



UNION CHRISTIAN COLLEGE ALUVA-2



SSR 5th CYCLE 2023



Criterion 1

1.1.1 Curriculum Planning and Implementation



ELA AND BRIDGE COURSE

Identification of the slow and the fast learners is important when it comes to a new batch of students, in order to get better idea about where each student stands academically. For this purpose, Entry Level Assessment is conducted. A bridge course is offered to train the slow learners to make them capable of understanding the concepts.

Entry Level Assessment 2020

UNION CHRISTIAN COLLEGE, ALUVA
Department of Computer Science

ashadas@uccollege.edu.in [Switch account](#)

The name and photo associated with your Google account will be recorded when you upload files and submit this form. Only the email you enter is part of your response.

* Indicates required question

Email *

Your email

Your Name As in Certificates

Your answer

Which Curriculum did you follow for plus two? (Kerala State / CBSE / ICSE etc)

Your answer

Overall marks your acquired for Plus two (I want to know marks not grades)

Your answer

Which stream did you followed for plus two? (Biology/ Computer Science etc. Also write what are the subjects you studied for plus two other than languages

Your answer

This question is not for biology students

Marks acquired for computer science? (Write theory and practical separately)

Your answer



Answer all the questions

Which of the following is not a point-and-draw device? *

1 point

- ☐ Keypad
- ☐ Trackball
- ☐ Touch screen
- ☐ Mouse

The physical devices of a computer : *

- ☐ Software
- ☐ Package
- ☐ Hardware
- ☐ System Software

The number of bits needed in the binary notation to represent a number in hexadecimal

1 point

Your answer _____

Computer has a built-in system clock that emits millions of regularly spaced electric pulses per ____ called clock cycles.

1 point

- ☐ second
- ☐ millisecond
- ☐ microsecond
- ☐ minute

Which part is known as Central nervous System of a Computer? *

1 point

- ☐ CPU
- ☐ Mempry
- ☐ ALU
- ☐ Control Unit



A detailed flowchart is called *

1 point

- ☐ Macro
- ☐ Micro
- ☐ Union
- ☐ Stack

Recursive functions are executed in ----- order

- ☐ First In First Out
- ☐ Parallel
- ☐ Last In First Out
- ☐ Load balancing

What will be the output of the following arithmetic expression ?

* 1 point

$5+3*2\%10-8*6$

Your answer _____

What is use of break keyword in C++ or any other programming language which is familiar to you

2 points

Your answer _____

Write down the out of the following program segment: (Program 1)

2 points

Your answer _____



Program1

```
using namespace std;
class Base1 {
public:
    Base1()
    { cout << " Base1's constructor called" << endl; }
};

class Base2 {
public:

    Base2()
    { cout << "Base2's constructor called" << endl; }
};

class Derived: public Base1, public Base2 {
public:
    Derived()
    { cout << "Derived's constructor called" << endl; }
};

int main()
{
    Derived d;
    return 0;
}
```

What is the use of continue in CPP or any other programming language which is familiar to you.

1 point

Your answer

What is meant by function overloading? What is the difference with function overriding?

2 points

Your answer

Write an algorithm to find the largest among three numbers

3 points

[Add file](#)

Do you know how to check a given number is prime or not using CPP program? If yes, explain the logic. (I don't want to see the program, I need the correct, effective explanation)

4 points

Your answer

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Bridge Course Syllabus

Department of Computer Science

Bridge Course Syllabus

Module 1: Computer Fundamentals

Definition, input processing output concept, motherboard, RAM, ROM, BIOS Booting concepts, Primary storage, cache memory, secondary storage concept, Examples of secondary storage devices and its advantages, Binary language, DC voltage concept. - (4 hours)

Module 2: Software Fundamentals

Software definition, types, high level languages, compilers and interpreters, operating systems, examples, drives, folder, files concepts, typing tools in operating systems. System software, application software, compiler, assembler, interpreter, high level language, low level language or machine language, examples, operating system definition, major functions of operating system (4 hours)

Module 3: Programming Concepts

Program logic, variables, operators, branching logic, looping logic. Logic explanation of sample programs such as even numbers, prime numbers, digit separation, character operations. Illustration using C, assignments on scratch. (4 hours)



Bridge Course Report

Bridge Course 2020-2021

Department of Computer Science
Union Christian College Aluva

Prepared by

Ms. Greeshma K

Bridge Course Coordinator 2020-21



1. About Bridge Course

The Department of Computer Science has been conducting a bridge course for the first year students which is primarily aimed at students who don't have a strong foundation in programming and computer fundamentals. This particularly includes students who opted branches other than computer science during higher secondary course. Students who failed to understand the basics of computer science during higher secondary course can also join the course.

2. Syllabus

The department has finalized a syllabus for Bridge Course which can be followed upcoming years too. The syllabus includes computer fundamentals: both hardware and software fundamentals and computer programming also, which students find difficult to follow during initial semesters. [Bridge Course Syllabus](#)

Module 1 was handled by the faculty members Mr. Cijin K Paul and Ms. Elizabeth Thomas

Module 2 was handled by Ms. Gincy Abraham and Dr. Asha Das

Module 3 was discussed by Ms. Greeshma K

3. Conduct

Bridge Course 2020-21 classes were conducted by all the faculty members in the department after the normal working hours. The syllabus is designed in such a way that the students will understand the basics by attending the 12 day bridge by listening the online class, one hour daily conducted by any of the faculty members. During the year 2020-21 the bridge course classes were conducted from 16th November 2020 to 1.12.2020 after the usual class hours, through any of the online platforms like Google Meet. A separate Google Classroom was created exclusively for Bridge Course Students where the faculty members uploaded their recorded classes and other study materials which the students can utilize to understand the topics thoroughly.



4. Exams and Evaluations

A bridge course entry test was conducted by the department on 27th October 2020 for all first year students through Google Forms. Based on the performance and marks obtained by each of the student, a student list was prepared for conducting the course. 23 students were selected for attending the course. After conducting the course, each student had gone through a final evaluation. Final evaluation which has one hour duration, was conducted on 9th January 2021 through Google Forms. Analysis

Out of 23 students who got selection to attend the bridge course 21 students attended the test and 17 students got marks 60% or above where there were only 4 students who scored 60% or above before conducting Bridge Course. The detailed result analysis (excel file) after the final evaluation is also attached herewith.

5. Bridge Course Syllabus

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Module 2: Software Fundamentals

Software definition, types, high level languages, compilers and interpreters, operating systems, examples, drives, folder, files concepts, typing tools in operating systems. System software, application software, compiler, assembler, interpreter, high level language, low level language or machine language, examples, operating system definition, major functions of operating system. (4 hours)

Module 3: Programming Concepts

Program logic, variables, operators, branching logic, looping logic. Logic explanation of sample programs such as even numbers, prime numbers, digit separation, character operations. Illustration using C, assignments on scratch. (4 hours)

- ❖ Scratch can be introduced to students after understanding the basic programming concepts and teachers can encourage students to do the programming assignments in scratch



Progress Evaluation

Union Christian College, Aluva

Department of Computer Science

Result Analysis for Bridge Course 2020-2021

| Sl.No. | Name of the Student | (OS Marks out of 14) | From Google form (37) | Total Marks out of 51 | Marks out of 50 | Name of the students who attended entry test | Marks acquired for entry test |
|--------|------------------------|----------------------|-----------------------|-----------------------|-----------------|--|-------------------------------|
| 1 | Abin Benhar A | 7.5 | 20 | 27.5 | 26.96078431 | Ajith Samuel | 12 |
| 2 | Akash M P | 9.5 | 27.5 | 37 | 36.2745098 | Akash suresh | 4 |
| 3 | Akash suresh | 10 | 29 | 39 | 38.23529412 | Anand Sathyapalan | 2 |
| 4 | Athira babu v b | 13 | 22 | 35 | 34.31372549 | Anjana. T | 4 |
| 5 | Chinnu Mathew | 10.5 | 18.5 | 27 | 26.47058824 | Aswath sivan | 7 |
| 6 | Dhanu Parvathy K S | 12 | 30.5 | 42.5 | 41.66666667 | Athira. Babu. V. B | 8 |
| 7 | Elizabeth Megha Thomas | 12 | 29.5 | 41.5 | 40.68627451 | Dhanu Parvathy K S | 3 |
| 8 | Fariza A A | 9.5 | 25 | 34.5 | 33.82352941 | Elizabeth Megha Thomas | 0 |
| 9 | Joshal Johnson | 13 | 28 | 41 | 40.19607843 | Joshal Johnson | 8 |
| 10 | Joviya P Joy | 12 | 33 | 45 | 44.11764706 | Joviya P Joy | 4 |
| 11 | Karun elza thomas | 10 | 28 | 38 | 37.25490196 | Karun elza thomas | 1 |
| 12 | KEERTHY SHAJU | 13 | 33 | 46 | 45.09803922 | KEERTHY SHAJU | 8 |
| 13 | MILAN BABY | 7 | 28 | 35 | 34.31372549 | Milan Baby | 1 |
| 14 | MOHAMED YASIR P. S | 10 | 27 | 37 | 36.2745098 | Naveen Mathew | 13 |
| 15 | Parvathy v | 12 | 23 | 35 | 34.31372549 | Parvathy v | 7 |
| 16 | Roshni Tomy | 10 | 25 | 35 | 34.31372549 | Prince Biju | 4 |
| 17 | Sachin Shaji | 11 | 14 | 25 | 24.50980392 | Safiya k ashraf | 5 |
| 18 | Safiya k ashraf | 7.5 | 18.5 | 24 | 23.52941176 | SIDHARTH K S | 12 |
| 19 | Sallap pradeep kumar | 12 | 24 | 36 | 35.29411765 | Sonu vama | 3 |
| 20 | SUHANA BAIJAN P A | 12.5 | 28 | 40.5 | 39.70588235 | SUHANA BAIJAN P A | 8 |
| 21 | Yedhu Krishnan T H | 9 | 25 | 34 | 33.33333333 | SWATHI SUBASH | 14 |
| 22 | | | | | | Yedhu Krishnan T H | 3 |



Before course conduction

| | |
|---|----|
| Total Students appeared | 22 |
| No of Students who scored 90% and more | 0 |
| No of Students who scored 80% and more | 0 |
| No of Students who scored 70% and more | 0 |
| No of Students who scored 60% and more | 4 |
| No of Students who scored Less than 60% | 18 |

After Course Conduction

| | |
|---|----|
| Total Students appeared | 21 |
| No of Students who scored 90% and more | 1 |
| No of Students who scored 80% and more | 4 |
| No of Students who scored 70% and more | 6 |
| No of Students who scored 60% and more | 6 |
| No of Students who scored Less than 60% | 4 |

