each. रोजगार कौशल पर दिए गए 5 प्रश्नों में से किन्हीं 3 प्रश्नों के उत्तर 20-30 शब्दों में दीजिए।		3x2=6
	6.	Communication is a two-way process through which information or message is exchanged between individuals using language, symbols, signs or behaviour. Speaking, listening, reading and writing are the parts of communication. (2 mark for correct answer)	U-1, Pg-1	2
	7.	(i) Openness- Individuals are creative, curious, active, flexible and adventurous.	U-2, Pg-33	0.5x4=2 any four
		(ii) Consciousness – self disciplined, work on time, take care of others.		
		(iii) Extraversion – love to interact with people.		
		(iv) Agreeableness – kind, sympathetic, cooperative, considerate and warm.		
		(v) Neuroticism – tendency towards anxiety, self doubt, depression, shyness. (1/2 mark for correct explanation of each parameter (any 4))		
	8.	Sorting Data in ICT refers to the process of arranging data elements in a specific order such as ascending or descending based on pre-defined criterion. (2 mark for correct answer)	U-3, Pg-58	2
	9.	Environmental barriers (Any two) :	U-4 Pg-92	2 
		(i) Lack of adequate resources or raw material.		
		(ii) Non-availability of skilled labour.		
		(iii) Lack of requisite machinery and infrastructure.		
		(iv) Unavailability of monetary resources on time. (Any other correct answer to be accepted)		
	10.	According to UNEP-United Nations Environment Program, green jobs or green collar jobs are works in agricultural, administrative, research and development, manufacturing and service activities that contribute substantially to preserving or restoring environment quality. (2 marks for correct answer)	U-5, Pg-112	2
		Answer any 4 out of the given 6 questions in 20 – 30 words each. दिए गए 6 प्रश्नों में से किन्हीं 4 प्रश्नों के उत्तर 20-30 शब्दों में दीजिए।		(4x2=8)
	11.	Answer : (a) The purpose is to evaluate if the collected data represents the problem to be solved by checking its relevance, comprehensiveness and suitability. (b) It is an N×N table used to evaluate a classification model's performance by summarizing its predicted outcomes against actual values. (1 mark for each correct part)	CBSE BOOK U-2 Pg-25, 34	2
	12.	Answer : (a) Self-driving vehicles : Computer vision helps make sense of the vehicle's surroundings by capturing video from different angles around the car. It is used to detect other cars and objects, read traffic signals and recognize pedestrian paths. (b) Surveillance : Computer vision analyses live footage from CCTV cameras in public places to help identify suspicious	CBSE BOOK U-3 Pg-54	2

		behavior, spot dangerous objects and prevent crimes by maintaining law and order. (1 mark for each correct part)		
	13.	Answer : (a) A data stream is a continuous, real-time flow of data generated by various sources, such as sensors, satellite imagery or web traffic. (b) Unlike traditional data mining, mining data streams processes data as it arrives, without storing it completely. (1 mark for each correct part)	CBSE BOOK U-5 Pg-98	2
	14.	Answer : A neural network is a machine learning program or model, that makes decisions in a manner similar to the human brain, by using processes that mimic the way biological neurons work together to identify phenomena, weigh options and arrive at conclusions. Application (Any two) : Chat-bots, suggesting/auto-replying emails, spam filtering, Facebook image tagging, product recommendations on e-shopping portals or Google's search algorithm. (1 mark for each correct part)	CBSE BOOK U-6 Pg-104	2
	15.	Answer : (a) Proper attribution is important to respect original creators and comply with copyright laws when using AI-generated content. (b) (Any two) ChatGPT, Gemini, Claude and DALL-E. (1 mark for each correct part)	CBSE BOOK U-7 Pg-124, 133	2
	16.	Answer : (a) Insights : The ability to have a clear, deep and sometimes sudden understanding of a complicated problem or situation. (b) Resolution : It is the end of the story where the characters arrive at a particular situation to resolve the conflict. It is the stage after the climax. (1 mark for each correct part)	CBSE BOOK U-8 Pg-148, 149	2
		Answer any 3 out of the given 5 questions in 50 – 80 words each. दिए गए 5 प्रश्नों में से किन्हीं 3 प्रश्नों के उत्तर 50-80 शब्दों में दीजिए।		3x4=12
	17.	Answer : (a) Deployment refers to the stage where the trained AI model is made available to the users in real-world applications. (b) The two main phases are : Diagnostic measures, Statistical significance test. Diagnostic measures : Ensures the model is working as intended (e.g., using a decision tree or a testing set to refine the model). Statistical significance test : Verifies that the model accurately processes and interprets the data to prevent unnecessary second-guessing. (1 mark for correct part-a) (1 mark for correct name of phases) (1 mark for each correct phase explanation)	CBSE BOOK U-2 Pg-29, 30	1+3=4
	18.	(a) (Any two) transactional data, machine data (e.g., sensor readings) and social data (e.g., social media posts). (b) The three types of Big Data are Structured Data, Semi-Structured Data and Unstructured Data. (c) It provides a competitive advantage by enabling organizations to uncover market trends, identify unique business opportunities and stay ahead of competitors. (ds) Organizations must ensure compliance with strict data protection laws such as GDPR (General Data Protection	CBSE BOOK U-5 Pg-87, 88, 89	4

		Regulation) or The Digital Personal Data Protection Act, 2023, to avoid legal risks and penalties. (1 mark for correct part)		
	19.	Answer : (i) Standard Neural Network (Perceptron) : A simple neural network with one input layer and one output layer. It is mainly used for binary classification problems. Application : Spam detection and basic decision-making. (ii) Feed Forward Neural Network (FFNN) : An artificial neural network in which data flows only from input to output through hidden layers. Application : Image recognition, Natural Language Processing (NLP) and regression tasks. (2 marks for each correct part)	CBSE BOOK U-6 Pg-110	2+2=4
	20.	Answer : (a) GAN (Generative Adversarial Network) should be used for generating realistic human faces. The generator aims to produce samples that are indistinguishable from real data. Through adversarial training, the generator and discriminator networks compete with each other, GANs learn to generate increasingly realistic samples. (b) VAE (Variational Autoencoder) should be used for generating structured transaction data. VAEs are better suited for structured data generation because VAEs focus on capturing the underlying patterns of the data to generate new samples. (2 marks for each correct part)	CBSE BOOK U-7 Pg-124, 125	2+2=4
	21.	Answer : (a) (i) Data – Basic facts or raw facts about any entity. It acts as the primary building block and foundation for the narrative and visual elements of a story. (ii) Visuals - Pictorial representation of data using various graphs, charts and diagrams. They present data in a graphical format to help convey complex information clearly. (b) • Collect the data and organize it. • Use proper visualization tools to visualize the data. • Observe the relationships between the data. • Create a simple narrative which is hidden in the data to be communicated to the audience. (2 marks for each correct part)	CBSE BOOK U-8 Pg-152, 158	4
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