Class : IX   Max Marks : 50 Marks

Date :   Duration : 2 Hours

SECTION A: OBJECTIVE TYPE QUESTIONS

Q1.	Answer any 4 out of given 6 questions on Employability Skills (1M X4=4M)	
I.	If you are aware of your own values, likes, dislikes, strengths & shortcomings as an individual, it denotes the fact that you are a. Self confident c. Self controlled b. Self motivated d. Self aware	1
II.	Focusing on the good, especially in the face of hardship, constitutes as optimistic attitude. Losing a game for example might be interpreted as a loss or an opportunity to analyze game methods and develop in order to win in future. This shows- a. Self-belief b. Hard work c. Positive attitude d. commitment	1
III	In digital technology, information is translated into _____. a. bits(0,1) b. electric pulse c. Mechanical pulse d. digits (0-9)	1
IV	In which of the following communications, do we get an instant feedback? a. Visual communication b. Written communication c. Oral communication d. Non-verbal communication	1
V	Personal hygiene is essential because it helps in our daily lives to a. Stay healthy b. Avoid feeling ashamed due to bad breath/body odour c. Create a good image of ourselves. d. All of these	1
VI	Which of the following is a web browser? a. Internet b. Chrome c. Windows d. None of the above	1

Q2.	Answer any 5 out of given 6 questions (1M X 5= 5M)	
I	_____canvas of 4Ws canvas helps us to analyze and recognize the nature of problem. a. What b. Where c. What d. Who	1
II	The game 'Quick Draw' is based on which AI domain? a. Data for AI b. NLP c. CV d. None of these	1
III	_____ helps to represent graphical data that uses symbols to convey a story and help people understand large volumes of information. a.Data set b. Data Visualization c. Data Exploration d. None of these	1
IV	The process of breaking down the big problem into a series of simple steps is known as – a. Modularity b. Efficiency c. Both (a) and (b) d. None of them	1

V	In fraud and risk detection, AI can be a great help. It mainly works on the following AI domain a. NLP b. Computer Vision c. Data Science d. Machine learning	1

VI	AI project cycle helps us to
	     a. create better AI projects easily b. create AI projects faster
	     c. understand the process d. all of the above
		1

Q3.	**Answer any 5 out of given 6 questions (1M X 5= 5M)**	
I	Partiality or preference for one over the other in the collected data is called as a. Privacy b. Bias c. Inclusion d. Human rights	1
II	The ____ are people who face the problem and would benefit from the solution. a.Stakeholders b. Key persons c. Developer d. End user	1
III	_____ enables machine to improve at tasks with experience. a. Deep learning b. Machine learning c. AI d. None of these	1
IV	_____ is the umbrella which holds both Deep learning and machine learning. a. Modelling b. Artificial intelligence c. Project d. None of these	1
V	_____ defines a set of beliefs dictated by society, culture or tradition a. Data literacy b. Ethics c. Morality d. None of these	1
VI	Which of the following is not a part of the 4 Ws canvas? a.Who b. What c. Where d. Which	1

Q4.	**Answer any 5 out of given 6 questions (1M X 5= 5M)**	
I	AI systems that are used in criminal justice system to predict future criminal behaviour can turn into mass surveillance of our public spaces, destroying any concept of privacy. Which AI principle is violated here? a.Bias b. Privacy c. Human rights d. Lack of access	1
II	 Draw a flowchart to display addition of two numbers.	1
III	What does it mean for an AI to be 'fair'?	1
IV	What is the output of the expression 3 + 2 * 2 in Python?	1
V	What will the following code print: print(2**3)?	1
VI	Give any two ways to write a multiline statement in Python.	1

Q5.	**Answer any 5 out of given 6 questions (1M X 5= 5M)**	
I	How does smart assistants work?	1
II	Identify the domain of the following AI applications: a) Autonomous car- b) Recommendations-	1

III	How can AI be used as a tool the transform the world into a better place?	1
IV	Predict output of the following python code 64**0.5 A==23	1
V	Name any 2 languages which are used in AI application.	1
VI	You order a new dress from Amazon and after wearing it on your friend's birthday party, you returned it stating the reason inappropriate fitting. Was this decision was dictated by your moral or ethics. Justify your answer	1

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills (2 M x 3 = 6 M)

Answer each question in 20 – 30 words.

Q6.	What is the importance of positive thinking?	2
Q7.	Name and explain two types of questions.	2
Q8.	Give short cut keys for the following i)Copy ii) Paste iii) Undo iv) Redo	2
Q9.	Write any two rules for capitalizing words along with example.	2
Q10.	What are the advantages of using e-mail?	2

Answer any 4 out of the given 6 questions (2 M x 4 = 8M)

Answer each question in 20 – 30 words.

Q11.	Why is ethics important in life?	2
Q12.	What are the 3 domains of AI? Also mention the type of data each domain works on.	2
Q13.	What is evaluation? Mention the parameters on which the efficiency of the AI model is calculated?	2
Q14.	Match the following 	2
Q15.	Draw out the difference between the three domains of AI with respect to the types of data they use.	2
Q16.	Explain the role of AI is medical imaging.	2

Answer any 3 out of the given 4 questions on Employability Skills (4 M x 3 = 12M)

Answer each question in 60 – 80 words.

Q17.	What is 4W canvas? Explain each canvas in detail. What is the use of 4W canvas?	4
Q18.	Write python code for following: i) Python Program to find the area of triangle where the 3 side are 5,6,7 cm each. ii) Construct a logical expression to represent each of the following condition- 1. Score is greater than or equal to 80 but less than 90. 2. Answer is either "N" or "n"	4
Q19.	What is data? What is data acquisition in AI project cycle? What are the various ways to collect data?	4
Q20.	Your grandmother watches you use AI applications. She wants to understand more about it. Help her understand the term artificial intelligence by giving the right definition and explain to her with an example how machines become artificially intelligent.	4

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