ED-1006

P.G. Diploma in Computer Application
1st Semester Examination, March-April 2021

INTRODUCTION TO SOFTWARE ORGANIZTION

(PGDCA - 101)

Time : Three Hours] [Maximum Marks : 100

Note : Answer any **two** parts from each question. All questions carry equal marks.

Unit-I

1. (a) Draw a block diagram of a computer and explain each component of computer.

    (b) What do you mean by input devices and output devices of a computer ? Explain each type of device in brief.

    (c) Explain the following terms :

    (i) Types of computers

    (ii) Development of processors

Unit-II

2. (a) What are the differences between RAM and ROM ? Explain the various types of RAM and ROM.

   (b) What do you mean by Memory ? Explain primary memory and secondary memory in brief.

   (c) Write short notes on the following :
      (i) SIMM
      (ii) DIMM
      (iii) Data storage and retrieval systems

Unit-III

3. (a) What is Software ? What are the needs of softwares in computer ? Explain application software and system software in brief.

   (b) Differentiate among compiler, assember and interpreter. Also give example of each and explain.

   (c) Write short notes on the following :
      (i) Booting process
      (ii) Types of reboot
      (iii) Types of operating system
      (iv) DOS commands

Unit-IV

4. (a) What are the characteristics of information? Explain data, information and knowledge.

(b) What do you mean by object-oriented programming? Explain the various features of object-oriented programming.

(c) Discuss the following:

(i) Functional programming

(ii) Program development steps

Unit-V

5. (a) What is computer network? Explain the various types of computer network in detail.

(b) What is communication protocol? Explain FTP, Telnet, SMTP, IP in brief.

(c) Write short notes on the following:

(i) Application of internet

(ii) WWW

(iii) E-mail

(iv) ISP (Internet Service Provider)

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FD-1006

PGDCA 1st Semester
Examination, Dec.-Jan., 2021-22

Introduction to Software Organization

(PGDCA - 101)

Time : Three Hours]   [*Maximum Marks* : 100

Note : Answer any **two** parts from each question. All
questions carry equal marks.

Unit-I

1. (a) Write down the characteristics and limitations of computer.

    (b) Describe generations of computer.

    (c) Explain evolution of PC's.

Unit-II

2. (a) What is the function of CPU ? Also explain different parts of Central Processing Unit (CPU).

(2)

(b) Write about magnetic tape and also explain advantages and disadvantages of magnetic tape.

(c) Differentiate between primary memory and secondary memory.

Unit-III

3. (a) What is operating system? Also write types and functions of operating system.

(b) Write differences among DOS, Windows and Linux.

(c) Write short notes on the following:

   (i) Open source software

   (ii) Interpreter and compiler

Unit-IV

4. (a) Write down the classification of programming languages.

(b) Explain different generations of languages with example (if necessary).

(c) Write short notes on the following:

   (i) Structured programming

   (ii) Process-oriented programming

Unit-V

5. (a) Explain network topologies.

(b) Define different network types.

DRG_212_(3)

(Continued)

(3)

(c) Write short notes on the following :

 (i) Internet and Intranet

 (ii) File transfer protocol and Gopher

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ED-1007

P.G. Diploma in Computer Application
1st Semester Examination, March-April 2021

Paper - II

Programming in 'C'

Time : Three Hours]   [*Maximum Marks* : 100

Note : Answer any **two** parts from each question. All
questions carry equal marks.

Unit-I

1. (a) Explain displaying and reading variables.

    (b) What is operator ? Explain any four types
    of operator used in C.

    (c) Explain basic Input/Output functions with
    their respective syntax and example.

Unit-II

2. (a) What is control statement ? Explain if ......
    else statement with example.

    (b) Write a program for the following formula
    $$(a^2 + b^2) / 4a$$

    (c) What is loop ? Explain while and do-
    while loop with example.

DRG_82_(2)   *(Turn Over)*

Unit-III

3. (a) What is Function ? Explain user defined and library function with example.

   (b) Explain the following with example :
      (i) Function Parameter
      (ii) Arrays of Strings

   (c) What is Array ? Explain multidimensional array with example.

Unit-IV

4. (a) Define Pointer and their use with suitable example.

   (b) Explain void pointers and pointer variables with example.

   (c) Write a program to sort the string using pointer exchange.

Unit-V

5. (a) Explain the declaring and using structure with example.

   (b) Explain the following :
      (i) Array within structure
      (ii) Scope of Union

   (c) What is Union ? Explain the difference between union and structure.

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Unit-III

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      (i) Array within structure
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   (c) What is Union ? Explain the difference between union and structure.

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Time : Three Hours]   [*Maximum Marks* : 100

Note : Answer any **two** parts from each question. All questions carry equal marks.

Unit-I

1. (a) Explain the operator precedence and associativity.

    (b) Explain the variable and constant with suitable example.

    (c) Explain the different types of character formatting in 'C' with suitable example.

DRG_259_(3)   *(Turn Over)*

Unit-II

2. (a) Write a programme to cheek a given number is even number or odd number.

   (b) Write a programme to display a table of any given number.

   (c) Explain the break and continue statement with suitable example.

Unit-III

3. (a) What is function? Explain with suitable example.

   (b) Write a programme to addition of two matrix. (assume 3×3 matrix)

   (c) Differentiate between iteration and recursion with suitable example.

Unit-IV

4. (a) What is pointer? Explain pointer authentication with suitable example.

   (b) What is pointer to pointer? Explain with suitable example.

   (c) Write a programme to sort the string using pointer.

Unit-V

5. (a) What is structure? How to initialize the structure element? Explain with suitable example.

(b) Write a programme to pass a structure as an argument in a function.

(c) Explain the array of structure with suitable programme.

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PGDCA 1st Semester
Examination, Dec.-Jan., 2021-22

Paper - III

Office Automation and Tally

Time : Three Hours]   [*Maximum Marks* : 100

Note : Answer any **two** parts from each question. All questions carry equal marks.

Unit-I

1. (a) What is Windows ? Write down the various versions and features of Windows.

   (b) What do you mean by linking and embedding ? Explain with example.

   (c) Write short notes on the following :

   (i) Notepad

   (ii) Desktop

   (iii) Taskbar

   (iv) My Computer

Unit-II

2. (a) Explain the procedure for inserting the following :

   (i) Header and Footer

   (ii) Table

   (b) Explain mail merge feature of MS Word with example.

   (c) Write the procedure of creating a graph in MS Excel. Also explain the types of graphs.

Unit-III

3. (a) How can we insert picture and sound to any slide ?

   (b) What is animation ? How can we insert animation in PowerPoint slide ?

   (c) What is slide transition ? Write the steps for applying a transition in PowerPoint slides.

Unit-IV

4. (a) What is MS Access ? Write down the various features of MS Access.

   (b) What is Report ? How can you create Report in MS Access ?

   (c) What is Relationship ? Explain the creation of Relationship.

(3)

Unit-V

5. (a) Define setting up ledger and groups in Tally.

   (b) How can you create, alter and delete company in Tally?

   (c) Explain the following in brief:

   (i) Service Tax

   (ii) Value Added Tax (VAT)

   (iii) Gratuity

   (iv) Bonus

   (v) PF

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P. G. Diploma in Computer Application
1st Semester, Examination, March-April 2021

Paper - III

Office Automation and Tally

Time : Three Hours]   [Maximum Marks : 100

Note : Answer any **two** parts from each question. All questions carry equal marks.

Unit-I

1. (a) Explain the terms desktop, shortcut icon, taskbar and start menu.

   (b) What is Dial-up Networking ? How does dial up network work ?

   (c) Explain the following :

      (i) Recycle Bin

      (ii) Notepad

DRG_145_(3)

Unit-II

2. (a) Discuss table and charts in MS Word.

   (b) What is database in Excel? How to create college database in MS Excel? Implement any three database functions in college database.

   (c) Explain the following:

      (i) Using thesaurus

      (ii) Macros

Unit-III

3. (a) What do you understand by MS PowerPoint? Discuss animations and linking.

   (b) Explain different categories of slide show in MS PowerPoint.

   (c) Describe the adding sound and movies in MS PowerPoint.

Unit-IV

4. (a) What is MS Access? Explain the terms database, tables, fields and data types.

   (b) Discuss data controls and data expressions in MS Access.

   (c) Describe the responsibilities of switch boards manager.

Unit-V

5. (a) What is voucher and types of vouchers ? How can you use voucher in Tally ?

   (b) Explain the alteration and deletion of ledger or groups.

   (c) Describe the outline of entry for Income Tax.

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PGDCA 1st Semester
Examination, Dec.-Jan., 2022-23

Introduction to Software Organization

(PGDCA-101)

Time : Three Hours]   [*Maximum Marks* : 100

Note : Answer any **two** parts from each question. All
questions carry equal marks.

Unit-I

1. (a) Draw block diagram of a computer and
   explain each component of a computer in
   detail.

   (b) What are input and output devices ?
   Explain each type of the device in brief.

   (c) Explain generations of computer. Write in
   brief about each generation.

19_DRG_(3)   (Turn Over)

Unit-II

2. (a) Describe the central processing unit (CPU), its components and functionability.

(b) What are SIMM and DIMM memories ? Explain them in detail with their application area.

(c) What are secondary memory and storage devices ? Explain working of hard disk.

Unit-III

3. (a) What is a software ? Explain application software and different types of system software by giving examples of each.

(b) What are the main functions of an operating system ? Explain booting process.

(c) Write short notes on the following :

(i) Types of operating system

(ii) Open source softwares

(iii) Interpreter and compiler

(iv) Linker and loader

Unit-IV

4. (a) Define Data, Information and Knowledge. Explain with the help of an example.

   (b) What is object-oriented programming? Explain the various features of object-oriented programming.

   (c) Write about generation of languages. Also specify their examples.

Unit-V

5. (a) What is computer network? Explain the types of computer network in detail.

   (b) Describe the working of Bridges, HUB, Routers and Gateways.

   (c) Write short notes on the following:

   (i) FTP

   (ii) E-mail

   (iii) www

   (iv) ISP

GD-1007

PGDCA 1st Semester
Examination, Dec.-Jan., 2022-23

Paper - II

Programming in 'C'

Time : Three Hours]   [*Maximum Marks* : 100

Note : Answer any **two** parts from each question. All questions carry equal marks.

Unit-I

1. (a) What is operator? Explain logical operator with example.

   (b) Write a program to calculate area of circle.

   (c) What is variable? How to declare and initialize value in the variable? Explain with example.

Unit-II

2. (a) Write a program to check a given year is leap year or not.

(b) Write a program to display the factorial of any given number.

(c) What is the difference between while and do-while loop? Explain with example.

Unit-III

3. (a) Write a program to calculate multiplication of any two matrix. (assume 3×3 matrix)

(b) Write a program to generate a fibonacci series using recursive function.

(c) How to pass an array as a function argument? Explain with suitable example.

Unit-IV

4. (a) Write a program to swap any two numbers using pointer.

(b) What is void pointer? Explain with suitable example.

(c) How to assign two dimensional array into pointer variable? Explain with suitable example.

Unit-V

5. (a) What is the difference between structure and union? Explain with suitable example.

(b) Explain the operation and scope of union variable.

(c) Explain the array within structure with suitable example.

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GD-1008

PGDCA 1st Semester
Examination, Dec.-Jan., 2022-23

Paper - III

Office Automation and Tally

Time : Three Hours]　　　[*Maximum Marks : 100*

Note : Answer any **two** parts from each question. All questions carry equal marks.

Unit-I

1.　(a)　What is Windows Explorer ? Explain the creating files and folders.

　　(b)　Explain dialup networking and phone dialer in detail.

　　(c)　Write short notes on the following accessories :

　　　　(i)　Calculator

　　　　(ii)　Note pad

　　　　(iii)　Paint

　　　　(iv)　Word pad

　　　　(v)　Character map

Unit-II

2. (a) What is mail merge ? Explain in detail.

   (b) Explain table and charts in brief.

   (c) Write short notes on the following Excel formulas :
   - (i) SUM
   - (ii) COUNT
   - (iii) AVERAGE
   - (iv) MIN
   - (v) MAX

Unit-III

3. (a) Explain the different types of slides in PowerPoint.

   (b) What is Animation ? How can we insert animation in PowerPoint slide ?

   (c) Explain slide transition, advancing slides and rehearsing timing in brief.

Unit-IV

4. (a) Explain the tables of a databse with its characteristics in detail.

   (b) What do you mean by multiple queries in access ? Explain.

   (c) Explain database numeric values and database conditional values with example.

Unit-V

5. (a) Write about the study of cash and fund in Tally.

    (b) Write short notes on the following :

    (i) Sales register

    (ii) Purchase register

    (c) Explain the study of recording of transaction in the 'voucher' in brief.

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FD-1011

PGDCA 2nd Semester
Examination, May-June 2022

PGDCA - 108

Essentials of E-Commerce and HTML

Time : Three Hours] [*Maximum Marks* : 100

Note : Answer any **two** parts from each question. All questions carry equal marks.

Unit-I

1. (a) What is EDI ? Explain applications of EDI.

   (b) What is E-Commerce ? Explain impact of internet on traditional business.

   (c) Write short notes on the following :

   (i) E-payment system

   (ii) FEDI

Unit-II

2. (a) Explain C2C and B2B2C model with example.

   (b) What are the security threats over internet? Explain.

   (c) Write short notes on the following:

   (i) Public key encryption

   (ii) Digital signature

Unit-III

3. (a) What is Hyperlink? How can we create a Hyperlink? Explain with suitable example.

   (b) What is CSS? Explain types of CSS.

   (c) Explain FORM and TABLE elements.

Unit-IV

4. (a) Explain IMG tag with some attributes.

   (b) Explain Frameset with suitable example.

   (c) What is Internal and External linking? Explain.

Unit-V

5. (a) Differentiate between static and dynamic web pages.

   (b) Explain hosting and promotion of the website.

   (c) Write short notes on the following :

   (i) FTP

   (ii) Search engines

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FD-1010

PGDCA 2nd Semester
Examination, May-June 2022

PGDCA - 107

Database Management System

Time : Three Hours]   [*Maximum Marks* : 100

Note : Answer any **two** parts from each question. All questions carry equal marks.

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1. (a) Draw and explain the DBMS architecture.

    (b) What are data models ? Explain any two data models with example.

    (c) Explain the following :

    (i) DBMS users

    (ii) ODBC

2. (a) Explain different types of attributes with suitable example.

(b) Draw and explain an E-R diagram for college management system.

(c) Explain the following :

　(i) Specialization and aggregation

　(ii) Relationship

3. (a) What are structures of relational database ? Explain it.

(b) Explain tuple relational calculus with example.

(c) Explain extended relational algebra operations.

4. (a) Explain 3NF and 4NF with example.

(b) Differentiate between 2NF and BCNF with example.

(c) Explain the following :

　(i) Functional dependencies

　(ii) 1NF and 5NF

5. (a) How to insert and update rows in table ? Explain with example.

(b) Explain the following :

　(i) Drop

　(ii) Where clause

　(iii) Create

　(iv) Granting roles and privilege

(c) What is views ? Explain with suitable example.

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