

2011000105020001
EXAMINATION MARCH 2024
BACHELOR OF COMPUTER APPLICATIONS
(FIFTH SEMESTER)
UNIX & SHELL PROGRAMMING (502)

[Time: Three Hours]

[Max. Marks: 70]

Instructions:

1. Fill up strictly the following details on your answer book

- a. Name of the Examination : **BACHELOR OF COMPUTER APPLICATIONS (FIFTH SEMESTER)**
 - b. Name of the Subject : **UNIX & SHELL PROGRAMMING (502)**
 - c. Subject Code No : **2011000105020001**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.

Seat No:

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Student's Signature

Q.1 Answers the following questions. (Any Seven)

14

1. What is the use of **mv** command?
2. What happen when **cd** command executed without any argument?
3. List out various symbols used with redirection.
4. Explain the significance of **init** process. What is the PID of **init** process?
5. What is the value of exit status of executed command and where is it stored?
6. Write the difference between **while** and **until** loop.
7. List out any four Internal commands.
8. Write structure of **/etc/passwd** file.
9. How to set line number in **vi** editor?

Q.2 Answers the following questions. (Any two)

14

1. Explain Unix System architecture in details.
2. Explain Booting sequence of Unix OS.
3. What is vi editor? List out modes of vi editor and explain in details.

Q.3 Answers the following questions. (Any two)

12

1. Discuss Relative and Absolute File access permission with example.
2. Explain following command with their options.
(i) **at** (ii) **bc** (iii) **head**
3. Explain **ls** command with its attributes.

Q.4 Answers the following questions. (Any three)

18

1. List out any four communication command. Explain any two online communication commands in details.
2. Explain modify command of **sed**.

3. Explain file comparison using *test* command.
4. Write a note on *grep* utility.
5. Explain *find* command in detailed.

- Q.5**
- A. Answers the following questions by using *grep* or *sed* utility. (Any six) **6****
1. To display lines of file f1 that begins with "The".
 2. Count total number of blank lines of file f1.
 3. Display the lines of file f1 that do not contain "Unix".
 4. Replace all occurrences of 'unix' with 'linux' of file f1.
 5. Display the lines of file f1 that contain "VB.net" and/or "Asp.net".
 6. Display lines of file f1 which have exactly 4-characters.
 7. Do not displays line number 3 to 5 of file f1.
 8. Insert blank line after each line of the file f1.
- B. Write a command using *awk* utility (Any Three) **6****
1. Display those words of file f1 whose length are greater than 5 characters and consist of only alphabets.
 2. Display even numbers of words in each line of file f1.
 3. Count occurrences of pattern 'unix' in file f1.
 4. Count number of vowels in file f1.
 5. Display all palindrome word in file f1.

7. What is used to validate complex string patterns like an e-mail address?
 - a. Extended expressions
 - b. Basic expression
 - c. Regular Expression
 - d. Irregular Expression

8. <Web Method> attribute is used to
 - a. Declare web service
 - b. Attach web service with any of web application
 - c. Declare method as web service
 - d. None of the above

9. Which of the following is not a server side state management technique?
 - a. User Profile
 - b. Session
 - c. Cookies
 - d. Application

10. The property of File Upload control used to verify that the control contains a file to upload or not is
 - a. Has File
 - b. Has Rows
 - c. Contains
 - d. None

Q.2 Answer the following

15

- a. List out various state management techniques. Explain Cookies with example.
- b. What do you mean by Developer Productivity in ASP.NET? Explain in detail.
- c. Explain <asp:Login> control with example.

OR

- a. What is Code sharing in ASP.net? Explain Various Code sharing techniques.
- b. Write a note on <asp:GridView> control.
- c. Explain request object in detail.

Q.3 Answer the following

15

- a. What are the advantages of Validator control? Explain pattern matching validator control in detail.
- b. What is a User Control? Explain creating and using a user control in asp.net.
- c. Write a note on: Response Object

OR

- a. Discuss session management with its uses in ASP.NET.
- b. Explain <asp: File Upload> Control
- c. What do you mean by Master Page? Why do we need it? Explain in brief.

Q.4 Answer the following

15

- a. Explain Image, Image Button and Image Map Controls.
- b. What is ADO.NET? Explain its advantages.
- c. What do you mean by Exception? How to Error handling in Database?

OR

- a. Explain Data Set and Data Reader. Also differentiate between them.
- b. Explain how to create and use Web Services.
- c. What is user profile? Explain purpose of it.

Q.5 Answer the following (Any Three)

15

- a. Explain Query String Object
- b. What is .NET framework? Explain its component.
- c. Explain how to achieve master-detail relationship using data binding controls in ASP.NET?
- d. Explain <asp:SiteMapPath> control.

2211000105010002
EXAMINATION MARCH 2024
BACHELOR OF COMPUTER APPLICATIONS (FIFTH SEMESTER)
ADVANCED WEB DESIGNING

[Time: Three Hours]

[Max. Marks: 70]

Instructions:

1. Fill up strictly the following details on your answer book

- a. Name of the Examination : **BACHELOR OF COMPUTER APPLICATIONS (FIFTH SEMESTER)**
 - b. Name of the Subject : **ADVANCED WEB DESIGNING**
 - c. Subject Code No : **2211000105010002**
2. Sketch neat and labelled diagram wherever necessary.
 3. Figures to the right indicate full marks of the question.
 4. All questions are compulsory.
 5. Mention your options clearly.

Seat No:

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Student's Signature

Q.1 Answer following questions (Any Seven)

14

1. What is AngularJS expressions?
2. What is a list?
3. What do you mean by Unstructured data?
4. What is ng-init?
5. What is the use of event.target.name?
6. What is aggregation in MongoDB?
7. What is the use of \$route Provider in AngularJS?
8. What is MVC?
9. What is a spread operator?
10. What is the difference between find () and find One ()?

Q.2 Answer following questions (Any Two)

14

1. Explain operators of MongoDB in detail.
2. Explain MongoDB Data types in detail.
3. Explain React Components in detail.

Q.3 Answer following questions: (Any Two)

14

1. Explain React hooks in detail.
2. Explain the Text Area and Drop-down List elements of React in detail.
3. Explain filters and Controller of AngularJS in detail.

Q.4 Answer following questions: (Any Two)

14

1. What is DOM? Explain Directives in detail.
2. Explain features of Angular JS in detail.

3. Explain ng-app, ng-model and ng-bind directive with example.

Q.5 (a) Write command/query for following MongoDB operations (Any Four) 08

1. Write a query to create "student" collection in the current database.
2. Write a query to insert five students' detail into "student" collection.
3. Write a query to display students' name from "student" collection.
4. Write a query to display top 3 students' Roll no from "student" collection.
5. Write a query to display students' detail with highest and lowest marks from "student" collection.

(b) Create a Form in React.js for Student Registration, with Name, DOB and password. Display the details also. 06

OR

(b) Write an Angular JS which accepts and validates Student Name, Email Address and Mobile No from the user. 06

2211000105010003
EXAMINATION MARCH 2024
BACHELOR OF COMPUTER APPLICATIONS
(FIFTH SEMESTER)
ADVANCED MOBILE COMPUTING

[Time: Three Hours]

[Max. Marks: 70]

Instructions:

1. Fill up strictly the following details on your answer book

- a. Name of the Examination : **BACHELOR OF COMPUTER APPLICATIONS (FIFTH SEMESTER)**
 - b. Name of the Subject : **ADVANCED MOBILE COMPUTING**
 - c. Subject Code No : **2211000105010003**
2. Sketch neat and labelled diagram wherever necessary.
 3. Figures to the right indicate full marks of the question.
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Seat No:

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Student's Signature

Q.1 Do as directed

14

1. Kotlin is Developed by
(A) Google (B) Microsoft
(C) JetBrains (D) IBM
2. _____ feature allows removing the risk of occurrence of Null Pointer Exception in real time.
(A) Null Risk (B) Null Safety
(C) Null Pointer (D) All of the above
3. How many different kinds of constructors are available for kotlin classes?
(A) one (B) two
(C) four (D) none
4. Which of the following is used to get the value.
(A) Setter (B) Getter
(C) Both a & b (D) None of above
5. What does API stand for?
(A) Application Programming Interface
(B) Android Programming Interface
(C) Android Page Interface
(D) Application Page Interface

6. What is the file type for JSON files?
 (A) .jso (B) .jsn
 (C) .js (D) .json
7. Who is the creator of JSON?
 (A) Jesse James Garrett (B) Rasmus Lerdorf
 (C) Alvin Alexander (D) Douglas Crockford
8. Identify among the one which is used to log debug messages.
 (A) Log.R() (B) Log.d()
 (C) Log.D() (D) Log.r()
9. What is used by android for relational data storage?
 (A) Tomcat (B) SQL
 (C) SQLiteDatabase (D) None
10. _____ class are open by default
 (A) Child class (B) Derived class.
 (C) Abstract class (D) None of above
11. All classes in Kotlin are by default?
 (A) final (B) public
 (C) Abstract class (D) Sealed
12. Which of the following is not a method of activity?
 (A) Oncreate() (B) Onstart()
 (C) Onresume() (D) Onsuspend()
13. All layout classes are the subclasses of _____
 (A) android.view.View (B) android.view.ViewGroup
 (C) android.widget (D) None of the above
14. Who manages data sharing between applications?
 (A) Telephony managers (B) Location manager
 (C) Content providers (D) Activity manager

Q.2 Answer the following.

14

1. Explain Activity Lifecycle in Android app development with different stages and their Importance.
2. What are lists in Kotlin, How to create, modify, and access them?

OR

1. What are open classes in Kotlin. Why it is important in terms of inheritance.
2. Explain Difference between if and when statement in kotlin.

Q.3 Answer the following (Any two)

14

1. What is the Logcat pane in Android Studio? How can we use it for debugging and logging purposes?

2. How to apply constraints to widgets in the Constraint Layout? How can we position widgets within the layout?
3. Explain the concept of properties and methods in Kotlin classes. Provide an example for each.

Q.4 Answer the following (Any two)

14

1. What are JSON arrays. Provide examples of different types of JSON arrays.
2. Explain the different types of intents with examples.
3. Explain JSON syntax rules. What are uses and the limitations of JSON?

Q.5 Answer the following (Any two)

14

1. Write the steps involved in creating and inserting data into database in Android?
2. How to set up a virtual server on a local computer for Android app development?
3. Write the code to delete data from database in Android.

2211000105040002
EXAMINATION MARCH 2024
BACHELOR OF COMPUTER APPLICATIONS
(FIFTH SEMESTER)
WEB FRAMEWORK AND SERVICES

[Time: Three Hours]

[Max. Marks: 70]

Instructions:

1. Fill up strictly the following details on your answer book

- a. Name of the Examination : **BACHELOR OF COMPUTER APPLICATIONS (FIFTH SEMESTER)**
 - b. Name of the Subject : **WEB FRAMEWORK AND SERVICES**
 - c. Subject Code No : **2211000105040002**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.

Seat No:

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Student's Signature

Q.1 Answer the following in short (Any 7) 14

1. List out the methods to mention the PHP code in webpage.
2. What is \$GLOBALS? Give an example of it.
3. How to use constants in PHP?
4. Explain Identity operator with example.
5. Explain the isset () method with an example.
6. What is the difference between include () and require ()?
7. Give the difference between validation and sanitization.
8. Explain the listdir () method of OS Module.
9. List out the Jinja2 delimiters.
10. List out the FLASK HTTP methods.

Q.2 Answer the following in details. (Any2) 14

1. What are the types of array in PHP? Explain how they are used in PHP? Explain any three array sorting methods.
2. Explain file& directory handling functions in PHP with suitable examples.
3. What is Session in PHP? How it is used in PHP? Explain with necessary examples.

Q.3 Answer the following (Any 2) 14

1. Explain the exception handling concepts of PHP with necessary example.
2. How python file can be executed in PHP? Explain with necessary commands and examples.
3. Explain OS module of Python with its methods.
4. Explain date-time methods of PHP with suitable example.

- Q.4 Do as directed** **14**
- a) Write the following PHP scripts (Any 2)** **10**
1. Write a script which may perform searching with AJAX concept.
 2. Write a script which can perform the concept of session-based login for different users.
 3. Write a script which can fetch and display the data from the JSON file consisting of exam timetable.
- b) Differentiate between the given (Any 2)** **4**
1. Get method Vs Post Method
 2. Print () Vs print_r()
 3. exit () Vs die ()
- Q.5 Answer the following in detail (Any 2)** **14**
1. What is FLASK? How to create FLASK object? Explain route (), run () & add_url_rule() with necessary script example.
 2. Explain form request object. Explain use of render_template() with necessary example.
 3. Explain the concept of Class in PHP.
 4. Explain the file uploading concept in PHP.
