JNAN VIKAS MANDAL'S
AmratlalRaichand Mehta Degree College of Arts
DiwaliMaa Degree College of Science
MohanlalRaichand Mehta College of Commerce
Padmashree(Dr.) R.T. Doshi Degree College of Computer Science
Plot no.9, Sector -19, AiroliNavi Mumbai

Date: 19/06/2023

NOTICE (Student)

All Students are hereby informed that the departmental is arranging a bridge course from June 21, 2023 to June 30, 2023.

Mrs. Janhavi Kshirsagar

Co-ordinator CS-IT DEPT

Dr. B.K. Deshpande

Vice Principal

Dr.(Mrs.) Leena Sarkar

Principal

PRINCIPAL
JNAN VIKAS MANDAL'S
M.R. MEHTA COLLEGE OF COMMERCE
D.M. COLLEGE OF SCIENCE
A.R. MEHTA COLLEGE OF ARTS
Dr. R.T. DOSHI COLLEGE OF COMPUTER SCIENC
Plot No.9, SEC.- 19, AIROLI,
NAVI MUMBAI-400 708

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Plot no.9, Sector -19, AiroliNavi Mumbai

Date: 19/06/2023

NOTICE

All departmental members are hereby informed that the departmental meeting is arranged on June 20, 2023 at 1:30 p.m. in CS lab.

Agenda

1. Conduction of Bridge Course of SYCS and TYCS students
2. Exam Conduction of Bridge Course

Asst. Prof. Janhavi Kshirsagar

Coordinator CS-IT DEPT

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Plot no.9, Sector -19, AiroliNavi Mumbai

Date: 20/06/2023

Minutes of Meeting

June 20, 2023

The departmental meeting was held on June 20, 2023 at 01:30 p.m. in CS Lab.

Following matters were discussed and finalized as per agenda.

❖ **Conduction of Bridge course of SYCS and TYCS students**

It was decided that the Bridge Course should be conducted from 21st June, 2023 to 30th June, 2023. Total 8 subjects are included in the Bridge Course. And it was decided that it should be 30 hours separately for each class.

Syllabus compilation and preparation of time table for bridge course for SYCS was assigned to Dr. Sanjivani Nalkar for CS department.

❖ **Exam conduction of bridge course**

After completion of lectures of bridge course on Saturday 30th June, 2023 exam will be conducted for students in online mode.

Class teacher completed work related to bridge course like preparation of flyer, syllabus, timetable, feedback form, exam conduction, certificate design and distribution to SYCS students.

Exam will be conducted on Google form at 5:30 pm on 30th June 2023.

And finally the marksheet will be shared to the certificate committee for distribution of certificates.
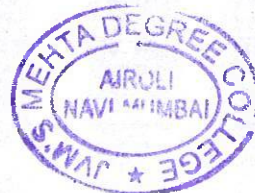
Adjournment: Meeting was adjourned at 2:30 pm.

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Plot no.9, Sector -19, AiroliNavi Mumbai

Date: 20/06/2023

Following members were present:

Asst. Prof Sarita Sarang

Dr. Sanjivani Nalkar

Asst. Prof Shakuntala Kulkarni

Signature

Flyer :

JNAN VIKAS MANDAL'S DEGREE COLLEGE
NAAC RE-ACCREDITED 'A' GRADE (CGPA 3.33)
Plot No. 9, Sector-19, Airoli, Navi Mumbai

Department of Computer Science
Organizes
Bridge Course
For
Second Year Computer Science

Mrs. Sarita Sarang
Dr. Sanjivani Nalkar
Ms. Shakuntala Kulkarni

Date : 21st June to 30th June 2023
Duration: 30 hours

Mrs. Janhavi Kshirsagar
CS-IT Coordinator

Dr. Mrs. Leena Sarkar
Principal

JNAN VIKAS MANDAL'S

Mohanlal Raichand Mehta College of Commerce
Diwali Maa Degree College of Science
Amritlal Raichand Mehta Degree College of Arts
Padmashree (Dr.) R:T. Doshi Degree College of Computer Science
Plot no.9, Sector -19, Airoli, Navi Mumbai

Bridge Course for SYBsc(CS)

Duration: - 30 hours

OBJECTIVES: -

1) To bridge the gap between subjects studied at pre-university level and subjects they would be studying in graduation.
2) To provide adequate foundation in core subjects, limited to moderate level so that students do not face any difficulty when the classes commence.
3) To act as a buffer for the new entrance.
4) To demonstrate a breadth and depth of knowledge in the discipline of computer science and information technology.

OUTCOME: -

Students will be able to

1) Equipped with the knowledge and confidence needed to take on bigger challenges.
2) Impact basic knowledge in them about advanced subjects that will be taught to them in upcoming future.
3) Understand the essence of knowledge gained beyond curriculum.

Module	Contents	Number of hours
I	**Module: Python and Free Open Source Software:** Introduction to Python, Data types, Python Tokens, operators, keyword, types of Statements. Programs based on above topics. List, Built in methods of List. Difference between mutable and immutable. Tuples, Built in methods of tuples. Dictionaries. Built in methods of Dictionaries. Programs based on above topics Built in Functions, User-defined Functions. introduction to object-oriented programming Programs based on above topics Exception Handling **Free Open Source Software:** Introduction: Open Source, Free Software, Free Software vs. Open Source software, Public Domain Software, FOSS does not mean no cost. History: BSD, The Free Software Foundation and the GNU Project. Open Source History, Initiatives, Principle and methodologies. Examples: Wikipedia, Android, Linux, Wordpress, GitHub	6 hours
	Case study/Assignment and test	1 hour
II	**Module: Database Management System and MySQL** Introduction to DBMS – Database, DBMS – Definition, Overview of DBMS, Advantages of DBMS, Levels of abstraction, Data independence, DBMS Architecture, Entity Relationship Model - Entities, attributes, entity sets, relations, relationship sets. SQL(Structured Query Language),SQL statements	6 hours
	Case study/Assignment and test	1 hour
III	**Module: Operating System and Linux** **Linux** History of Linux, philosophy, community, terminology, Distributions,	6 hours

		Linux Kernel vs. distribution. Linux Architecture, File systems basic, The boot process, init scripts, run levels, shutdown process, File system, File system architecture, file types, File attributes, working with files, Understanding Linux Security, Users of root, sudo command, working with passwords, Packaging methods: rpm/deb, Graphical Vs Command line. **Operating Systems:** Introduction and Operating-Systems Structures: Definition of Operating system, Operating System's role, Operating-System Operations, Functions of Operating System, Computing Environments, Operating-System Services, User and Operating-System Interface, System Calls, Types of System Calls, Operating-System Structure, Deadlocks, Deadlock Prevention, Deadlock Avoidance, Deadlock Detection	
		Case study/Assignment and test	1 hour
IV		**Module: Computer Organization & Design and Digital Electronics** **Computer Organization & Design:** Computer Organization and Architecture, Computer types, Basic Terminologies, Computing Systems, Functional Unit of Computer, Basic Operational Concepts, Registers, Interrupt, Bus structure, Performance, Memory Location and Addresses, Address Space, Big Endian, Memory Operations **Digital Electronics:** Logic Circuits, Basic Logic Gates, NOT Gate, AND Gate, NOR Gate, NAND Gate, NOR Gate, EX-OR Gate, EX-NOR Gate, Applications of Logic Gates, Multiplexer, Demultiplexer, Number System- Binary, Octal, Decimal, hexadecimal, Conversion, Electronic translators	6 hours
		Case study/Assignment and test	1 hour
V		Module: Basic OOPS Concepts and C++ Programming Language and Introduction to Python Programming	6 hours

| | | Object oriented programming paradigm, basic concepts of object oriented programming, benefits of object oriented programming, object oriented languages, applications of object oriented programming.
 C++ Programming Language
 Tokens-keywords, features of C++ and its basic structure,Basic data types,Decision Making, Loops, Classes and objects, Dot Operator, data members, member functions,
 Simple programs based on above topics

 Introduction to Python Programming :
 Overview of Python: History & Versions, Features of Python, Execution of a Python Program, Flavours of Python,Data types,
 List and Tuples and Dictionary. Basic Functions of these above data types.
 Control statements, Syntax and Examples. | |
| | | Case study/Assignment and test | 1 hour |

Time Table :

MohanlalRaichand Mehta College of Commerce
DiwaliMaa Degree College of Science
AmritlalRaichand Mehta Degree College of Arts
Padmashree(Dr.) R.T. Doshi Degree College of Computer Science
Plot no.9, Sector -19, AiroliNavi Mumbai

SYCS Bridge Course Time table 2023-24

Time	21-06-2023	22-06-2023	23-06-2023	26-06-2023	27-06-2023	28-06-2023	30-06-202
8:40-9:30	C++	DBMS	Linux	COD	Python	MySQL	DS
9:30-10:20	DBMS	C++	COD	Linux	OS	Python	MySQL
10:20-11:10	Linux	COD	C++	DBMS	MySQL	OS	Python
11:10-12:00	COD	Linux	DBMS	C++	DS	DS	OS

C++ & Python: Mrs. Janhavi Kshi DBMS & Web: Mrs. Sarita Sarang
Linux and OS: Dr. Sanjivani Nalk COD and DS: Ms. Shakuntala Kulka

Exam Paper :

Bridge Course Examination (S.Y.B.Sc(C.S)) June - 2023

Date : 30-06-2023   Marks : 50

Email *

Valid email

This form is collecting emails. Change settings

Roll No :

Short answer text

Name of the Student : *

Short answer text

Which of the following correctly declares an array in C++? *

○ array(10);

○ array array[10];

○ int array;

○ int array[10];

A source program is usually in _____ *   2 points

○ Assembly language

○ Machine level language

○ High-level language

○ Natural language

The ALU makes use of _____ to store the intermediate results. *   2 points

○ Accumulators

○ Registers

○ Heap

○ Stack

The NOR gate output will be high if the two inputs are _____ *   2 points

○ 00

○ 01

○ 10

○ 11

Which input values will cause an AND logic gate to produce a HIGH output?   * 2 points

○ At least one input is HIGH

○ At least one input is LOW

○ All inputs are HIGH

○ All inputs are LOW

If the decimal number is a fraction then its binary equivalent is obtained   * 2 points
by _____ the number continuously by 2.

○ Dividing

○ Multiplying

○ Adding

○ Subtracting

Which one is not the keyboard of C language? *   2 points

○ static

○ void

○ int

○ data

C Program is converted into machine Language with the help of *   2 points

○ Compiler

○ Operating System

○ Editor

○ Interpreter

Process of inserting an element in stack is called _____ *   2 points

○ Create

○ Evaluation

○ Push

○ Pop

In linked list each node contains a minimum of two fields. One field is   * 2 points
data field to store the data second field is?

○ Pointer to node

○ Pointer to character

○ Pointer to integer

○ Node

Format specifier for double data type is *   2 points

○ %f

○ %lf

○ %d

○ %a

Which of these in not a core data type? *   2 points

○ Class

○ Lists

○ Dictionary

○ Tuples

To add packages or module in the program _____ statement is used. * 2 points

- ○ Use
- ○ Add
- ○ import
- ○ AddModule

By default division operator(/) returns the result in _____ format. * 2 points

- ○ integer
- ○ int
- ○ Boolean
- ○ Floating point

The users must agree to the_____ terms and agreements when they use open-source software. * 2 points

- ○ System
- ○ License
- ○ Community
- ○ Programmer

FOSS stands for _____. * 2 points

- ○ Free Open System Service
- ○ Free Open Source Software
- ○ Free Open Service Software
- ○ Free Synchronized Software

What command is used to remove files? * 2 points

- ○ dm
- ○ rm
- ○ delete
- ○ erase

UNIX operating system . It is possible to run commands that are not
located in a directory listed in the PATH if you know the full path and
command name.

* 2 points

○ can run on PC's and larger system

○ is multitasking

○ is multiuser

○ all of these

Which of the following is not an operating system? *

2 points

○ UNIX

○ MS-DOS

○ CP/M

○ PASCAL

Which directory contains the system kernel? *

2 points

○ /etc

○ /

○ /boot

○ /proc

Which utility provides contact and name server information about the
specified domain?

* 2 points

○ nameserver

○ whois

○ finger

○ host

In an E-R diagram an entity set is represent by a *

2 points

○ rectangle

○ diamond box

○ ellipse

○ circle

Data independence means _____ *

2 points

○ data is defined separately and not included in programs.

○ programs are not dependent on the physical attributes of data.

○ programs are not dependent on the logical attributes of data.

○ both (B) and (C).

Key to represent relationship between tables is called *

2 points

○ Primary key

○ Secondary key

○ Foreign Key

○ None of the Above

What is a relationship called when it is maintained between two entities? * 2 points

○ Unary

○ Binary

○ Ternary

○ Quaternary

The full form of DDL is *

2 points

○ Dynamic Data Language

○ Data Derivation Language

○ Data Definition Language

○ Detailed Data Language

Submit

Clear form

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Padmashree(Dr.) R.T. Doshi Degree College of Computer Science
Plot no.9, Sector -19, AiroliNavi Mumbai

List of Participants

Bridgecourse Result

Sr. No	Name of Students	Marks
1	Vinita Santosh Kumar Vishwakarma	18
2	Avani Rambhia	42
4	Prathamesh Gurav	30
5	tushar Rajaram jadhav	26
6	Archita Pandey	36
7	Vanshika Chaudhary	40
8	Raj Ramesh Bangade	44
9	Purav Ranjan Salla	36
10	Rakesh Kumar meghwal	34
11	Vinayak Rajan Vishwakarma	42
12	Sujal Vishal Mad	40
13	Vinayak Rajan Vishwakarma	42
14	YADAV CHANDRASEN MELARAM	44
15	kshamata yadav	34
16	Vaishnavi Magadum	40
17	omeshwariben desai	38
18	omeshwariben sanjay desai	36
19	Friti Biswas	36
20	Aamna shaikh	42
21	Kanchan Choudhary	40
22	Rahul charste	38
23	priyanka gurnani	44
24	Siddhi salvi	38

Feedback Form :

SYCS Sem III Bridge Course Feedback Form

Form description

Email *

Valid email

This form is collecting emails. Change settings

Name of the Student

Short answer text

Roll Number *
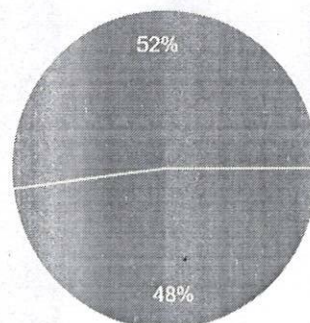
Short answer text

Were the objectives of the course clear to you? *

○ Very Clear

○ Moderately Clear

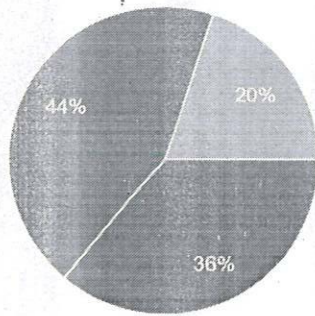○ Not at all Clear

The lectures were clear & easy to understand. *

○ Strongly Agree

○ Agree

○ Neutral

○ Disagree

○ Strongly Disagree
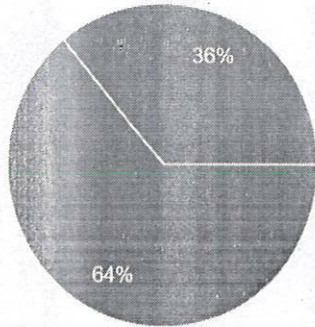
The course was organized in a manner that helped you understand the underlying concepts. *

○ Strongly Agree

○ Agree

○ Neutral

○ Disagree

○ Strongly Disagree

How useful to you was this course? *

○ Very Useful

○ Moderately useful

○ Not at all useful

How much did you learn from this course? *

◯ A great deal

◯ A lot

◯ A moderate amount

◯ A little

◯ Nothing

Overall, how would you describe the quality of the instruction in this course? *

◯ Excellent

◯ Very good

◯ Good

◯ Fair

◯ Poor

What skills or knowledge did you learn or improve? *

Long answer text

Feedback Analysis :

Bridge course Feedback Analysis SYCS Sem-III June 2022-23

Were the objectives of the course clear to you?
25 responses

- Very Clear
- Moderately Clear
- Not at all Clear

32%

64%

The lectures were clear & easy to understand.
25 responses

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly disagree

52%

48%

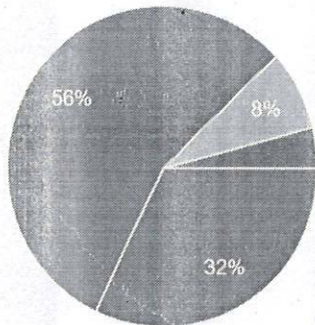The course was organized in a manner that helped you understand the underlying concepts.
25 responses

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly disagree

44% 20% 36%

How useful to you was this course?
25 responses

- Very Useful
- Moderately useful
- Not at all useful

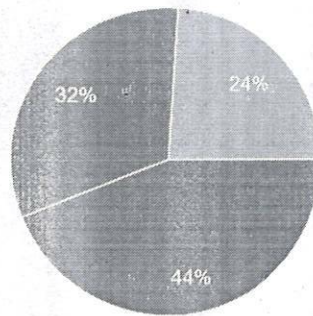36% 64%

How much did you learn from this course?
25 responses

- A great deal
- A lot
- A moderate amount
- A little
- Nothing

56% 8% 32%

Overall, how would you describe the quality of the instruction in this course?
25 responses

- Excellent
- Very good
- Good
- Fair
- Poor

Certificate :

Jnan Vikas Mandal's Degree College
NAAC Re-Accredited 'A' Grade (CGPA - 3.3)
Plot No. 9, Sector-19, Airoli, Navi Mumbai, Maharashtra 400 708

Certificate

This certificate is awarded to

<<NAME>>

of   SYCS who has successfully completed Bridge Course
organized by Department of Computer Science of JVM's Degree
College from 21ᵗʰ June 2023 to 30ᵗʰ June 2023.

Asst. Prof. Janhavi Kshirsagar
CS-IT Coordinator

Dr. (Mrs.) Leena Sarkar
Principal

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<u>Report on Bridge Course</u>

The bridge course was conducted for Second Year computer science students from 21/06/2023 to 30/06/2023. The duration of the course was 30 hours. Total 10 subjects were included in the course. The course was conducted by Computer Science department faculty members.

Mrs. Janhavi Kshirsagar   Python, FOSS, C, DS

Dr. (Mrs.) Sanjivani Nalkar   OS, LINUX

Mrs. Sarita Sarang   DBMS, MySQL

Ms. Shakuntala Kulkarni   COD, DE

The course benefitted 40 students.

The intention of this course was to bridge the gap between subjects studied at an earlier level and subjects to be learned in the next year of graduation. The course contents were designed to give enough knowledge of the subject as well as its application in the industry. The course also aimed at laying a strong foundation for the students.

A test was conducted for all the students using Google Form. All subject teachers shared 5 questions of their respective subjects.

Due to network issues some students had not submitted paper, so retest was conducted the following day. A student has to secure a minimum 40% in the test to qualify for the certificate.

Successful students were awarded certificates for the bridge course.

Asst. Prof. Janhavi Kshirsagar   Dr.(Mrs.) Leena Sarkar
Coordinator, CS-IT Department   Principal