

Tribhuvan University
Faculty of Humanities & Social Sciences
OFFICE OF THE DEAN
2021

Bachelor in Computer Applications
Course Title: Mobile Programming
Code No: CACS351
Semester: VI

Candidates are required to answer the questions in their own words as far as possible.

Group B

Attempt any SIX questions.

2. What are different mobile application development approaches? Explain in details. [5]
3. Draw the hierarchical directory structure of android application. How can you use string and string array in android? Explain. [2+3]
4. How to create AVD's? How to use spinner in android? Explain with suitable example. [2+3]
5. What are uses of fragments? How fragments are differing from activity? [2+3]
6. Develop an android application to display alert dialog box. [5]
7. Develop an android application to display 8 programming language in List View. [5]
8. What do you mean by view hierarchy in IOS programming? Write a swift function to calculate factorial of any positive integer

Group C

Attempt any TWO questions.

9. Develop an Android application to display a list of student names in a ListView and display the student details(roll num, name,and address) in fragment when a Listview item is selected [10]
10. Develop and Android application to demonstrate the retrieval of content from a remote server
11. How to generate a signed APK(Android package)? Write a program to locate the user's current location (Write only the java and manifest files) [3+7]

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Bachelor in Computer Applications

Course Title: Applied Economics

Code No: CAEC353

Semester: VI

Full Marks: 60

Candidates are required to answer the questions in their own way as far as practicable.

Group B

Attempt any SIX questions.

2. Explain the Macro Economics with its subject matters.
3. Explain the price elasticity of demand with point method of elasticity measurement.
4. How is income effect can be explained on the basis of indifference curve approach?
5. Define cost and its various types.
6. Profit can be Maximized in Monopoly Market. Explain.
7. Is the study of Economics useful to BCA student? How? Explain.
8. **Write short note on (Any Two):**
 - a) Relation between AC & MC of a firm.
 - b) Law of Diminishing Marginal Utility
 - c) Functions of Central Bank

Group C

Attempt any TWO questions.

9. Briefly explain about Short run equilibrium of a firm in monopolistic competition.
10. Explain circular flow of Income and expenditure in three sector economy.
11. How does National Income calculate with Final Production Method?

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Group B

Attempt any SIX questions.

2. Define distributed system. Write the characteristics of distributed system. [2+3]
3. Explain different architecture styles use in distributed system.
4. What is attribute based naming? Explain with example? [3+2]
5. What do you mean by data centric consistency models? Explain its types.[2+3]
6. Explain different types of fault with recovery method.
7. Explain the different types of threads and attacks in distributed system.
8. Write short notes on:
 - a) Access control
 - b) Secure naming

Group C

Attempt any TWO questions.

9. What is Virtualization? Explain the types of virtualization with example [2+8]
10. What is remote procedure call? Write its operation also explain advantage and disadvantage of RPC.[2+4+4]
11. What do you mean by physical clock and logical clock? Explain the network time protocol and Berkeley algorithm.

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Bachelor in Computer Application
Course Title: Network Programming
Code No CACS355
Semester VI

Candidates are required to answer the questions in their own words as far as possible.

Group B

Attempt any SIX questions.

2. What is Client-Server software model? Explain the strengths and weaknesses of java programming as a network programming language[1+4]
- 3 What is the use of InetAddress class? Write a program to retrieve IP and MAC address? [1+4]
4. Define URL class. Write a program to show the parts of the URL (Splitting URL.) [1+4]
5. Define Socket. Differentiate between TCP and UDP Sockets with their applications. [1+4]
6. Define cookies. Write a program to retrieve cookie information stored in the system. [5]
7. Define IP Multicast. Write a program to join a computer system in a multicast group. [1+4]
8. Write Short Notes on (Any Two):
 - a) HTTP
 - b) RMI
 - c) Secure Socket

Group C

Attempt any TWO questions.

9. Write multithreaded TCP client and server socket programs for daytime service [5+5]
10. Write UDP client and server socket programs in which the server identifies the number sent by a client is either even or odd and replies to client accordingly. [5+5]
11. How blocking I/O is differing from Non-Blocking I/O? Explain the basic mechanism of handling Buffers and Channels in Java with example. [2+8]

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2021

Bachelor in Computer Applications
Course Title: Advanced Java Programming
Code No: CACS354
Semester: VI

Candidates are required to answer the questions in their own words as far as possible.

Group B

Attempt any SIX questions.

2. Why do we use Panels while creating GUI applications in Java? Explain the components of the event handling model in java.[2+3]
3. What are adapter classes? What is the benefit of using adapter classes in Java while creating events in GUI programs? Explain with an example.[2+3]
- 4 How the data can be accessed through a resultset object? Explain forward only, scroll- insensitive and scroll sensitive resultsets.
5. What is a Javabean? Explain different types of properties in Javabeans.
6. What are the differences between servlets and Java applications? Explain different methods used for handling cookies in Java. [2+3]
7. What are marshallng and unmarshallng of arguments in RMI? Differentiate between CORBA and RMI [2-3]
8. Write short notes on (Any Two): [2×2.5-5]
 - a) 2D shapes in swing
 - b) Mouse Event and Mouse Listener
 - c) Session tracking

Group C

Attempt any TWO questions.

9. Why do we need to use Layout managers while creating GUI application in Java? Explain the key interfaces required to develop any database application using Java. Also, write a program to display the records from the table Students who have got distinction and have a major subject Data science. Assume that the Student table is in the database College and contains the columns Rollno, Name, Level, Division and Major. [2+4+4]
10. Differentiate between declaration and expression tags used in JSP. Also create a JSP page that contains three textboxes to input three numbers and a button. It should display the greatest number among three numbers when the button is clicked
11. What is RMI? Explain its components. Write a client-server application in RMI to find the selling price of an item with cost price Rs. 5000 after a discount of Rs.50. [1+3+6]