CBSE Class 12 2026 Artificial Intelligence Code - 367 Question Paper

Time Allowed :2 Hours	**Maximum Marks :**50	**Total questions :**21

General Instructions

Read the following instructions very carefully and strictly follow them:

(a) The question paper consists of 21 questions in two Sections: Section–A and Section–B.

(b) Section–A contains objective type questions whereas Section–B contains subjective type questions.

(c) Out of the given (8 + 16) = 21 questions, a candidate has to answer (5 + 10) = 15 questions in the allotted time of 2 hours.

Section–A : Objective Type Questions (24 marks)

(a) This section has 5 questions.

(b) There is no negative marking.

(c) Marks allotted are mentioned against each question/part.

Section–B : Subjective Type Questions (26 marks)

(a) This section has 16 questions.

(b) A candidate has to do 10 questions.

(c) Marks allotted are mentioned against each question/part.

Section - A

1(i). A statement which conveys the exact message that you are trying to convey to the other person is called _____ statement.

(A) Clear

(B) Concise

(C) Accurate

(D) Active

(ii). Which of the following is NOT related to positive attitude?

(A) It makes a person happier

(B) Helps to build and maintain relationships

(C) Decreases one's chances of success

(D) Improves overall well-being

(iii). "No baile é pressão. Mina linda, perigosa." Identify the musical genre to which this line belongs.

(iv). _____ are like new pages, which are added to separate different topics in a presentation.

(A) Text

(B) Document

(C) File

(D) Slides

(v). Which of the following is NOT a characteristic of entrepreneurship?

(A) It is a non-economic activity.

(B) It deals with optimization in utilization of resources.

(C) Ability to take risks.

(D) Identifying an opportunity.

(vi). Write the expanded form of FIGs.

2(i). A retail company notices a sudden decline in online sales during the last quarter. The data analytics team decides to investigate the underlying causes of this drop. They begin examining customer behaviour patterns, website traffic, and product return rates to identify factors contributing to the decline. Which type of data analytics is the team primarily using?

(A) Descriptive Analytics
(B) Diagnostic Analytics
(C) Predictive Analytics
(D) Prescriptive Analytics

(ii). When a computer processes an image, it perceives it as a collection of tiny squares. What are these tiny squares called?

(A) Vectors
(B) Pixels
(C) Kernels
(D) Frames

(iii). A social media analyst is working with a large collection of audio files, images, and video files to study user engagement and content trends on digital platforms. Which type of Big Data is the analyst dealing with?

(A) Structured Data
(B) Semi-Structured Data
(C) Unstructured Data
(D) Filter Data

(iv). Which component of a neural network decides whether a neuron should be activated or not based on the input it receives?

(A) Activation Function

(B) Bias

(C) Weight

(D) Neuron

(v). What is the primary objective of Generative AI?

(A) To classify existing data into different categories

(B) To define clear boundaries between existing data for classification tasks

(C) To generate new data that resembles its training samples

(D) To delete redundant data from large datasets

(vi). Which key component in Data Storytelling specifically addresses the need to "clarify the sources of the data, methods used for analysis, and any limitations or biases"?

(A) Data Context

(B) Transparency

(C) Respect for Privacy

(D) Story Relevance

3(i). The primary purpose of Prescriptive Analytics is to:

(A) Uncover root causes and factors contributing to specific outcomes.

(B) Identify patterns, trends, and anomalies in past data.

(C) Forecast future events or behaviour.

(D) Recommend specific actions or interventions based on predictive insights.

(ii). A bank's fraud detection team analyses thousands of daily transactions to identify suspicious activities. This process of finding unusual or abnormal trends within a dataset is associated with:

(A) Clustering

(B) Recommendation

(C) Regression

(D) Anomaly Detection

(iii). A wildlife research organization is building a computer vision system to monitor animal movements in forests. They install cameras to capture images and analyze them. The organization is currently working on which stage of the computer vision process?

(A) Image Acquisition

(B) Preprocessing

(C) Feature Extraction

(D) Detection and Segmentation

(iv). A healthcare analytics firm gathers patient information from a large number of hospitals, laboratories, and wearable devices. Before analyzing this Big Data, the company ensures the consistency, accuracy, quality, and trustworthiness of the data to produce reliable insights and reports. Which Big Data characteristic is illustrated in this scenario?

(A) Volume

(B) Velocity

(C) Variety

(D) Veracity

(v). In context of Neural Networks, the process in which input data flows through the layers, activations are computed, and the predicted output is compared to the actual target is specifically known as _____.

(A) Back Propagation

(B) Deep Learning

(C) Forward Propagation

(D) Optimization

(vi). Which data visualization type provides a visual representation of data where two variables are used indicating frequency and dispersion?

(A) Scatter Plot
(B) Word Cloud
(C) Line Graph
(D) Bar Chart

4(i). What is the main purpose of evaluation in an AI project cycle?

(A) To collect data for training the model
(B) To assess how well a model performs after training
(C) To deploy the model into real-world systems
(D) To visualize the data used for model building

(ii). A security company is designing a computer vision system for night surveillance. The captured footage often contains random dots and blurry patches due to low lighting. To make these images clearer before object detection, the system applies a technique to remove these blurry patches and distortions. Which technique of Computer Vision processing is being used by the system?

(A) Cropping image
(B) Noise Reduction
(C) Resizing image
(D) Image Normalization

(iii). Which method is used in real-time data processing to minimize the delay between data collection and analysis, enabling quicker decision making?

(A) Batch processing

(B) Stream processing

(C) Predictive analysis

(D) Descriptive analysis

(iv). Identify the type of neural network used for extracting features from images and handling spatial data effectively.

(A) Recurrent Neural Network

(B) Feed Forward Neural Network

(C) Standard Neural Network

(D) Convolutional Neural Network

(v). What is an Artificial Neural Network (ANN) with two or more hidden layers known as?

(A) A Basic Neural Network

(B) A Deep Neural Network

(C) A Perceptron

(D) A Connection Neural Network

(vi). Variation from Artificial Intelligence (AI) are computer programs designed to learn from data and perform tasks in a unique way. What are their two main parts?

(A) A generator and a discriminator

(B) An encoder and a decoder

(C) A Large Language Model and a Transformer

(D) A recurrent and a convolutional network

5(i). Assertion (A): Social media posts and images are examples of structured data.
Reason (R): Unstructured data does not follow a predefined format.

(A) Both (A) and (R) are true, and (R) is the correct explanation of (A).

(B) Both (A) and (R) are true, but (R) is not the correct explanation of (A).

(C) (A) is false, but (R) is true.

(D) Both (A) and (R) are false.

(ii). The resolution of a digital image is determined by which factor?

(A) The numerical value assigned to each pixel (0 to 255)

(B) The number of pixels in the image

(C) The size of the file in bytes

(D) The time taken for image acquisition

(iii). A computer vision system detects objects of interest in an image by drawing bounding boxes around them. This activity of identifying and locating multiple objects of interest within the image is called _____.

(A) Semantic Segmentation

(B) Instance Segmentation

(C) Object Detection

(D) Histogram Equalization

(iv). Innovative Labs, a startup focused on developing intelligent language models, is training a neural network to improve its text prediction accuracy. During the training process, the team uses the practice of fine-tuning the weighting of the neural network based on the error rate (loss) obtained in the previous iteration to minimize error. This practice is known as _____.

(A) Forward Propagation

(B) Activation Function

(C) Back Propagation

(D) Deep Learning

(v). Why are Large Language Models (LLMs) referred to as 'large'?

(A) They use a large number of GPUs.

(B) They are trained on massive datasets of text and code.

(C) They can only generate long text outputs.

(D) They have more layers than other models.

(vi). The key element "Visuals" in data storytelling refers to:

(A) Using charts, graphs, and images to present data clearly and effectively

(B) Writing long textual descriptions of data insights

(C) Ignoring graphical representation of data

(D) Focusing only on numerical tables

Section - B

6. List out the problems faced by the person who lacks in communication skills.

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7. Suggest any four techniques how a person can become result-oriented.

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8. Give any four advantages of Presentation software.

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9. Who are called Business Entrepreneurs?

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10. Explain the role of green jobs in eco-tourism.

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11. Name any four evaluation metrics for classification.

12. What is the role of preprocessing images in the computer vision process? How is it different from High Level Processing?

13. Identify the language of the following sentence: "desce, ela sobe no baile, é pressão. Mina, linda,"

14. What is bias in a neural network? Mention any one of its functions.

15. State any two risks associated with Large Language Models (LLMs) that arise from the training process or the training data.

16. Define the term Data Storytelling. Mention any one reason why Data Storytelling has become very powerful today.

17. With reference to the steps of Data Science Methodology, define the process of data collection. Also differentiate between primary and secondary data sources of data collection with suitable examples.

18. List and briefly explain the four steps involved in the working process of Big Data Analytics.

19. Describe the structure of an Artificial Neural Network by explaining its three fundamental layers, and define the role of the weights assigned to each connection between the nodes.

20. Differentiate between Generative AI and Discriminative AI based on their Purpose, Training Focus, Application, and Models.

21. Define the terms 'Data' and 'Data Visualization'. Explain the uses of the 'Heat Map' and 'Candlestick Chart' visualization types.