## B.Com/B.Sc. III Semester Degree Examination, March/April - 2023
## COMPUTER SCIENCE
### Artificial Intelligence
### (NEP)

Time : 1 Hour                                    Maximum Marks : 30

**Note :** *Answer **all** Questions.*

Answer **all** the following questions.  Each question carries **one** mark.

**1.** A predictive app provides audio output for visually impaired users.  Which Principle of Responsible AI is reflected here ?
   (A)  Transparency              (B)  Inclusiveness
   (C)  Fairness                  (D)  Accountability

**2.** You want to create a model to predict sales of icecream based on historic data that includes daily icecream sales totals and weather measurements.  Which Azure service should you use ?
   (A)  Azure Machine Learning    (B)  Azure Bot
   (C)  Language                  (D)  Pipeline

**3.** You are designing an AI application that uses images to detect cracks in car windshields and warn the drivers when a windshield should be repaired or replaced.  What AI workload is described ?
   (A)  Computer Vision
   (B)  Anomaly Detection
   (C)  Natural Language Processing
   (D)  Knowledge Mining

**4.** You want to use automated machine learning to train a regression model with the best possible R2 score.  How would you configure the automated machine learning experiment ?
   (A)  Set the primary metric to R2 score
   (B)  Block all algorithms other than Gradient Boosting
   (C)  Enable featurization
   (D)  Set all the primary metric to zero

5. In Azure Machine learning studio, what can you use to author regression machine learning pipelines using a drag-and-drop interface ?
   (A) Note books
   (B) Automated Machine learning
   (C) Designer
   (D) None of the above

6. A bank wants to use historic loan re-payment records to categorize loan applications as low-risk or high-risk based on characteristics like the loan amount, the income of the borrower and the loan period. What kind of machine learning model should the bank use automated machine learning to create ?
   (A) Regression
   (B) Classification
   (C) Time series forecasting
   (D) Association

7. You are using Azure Machine learning Designer pipeline to train and test a K-Means clustering model. You want your model to assign items to one of three clusters. Which configuration property of the K-Means clustering module should you set to accomplish this ?
   (A) Set Number of centroids to 3
   (B) Set Random number seed to 3
   (C) Set Iterations to 3
   (D) Set Functions to 3

8. You want to use the computer vision service to identify the location of individual items in an image. Which of the following features should you retrieve ?
   (A) Categories
   (B) Tags
   (C) Objects
   (D) Class

9. You want to use the Computer Vision Service to analyze images. You also want to use language service to analyse text. You want developers to require only one key and end point to access all of your services. What kind of resource should you create in your Azure subscription ?
   (A) Computer Vision
   (B) Cognitive Services
   (C) Custom Vision
   (D) Image Recognizer

10. What is one aspect that may impair facial detection ?
    (A) Glasses
    (B) Extreme angles
    (C) Fast shutter speed
    (D) Facial expression

11. You plan to use Computer Vision services **Read API**. What results can the ReadAPI provide ?
    (A) Results arranged in pages, lines and words
    (B) Only the bounding box coordinations
    (C) Results arranged by pages that have photographs first and then pages that exclusively have text
    (D) Results arranged by pages that have text first and then photographs

**12.** You plan to use the Form Recognizer pre-built receipt model. Which kind of Azure resource should you create ?

(A)   Computer Vision resource

(B)   Form Recognizer or Cognitive Services resource

(C)   Only Form Recognizer resource

(D)   Only Cognitive Services

**13.** You are using the Form Recognizer Service to analyze Receipts that you have scanned into JPG format images. What is the maximum file size of JPG file you can submit to the pre-built receipt model ?

(A)   2 MB                                      (B)   50 MB

(C)   200 MB                                    (D)   500 MB

**14.** You use the language service to perform sentiment analysis on a document and a score of 0.99 is returned. What does this score indicate about the document sentiment ?

(A)   The document is positive          (B)   The document is neutral

(C)   The document is negative          (D)   The score is invalid

**15.** You want to use the language service to determine the key talking points in a text document. Which feature of the service should you use ?

(A)   Sentiment analysis                 (B)   Key phrase extraction

(C)   Entity detection                   (D)   Object detection

**16.** You want to use the speech service to build an application that reads incoming email message subjects aloud. Which API should you use ?

(A)   Speech-to-Text                     (B)   Text-to-Speech

(C)   Translate                          (D)   Reader

**17.** You are developing an application that must take English input from a microphone and generate a real-time based transcription in Hindi. Which service should you use ?

(A)   Translator        (B)   Language        (C)   Speech        (D)   Reader

**18.** You want to create knowledge base for bots. What service would you use ?

(A)   Conversational Language Understanding

(B)   Azure Bot

(C)   Custom Services

(D)   Question Answering

**19.** Which data format is accepted by Azure Cognitive Search when you are pushing data into the index ?

(A) CSV       (B) SQL       (C) XLS       (D) JSON

**20.** What is meant by seasonal data ?

(A) Data based on the time or year it was recorded

(B) How far apart the values are by default for each recorded period

(C) Data occurring at regular intervals

(D) Data occurring at irregular intervals

**21.** Which data role enables advanced capabilities specifically through reports and Visualizations ?

(A) Data Scientist            (B) Data Engineer

(C) Data Analyst             (D) Database Administrator

**22.** Which data analyst task has a critical performance impact on reporting and data analysis ?

(A) Model       (B) Analyze       (C) Visualize       (D) Transform

**23.** Which one of the following is the most important key benefit of data analysis ?

(A) Decisive analytics       (B) Informed Business Decisions

(C) Complex reports         (D) Descriptive analytics

**24.** Which of the following are the building blocks of power BI ?

(A) Tiles, dashboards, databases, mobile devices

(B) Visualizations, datasets, reports, dashboards etc.

(C) Visual studio, C# and JSON files

(D) Tiles, JSON files, databases

**25.** A collection of readymade visuals, pre-arranged in dashboards and reports is called what in power BI ?

(A) The Canvas          (B) Scheduled refresh

(C) An app              (D) Dashboard

**26.** When connecting to a SQL server database to get data, what language should you use to extract data ?

(A) DAX            (B) T-SQL

(C) MDX           (D) None of the above

**27.** You are creating a power BI report with data from an Azure Analysis Services MDX cube. When the data refreshes in the cube, you would like to see it immediately in the Power BI report. How should you connect ?
(A) Import
(B) T-SQL
(C) Live Connection
(D) Cannot be Connected

**28.** What can you do to improve performance when you are getting data in Power BI ?
(A) Remove unnecessary columns and rows
(B) Export database files to CSV to load
(C) Combine date and time columns into a single column
(D) Export files from excel only

**29.** Which of the following filters are not available in Power BI reports ?
(A) Drill through
(B) Report level
(C) Page level
(D) Page type

**30.** Power BI paginated reports are created by using which tool ?
(A) Power BI Desktop
(B) Power BI Service
(C) Power BI Report Builder
(D) Mobile Power BI App

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