AFN-0582 **PCA 234**

PGDCA DIPLOMA EXAMINATION, MAY 2010

II SEMESTER

COMPUTER APPLICATIONS

SOFTWARE ENGINEERING

(NON-CBCS)

Duration : 3 Hours Maximum : 100 marks

Part - A (15 x 1 = 15)

Answer ALL Questions

1. Mention any two goals of software engineering
2. List out any four software quality attributes.
3. Expand: COCOMO
4. Define the term "Module".
5. Write down the benefits of stepwise refinement.
6. Distinguish between verification and validation.
7. Define : Software Reliability.
8. What do you mean by debugging ?
9. What is a database tool ?

10. Define the term “Error”.

11. What is cause-effect graphing ?

12. Write the inputs of test plan.

13. Mention any two typeless languages.

14. What is the use of data encapsulation ?

15. Define: Exception event.

Part - B (5 x 5 = 25)

Answer ALL Questions

16. a. Describe the project size categories for software products.

OR

b. Write down the characterestics of various term structures.

17. a. Write a short note on abstraction and information hiding.

OR

b. Describe the guidelines for internal documentation of source code.

18. a. Explain the concept of software reliability.

OR

b. Compare software faults and software repairs.

19. a. Discuss test cases and test criterias.

OR

b. Write a note on reliability estimation metrics.

20. a. Write the features of ADA language.

OR

b. Describe the different types of abstraction.

Part - C (5 x 12 = 60)

Answer ALL Questions

21. a. Discuss the phased model of the software life cycle.

OR

b. What are the software cost estimation techniques ? Explain any two of them.

22. a. Compare coupling and cohesion.

OR

b. Explain any three software design notations.

23. a. Describe the use of database as a study tool.

OR

b. Write a note on availability models.

24. a. Explain the various steps involved in testing process.

OR

b. Write a note on:
   i. Unit testing
   ii. System testing

25. a. Discuss briefly about the concurrency mechanisms.

OR

b. Explain about the exception handling in Ada language.

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AFN-0577 PCA132

PGDCA DIPLOMA EXAMINATION, MAY 2010

I Semester

NON - CBCS

COMPUTER APPLICATIONS

OFFICE AUTOMATION

Duration : 3 Hours Maximum : 100 marks

Part - A (15 x 1 = 15)

Answer ALL Questions

1. What is the use of maximising, minimising and restoring windows?
2. Define File Manager.
3. Expand OLE.
4. What is a document?
5. Define a Table.
6. What is known as Templates?
7. Define the term Worksheet.
8. What is called as Absolute Addressing?
9. Give the general format of date and time.
10. What is called as Database?

11. Define Macros.

12. Name any two tools presented in the Drawing tool bar.

13. What is Powerpoint?

14. Define a slide.

15. Name any two powerpoint views.

Part - B (5 x 5 = 25)

Answer ALL Questions

16. a. Explain the following with diagram:

(i) Opening multiple windows.

(ii)Arranging Icons in a window.

(OR)

b. Discuss the following:

(i) Deleting and renaming files.

(ii) Searching for files.

17. a. Describe the process of Formatting text and paragraph.

(OR)

b. Explain the concept of Templates and Wizards.

18. a. Discuss the process of Inserting and Deleting rows and columns in Excel.

(OR)

b. Give the syntax of any FIVE Financial functions. Explain it with example.

19. a. Explain the process of creating database in a worksheet with diagram.

(OR)

b. Describe the steps in working with multiple worksheets.

20. a. Discuss the concept of Powerpoint views.

(OR)

b. Explain the steps for printing a presentation.

Part - C (5 x 12 = 60)

Answer ALL Questions

21. a. Write short notes on the following:

(i) Moving and resizing windows.

(ii) File Manager and Program manager.

(iii) Changing File attributes.

(OR)

b. Explain the following:

(i) Copying and moving files.

(ii) Managing group windows in program manager.

(iii) Using Menus in windows.

22. a. Discuss the following process with an example:

(i) Finding and replacing text. (8)

(ii) Spell checking. (4)

(OR)

b. Explain the concept of creating Mail Merge with example.

23. a. Describe the process of creating charts with diagram. Also list the types of charts available in Excel.

(OR)

b. Explain the following with its syntax and give example:

(i) Any SIX Math functions.

(ii) Any SIX statistical functions.

24. a. List down the additional formatting commands. Explain it with example.

(OR)

b. Write short notes on the following with data:

(i) Macros (4)

(ii) Drawing tool bar. (4)

(iii) Miscellaneous commands and functions (4)

25. a. Discuss the process of creating a presentation with diagram.

(OR)

b. Explain the process of Running a slide show with example diagram.

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AFN-0578 PCA134

PGDCA DIPLOMA EXAMINATION, MAY 2010

I Semester

NON -CBCS

COMPUTER APPLICATIONS

Visual Programming

Duration : 3 Hours Maximum : 100 marks

Part - A (15 x 1 = 15)

Answer ALL Questions

1. DDE stands for _____.
2. Expand ODBC.
3. What is the use of menu ?
4. What is the syntax of remark statement ?
5. What is the use of label box ?
6. Name the function used to get the current date and time.
7. Write the method of a form that draws a line.
8. What is Tree view ?
9. Name any two properties of Data Grid.
10. Expand MFC.

11. What is the purpose of CWnd ?

12. Expand AFX.

13. Expand DAO.

14. C Thread is one of the _____ classes.

15. Name any two Data Access Methods.

Part-B (5 x 5 = 25)

Answer ALL Questions

16. a. Explain GVI concept.

OR

b. Explain PE files.

17. a. Describe the variables and constants in VB.

OR

b. Explain the properties and events of Text Boxes in VB.

18. a. What are the types of Record sets ? Describe them.

OR

b. Explain the DDE events.

19. a. Explain the bitmaps resource.

OR

b. Write short note on CExcept class of VC++.

20. a. Explain the use of ODBC.

OR

b. Write short notes on C Event synchronization class.

Part-C (5 x 12 = 60)

Answer ALL Questions

21. a. Discuss the following:
    i. Hungarian Notation
    ii. Displaying text and graphics

(OR)

b. Discuss ODBC and Windows Registry.

22. a. Explain the various string functions in VB.

(OR)

b. Explain the user defined functions and modules.

23. a. Explain the Active X controls creation and usage.

(OR)

b. How to use Data Control in VB application ? Explain with an example program.

24. a. Explain the VC++'s MFC class hierarchy.

(OR)

b. Write a VC++ program that accept course name and displays a picture if the given course name is "PGDCA".

25. a. Describe the steps in creating MDI application in VC++.

(OR)

b. How will you use DAO in VC++ ? Explain it with an example program.

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AFN-0579 PCA231

PGDCA DIPLOMA EXAMINATION, MAY 2010

I Semester

NON - CBCS

COMPUTER APPLICATIONS

OBJECT ORIENTED PROGRAMMING AND C++

Duration : 3 Hours Maximum : 100 marks

Part - A (15 x 1 = 15)

Answer ALL Questions

1. What is an Object oriented program?
2. What is a token?
3. What is an operator?
4. Define overloading.
5. What is an object?
6. What is the use of static variable?
7. Define constructor.
8. What is the use of copy constructor?
9. What are the types available in operator overloading?
10. Define Inheritance.

11. What is hybrid Inheritance?

12. Define abstract class.

13. Define Manipulator.

14. What are the statements available to handle the exceptions.

15. Define Template.

Part - B (5 x 5 - 25)

Answer ALL Questions

16. a. Discuss on any THREE operators available in C++.

(OR)

b. Describe the applications of OOP.

17. a. Explain the significance of Inline functions with example.

(OR)

b. Write a C++ program for student mark list using array of objects.

18. a. What is the use of default parameter? Explain.

(OR)

b. Discuss on parameterised constructor with example.

19. a. Explain how to define derived class with example.

(OR)

b. What is a nested class? Explain.

20. a. Discuss on generic classes and functions.

(OR)

b. Write a C++ program to display formatted output.

Part-C (5 x 12 = 60)

Answer ALL Questions

21. a. Explain the basic concepts and benefits of OOP.

(OR)

b. Discuss on C++ control structures with example.

22. a. Explain the significance of call by reference and return by reference with example.

(OR)

b. What is function overloading? Explain with example.

23. a. Write a C++ program to overload the various types of operators.

(OR)

b. Discuss on copy and dynamic constructors.

24. a. Write a C++ program for employee pay bill preparation using multiple inheritance.

(OR)

b. Discuss on exception handling mechanism.

25. a. Write a C++ program to create a file containing employee names and their addresses.

(OR)

b. Write a C++ program that stores object data on disk files.

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AFN-0580 **PCA232**

PGDCA DIPLOMA EXAMINATION, MAY 2010

I Semester

NON - CBCS

COMPUTER APPLICATIONS

INTERNET PROGRAMMING

Duration : 3 Hours Maximum : 100 marks

Part - A (15 x 1 = 15)

Answer ALL Questions

1. Define Internet.
2. What is ISP?
3. Define E-mail.
4. What is a hyper text?
5. Name any two web browsers.
6. Define Usenet.
7. What is FTP?
8. What is Telnet?
9. Expand IRC.

10. Define Polymorphism.

11. Multiple inheritance in Java is achieved through_____.

12. In Java, conditional operator is _____ operator.

13. _____ code file makes java program cross-platform independent.

14. Define AWT package.

15. What is an Applet?

Part-B (5 x 5 = 25)

Answer ALL Questions

16. a. Explain the history and resources of Internet.

(OR)

b. Explain about Internet Addressing.

17. a. Describe the HTML with an example.

(OR)

b. Write short notes on Gopher and Veronica.

18. a. Explain about mailing list with suitable examples.

(OR)

b. Describe about Telnet with suitable examples.

19. a. List the differences between C++ and Java.

(OR)

b. Explain the interface with suitable examples.

20. a. Explain the various string handling methods.

(OR)

b. Explain applet with suitable examples.

Part-C (5 x 12 = 60)

Answer ALL Questions

21. a. Explain the ISP in detail.

(OR)

b. Describe E mail in detail.

22. a. Explain the URL schemes and host names in detail.

(OR)

b. Explain Usenet with suitable examples.

23. a. Describe FTP in detail.

(OR)

b. Describe Chatting with suitable examples.

24. a. Explain the various features of Java.

(OR)

b. Explain the various operators in Java.

25. a. Explain Exception handling with suitable examples.

(OR)

b. Explain Multithreading with an Applet program.

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AFN-0581 **PCA 233**

PGDCA DIPLOMA EXAMINATION, MAY 2010

II SEMESTER

COMPUTER APPLICATIONS

R.D.B.M.S

(NON-CBCS)

Duration : 3 Hours Maximum : 100 marks

Part - A (15 x 1 = 15)

Answer ALL Questions

1. What is tuple ?
2. What do you mean by flat file ?
3. What is database ?
4. Name any two tools of ORACLE.
5. Expand DDL and DML terms.
6. Write the usage of 'OUT' operator in SQL.
7. Write the usage of Uid function.
8. What is the content of sys-date.
9. Write the usage of to_char function.
10. What is object binding ?

11. Define the term 'synonym'.

12. What is 'view' ?

13. Define the term 'sequence'.

14. What is DBA ?

15. Name any two user previliges.

Part - B (5 x 5 = 25)

Answer ALL Questions

16. a. Explain briefly about Codd's rules.

OR

b. How two tables are related in a relational database ? Illustrate.

17. a. Write a short note on SQL pre compiler.

OR

b. Describe ORACLE data types.

18. a. Explain the use of date and time functions.

OR

b. Explain Union, Intersect and Minus operators.

19. a. Describe the concept of object oriented DBMS.

OR

b. Explain the terms class, attribute and methods through examples.

20. a. List and briefly explain the roles of DBA.

OR

b. Explain the use of REVOKE, COMMIT and ROLLBACK previleges.

Part - C (5 x 12 = 60)

Answer ALL Questions

21. a. Describe Network Model.

OR

b. Describe Relational Model.

22. a. With an example, explain how tables are created and its contents are manipulated.

OR

b. Explain all the operators in SQL.

23. a. Explain mathematical and character functions in SQL.

OR

b. Describe different ways and types of joining tables.

24. a. Explain the components of an object oriented database through an example.

OR

b. Explain in detail about creation, updation and deletion of view in OODBMS.

25. a. Explain new user creation, granting and removal of previleges and their effects.

OR

b. Explain the features of Report writer in SQL.

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AFN-0576 PCA131

PGDCA DIPLOMA EXAMINATION, MAY 2010

I Semester

NON - CBCS

COMPUTER APPLICATIONS

FUNDAMENTALS OF DIGITAL COMPUTER

Duration : 3 Hours Maximum : 100 marks

Part - A (15 x 1 = 15)

Answer ALL Questions

1. What is an algoritham?
2. What is a bit?
3. Expand ASCII.
4. What is volatile memory?
5. Give the 2's complement of 11011001.
6. What is machine language program?
7. Give the value of $A \cdot \overline{A}$ and $A + A$ if A = 1.
8. What is an interrupt?
9. Expand: RISC.

10. Name any two high level languages.

11. What is an operating system?

12. Differentiate between multiprogramming and multiprocessing.

13. What is a smart card?

14. State Moore's Law.

15. What is a distributed computer system?

Part-B (5 x 5 = 25)

Answer ALL Questions

16. a. Discuss the steps in problem solving using computers.

(OR)

b. Write a procedure to find the average number of vowels in a passage.

17. a. Explain the working of a CDROM.

(OR)

b. Evaluate: (i) 100100 - 100011

(ii) 11011 x 1101

18. a. Explain the working of a parallel binary adder.

(OR)

b. Explain the features of Reduced Instruction Set Computers.

19. a. What is the need for high -level-languages? How are they better than other types of languages?

(OR)

b. Discuss the features of On-line and Real Time Systems.

20. a. Whatare the applications of micro-computer?

(OR)

b. Explain distributed computer systems and their functions.

Part-C (5 x 12 = 60)

Answer ALL Questions

21. a. Describe data representation on computers.

(OR)

b. Describe the features of various input units and their working.

22. a. Explain the logical organization of a CPU and its working. Also explain how machine instructions are stored and executed. (8+4)

(OR)

b. Explain floating point representation of numbers and arithmetic operations with normalised floating point numbers.

23. a. Explain Boolean functions, postulates, principles and canonical form of Boolean functions.

(OR)

b. Explain:
   i. Interconnection of units and communication between them in a computer.
   ii. Bus architecture of personal computers.

24. a. Describe the features of various types of operating systems.

(OR)

b. Discuss in detail about various types of computer languages.

25. a. Discuss the components and architecture of microcomputers.

(OR)

b. Elaborate on - computer generations and classification of computers.

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