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VI—23—2024

FACULTY OF SCIENCE AND TECHNOLOGY

BCA (Third Year) (Fifth Semester) EXAMINATION

NOVEMBER/DECEMBER, 2024

(CBCS/Revised Pattern)

COMPUTER APPLICATION

Paper-BCA-504B

(Cloud Computing)

(Tuesday, 3-12-2024)   **Time : 10.00 a.m. to 1.00 p.m.**

Time—3 Hours   *Maximum Marks*—75

N.B. :— (*i*)   Attempt *all* questions.

(*ii*)   Figures to the right indicate full marks.

(*iii*)   Assume suitable data, if necessary.

1.   Answer the following (any *five*) :   15

(*a*)   Explain the concept of retrospective.

(*b*)   Explain internet of services.

(*c*)   What is microsoft azure ? Explain.

(*d*)   Explain big table.

(*e*)   Explain Dev 2.0 platforms.

(*f*)   Explain google app engine.

(*g*)   Explain Amazon EC2.

P.T.O.

2. Answer the following (any *three*) :   15

    (*a*)   Explain mainframe architecture.

    (*b*)   Explain SaaS Architecture.

    (*c*)   Explain client server architecture.

    (*d*)   Explain cloud computing in detail.

    (*e*)   Explain 3-tier architecture with TP monitors.

3. Answer the following (any *three*) :   15

    (*a*)   Explain web application servers.

    (*b*)   What is internet technology ? Explain in detail.

    (*c*)   Explain emergence of software as a service.

    (*d*)   Explain web-enabled application.

    (*e*)   Explain Dynamo.

4. Answer the following (any *three*) :   15

    (*a*)   Explain infrastructure as a service.

    (*b*)   Explain platform as a service.

    (*c*)   Differentiate between Soap and REST.

    (*d*)   Explain mashups user interface service.

    (*e*)   Explain data in cloud.

5. Write short notes on (any *three*) : 15

   (*a*)   Hbase

   (*b*)   Web Services

   (*c*)   Ajax asynchronous rich interfaces.

   (*d*)   Rational database and cloud file systems.

   (*e*)   HDf.

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VI—22—2024

FACULTY OF SCIENCE AND TECHNOLOGY

BCA (Third Year) (Fifth Semester) EXAMINATION

NOVEMBER/DECEMBER, 2024

(CBCS/Revised Pattern)

COMPUTER APPLICATION

Paper-BCA-504A

(Computer Network)

(Tuesday, 3-12-2024)   **Time : 10.00 a.m. to 1.00 p.m.**

Time—3 Hours   *Maximum Marks—75*

N.B. :— (*i*)   *All* questions are compulsory.

      (*ii*)   Figures to the right indicate full marks.

      (*iii*)   Assume suitable data, if necessary.

1.   Attempt any *five* of the following (**3** marks each) :   15

(*a*)   LAN and WAN

(*b*)   Bluetooth

(*c*)   Microwave

(*d*)   Ring Topology

(*e*)   URL

(*f*)   DNS

(*g*)   What is Computer Network ?

P.T.O.

2. Attempt any *three* of the following (**5** marks each) : 15

   (*a*) Explain OSI reference model.

   (*b*) Explain Traditional Cryptography in detail.

   (*c*) Explain IP address.

   (*d*) Explain Twisted pair cable in detail.

   (*e*) Explain Transposition Ciphers in detail.

3. Attempt any *three* of the following (**5** marks each) : 15

   (*a*) Explain Intranet and Extranet in detail.

   (*b*) Explain TCP/IP reference model.

   (*c*) Explain Network Security issues in detail.

   (*d*) Explain Fiber optic cable in detail.

   (*e*) Explain Data Encryption Standard (DES).

4. Attempt any *three* of the following (**5** marks each) : 15

   (*a*) Explain FTP and HTTP in detail.

   (*b*) What is Ethernet ? Explain types of Ethernet.

   (*c*) Explain Internet Architected in detail.

   (*d*) What is Topology ? Explain Bus and Mesh topology.

   (*e*) Explain DHCP in detail.

5. Write short notes on any *three* of the following (**5** marks each) : 15

    (*a*)   Firewall.

    (*b*)   Wireless LAN.

    (*c*)   Radio Transmission.

    (*d*)   Digital signature.

    (*e*)   What is internet ? Explain ISP.

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VI—28—2024

FACULTY OF SCIENCE AND TECHNOLOGY

BCA (Third Year) (Fifth Semester) EXAMINATION

NOVEMBER/DECEMBER, 2024

(CBCS/Revised Pattern)

COMPUTER SCIENCE

Paper-BCA–503

(Mobile Application Development)

(Thursday, 05-12-2024)   **Time : 10.00 a.m. to 1.00 p.m.**

Time—3 Hours   *Maximum Marks*—75

N.B. :— (*i*) *All* questions are compulsory.

      (*ii*) Figures to the right indicate full marks.

     (*iii*) Assume suitable data, if necessary.

1. Attempt any *five* of the following (**3** marks each) :   15

  (*a*) Explain the Wi-Fi Connectivity.

  (*b*) Explain the Internal Storage.

  (*c*) Explain the Rotate Animation.

  (*d*) Explain the Playing Audio and Video.

  (*e*) Explain the Intents.

  (*f*) Explain the features of ART.

  (*g*) Explain the Resources.

P.T.O.

2. Attempt any *three* of the following (**5** marks) each : 15

   (*a*) Explain in detail activity life cycle.

   (*b*) Explain in detail Android Application Structure.

   (*c*) Explain in detail working with AndroidManifest.xml.

   (*d*) Explain in detail services to application.

   (*e*) Write an android application to display "Hello Android" message when click on button.

3. Attempt any *three* of the following (**5** marks) each : 15

   (*a*) Explain in detail Buttons control with example.

   (*b*) Explain in detail Radio Buttons control with example.

   (*c*) Explain in detail Dialog box.

   (*d*) Explain in detail Styles and Themes.

   (*e*) Write an android application to demonstrate on Toggle Buttons.

4. Attempt any *three* of the following : 15

   (*a*) Explain in detail Layouts.

   (*b*) Explain in detail System Permissions.

   (*c*) Explain in detail Intent Filters.

   (*d*) Explain in detail creating application template.

   (*e*) Explain in detail Recycler View and List View.

5. Attempt any *three* of the following (**5** marks each) : 15

(*a*) Explain in detail Zoom Animation and Scale Animation.

(*b*) Explain in detail 2D and 3D graphics.

(*c*) Explain in detail Shared Preferences.

(*d*) Explain in detail SQLite Databases.

(*e*) Explain in detail Google maps.

VI—11—2024

FACULTY OF SCIENCE AND TECHNOLOGY

BCA (Third Year) (Fifth Semester) EXAMINATION

NOVEMBER/DECEMBER, 2024

(CBCS/Revised Pattern)

COMPUTER APPLICATION

BCA–501 (SAAD)

(System Analysis and Design)

(Friday, 29-11-2024)   **Time : 10.00 a.m. to 1.00 p.m.**

Time—3 Hours   *Maximum Marks*—75

N.B. :— (*i*)   *All* questions are compulsory.

   (*ii*)   Figures to the right indicate full marks.

   (*iii*)   Assume suitable data, if required.

1.   Attempt any *five* of the following (**3** marks each) :   15

   (*a*)   Explain Gantt charts.

   (*b*)   Discuss characteristics of system.

   (*c*)   Define system.

   (*d*)   Explain technical feasibility.

   (*e*)   Enlist objectives of database design.

P.T.O.

(f) Discuss the concept of decision tables.

(g) Discuss open and closed system.

2. Attempt any *three* of the following (**5** marks each) : 15

(a) Discuss role of system analyst.

(b) Explain flow charts.

(c) Discuss the steps for introduction to files and database design.

(d) Explain data flow diagram.

(e) What are the various phases of system development ? Explain.

3. Attempt any *three* of the following (**5** marks each) : 15

(a) Discuss the considerations for system planning and control for system success.

(b) Discuss Cost/Benefit Analysis.

(c) Explain file structures and organization.

(d) Discuss fact finding process and techniques.

(e) Discuss the concept of decision tree.

4. Attempt any *three* of the following (**5** marks each) : 15

(a) Discuss logical view of data.

(b) Explain operational feasibilities.

    (*c*)   Explain Pseudo codes.

    (*d*)   Explain elements of system.

    (*e*)   Discuss HIPO charts.

5.   Write short notes on any *three* of the following (**5** marks each) :   15

    (*a*)   Determining user's requirements and analysis.

    (*b*)   IPO charts.

    (*c*)   Physical view of data.

    (*d*)   Economic feasibilities.

    (*e*)   Physical and abstract system.

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VI—18—2024

FACULTY OF COMPUTER SCIENCE AND TECHNOLOGY

BCA (Third Year) (Fifth Semester) EXAMINATION

NOVEMBER/DECEMBER, 2024

(CBCS/Revised Pattern)

COMPUTER APPLICATION

Paper-BCA-502

(Web Development and PHP Programming)

(Monday, 2-12-2024)   **Time : 10.00 a.m. to 1.00 p.m.**

Time—3 Hours   *Maximum Marks—75*

N.B. :— (*i*)   *All* questions are compulsory.

      (*ii*)   Figures to the right indicate full marks.

      (*iii*)   Assume suitable data, if required.

1.   Attempt any *five* of the following (**3** marks each) :   15

    (*a*)   Array Functions.

    (*b*)   String Functions.

    (*c*)   Switch.

    (*d*)   MySQL Commands.

    (*e*)   PHP Objects.

P.T.O.

(*f*)   Multidimensional array.

(*g*)   Include( ) and Require( ).

2.   Attempt any *three* of the following (**5** marks each) :   15

(*a*)   Explain history and features of PHP.

(*b*)   Explain Constants in PHP.

(*c*)   Explain PHP expressions in detail.

(*d*)   Explain Installation of PHP.

(*e*)   Explain how to Execute Simple Queries ?

3.   Attempt any *three* of the following (**5** marks each) :   15

(*a*)   Explain if-esle statement with suitable example.

(*b*)   Explain how to Updating Records with PHP.

(*c*)   Explain Looping statements.

(*d*)   Explain Implicit and Explicit casting in PHP.

(*e*)   Explain MySQL Commands.

4.   Attempt any *three* of the following (**5** marks each) :   15

(*a*)   Explain Conditional statements.

(*b*)   Explain Arrays and its types.

(*c*)   Explain Overloading.

(*d*)   Explain Constructor and Destructor.

(*e*)   Explain Object Methods.

5.   Write short notes on any *three* of the following (**5** marks each) :   15

(*a*)   Explain Data types in PHP.

(*b*)   Explain PHP Functions.

(*c*)   Explain Arrays.

(*d*)   Explain Inheritance.

(*e*)   Explain Date and Time Function.