BCA(V) — Rel. Data. Mgt. Sys. (501)

2024

(Session : 2021-24)
(Paper ID : 15009)

Time : 3 hours

Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

Answer any five questions.

1. What is SQL ? What are the two major categories of SQL command ? Example, in detail, by taking one example.

2. Explain ten(10) different Aggregate function of SQL.

3. What is Subquery ? Explain subqueries with a suitable example.

4. What is Data Constraint ? Explain different type of constraint.

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5. What is the concept of View ? Explain creating and destroying a view using suitable example.

6. Write the difference between SQL and PL / SQL and also explain PL / SQL generic block.

7. What is a function in PL / SQL ? Explain with advantages, creation, execution, suitable example.

8. Define cursor with its types and attribute. How cursor for loop be used to simplify the processing of cursor. How parameterized cursor works in block ?

9. (a) What are built-in functions ? Give example. List and explain Character / String functions applied (any Five) with appropriate example.

   (b) Explain with examples :

       (i) Select data within a Range

       (ii) Null Value

10. What is Procedure in PL / SQL ? Explain with syntax and suitable example.

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BCA(V) — Art. Int.
Through Pyth. (502)

2024

(Session : 2021-24)

(Paper ID : 15010)

Time : 3 hours

Full Marks : 80

Candidates are required to give their answers in
their own words as far as practicable.

The questions are of equal value.

Answer any **five** questions.

1. Explain, in detail, about Python Files, its types,
   functions and operations that can be performed
   on files with examples.

2. What type of Looping is present in a
   programming language ? How many of them are
   supported in Python ? Explain with example.

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(Turn over)

3. Explain the following built in function and method with clear syntax, description and illustration :

   (a) read ()

   (b) file ()

   (c) write ()

   (d) writelines ()

   (e) tell ()

4. What is Lambda Function ? What are the characteristics of a lambda function ? Give an example.

5. (a) What is structured programming in context of Python language ?

   (b) What is Dictionary in Python ? Write a program using dictionary.

6. State the various applications of Python.

7. What do you mean by Artificial Intelligence ? Mention some of the characteristics of Intelligence. Discuss any four application areas of Artificial Intelligence.

8. Write a Python program to multiply two matrices.

9. What is pattern matching and searching technique used in Python ? Explain with suitable example.

10. What is a Supervised Learning in AI ? Discuss the types of Supervised Learning. Also explain advantage and disadvantage.

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BCA(V) — Web.
Tech. (503)

2024

(Session : 2021-24)

(Paper ID : 15011)

Time : 3 hours

Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.
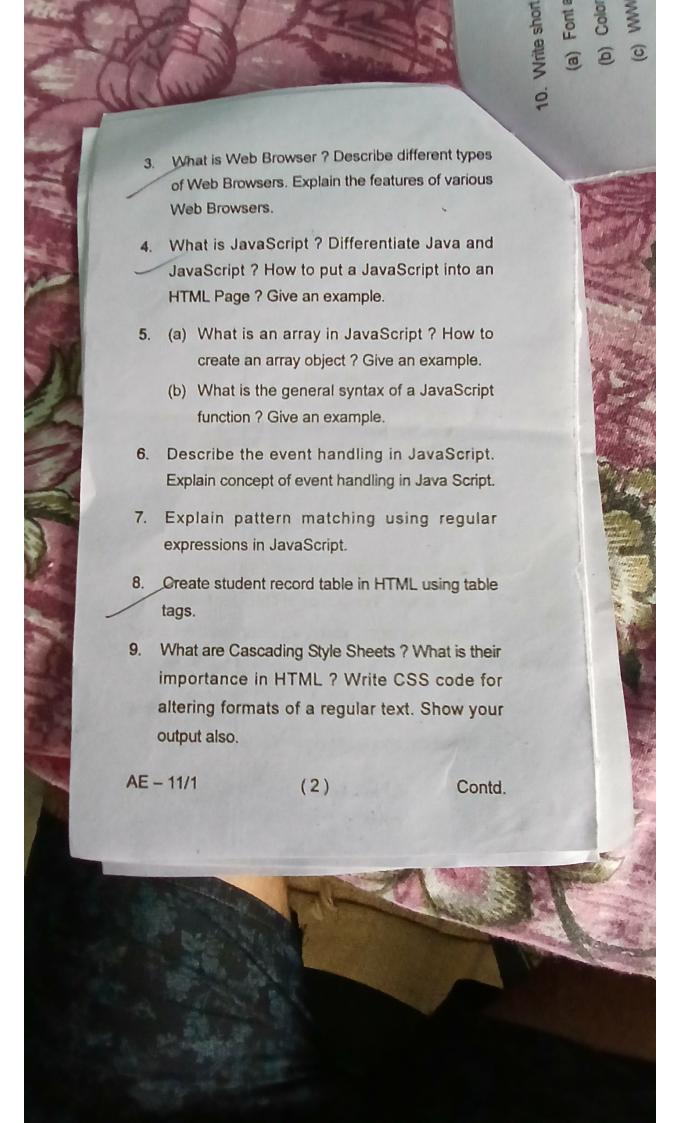
The questions are of equal value.
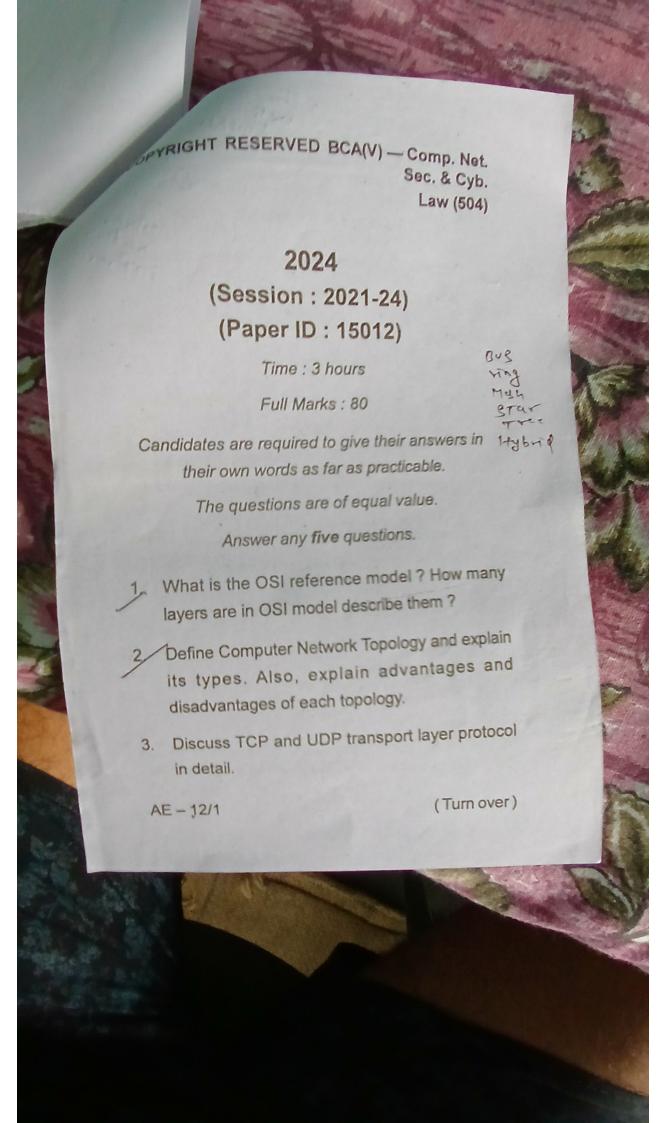
Answer any *five* questions.

1. What are HTML Tags and its types ? Write the basic syntax of HTML List different formating tags. Explain with examples any five of them.

2. What is Internet ? Write the application of internet. Write the short note on domain name server.

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3. What is Web Browser ? Describe different types of Web Browsers. Explain the features of various Web Browsers.

4. What is JavaScript ? Differentiate Java and JavaScript ? How to put a JavaScript into an HTML Page ? Give an example.

5. (a) What is an array in JavaScript ? How to create an array object ? Give an example.

   (b) What is the general syntax of a JavaScript function ? Give an example.

6. Describe the event handling in JavaScript. Explain concept of event handling in Java Script.

7. Explain pattern matching using regular expressions in JavaScript.

8. Create student record table in HTML using table tags.

9. What are Cascading Style Sheets ? What is their importance in HTML ? Write CSS code for altering formats of a regular text. Show your output also.

AE – 11/1   (2)   Contd.

10. Write short notes on any **four** of the following :

   (a) Font attributes

   (b) Color

   (c) WWW

   (d) Hyperlinks

   (e) Web Server

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BCA(V) — Comp. Net.
Sec. & Cyb.
Law (504)

2024

(Session : 2021-24)

(Paper ID : 15012)

Time : 3 hours

Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

Answer any five questions.

1. What is the OSI reference model ? How many layers are in OSI model describe them ?

2. Define Computer Network Topology and explain its types. Also, explain advantages and disadvantages of each topology.

3. Discuss TCP and UDP transport layer protocol in detail.

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4. What is Transmission Media ? Explain different types of Transmission Media.

5. Explain Message Authentication in detail.

6. Explain Computer Network Architecture with advantage and disadvantage.

7. What is Data and Signal ? Differences between Analog and Digital Signals.

8. What is Virtual Circuits ? Explain advantage and disadvantage of virtual circuit.

9. What is Network Security ? Describe Network Security Model.

10. What is Cyber Security ? How to secure the cyber using security risk analysis ?

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