Dept. of Computer Sc., SDP College for Women, Ludhiana

QUESTION BANK

PROBLEM SOLVING THROUGH "C"

BCA – 1 st semester (2018-19)

1. "Structured programming has been called a revolution in programming & is considered important advancement in software " Prove this statement.
2. To develop a program, whether it is small or complex a special procedure to be followed explain in detail what that process includes.
3. What document by step by step solving procedure of developing program explain?
4. Study and present the method of pictorial or graphical representation of step by step procedure of a problem to be solved with help of symbols and example.
5. What is the purpose of using Data Flow Diagram?
6. "This is not actual programming language but uses short phrases to write code for programs" State the definition with example.
7. Explain the types of errors in your program with different categories.
8. What do you mean by Debugging & Testing?
9. Discuss the Merits & Importance of C
10. language with application areas.
11. What are the various stages involved in compilation & execution of C program.
12. Draw basic structure of C program with Description of each section.
13. Write a program to calculate sum & product of 2 numbers.
14. Differentiate between a keyboard and an identifier.
15. Explain what is the character set of C language.

16. What is meant by ‘data type’ ? What are the data -types supported by C language ? Illustrate the importance of each.
17. Represent those characters that cannot be typed directly from keyboard with examples.
18. Write a short note on:
19. Qualifiers
20. Declaration of variables
21. Expression & Rules
22. Statements & Instructions
23. Describe Format Specifiers & provide the output of

```
# include <stdio.h>
# include <conio.h>
void main()
{
int a=100;
float x=9.7 ,y=11.57, z=113.75 ;
clrscr ;
printf (“\n value of a is %d “,a);
printf (“\n value of a is %6d “,a);
printf (“\n value of a is %-6d “,a);
printf (“\n %f %f %f “,x,y,z);
printf (“\n %10.1f %10.2f %10.2f “,x,y,z);
getch();
}
```

24. Give Brief explaination of :-

(a) Unformatted console I/O function.

(b) Categories of operators with example

(c) Type Converstion

(d) Output :-

```
# include <stdio.h>
void main ()
{
float a=0.7;
if (a<0.7f);
printf (“c”);
else
printf (“c++”);
```

(b)

```
void main ()
    {
    int x= 5 ,y= 5;
    printf (“%d %d %d %y “ , x++,++x,y++,++y);
}
```

QUESTION BANK

WEB APPLICATION DEVELOPMENT USING PHP

BCA – 5th semester (2018-19)

1. What is PHP &its characteristics with the common usage of PHP ?
2. In how many ways you can embed PHP code in HTML ?
3. Differentiate between Client Side Scripting & Server Side Scripting.
4. In how many categories websites fall?
5. Discuss the working of web server.
6. What are the different primitives of PHP variables?
7. In PHP , variables can be in one of the three scopes which are those explain with example.
8. (a) Using define () function.
9. (b) Using const keyword.

9. Breif the purpose of

(a) _LINE_constant

(b) _FILE_constant

(c) _FUNCTION_constant

(d) _CLASS_constant

(e) _METHOD_constant

10. State the following :->

(1) ** (2) % (3) II (4) = = (5) <> (6) === (7) += (8) *= (9) . (10) $x++

11. Discuss comments in PHP with example.
12. Define basic control structure in programming language.
13. Program to find whether a given no. is even or odd.
14. Program to show the division of a students as per this percentage.

15. Program to display the name of the day as per day number using switch -case statement.

16. Program to find the greater number from two given numbers using ternary operators.

17. Compare between while & do-while.

18. How break & continue statement works? Give example.

19. What are those PHP functions which can be used to include on PHP function to another PHP file with example.

20. Write a program to reverse the digits of an integer.

21. Differentiate the purpose of using call by value and reference with example.

22. Write a Program to calculate Fibonacci Sequence using recursion.

23. Discuss

(1) Types of Arrays in PHP

(2) Using FOR Loop

(3) Using print_r () function

(4) Using FOREACH Loop

(5) Array Splitting and Merging

24. State the following :-

(a) sort (b) ksort () (c) arsort (d) rsort (f) array_intersect()

(g) array_splice (h) reset ().

25. Explain HEREDOC syntax with example.

26. Give in Brief

(1) sprintf() (2) chop() (3) ltrim() (4) rtrim() (5) strolower

(6) strtoupper (7) ucfirst (8) ucwords() (9) strpos () (10) strlen ()

(11) strrev ().

QUESTION BANK

FUNDAMENTALS OF COMPUTERS

BA – 1st semester (2018-19)

1 What is computer ? Draw a block diagram of a computer system and discuss the functionalities of each in detail. Discuss various applications of computer?

02 (A) Compare the five generations of computers on the basis of the software technologies used .

(B) Explain the different types of input devices and explain different categories of keys in a Keyboard.

03 (A) Differentiate between System Software and Application Software with one example for each

(B) What is Memory? Differentiate between the characteristic of primary and secondary memory Of computer

04 (A) Explain the printing mechanism of a laser printer

(B) List different Output Devices Explain (a)LCD Monitors (b)Laser Printer (c)Mouse (d)Scanner

05 (A) Explain how data is organized on a magnetic tape.

(B) Explain the access mechanism in an optical disk.

(C) Distinguish between sequential access files and random access files.

06 (A) Differentiate between the Compiler and Interpreter. Define the terms: Compiler,

Interpreter, Assembler, Loader, and Linker.

(B) Short notes on a) Machine Language b) High-Level Language c) Assembly Language

(C) What is DVD ROM ? What is the difference Between CD ROM and DVD ROM ?

07 (A) What do you mean by problem solving ? Describe the difference between Algorithm and

Flowchart?

(B) What are the different symbol used in a Flowchart and draw a flowchart to find larger

Of two numbers.

08 (A) Explain the different types of number system representation in computer with suitable

Example.

(B) Convert the octal number 577.46 to the Following: (i) BCD equivalent (ii) Decimal number

(iii) Binary number (iv) Hexadecimal number

QUESTION BANK

BCA – 5th Sem

Networks

Q1) How does TCP/IP reference model differ from OSI reference model.

Q2)Define computer networks. What are the different types of network

Q3) Discuss the various types of wired transmission media used for networks.

Q4) what is message switching? What are the advantages of it over other switching techniques?

Q5) Discuss the various multiplexing techniques..

Q6) Define ISDN. Discuss its various services, channel and architecture)

Q7) Discuss the various error detection &correction codes in brief.

Q8) How does Selective repeat sliding window protocol differ from GO-BACK-N window protocol? Discuss

Q9) Attempt the following:-

- What is piggybacking?
- What is difference between simplex and half duplex communication?
- What is the need of multiplexing?
- Explain Message Switching in detail.

QUESTION BANK

BCA-1st sem

Comp Fundamentlals & Comp. S/w

Q1) a) What do you mean by computer? Explain in detail block diagram of computer.
b) Difference between System Software and Application Software.

Q2) a) Explain in detail various input and output devices.
b) Briefly explain role of cache memory.

Q3) a) Explain in detail Booting process of DOS.
b) Difference between Warm and Cold Booting.

Q4) a) Discuss in detail anatomy of windows.
b) What is the purpose of Recycle Bin.

Q5) a)Explain the following:-
i) Secondary Storage and its types
ii) ROM and its types
iii) Magnetic Disk

Q6) a) Explain various programming languages of computer.
b) Explain in detail various areas of application where computers are being used.

Q7) Explain in detail any five internal and any five external commands of DOS.

Q8) a) Explain role of autoexec.bat and config.sys file in detail.
b) What do you mean by Control Panel? Also explain its uses.

Q9) Attempt the following:-

I. Scandisk
II. Difference between Interpreter and Compiler
III. Difference between RAM and ROM
IV. Difference between Digital and Analog computer
V. Operating system
VI. Difference between Printer and Plotter
VII. Assembler
VIII. Hardware
IX. Benefits of computer
X. Shortcut

QUESTION BANK

BCA - 3rd Sem

Data Structure

Q1) What is Searching? Explain Binary Search in Details with Example and write its Algorithm.

Q2) What is Stack? Explain its operations with examples write any one Algorithm.

Q3) What is Queue? Explain its types and operations with examples and Algorithm.

(4) What is Array? Explain its types, operations and memory representation in Detail.

Q5) What is Bubble sort Explain in Detail with example.

Q6) Explain in detail array and linked list representation of Stack. Write the algorithm of insertion.

Q7) What is Selection sort Explain in Detail with Example.

Q8) Explain in detail array and linked list representation of Queue. Write the algorithm of deletion.

Q9) Attempt the following:-

- What is Space Complexity?
- What is Time Complexity?
- Write the Best, Average and Worst case
- What is Algorithm write its steps.

QUESTION BANK

BCA – 3rd Sem

I/f Sys. Design & Analysis

Q1) a) What do you mean by a system? Explain in detail various characteristics of a system.
b) Differentiate between Open and Closed Sytem.

Q2) a) Explain in detail man-made information system.
b) What are the basic principles of a asuccessful system?

Q3) Explain in detail the procedure for determining the user information requirement.

Q4) a) Explain in detail type of information required for designing a system.
b) What do you mean by structured analysis? What are its various advantages.

Q5) a) Explain data flow diagrams, its symbols. How to construct a DFD and what are its various rules? Also explain advantages and disadvantages of DFD
b) Briefly explain the meaning of decision tree.

Q6) Explain the following:-
i) On-site observation
iI)Types of questionnaire

Q7) Explain in detail various phases of System Development Life Cycle.

Q8) What do you mean by System Analyst? What are the skills required for System analyst?
Explain in detail the role of System Analyst.

Q9) Attempt the following:-
i)Functions of system analyst
ii)Physical and abstract system

iii)System planning
iv)Decision Support System
v)Data Dictionary
vi)Interviews

QUESTION BANK

BA - 3rd Sem

C++

Q1) What is OOP? Differentiates between OOPs and structured programming.

Q2) Explain the structure of c++ program in Details.

Q3) What is Class? Explain the basic syntax of declaring a class, creating objects and accessing members of a class with the help of an example.

(4) What is New, Cout,Cin and Scope resolution operators? Why and how they are used? Explain with the help of an example

(4) What is Function ? Explain function overloading in detail.

(5) Explain Pass by value and Pass by reference in detail.

(6) what is data members ? explain the private and public members

(7)Explain in detail

a. Polymorphism
b. Encapsulation
c. Inheritance

Q9) Attempt the following:-

- What is the difference between Private and Public members of a class?

- How class is different from Objects? Discuss in brief.

How to create a Class in C++.