K22U 2252

Reg. No. : .....

Name : .....

V Semester B.C.A. Degree (CBCSS – OBE-Regular/Supplementary/ Improvement) Examination, November 2022
(2019 Admission Onwards)
Core Course
5B14BCA : PYTHON PROGRAMMING

Time : 3 Hours Max. Marks : 40

PART – A
(Short answer)

Answer **all** questions. **(6×1=6)**

1. What is commit operation ?
2. Which is the difference between Mutable and Immutable objects ?
3. What are the different numerical types supported by Python ?
4. List out Basic operations on Arrays.
5. What is PYTHONPATH variable ?
6. Which method is used to disconnect a database ?

PART – B
(Short essay)

Answer **any 6** questions. **(6×2=12)**

7. How do you plot the mathematical function sin x ?
8. What is NumPy Arrays ?
9. List out some Data type conversion functions.
10. How do you create class in Python ?
11. What are Built-in Methods of List ?
12. What are the arithmetic operations on Arrays ?
13. What is Cursor object ?
14. What is Data Visualization in Python ?

P.T.O.

PART – C
(Essay)

Answer **any 4** questions. **(4×3=12)**

15. Briefly explain features of Python.
16. What are Layout Managers in Python GUI ?
17. Differentiate Global variables and Local variables with suitable example.
18. Which are Assignment Operators ?
19. What are the built-in functions to read data from standard input ?
20. What are Database exceptions ?

PART – D
(Long essay)

Answer **any 2** questions. **(2×5=10)**

21. Describe Class Inheritance.
22. How do you fetch data from a Database ?
23. Describe standard exceptions in Python.
24. What is Tkinter ? List out Tkinter Widgets.

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K22U 2251

Reg. No. : .....

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V Semester B.C.A. Degree (CBCSS-OBE-Regular/Supplementary/ Improvement) Examination, November 2022
(2019 Admission Onwards)
Core Course
5B13BCA : ENTERPRISE JAVA PROGRAMMING

Time : 3 Hours Max. Marks : 40

SECTION – A

Answer **all** the questions : **(6×1=6)**

1. What is meta data ?
2. What is SQL warning ?
3. What is RMI registry ?
4. Why are cookies created ?
5. What is holder class ?
6. What is client stub ?

SECTION – B

Write short notes on **any six** of the following questions : **(6×2=12)**

7. List JDBC data types.
8. Briefly explain the working of DGC.
9. What is servlet ? Explain its types.
10. Explain the methods to insert current, date and time in a database using JDBC.
11. What is marshalling and unmarshalling ?

P.T.O.

12. What is IDL Compiler ?
13. How is ORB initialized ?
14. What are initialization parameters in servlets ?

SECTION – C

Answer **any four** of the following questions : **(4×3=12)**

15. What are the types of ResultSet in JDBC ?
16. What are ServletConfig and ServletContext ?
17. How are stubs and skeletons generated ? Explain.
18. How do inter-ORB communication works ?
19. Explain how to register with a naming service.
20. What are CORBA remote object references ?

SECTION – D

Write an essay on **any two** of the following questions : **(2×5=10)**

21. What is JDBC ? Explain the architecture of JDBC with the help of a diagram.
22. Explain the life cycle of java servlets.
23. What are RMI architecture layers ? Explain in detail.
24. What is CORBA ? Explain its architecture.

K22U 2253

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V Semester B.C.A. Degree (CBCSS – OBE-Regular/Supplementary/ Improvement) Examination, November 2022
(2019 Admission Onwards)
Core Course
5B15BCA : WEB TECHNOLOGY

Time : 3 Hours Max. Marks : 40

SECTION – A

Answer **all** questions. **(6×1=6)**

1. What is a web browser ?
2. The _____ attribute allows you to specify a background color for the whole document.
3. Explain the syntax of ordered list.
4. Differentiate Write and Writeln methods in Javascript.
5. What is the use of Strcmp() in PHP ?
6. What is DDL statements ?

SECTION – B

Write short note on **any six** of the following questions. **(6×2=12)**

7. What is the use of inline frame ?
8. Explain ordered and unordered lists in HTML.
9. What are the logical operators in Javascript ?

P.T.O.

10. Explain about arrays in PHP.
11. How to create a function in PHP ?
12. What is class ? How to create a class in PHP ?
13. What is the use of mysql_fetch_array function ?
14. What is the use of font tag ?

SECTION – C

Write **any four** of the following questions. **(4×3=12)**

15. Describe frameset and frames in HTML.
16. Write the branching and conditional statements in PHP.
17. What is static and dynamic web documents ?
18. Write a note on Window object in Javascript.
19. How to connect mysqlDatabase using PHP ?
20. What is client server model ?

SECTION – D

Write an essay on **any two** of the following questions. **(2×5=10)**

21. Describe various form elements of HTML.
22. Explain text formatting elements in HTML.
23. Explain the any 5 array functions in PHP.
24. Explain any five event handling functions in Javascript.

K22U 2250

Reg. No. : .....

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V Semester B.C.A. Degree (CBCSS – OBE – Regular/Supplementary/ Improvement) Examination, November 2022
(2019 Admission Onwards)
Core Course
5B12BCA – OPERATING SYSTEMS

Time : 3 Hours Max. Marks : 40

SECTION – A
(Short Answer)

Answer **all** questions. **(6×1=6)**

1. What is an operating system ?
2. Differentiate between virus and worm.
3. What is meant by IPC ?
4. Explain fragmentation in memory management.
5. What is meant by paging ?
6. What is buffering ? Why it is used ?

SECTION – B
(Short Essay)

Answer **any 6** questions. **(6×2=12)**

7. Briefly explain any four system calls with example.
8. What are the methods for handling deadlock ?
9. What is thrashing ?
10. Why virtual memory is used ?

P.T.O.

11. Explain demand paging.

12. How I/O protection implemented in OS ?

13. Write a note on disk management in OS.

14. What is meant by free space management ?

SECTION – C

(Essay)

Answer **any 4** questions. **(4×3=12)**

15. Briefly explain the structure of an operating system.

16. What are different process states in operating system ?

17. What is meant by contiguous memory allocation ?

18. What is LRU ? Explain with example.

19. Write a note on file sharing and protection.

20. What are the applications of an I/O interface ?

SECTION – D

(Long Essay)

Answer **any 2** questions. **(2×5=10)**

21. Explain the functions of an operating system in detail.

22. What are preemptive and non preemptive scheduling algorithms ? Explain with examples.

23. Write a note on deadlock, deadlock avoidance and deadlock prevention.

24. What is segmentation ? Write a note on it.

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V Semester B.C.A. Degree (CBCSS-OBE-Regular/Supplementary/ Improvement) Examination, November 2022
(2019 Admission Onwards)
Core Course
5B16BCA – E01 INFORMATION SECURITY

Time : 3 Hours Max. Marks : 40

PART – A
Short Answer

Answer **all** questions : **(6×1=6)**

1. What do you mean by confidentiality ?
2. What do you mean by substitution cipher ?
3. What do you mean by cryptanalysis ?
4. List out any two private key algorithms.
5. What are the principles of a public key cryptographic algorithm ?
6. What do you mean by message authentication ?

PART – B
Short Essay

Answer **any 6** questions : **(6×2=12)**

7. List out the needs for information security.
8. What is a symmetric key ?
9. List out some weaknesses of DES algorithm.
10. What are the criteria that a cryptographic hash function must satisfy ?

P.T.O.

11. What do you mean by cryptanalysis system ?
12. What are the benefits of RSA digital signature ?
13. What is steganography ?
14. What are the features of Trogan horse ?

PART – C
Essay

Answer **any 4** questions : **(4×3=12)**

15. Briefly explain various principles of security.
16. What are various categories of traditional ciphers ?
17. Explain brute force attack.
18. Differentiate public key and private key cryptographic systems.
19. What do you mean by message digest ?
20. Explain Kirchoff's principle of cryptography.

PART – D
Long Essay

*Answer **any 2** questions :* ***(2×5=10)***

21. Describe various types of security attacks.
22. Explain DES algorithm in detail.
23. Describe RSA algorithm.
24. Compare various digital signature schemes.
