



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: 07/11/2022

**NOTICE**

All departmental members are hereby informed that the department meeting is arranged on Nov 07, 2021 at 8:00 a.m. in the Computer Science Laboratory.

**Agenda**

1. Conduction of Bridge Course of SYCS students
2. Subject Distribution
3. Work Distribution

Asst. Prof. Janhavi Kshirsagar

Co-ordinator CS-IT Dept

Dr. B.R. Deshpande

Vice Principal

Dr. (Mrs.) Leena Sarkar

**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 SCIENCE  
 Plot No.9, SEC.- 19, AIROLI,  
 NAVI MUMBAI-400 708





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

Date: 08/11/2022

## Minutes of Meeting

November 07, 2022

The departmental meeting was held on November 07, 2022 at 8:00 a.m. in Computer Science Laboratory

Following matters were discussed and finalized as per agenda.

### ❖ Conduction of Bridge Course for SYCS students

It was decided that Bridge Course should be conducted from 07<sup>th</sup> November 2022 to 16<sup>th</sup> November 2021. A total of 4 subjects are included in Bridge Course. And it was decided that it should be of 30 hours.

### ❖ Subject Distribution

It was decided that Basics of Core Java and Android subject will be taken by Mrs. Janhavi Kshirsagar, Fundamentals of .NET and PL/SQL subject will be taken by Mrs. Sarita Sarang, Introduction to Software Engineering and Computer Networks subject will be taken by Dr. Sanjivani Nalkar and Basics of Algorithms and Linear Algebra subject will be taken by Ms. Shakuntala Kulkarni.

### Adjournment

Meeting was adjourned at 8:30 a.m.





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Date: 07/11/2022

**Following members were present:**

**Signature**

Dr. (Mrs.) Leena Sarkar - Principal

*Leena*

Dr. B. R. Deshpande - Vice-Principal

*[Signature]*

Asst. Prof. Janhavi Kshirsagar

*[Signature]*

Asst. Prof. Sarita Sarang

*[Signature]*

Dr. Sanjivani Nalkar

*[Signature]*

Asst. Prof. Shakuntala Kulkarni

*Shakuntala*



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  
ONLINE BRIDGE COURSE  
FOR  
SECOND YEAR COMPUTER SCIENCE**

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

Platform : Google Meet

Date:  
07th November-17th November 2022  
Duration : 30 Hours

Mrs. Janhavi Kshirsagar  
CS-IT Coordinator and Course Convener

Dr.(Mrs.) Leena Sarkar  
Principal and Chairperson





## 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	<p><b>Module: Python and Free Open Source Software:</b>            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</p> <p><b>Free Open Source Software:</b>            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</p>	6 hours
	Case study/Assignment and test	1 hour
II	<p><b>Module: Database Management System and MySQL</b>            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</p>	6 hours
	Case study/Assignment and test	1 hour
III	<p><b>Module: Operating System and Linux</b>  <b>Linux</b>            History of Linux, philosophy, community, terminology, Distributions,            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</p>	6 hours



	<p>passwords, Packaging methods: rpm/deb, Graphical Vs Command line.</p> <p><b>Operating Systems:</b> 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</p>	
	Case study/Assignment and test	1 hour
IV	<p><b>Module: Computer Organization &amp; Design and Digital Electronics</b></p> <p><b>Computer Organization &amp; Design:</b> 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</p> <p><b>Digital Electronics:</b> 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</p>	6 hours
	Case study/Assignment and test	1 hour
V	<p><b>Module: C programming and Data Structure</b></p> <p>Introduction to C, Data types, C Tokens, operators, Types of Operator keyword, types of Statements. Programs based on above topics. Introduction to Control Structure, simple if, i-else, nested if, Loops, Types of loops, Switch-Case, Jump Statements – break, Continue, goto Statements. Programs based on above topics.</p> <p>Introduction to Array, Syntax Types of Array, Memory allocation of array elements, One dimensional array, Two dimensional array, Built in Functions, User-defined Functions.</p>	6 hours



<p>Programs based on above topics</p> <p>Introduction to Data structure. Need of Data Structure. Types of Data Structures. Operations can be performed on Data Structure.</p> <p>Searching and Sorting: Searching-Linear Search, Binary Search, Sorting-Bubble, Selection and Insertion Sort,</p> <p>Linked Structures: Introduction, Singly Linked List-Traversing, Searching, Prepending and Removing Nodes,</p> <p>Stacks: Stack, Operations on Stack</p> <p>Queues: Queue , operations on Queue.</p> <p>Non-Linear Data Structure: Trees and Graphs</p>	
Case study/Assignment and test	1 hour

**Time Table :**

<b>SYCS Bridge Course Sem-IV Time Nov2022</b>							
Date	07-11-2022	09-11-2022	10-11-2022	11-11-2022	12-11-2022	14-12-2022	15-11-2022
7:50-8:40	SE	Java	SE	Java	LA	CN	PL/SQL
8:40-9:30	.Net	Algorithm	Algorithm	Algorithm	Android	PL/SQL	LA
9:30-9:50	BREAK						
9:30-9:50	Algorithm	SE	.Net	SE	PL/SQL	LA	Android
9:50-10:40	Java	.Net	Java	.Net	CN	Android	CN

Basics of core Java and Android- Mrs. Janhavi Kshirsagar

Fundamentals of .Net and PL/SQL- Mrs. Sarita Sarang

Introduction to Software Engineering and Computer Science- Dr. Sanjivani Nalkar

Basics of Algorithm and Linear Algebra- Ms. Shakuntala Kulkarni





### Exam Paper :

Questions Responses **1** Settings Total points

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**Bridge Course Examination (S.Y.B.Sc(C.S)) June - 2022**

Date : 17-09-2022 Marks : 50

Email \*

Valid email

This form is collecting emails. [Change settings](#)

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111

Roll No :  Short answer

Short answer text

Answer key (0 points) Required

---

Name of the Student : \*

Short answer text

---

A source program is usually in \_\_\_\_\_ \*

- Assembly language
- Machine level language
- High-level language
- Natural language



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 by \_\_\_\_\_ the number continuously by 2. \*

2 points

- Dividing
- Multiplying
- Adding
- Subtracting



Which one is not the keyword 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 data field to store the data second field is?

\* 2 points

- 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 is 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

*Keena*





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Result-Bridge Course Examination (S.Y.B.Sc(C.S)) June - 2022			
Roll No :	Name of the Student :	Score	Result
1601	Amisha Anirudhan Achari	40	Pass
1602	Abhimanyu	50	Pass
1603	Pranil Dhamal	46	Pass
1605	GAUTAM RAVISHANKAR DURGASHANKAR	42	Pass
1608	Rahul	36	Pass
1609	Sahil Harishchandra Gupta	40	Pass
1610	Vinit gupta	44	Pass
1613	Pranay shankar jadhav	46	Pass
1615	KADAM YASH RAMESH	46	Pass
1616	Sapna Kapil Kewat	38	Pass
1618	Sujal lodha	14	Pass
1619	Vinita mandal	44	Pass
1620	Ketna Mhatre	44	Pass
1621	Mhetre Ganesh Vishwanath	34	Pass
1623	Deepak pal	32	Pass
1624	Ravi shivpher pal	34	Pass
1625	Shivani Pandey	42	Pass
1626	Yash Bramhadev Pandey	38	Pass
1629	Ankit prajapati	46	Pass



1630	Ankit Rai	40	Pass
1632	Walid Shaikh	50	Pass
1633	Aman	32	Pass
1634	Pradeep Shukla	42	Pass
1635	Khushboo singh	38	Pass
1637	Arpit Premnarayan Tiwari	38	Pass
1637	Arpit Premnarayan Tiwari	36	Pass
1638	Anurag Verma	48	Pass
1640	Pawan yadav	30	Pass
1642	Khan Ajaj	24	Pass
1643	Atharva Santosh Shinde	38	Pass
1645	Bhagyshri Babu Bhandari	42	Pass
1646	Sakshi Naik	48	Pass
1647	Kumud Singh	46	Pass
1648	Anshu Virendra chaurasiya	26	Pass
1649	Aryan Mahendra Mokashi	44	Pass
1650	Smita Gavit	36	Pass
1651	Anushka Chavan	46	Pass
1652	Aniruddh Suhas Hatkar	50	Pass
1654	Kashish kamble	46	Pass
1655	Amit udaybhan thakur	42	Pass
1656	Amit udaybhan thakur	42	Pass





**Feedback Form :**

## SYCS Sem III Bridge Course Feedback Form

Form description

Email \*

Valid email

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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



u<sup>b</sup>

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

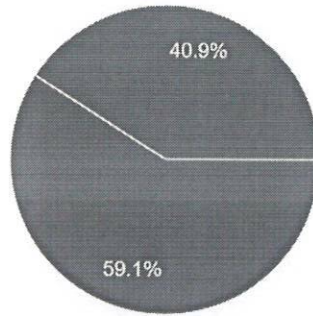


### Feedback Analysis :

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

Were the objectives of the course clear to you?

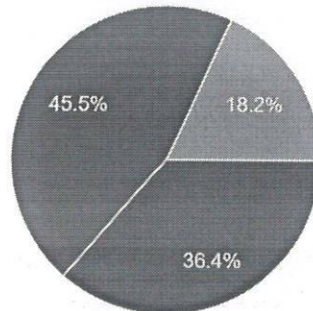
22 responses



- Very Clear
- Moderately Clear
- Not at all Clear

The lectures were clear & easy to understand.

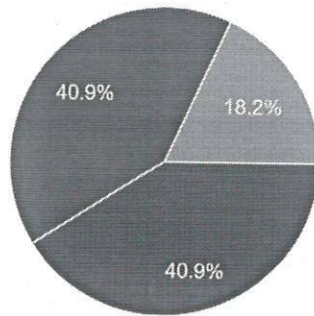
22 responses



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

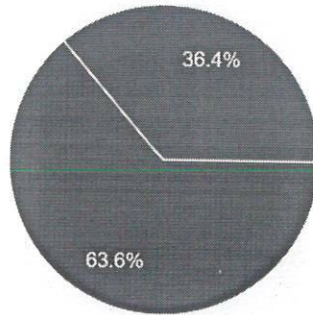


The course was organized in a manner that helped you understand the underlying concepts.  
22 responses



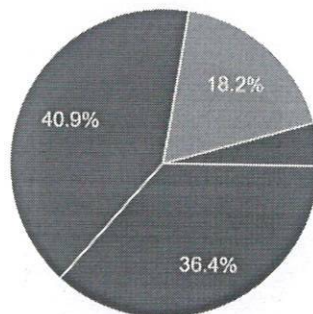
- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

How useful to you was this course?  
22 responses



- Very Useful
- Moderately useful
- Not at all useful

How much did you learn from this course?  
22 responses

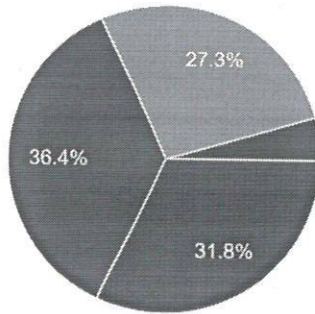


- A great deal
- A lot
- A moderate amount
- A little
- Nothing

Keena




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




- Excellent
- Very good
- Good
- Fair
- Poor


Certificate :

**Jnan Vikas Mandal's Degree College**  
Plot No.9, Sector-19, Airoli, Navi Mumbai, Maharashtra – 400708  
NAAC RE-ACCREDITED 'A' GRADE (CGPA-3.33)

## Certificate of Participation

This certificate is awarded to  
<<NAME>>  
of SYBSc(CS) who has successfully completed Bridge Course organized  
by Department of Computer Science of JVM's Degree College from  
07<sup>th</sup> Nov 2022 to 17<sup>th</sup> Nov 2022.

  
Asst. Prof. Janhavi Kshirsagar  
Co-ordinator, CS-IT

  
Dr. (Mrs.) Leena Sarkar  
Principal

*Keena*





## JNAN VIKAS MANDAL'S

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### Report on Bridge Course

The bridge course was conducted for Second Year computer science students from 07/11/2022 to 15/11/2022. 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	Basics of Core Java and Android
Dr. (Mrs.) Sanjivani Nalkar	Introduction to Software Engineering and Computer Networks
Mrs. Sarita Sarang	Fundamentals of .NET and PL/SQL
Ms. Shakuntala Kulkarni	Basics of Algorithms and Linear Algebra


The course benefitted 42 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.

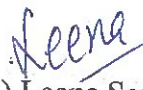
A test was conducted for all the students using Google Form. All subject teachers shared 5 questions of their respective subjects.

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  
Coordinator, CS-IT Department



  
Dr. (Mrs.) Leena Sarkar  
Principal  
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