Roll No.	
Total No.	of Questions : 09

Total No. of Pages: 02

MCA (Sem.-4) ADVANCED WEB TECHNOLOGIES

Subject Code: PGCA1958

M.Code: 91856 Date of Examination: 13-05-2024

Time: 3 Hrs.

Max. Marks: 70

INSTRUCTIONS TO CANDIDATES :

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks
- SECTION B & C have FOUR questions each.
- Attempt any FIVE questions from SECTION B & C carrying TEN marks each.
- Select atleast TWO questions from SECTION B & C.

SECTION-A

- Answer the following questions briefly:
 - What is server side scripting? i)
 - How arrays are used in PHP? 11)
 - Why we use cookies? 111)
 - What is CMS?
- Write a short note on NPM. V)
- What are regular expressions? VI)
- What are advantages of AJAX? VIII)
- What are the disadvantages of using xml? viii)
- ix) What is a breadcrumb in Bootstrap?
- What are the component of API? X)

SECTION-B

STIEGO SIGNATOR COMMENDED FOR ECTION & MISSON SINGLESS AND STATES OF STREET səfdunxə Bursa Kresqij qipojdiety əti to əstevii əti trejid.

- What are the various constants predefined in PHP? What is the use of the constant()
- Differentiate between following using example :
 - i) FLOAT and DOUBLE
 - ii) CHAR_LENGTH and LENGTH.
- How sessions are maintained in PHP? Also, highlight the importance of cookies
- What are the various types of CMS? Discuss alongwith its usage and benefits.

SECTION-C

- Discuss various components of Bootstrap in detail
- How XML is different from HTML? What is XML DOM?
- How is jQuery different from other Javascript frameworks? List down any four features of jQuery.
- What is the difference between synchronous and asynchronous requests in AJAX? Explain with an example.



NOTE: Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.

Total No. of Pages: 03

MCA (Sem.-4)

MACHINE LEARNING AND DATA ANALYTICS USING PYTHON Subject Code: PGCA-1976

M.Code: 91855

Date of Examination: 07-05-2024

Time: 3 Hrs.

Max. Marks: 70

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INSTRUCTIONS TO CANDIDATES:

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks
- SECTION B & C have FOUR questions each.
- Attempt any FIVE questions from SECTION B & C carrying TEN marks each.
- Select aileast TWO questions from SECTION B & C.

SECTION-A

- Answer Briefly:
 - a) When to apply linear regression?
 - b) Write the loss function for multiple linear regression.
 - c) How to do multiclass classification using logistic regression?
 - d) Name a method used in choosing the value of K in KNN.
 - e) What are the criteria for choosing a root in a decision tree?
 - Why do we use the dot (.) operator in python?
 - What are various datatypes in Python?
- h) When do we need NumPy?
- Write two advantages of using PCA.
- j) What is supervised learning? Explain with an example.

SECTION-B

- a) Explain the working of Decision Trees
 - b) What are the advantages of random forests over decision trees?
- a) Explain PCA in detail using eigen values and eigen vectors
 - b) Logistic regression does work of classification. Discuss
- a) What are neural networks? When do we use them?
 - b) What are the various hyperparameters needed for neural networks?
- Consider the following training set that classifies the output variable play tennis as Yes or No depending upon weather conditions such as Outlook, Temperature, Humidity, and Windy Status.

S. No.	Outlook	Femperature	Humidity	Windy	Play Tennis
1	Sunny	Hot	High	Weak	No
2	Sunny	Hot	High	Strong	No
3	Overcast	Hot	High	Weak	Yes
4	Rainy	Mild	High	Weak	Yes
5	Rainy	Cool	Normal	Weak	Yes
6	Rainy	Cool	Nonnal	Strong	No
7	Overcast	Cool	Normal	Strong	Yes
8	Sunny	Mild	High	Weak	No
9	Sunny	Cool	Normal	Weak	Yes
10	Rainy	Mild	Normal	Weal	K Yes
11	Sunny	Mild	Norma	l Stron	ng Yes
12	Overcast	Mild	High	Stro	ng Ye
13	Overcas		Nonn	al We	ak Yo
14	Rainy	SMIL	Rig	Righ Strong	

Using Naive Bayes Classifyer, classify whether, on a Sunny, Cool, Normal Humidity, Weak Windy day, we on play tennis or not.

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