COMPUTER SCIENCE HSSC–II

Time allowed: 2:40 Hours **Total Marks Sections B and C: 62**

SECTION – B (Marks 42)

Q. 2 Answer the following questions briefly. **14x3=42**

(i)	Write down any three features of Multi-user Operating System.	**03**	**OR**	How is an argument pass by value different from an argument pass by reference?	**03**
(ii)	Describe any three objectives of SDLC.	**03**	**OR**	How is multi-threading different from multi-tasking? Give any three reasons.	**03**
(iii)	Briefly explain the three steps of requirement engineering phase of SDLC.	**03**	**OR**	Write down any three differences between post-tested and pre-tested loops with example.	**03**
(iv)	Write down the use of string stream in file handling.	**03**	**OR**	How is a project manager responsible for planning execution and closing of a project?	**03**
(v)	Rewrite the following for loop into do-while loop. **for(int n=0;n<10;n++)** **cout<<n<< " ";**	**03**	**OR**	Briefly explain the concept of two-dimensional array with an example.	**2+1**
(vi)	Write down the purpose of **sizeof( )** function in array.	**03**	**OR**	Write down the output of the following code-segment. **int p,q,r;** **p=10; q=3;** **if(p%q==3)** **r=0;** **else** **r=1; cout<<r;**	**03**
(vii)	Write a c++ code that prints sum of following. **int arr[10]={1,2,3,4,5,6,7,8,9,10};**	**03**	**OR**	Differentiate between **strlen( )** and **strcat( )** functions with an example.	**2+1**
(viii)	Briefly explain how a pointer variable is declared by using an example.	**03**	**OR**	Write down a piece of code in c++ that shows the use of inline function.	**03**
(ix)	Write a piece of code that shows how a string copies into another string using **strcpy( )** function.	**03**	**OR**	Given the array definition: **float a[5]={1,2,3};** a. How many elements are there in the array? b. What are the values of the first and last elements?	**1+2**
(x)	Differentiate local and global variables.	**03**	**OR**	Briefly explain the concept of data hiding in c++.	**03**
(xi)	Explain the difference between the following statements if P is a pointer variable: **cout<<P;** **cout<<*P;**	**03**	**OR**	Write down the use of function overloading in terms of: • Number of arguments • Datatypes of arguments • Return types	**03**
(xii)	How is constructor different from destructor?	**03**	**OR**	Write a c++ code that reads 03 characters from user and stores them in a file.	**03**
(xiii)	How is a binary file different from a text file in c++?	**03**	**OR**	Briefly explain the concept of polymorphism with daily life example.	**2+1**
(xiv)	Rewrite the following code by using the conditional operator: **if(a==b)** **cout<< "equal"; else** **cout<< "Not equal";**	**03**	**OR**	Write down the output of the following code: **int i,j,k;** **for(i=0,j=2,k=1;i<=2;i++)** **cout<<i+j+k;**	**03**

SECTION – C (Marks 20)

Note: Attempt the following questions. **(5x4=20)**

Q.3	Why is feasibility study important? Discuss any four types of it.	**1+4**	**OR**	Write down the use of type casting in c++. Briefly explain two types of casting with example.	**2+2 +1**
Q.4	Write down a c++ program by using class that input two values using a member function of a class named **input( ),** then display the sum of two values by using another member function named **show( )**.	**2+2 +1**	**OR**	What is the purpose of **setw** in c++? Also compare the use of **setw** and **endl** manipulators in c++.	**2+2 +1**
Q.5	Explain use of **exit( )** function in c++ with an example.	**4+1**	**OR**	Write a c++ program that prints all the positive odd numbers upto 30 skipping those that are divisible by 5 using continue statement.	**05**
Q.6	Explain the concept of function. Also explain the use of function definition and function call with the help of examples.	**2+2 +1**	**OR**	Name four functions of operating system and explain any two functions in detail.	**2+2 +1**