Total Pages: 2

BCA (Semester-V) Examination, 2022

( Session 2019-22 )

### RELATIONAL DATABASE MANAGEMENT SYSTEM

[ Paper Code : BC-501 ]

Time: Three Hours

[Maximum Marks: 80

Note: 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.

- What is Database? Explain Oracle and its tools.
- Explain database types of oracle and also explain each data type length.
- (a) Define Primary key. How primary key creation is implemented with table? Explain with example.
  - (b) Explain with example :
    - (i) Need of Join operation
    - (ii) Oracle data conversion function

(1)

[P.T.O.]

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- 4. (a) Explain Index creation implementation in oracle database.
  - (b) How can the automatic data generation be applied in database fields? Give syntax.
- 5, Explain the concept of View. Explain creating and destroying a View using suitable example.
- 6, Explain SQL security management tools.
- 7 (a) How exception block of PL/SQL works? Explain using example.
  - (b) What are Triggers? How are triggers executed on events? Explain with example.
- 8. (a) What are conditional statements used in PL/SQL programming? Explain each with example code.
  - (b) What is the difference between a stored procedure and function?
- 9 Explain exceptional handling with suitable example.
- 10. (a) What is pre-defined exception and how is it used in an exception handler?
  - (b) Write a trigger which enters the primary key field by default when insertion performed.

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BCA (Semester-V) Examination, 2022

( Session 2019-22 )

# ARTIFICIAL INTELLIGENCE THROUGH PYTHON PROGRAMMING

[ Paper Code: BC-502 ]

Time: Three Hours]

[Maximum Marks: 80

Note: 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.

- Summarize various operators, built-in functions and standard library modules that deal with Python's numeric type.
- Define various types of looping statements in Python.

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(b) Write a program for pyramid of digits as given below:

1
1 2 1
1 2 3 2 1
1 2 1
1 1 1

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

Explain the following built-in functions and method with clear syntax, description and illustration:

- (i) open (ii) file (iii) seek
- (iv) tell() (v) read()

 Examine how python supports regular expressions through the 're' module with brief introduction and various built-in methods related to it.

State the various application of Python.

- 7. Explain the basic functionality of match() function.
- 8. Python is pure oop's language contrasting with C++ and Java. Justify your answer.

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(2)

- (a) Which Python objects are immutable? Explain with example.
  - (b) Which Python types are sequences and how do they differ from mapping.
- Discuss various applications of Artificial Intelligence.

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# BCA (Semester-V) Examination, 2022

( Session 2019-22 )

#### **WEB TECHNOLOGY**

(HTML, JAVASCRIPT, CSS)

[ Paper Code : BC-503 ]

Time: Three Hours]

[Maximum Marks: 80

Note: 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.

- What is Web Browser? Explain different types of web browsers.
- What is HTML? Explain the structure of HTML document.
  - What is Form? Distinguish between Post method and Get method. Create a web page to display different buttons like radio button, check box, combo box.

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(1)

[P.T.O.]

- Explain operators in JavaScript. Write a JavaScript to find maximum of three given numbers.
- What is For loop in JavaScript? Write a program to find the factorial of a given integer.
- What are user-defined functions? Write a JavaScript to find square and cube of a number using functions.
- Discuss the event handling in JavaScript. Write a JavaScript to demonstrate the concept of event handling.
  - Explain various CSS colors formats. Discuss the all possible lists of color formats used. in CSS.
  - 10. Write notes on any two of the following :
    - (a) Hyperlinks
    - (b) Web Servers
    - (c) WWW (World Wide Web)
    - (d) Arrays in JavaScript

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# BCA (Semester-V) Examination, 2022

( Session 2019-22 )

## COMPUTER NETWORK, SECURITY AND CYBER LAW

[Paper Code: BC-504]

Time: Three Hours] [Maximum Marks: 80

Note: 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.

- What do you mean by IP address? Explain IP addressing method.
- 2. Explain about multiple access protocol in detail.
- Explain network management. Explain five areas of network management in detail.
- What is Transmission Media? Describe in detail about guided and unguided transmission media.

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(1)

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- Define Multiplexing. Explain various types of multiplexing in detail.
- What is need of Security Technology? Discuss various types of firewall security technologies.
- 7. What is the security architecture of information system?
  Explain the secure system design of information system.
- What is Cyber Security? How to secure the cyber using security risk analysis?
  - Explain about OSI security architecture tools and techniques in detail.
- 10. Explain OSI reference model in detail.

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