

NOV24-1-401
B. C. A. Semester - V (New Course) Examination
November - 2024
BCA-501 : Java Programming

Total Marks : 70

Time : 2½ Hours

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| 1.a | Answer the following : | 06 |
| | 1. Define : Class, Object | |
| | 2. List Java Features | |
| | 3. List JDK Tools | |
| 1.b | Answer the following (Any Two) | 12 |
| | 1. Explain the basic Structure of Java Program. | |
| | 2. Explain Command Line arguments with syntax and example. | |
| | 3. What is Array ? How to declare and create an array in Java ? Explain with syntax and example. | |
| 2.a | Answer the following : | 05 |
| | 1. Define : Nesting of methods | |
| | 2. What is abstract class ? | |
| | 3. Define : Final Variable | |
| | 4. List access modifiers | |
| | 5. What is the use of super keyword ? | |
| 2.b | Answer the following (Any Two) | 12 |
| | 1. Explain Multilevel Inheritance with example. | |
| | 2. Explain Method overriding with example. | |
| | 3. What is constructor ? Explain types of constructors with suitable example. | |
| 3.a | Answer the following : | 06 |
| | 1. List any four methods of Math Class. | |
| | 2. What is interface ? Give difference between class and interface. | |
| | 3. What is thread ? What is the use of yield() method ? | |
| 3.b | Answer the following (Any Two) | 12 |
| | 1. Explain the process for defining and implementing interface with syntax and example. | |
| | 2. Explain methods of stack class with syntax and example. | |
| | 3. Explain Life Cycle of a Thread. | |
| 4.a | Answer the following : | 05 |
| | 1. Define : Local Applet | |
| | 2. What is the use of finally statement ? | |
| | 3. What is Exception ? | |
| | 4. What is the use of <PARAM> tag ? | |
| | 5. What is the use of throw statement ? | |
| 4.b | Answer the following (Any Two) | 12 |
| | 1. What is Exception ? Explain Multiple catch statement with syntax and example. | |
| | 2. Explain Applet Life Cycle in detail. | |
| | 3. Explain any four methods of graphics class with syntax and example. | |
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NOV24-1-391
B. C. A. Semester - V (Old Course) Examination
November - 2024
BCA-501 : Java Programming

Total Marks : 70

Time : 2½ Hours

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| 1.a | Answer the following : | 06 |
| | 1. Define : Encapsulation, Polymorphism | |
| | 2. Explain command line arguments | |
| | 3. How to create constants in JAVA ? Give example | |
| 1.b | Answer the following (Any Two) | 12 |
| | 1. Explain JDK tools available in java. | |
| | 2. Explain the basic structure of Java Program. | |
| | 3. Explain automatic type conversion and casting with syntax and example. | |
| 2.a | Answer the following : | 05 |
| | 1. Explain Static Data Member | |
| | 2. Write short notes on Access Modifiers | |
| 2.b | Answer the following (Any Two) | 12 |
| | 1. Explain Multilevel Inheritance with example. | |
| | 2. Explain Method overriding with example. | |
| | 3. Write a java program which explains the use of parameterized constructors. | |
| 3.a | Answer the following : | 06 |
| | 1. What is Package ? List Java API Packages. | |
| | 2. Write short notes on Thread Priority | |
| | 3. What is the use of yield() method ? | |
| 3.b | Answer the following (Any Two) | 12 |
| | 1. Explain Interface in detail with syntax and example. | |
| | 2. Explain Stack class with methods and example. | |
| | 3. How to create our own package ? Explain with syntax and example. | |
| 4.a | Answer the following : | 05 |
| | 1. What is Exception ? | |
| | 2. What is the use of finally statement ? | |
| | 3. Define : Local Applet, Remote Applet | |
| 4.b | Answer the following (Any Two) | 12 |
| | 1. Explain Applet tag with all its Attributes. | |
| | 2. Explain Nested try statement with syntax and example. | |
| | 3. Explain any three methods of Graphics class with syntax and example. | |

NOV24-1-402
B. C. A. Semester - V (New Course) Examination
November - 2024
BCA-502 : .Net Using C#

Total Marks : 70

Time : 2½ Hours

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| 1.a | Do as Directed : | 06 |
| | <ol style="list-style-type: none">1. What is CTS ?2. Define : MSIL ?3. What is JIT ? | |
| 1.b | Attempt the following (Any Two) | 12 |
| | <ol style="list-style-type: none">1. Explain .NET Framework Architecture 4.02. Explain CLR in detail.3. Explain Delegates with an example. | |
| 2.a | Answer the following : | 05 |
| | <ol style="list-style-type: none">1. Explain Namespaces and Assemblies.2. Explain XML file in short ? | |
| 2.b | Attempt the following (Any Two) | 12 |
| | <ol style="list-style-type: none">1. Difference between Web Based vs Window Based Application2. Explain HTML Controls vs ASP.NET Controls3. What is Webserver ? Explain in detail. | |
| 3.a | Answer the following : | 06 |
| | <ol style="list-style-type: none">1. What is DataList & Detail view ?2. What is formview & ListView ?3. What is Master Page ? | |
| 3.b | Answer the following (Any Two) | 12 |
| | <ol style="list-style-type: none">1. What is Navigation Control ? Explain Tree View Control.2. What is Validation ? Explain compare validation and summary validation with an example.3. Explain Grid View Control with example. | |
| 4.a | Answer the following : | 05 |
| | <ol style="list-style-type: none">1. Difference between DataReader vs DataSet.2. Explain Data Binding ?3. What is DataSet ? | |
| 4.b | Answer the following (Any Two) | 12 |
| | <ol style="list-style-type: none">1. Difference Between ADO vs ADO.Net ?2. Explain three tiers of Web Applications.3. Explain ADO.net Architecture ? | |

NOV24-1-392
B. C. A. Semester - V (Old Course) Examination
November - 2024
BCA-502 : Net Frame Work Using C#

Total Marks : 70

Time : 2½ Hours

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| 1.a | Answer the following : | 06 |
| | 1. Difference between ASP and ASP .NET | 2. What is Delegates ? |
| | 3. What is MSIL ? | 4. JIT stand for ? |
| | 5. Give full form of CLS ? | 6. What are FCL ? |
| 1.b | Answer the following (Any Two) | 12 |
| | 1. Discuss : .Net Framework for 4.0. | |
| | 2. Describe Session object of ASP. | |
| | 3. What is Data Type ? Explain in detail. | |
| 2.a | Answer the following : | 05 |
| | 1. What is Bin Directory ? | 2. List out names of Web-server. |
| | 3. What is Namespace ? | 4. What is Virtual Directory ? |
| | 5. IIS Stand for ? | |
| 2.b | Answer the following (Any Two) | 12 |
| | 1. Write short note on Web Sever. | |
| | 2. Differentiate Web-based and Window-Based Application | |
| | 3. Define : Assembly ? Explain in detail. | |
| 3.a | Answer the following : | 06 |
| | 1. Define : Code behind and Inline Code | |
| | 2. Write short notes on Global Access file in detail. | |
| | 3. Discuss : Theme in brief | |
| 3.b | Answer the following (Any Two) | 12 |
| | 1. Explain Master page in detail. | |
| | 2. Write short note on Global Access file in detail. | |
| | 3. Discuss : Page Life Cycle in detail. | |
| 4.a | Answer the following : | 05 |
| | 1. Discuss : ADO.NET | |
| | 2. Explain Data Binding in detail. | |
| 4.b | Answer the following (Any Two) | 12 |
| | 1. Discuss ADO.Net Architecture | |
| | 2. Differentiate DATASET and DATAREADER. | |
| | 3. Explain any two Objects of ADO.NET. | |
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NOV24-1-403
B. C. A. Semester - V (New Course) Examination
November - 2024
BCA-503 : Software Engineering

Total Marks : 70

Time : 2½ Hours

- 1.a Answer the following : 06
1. What is Software Engineering ?
 2. List out Software Characteristics ?
 3. What is System ?
 4. What are the ethical responsibilities of a software engineer ?
 5. List out Software quality attributes.
 6. What is the software cost in software engineering ?
- 1.b Answer the following (Any Two) : 12
1. Explain Principle of Software Applications.
 2. Explain Software Myths in detail.
 3. Explain Incremental Model.
- 2.a Answer the following : 05
1. SRS stands for _____.
 2. What is System Design ?
 3. What is the importance of Software requirement ?
 4. What is function oriented design ?
 5. What is problem partitioning in system design ?
- 2.b Attempt Any Two : 12
1. Explain types of requirement in SRS.
 2. Explain types of design pattern.
 3. Explain Role of Metrics and Measurement in software development process.
- 3.a Answer the following : 06
1. What is Coding ?
 2. What is Testing ?
 3. What is Test case ?
 4. What is Functional Testing.
 5. Structure testing is also known as a white box testing ? [TRUE / FALSE]
 6. BVA Stands for _____
- 3.b Answer the following (Any Two) 12
1. Explain Top Down approaches & Bottom up Approaches for testing.
 2. Discuss the Programming style in coding.
 3. Explain Equivalence Class Partitioning and Cause Effect Graphing.
- 4.a Do as directed : 05
1. What is the aim of Software Project Management ?
 2. The COCOMO model is developed by Barry W. Boehm ? [TRUE / FALSE]
 3. ISO stands for _____.
 4. Define Term : Risk
 5. What is Validation ?
- 4.b Attempt Any Two : 12
1. Explain COCOMO Model.
 2. Short Note : Software Risk Management.
 3. Explain ISO-9000 certification for Software Industry.
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NOV24-1-404
B. C. A. Semester - V (New Course) Examination
November - 2024
BCA-504 : Computer Security

Total Marks : 70

Time : 2½ Hours

- 1.a Explain Following : 06
1. What is Computer Security ?
 2. Define Cyber Security.
 3. _____ security is securing information from unauthorized access, modification and deletion.
 4. What is Computer Worm ?
 5. What is Two-Factor authentication ?
 6. What is network security ?
- 1.b Answer the following questions : (Any Two) 12
1. Explain CIA model in details.
 2. What is cyber security ? Discuss about requirement and needs of information security in global business.
 3. Explain the prevention key or points or ways to prevent security threats in system.
- 2.a Explain Following : 05
1. Define Phishing
 2. Give full form of IDS and IPS
 3. List out Any three Malware
 4. What is Spyware ?
 5. _____ is a system that monitors network traffic for malicious activity and issue alert when such activity is detected.
- 2.b Answer the following questions : (Any Two) 12
1. What are intrusion Detection methods and explain the types of detection methods.
 2. What is firewall ? How it works ? Also write limitation and explain it in details.
 3. Give difference between IDS and Firewall.
- 3.a Explain Following : 06
1. What is System Vulnerability ?
 2. Define, Sniffing attack.
 3. Who is Hacker ?
 4. What is Interruption ?
 5. What is Security Threats ?
 6. List out causes of Vulnerability in system.
- 3.b Answer the following questions : (Any Two) 12
1. Define Security Attack. Explain Interception and Modification in details.
 2. Explain Password management with its challenges.
 3. What is System Abuse ? Explain in details with example.
- 4.a Answer the Following : 05
1. Define, Cryptanalysis
 2. What is Hash Function ?
 3. _____ process is converting cipher text to plaint text.
 4. Give full form of SMTP.
 5. What is Electronic Mail Security ?
- 4.b Answer the following questions : (Any Two) 12
1. Discuss about MIME in details.
 2. Define Cryptography. Discuss about types of cryptography in details.
 3. Discuss about cryptanalysis techniques and attacks in details.
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NOV24-1-394
B. C. A. Semester - V (Old Course) Examination
November - 2024
BCA-504 : E-Commerce

Total Marks : 70

Time : 2½ Hours

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|-----|---|----|
| 1.a | Explain Following :
1. B2G and G2C
2. EDI
3. Pure E-commerce and Partial E-Commerce | 06 |
| 1.b | Answer the following questions : (Any Two)
1. Difference between Traditional Commerce & E-Commerce.
2. Explain any two E-Commerce technology.
3. Give Benefits of E-Commerce to Business and Customer. | 12 |
| 2.a | Explain Following :
1. B2B and SSL
2. PSTN and ISP
3. HTTPS | 05 |
| 2.b | Answer the following questions : (Any Two)
1. Explain Firewall.
2. Explain Driving forces of E-Commerce.
3. Explain Any Four models of E-Commerce. | 12 |
| 3.a | Explain Following :
1. EFT and MITM
2. E-Wallet and OTPPS
3. ATM and VPN | 06 |
| 3.b | Answer the following questions : (Any Two)
1. Explain E-cash & E-wallet.
2. Explain Payment Gateway.
3. What is Credit & Debit Card ? | 12 |
| 4.a | Explain Following :
1. MIME and STP
2. L2TP and TCP
3. DNS | 05 |
| 4.b | Answer the following questions : (Any Two)
1. Explain LAN & WAN.
2. Explain M-Commerce in details.
3. Explain Ethical issues in E-Commerce. | 12 |
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NOV24-1-397
B. C. A. Semester - V (Old Course) Examination
November - 2024
BCA-504 : Geographic Information System

Total Marks : 70

Time : 2½ Hours

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| 1.a | Answer the following (Any Three)
<ol style="list-style-type: none">1. Difference between Raster and Vector data structure.2. Write a short note on Spatial Data.3. Define : Latitude, Longitude | 06 |
| 1.b | Attempt the following : (Any Two)
<ol style="list-style-type: none">1. What is GIS ? Explain the Components of GIS.2. Write a short note on Applications of GIS.3. Explain Spatial Data Modeling | 12 |
| 2.a | Define the Following terms :
<ol style="list-style-type: none">1. Explain Concept of Map Overlay.2. Write about Data Input and Editing Methods | 05 |
| 2.b | Answer the following : (Any Two)
<ol style="list-style-type: none">1. Explain Decision support system in detail.2. Explain Non-Cartographic output in GIS.3. Explain Physical, Environment and Human Process. | 12 |
| 3.a | Answer the following :
<ol style="list-style-type: none">1. Write about Internet resources of GIS.2. Explain GIS hardware and software3. Define : Source of Error | 06 |
| 3.b | Answer the following : (Any Two)
<ol style="list-style-type: none">1. Explain in detail Data Quality and Errors2. Explain the Human and Organizational issues in GIS.3. Explain the development of computer methods for handling spatial data. | 12 |
| 4.a | Attempt the Following :
<ol style="list-style-type: none">1. Explain extraction of information from different images.2. Components of GPS. | 05 |
| 4.b | Answer the following : (Any Two)
<ol style="list-style-type: none">1. Explain integration of GIS and GPS.2. Explain in detail the Application of GPS.3. What is remote sensing ? Explain the types of remote sensing in brief. | 12 |

NOV24-1-395
B. C. A. Semester - V (Old Course) Examination
November - 2024
BCA-504 : Management Information System

Total Marks : 70

Time : 2½ Hours

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|-----|---|----|
| 1.a | Attempt the following (Any Three)
1. What is Integrity ?
2. Data and Information
3. End-User Systems
4. What is MIS ? Give Limitation of it. | 06 |
| 1.b | Attempt the following : (Any Two)
1. Explain Techniques and Application of MIS.
2. What is Communication System ? Explain Communication Method in detail.
3. Explain Classification and Characteristic of Information in detail. | 12 |
| 2.a | Attempt the Following :
1. Differentiate : Formal Planning V/s Informal Planning
2. Element of Information | 05 |
| 2.b | Attempt the following : (Any Two)
1. What is MIS Planning ? Explain need scope of it.
2. Describe Organization Culture in detail.
3. Explain objectives and problem of planning. | 12 |
| 3.a | Attempt the following : Any Two
1. Discuss Behavioral Approach of Management.
2. Difference between Formal and Informal Relationship.
3. Internet and Information System | 06 |
| 3.b | Attempt the following : (Any Two)
1. What is Job Satisfaction ? Explain in detail.
2. Explain Characteristics of Individual Behaviors.
3. Explain the Role of MIS in organization. | 12 |
| 4.a | Attempt the Following :
1. Explain Principle of Controlling.
2. Explain about organization function of subsystem. | 05 |
| 4.b | Attempt the following : (Any Two)
1. Explain Life Cycle approach for development of MIS.
2. Explain Different Feedback Loop.
3. Explain TQM in detail. | 12 |
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NOV24-1-396
B. C. A. Semester - V (Old Course) Examination
November - 2024
BCA-504 : Mobile Computing

Total Marks : 70

Time : 2½ Hours

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|-----|---|-----------------------------|
| 1.a | Attempt the following (Any Three) | 06 |
| | 1. What is Multiplexing ? | 2. What is Modulation ? |
| | 3. What is POS ? | 4. What is MAC. |
| 1.b | Attempt the following : (Any Two) | 12 |
| | 1. Explain Wireless Transmission. | |
| | 2. Explain the application of Mobile Computing. | |
| | 3. What TDM ? | |
| 2.a | Attempt the Following : | 05 |
| | 1. Explain Infrared Transmission | 2. What is Roaming ? |
| | 3. Define IEEE. | 4. What is ad-hoc Network ? |
| | 5. What id Bluetooth ? | |
| 2.b | Attempt the following : (Any Two) | 12 |
| | 1. Explain Network Element. | 2. What is Optimization ? |
| | 3. Explain Packet Delivery ? | |
| 3.a | Attempt the following : | 06 |
| | 1. Define TCP UMTS | 2. Define GPRS and GIS |
| | 3. What is GSM ? | |
| 3.b | Attempt the following : (Any Two) | 12 |
| | 1. Explain the Selective Transmission | |
| | 2. Explain FSK. | |
| | 3. Explain WWW architecture for mobile computing. | |
| 4.a | Attempt the Following : | 05 |
| | 1. Define GSM | 2. Define WCDMA |
| | 3. What is MMS ? | 4. Define RFID |
| | 5. Explain Multicast Routing Protocol | |
| 4.b | Attempt the following : (Any Two) | 12 |
| | 1. Explain Mobile Payment Model. | |
| | 2. What is SMS Architecture ? | |
| | 3. Explain System Architecture. | |
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