

**I PUC ANNUAL EXAMINATION – FEB / MAR 2014**  
**SUBJECT: COMPUTER SCIENCE (41)**

**TIME: 3.15 Hours.**

**Max. Marks: 70**

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**PART-A**

**I Answer ALL the following questions:**  
**Each question carries One mark.**

**10 x 1 = 10**

1. Give the expansion of IC.
2. What is cache memory?
3. What is meant by debugging?
4. How do you declare a constant in C++?
5. What is the purpose of setw()?
6. Which statement is also called as post-tested looping statement?
7. What are subscripts?
8. What are actual arguments?
9. What is footer in word processor?
10. What is a cell in spreadsheet?

**PART-B**

**II Answer any FIVE of the following questions:**  
**Each question carries Two marks.**

**5 x 2 = 10**

11. What is input device? Name any two input devices.
12. Compare Rom and RAM.
13. What is software? Mention the different types of software.
14. What are syntax and semantic errors?
15. Define the following terms in OOPS:  
(i) Class      (ii) Inheritance
16. Write the syntax and example for input operator in C++.
17. What is string concatenation? Name the function used for string concatenation.
18. Explain any two options of the formatting toolbar in word processor.

(P.T.O)

**PART-C****III Answer any FIVE of the following questions:****5 x 3 = 15****Each question carries Three marks.**

19. Write any three characteristics of impact printers.
20. What is the radix (base) of a hexadecimal number system? What does A, B, C, D, E, and F represent in this system? Convert FAD into its binary equivalent.
21. Write a note on multiprogramming operating system.
22. What is nested-if statement? Write its syntax.
23. What is precedence of operators in C++?  
Evaluate:  $P = 10 + 5 * (37 \% 5) - 2$
24. What are modifiers? Mention the different modifiers.
25. Define one dimensional array? Write its declaration syntax and give one example.
26. What is a structure? How do we access the elements of a structure? Give one example.

**PART-D****IV Answer any SEVEN of the following questions:****7 x 5 = 35****Each question carries Five marks.**

27. Briefly explain the history of computers.
  28. (i) Add  $25_{(10)} + 15_{(10)}$  using binary addition.  
(ii) Solve  $18_{(10)} - 9_{(10)}$  using 2's complement.
  29. What is algorithm? Write any four characteristics of an algorithm.
  30. Explain the general structure of a C++ program.
  31. With syntax and example, explain the working of for statement.
  32. Draw a flowchart to find the sum of all the digits of a number.
  33. Write a C++ program to find the sum of two matrices.
  34. What is user-defined function? Write the general syntax and an example for user-defined function.
  35. What is a spread sheet? Write any four applications of spreadsheet.
  36. Explain any five mathematical functions with suitable examples in spreadsheet.
  37. What is Internet? Explain any four services of Internet.
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**I PUC SUPPLEMENTARY EXAMINATION – MAY - 2014**  
**SUBJECT: COMPUTER SCIENCE (41)**

**TIME: 3.15 Hours.**

**Max. Marks: 70**

**PART-A**

**I Answer ALL the following questions:**  
**Each question carries One mark.**

**10 x 1 = 10**

1. Expand the term VLSI.
2. What is cache memory?
3. Define modularity.
4. Why should variables be declared in a program?
5. What is real mode expression?
6. What is meant by inheritance?
7. How are arrays different from normal variables?
8. Name the header file to which the function `sin()` belong?
9. What is mail merge?
10. What is a cell pointer?

**PART-B**

**II Answer any FIVE of the following questions:**  
**Each question carries Two marks.**

**5 x 2 = 10**

11. Write any two features of second generation computers.
12. Write the characteristics of non-impact printers.
13. What is meant by source code and object code?
14. Write the flowchart to interchange the values of two variables.
15. Give any two applications of OOPS.
16. Write any two differences between float and double data types used in C++.
17. Distinguish between `strcat()` and `strcpy()` functions.
18. Explain any two statistical functions.

**PART-C**

**III Answer any FIVE of the following questions:**  
**Each question carries Three marks.**

**5 x 3 = 15**

19. Write a note on OMR.
20. Using 1's complement method, solve :  $(54)_{10} - (94)_{10}$ .

(P.T.O)

21. What are the functions of operating system? Explain any one.
22. Define the following terms:
  - a) Coding
  - b) Debugging
  - c) testing
23. Explain relational operators supported by C++ language with examples.
24. Write a C++ program to convert Fahrenheit temperature into Celsius temperature using the formula:  $C = 5/9 * (F - 32)$
25. What are the two dimensional arrays? How are they declared and initialized? Give example for each.
26. Give the general syntax for defining and declaring a structure in C++. Give suitable example.

### PART-D

**IV Answer any SEVEN of the following questions: 7 x 5 = 35**  
**Each question carries Five marks.**

27. Explain the characteristics of a digital computer in detail.
  28. Convert the following:
    - a)  $(11000111.1010)_2 = (?)_{16}$
    - b)  $(511)_{10} = (?)_2$
    - c)  $(FACE)_{16} = (?)_2 = (?)_8$
  29. Explain the working of switch statement with syntax, flowchart and example.
  30. Explain the general structure of C++ program with suitable programming example.
  31. Compare while and do-while statements used in C++.
  32. Write a C++ program to check whether a given number is an Armstrong number or not using do-while statement.
  33. Write a C++ program to find position of the element in one-dimensional array.
  34. What is recursive function? Give an example. Write a recursive function in C++ to find the factorial of a number.
  35. What is word processor? What are the advantages of word processor over a manual system?
  36. Write any two features of spreadsheets. Explain any three date functions with examples.
  37. What is HTML? Explain any four text formatting tags used in HTML.
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**I PUC ANNUAL EXAMINATION – FEBRUARY 2015**  
**SUBJECT: COMPUTER SCIENCE (41)**

**TIME: 3.15 Hours.**

**Max. Marks: 70**

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**PART-A**

**Note: i) Answer ALL the following questions:**  
**ii) Each question carries One mark.**

**10 x 1 = 10**

1. What does IC stands for?
2. Give an example for Non-impact printer.
3. Define debugging.
4. What is an identifier?
5. Name any one manipulator defined in iomanip.h
6. What is selection statement?
7. Give the significance of array subscript.
8. Define local variables.
9. Write the Short Cut key to cut the text in text editors.
10. What is a cell address?

**PART-B**

**Note: i) Answer any FIVE questions:**  
**ii) Each question carries Two marks.**

**5 x 2 = 10**

11. Explain the role of Computers in Education.
12. Write the difference between volatile and non-volatile memory.
13. What are language translators? Give an example.
14. Write the flowchart for swapping of 2 numbers.
15. Mention any two characteristics of OOPS.
16. Explain any two fundamental data types in C++.
17. Explain any two character handling functions.
18. What is a header and footer?

(P.T.O)

**PART-C****Note: i) Answer any FIVE questions:****5 x 3 = 15****ii) Each question carries Three marks.**

19. Give the application of OCR, OMR and MICR.
20. Find  $(FADE)_{16} = (?)_8 = (?)_2 = (?)_{10}$
21. Write the features of Unix OS.
22. Write an algorithm to find simple interest.
23. Explain any three Unary Operators in C++.
24. What is Cascading? Explain with an example.
25. Write the program segment to read and write the elements of 1-D array.
26. What is a structure? Give Syntax and Example for define a structure.

**PART-D****Note: i) Answer any SEVEN of the following questions:****7 x 5 = 35****ii) Each question carries Five marks.**

27. Explain the fundamental units of Block Diagram of the Computer.
  28. Subtract:  $25_{(10)} - 14_{(10)}$  using 2's Complement method.
  29. Explain the working of while-loop structure with an example.
  30. What is a Constant? Explain any 2 types of constants.
  31. Discuss the working of if-else structure with an example.
  32. Write a program to check the given number is a power of 2 or not.
  33. Write a program to input and output  $m \times n$  matrix.
  34. Explain functions with arguments and no return values.
  35. Write the steps for Mail Merge.
  36. Explain any five built in functions in ESS.
  37. Explain different HTML tags.
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**I PUC SUPPLEMENTARY EXAMINATION – MAY 2015**  
**SUBJECT: COMPUTER SCIENCE (41)**

**TIME: 3.15 Hours.**

**Max. Marks: 70**

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**PART-A**

**Note: Answer ALL the following questions:**  
**Each question carries One mark.**

**10 x 1 = 10**

1. Which is the earliest computing machine?
2. Expand MOUSE.
3. Define flow-chart.
4. What is a token?
5. What is a stream?
6. Define the term looping.
7. What is an array?
8. What is a function?
9. Define mail merge.
10. What is a cell in MS-Excel?

**PART-B**

**Note: Answer any FIVE questions:**  
**Each question carries Two marks.**

**5 x 2 = 10**

11. Explain any two characteristics of a computer.
12. Mention different types of printers.
13. Explain object code and source code.
14. Write any two characteristics of an algorithm.
15. Give two advantages of OOPS.
16. Mention the data types available in C++.
17. Name two examples of library functions.
18. Explain find and replace in WP.

(P.T.O)

**PART-C****Note: Answer any FIVE questions:****5 x 3 = 15****Each question carries Three marks.**

19. Explain the various types of primary memory.
20. Briefly explain the different types of computer codes.
21. List any three functions of operating system.
22. Design a flow-chart to find the average of four numbers.
23. What is a variable? Give the syntax and an example.
24. Mention the different types of expressions in C++.
25. What is a string? Give any two string operations.
26. Explain structure with an example.

**PART-D****Note: Answer any SEVEN of the following questions:****7 x 5 = 35****Each question carries Five marks.**

27. Write short note on the history of computers.
  28. What is 2's complement? Write 2's complement subtraction rules.
  29. Write an algorithm to find sum of digits of a number.
  30. Explain the structure of a C++ program with a suitable programming example.
  31. Name looping constructs and explain any one with a suitable programming example.
  32. Explain the working of the switch statement with an example.
  33. Write a C++ program to read and print a matrix of order of M x N.
  34. What are the different types of functions? Explain any one.
  35. What is a spreadsheet? Give its characteristics.
  36. Explain any five library functions in MS-Excel.
  37. What is internet? Explain any two internet services.
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**I PUC ANNUAL EXAMINATION – FEBRUARY / MARCH 2016**  
**SUBJECT: COMPUTER SCIENCE (41)**

**TIME: 3.15 Hours.**

**Max. Marks: 70**

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**PART-A**

**Note: i) Answer ALL the following questions:  
ii) Each question carries ONE mark.**

**10 x 1 = 10**

1. What is Von-Neumann concept also called as?
2. What is meant by non-volatile memory?
3. Define structured programming.
4. What is a keyword?
5. Give the purpose of cout object.
6. Define the term looping.
7. What is the data type of the subscript of an array?
8. What are local variables?
9. What is a header in MS-WORD?
10. Give an example for spreadsheet package.

**PART-B**

**Note: i) Answer any FIVE questions:  
ii) Each question carries Two marks.**

**5 x 2 = 10**

11. Mention any two features of ENIAC.
12. Compare static RAM and dynamic RAM.
13. What are the types of softwares?
14. Name any two symbols of flowchart with their purposes.
15. Write any two applications of OOP.
16. Mention the simple data types of C++.
17. Name any two functions of the header file <string.h>.
18. Write the shortcut keys for cut and copy operations in MS-WORD.

(P.T.O)

**PART-C****Note: i) Answer any FIVE questions:****5 x 3 = 15****ii) Each question carries Three marks.**

19. Write a note on non-impact printers.
20. Using 2's complement method, solve  $49_{(10)} - 23_{(10)}$ .
21. Mention any three features of UNIX operating system.
22. Briefly explain documentation and program maintenance.
23. Write the rules for naming the identifiers.
24. Explain the cascading of output operators with examples.
25. How do we initialize a one dimensional array? Explain with syntax and example.
26. What is a structure? Give an example for definition and initialization of a structure.

**PART-D****Note: i) Answer any SEVEN of the following questions:****7 x 5 = 35****ii) Each question carries Five marks.**

27. Explain any two generations of computers.
  28. Convert  
 $FEAD_{(16)} = (?)_{(10)} = (?)_{(8)} = (?)_{(2)}$
  29. Write an algorithm to print 'N' Fibonacci numbers.
  30. Explain the arithmetic operators in C++ with suitable examples.
  31. Explain the working of WHILE statement with an example.
  32. Name the jump statements of C++. Explain any one with syntax and example.
  33. Define two-dimensional array. Write a program fragment to input and output the elements of two-dimensional array.
  34. Explain the working of "Functions with arguments and with return values" with syntax and example.
  35. Explain any five formatting options in MS-EXCEL.
  36. Explain the mathematical functions of MS-EXCEL with examples.
  37. Expand HTML. Write the general structure of HTML document with an example.
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**I PUC SUPPLEMENTARY EXAMINATION – MAY 2016**  
**SUBJECT: COMPUTER SCIENCE (41)**

**TIME: 3.15 Hours.**

**Max. Marks: 70**

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**PART-A**

**Note: i) Answer ALL the following questions:  
ii) Each question carries ONE mark.**

**10 x 1 = 10**

1. Who is known as father of Computer?
2. What is a bit?
3. Define an Algorithm.
4. What is a Token?
5. Stream Extraction (>>) is used with input. True / False
6. What is the significance of continue statement?
7. Which is the smallest subscript in an Array?
8. What is a Recursive function?
9. Write the extension of a word processor file.
10. Expand ESS.

**PART-B**

**Note: i) Answer any FIVE questions:  
ii) Each question carries Two marks.**

**5 x 2 = 10**

11. Write any four applications of computers.
12. What is ROM? Mention different types of ROM.
13. Write short notes on Assembly level language programming.
14. Write any two advantages of structured programming.
15. Define the words object and class.
16. What are primary and derived data types?
17. Write any two Arithmetic built in functions in C++ and their meaning.
18. What are Header and Footer in Word processors?

**PART-C**

**Note: i) Answer any FIVE questions:  
ii) Each question carries Three marks.**

**5 x 3 = 15**

19. Write one application area where the following devices are used:  
a) Barcode Readers      b) MICR      c) OMR

(P.T.O)

20. Convert :  $(101011)_2$  to  $(?)_{10}$  ,  $(?)_{16}$
21. Write any three features of windows operating system.
22. Discuss different types of errors.
23. What is a constant? Write a note on any two types of constants with an example.
24. Name the header file used for manipulators. Mention any two manipulators and their meaning.
25. What is one dimensional array? Give its syntax and example.
26. With respect to structures discuss the following :
  - a) Structure declaration syntax
  - b) Example for structures

### PART-D

**Note: i) Answer any SEVEN of the following questions:**

**7 x 5 = 35**

**ii) Each question carries Five marks.**

27. Mention the components used in I, II, III generation computers. Write a note on any two generations of computers.
  28. Convert the following numbers to Binary and perform 2's complement Arithmetic:  $(26)_2 - (45)_2$
  29. Write an algorithm to swap two numbers using third variable.
  30. With an example explain general structure of a C++ program.
  31. Explain if-else statement with an example.
  32. Mention the different iterative constructs used in C++ program. Explain any one.
  33. Write a program segment to read and print the elements of a two-dimensional array.
  34. Mention different types of user-defined functions. Explain functions with argument and with return value.
  35. How are the following operations carried out in an electronic spread sheet? Discuss.
    - a) cut and paste
    - b) sort
    - c) entering a formula
    - d) inserting a graph
  36. Discuss any three statistical functions and tow Arithmetic built in functions in ESS.
  37. Explain any five HTML tags.
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**I PUC ANNUAL EXAMINATION – FEBRUARY / MARCH 2017****SUBJECT: COMPUTER SCIENCE (41)****TIME: 3.15 Hours.****Max. Marks: 70**

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**PART-A**

**Note: i) Answer ALL the following questions:  
ii) Each question carries ONE mark.**

**10 x 1 = 10**

1. What is Charles Babbage known as?
2. Give the expansion of MICR.
3. What is meant by debugging?
4. Define variable.
5. Give the header file that holds setw( ) and endl.
6. Which statement is also called as pre-tested looping statement?
7. What is meant by the subscript of an array?
8. What is function prototype?
9. Define the term Word processing.
10. What is a cell address in ESS?

**PART-B**

**Note: i) Answer any FIVE questions:  
ii) Each question carries Two marks.**

**5 x 2 = 10**

11. Mention any two features of fourth generation of computers.
12. Write the difference between static RAM and dynamic RAM.
13. Explain real time operating system.
14. Define : a) syntax error b) Logical error
15. Write any two applications of OOPS.
16. What are modifiers? Mention the different modifiers in C++.
17. What are Library functions? Give examples.
18. How do we perform copy and paste operations in word processing?

(P.T.O)

**PART-C****Note: i) Answer any FIVE questions:****5 x 3 = 15****ii) Each question carries Three marks.**

19. Write a note on Hard Disk.
20. Convert  $4D_{(16)} = (?)_{(10)} = (?)_{(8)} = (?)_{(2)}$
21. Compare CUI and GUI.
22. Write an algorithm to find the area of triangle given three sides.
23. Explain the relational operators in C++.
24. Explain the cascading of input-output operators in C++.
25. Write a program fragment to read and write the elements of one-dimensional array.
26. Define structure. Give the syntax and example for structure definition.

**PART-D****Note: i) Answer any SEVEN of the following questions:****7 x 5 = 35****ii) Each question carries Five marks.**

27. Explain the characteristics of computers.
  28. Subtract  $35_{(10)} - 12_{(10)}$  using 1's complement method.
  29. Write a flowchart to find the sum of all the digits of a given number using while statement.
  30. Explain the structure of C++ program with suitable programming example.
  31. Explain the working of Nested-if statement with an example.
  32. Explain the working of do-while statement with an example.
  33. Define two-dimensional array. Give the syntax and example for the initialization of declaration of two-dimensional array.
  34. Explain with syntax and example the functions with arguments and with return values.
  35. Mention the features of spreadsheet.
  36. Explain the use of various statistical functions with suitable examples.
  37. What is the use of HTML? Write the general structure of HTML document with an example.
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**I PUC SUPPLEMENTARY EXAMINATION – MAY 2017**  
**SUBJECT: COMPUTER SCIENCE (41)**

**TIME: 3.15 Hours.**

**Max. Marks: 70**

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**PART-A**

**Note: i) Answer ALL the following questions:  
ii) Each question carries ONE mark.**

**10 x 1 = 10**

1. Who invented Pascaline?
2. What is the use of memory?
3. What is run time error?
4. Define keyword.
5. Give the other name of cout( ).
6. What is the function of exit( )?
7. What is the subscript of the first element of an array?
8. What is a called function( )?
9. What is the extension of word processing file?
10. Expand ESS.

**PART-B**

**Note: i) Answer any FIVE questions:  
ii) Each question carries Two marks.**

**5 x 2 = 10**

11. Explain the role of computers in science and technology?
12. What is hard copy and soft copy?
13. What is an operating system? Give an example.
14. Write any two characteristics of an algorithm.
15. What is a variable? Write its syntax.
16. What is the purpose of a) strcmp( ) b) strcat( )
17. Write any two advantages of OOPS.
18. What are headers and footers in a word processor?

(P.T.O)

**PART-C****Note: i) Answer any FIVE questions:****5 x 3 = 15****ii) Each question carries Three marks.**

19. Write the differences between ROM and RAM.
20. Subtract 09 from 12 using 2's complement.
21. Write the features of UNIX operating system.
22. Draw a flowchart to check whether a number is even or odd.
23. What is an identifier? Write any two rules to name the identifier.
24. Explain the cascading of output operators with suitable example.
25. Define one dimensional array. How to initialize one dimensional array. Give syntax and example.
26. What is structure? Write the syntax for structure definition.

**PART-D****Note: i) Answer any SEVEN of the following questions:****7 x 5 = 35****ii) Each question carries Five marks.**

27. Discuss the features of 3<sup>rd</sup> generation computers.
  28. Convert  $(11010010.10)_2 = ( )_{10} = ( )_8 = ( )_{16}$  .
  29. Explain the different steps to solve a problem using computer.
  30. Mention the different types of operators. Explain arithmetic operators in detail.
  31. Explain switch statement with example.
  32. Write the differences between while loop and do-while loop.
  33. Define two-dimensional array. Write a program segment to read and display two-dimensional array.
  34. Explain with structure of user defined function with an example.
  35. Explain the features of ESS.
  36. Write the Mathematical functions of ESS.
  37. What is the use of HTML? Explain any four tags of HTML.
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