JNAN VIKAS MANDAL'S
Amratlal Raichand Mehta Degree College of Arts
Diwali Maa Degree College of Science
Mohanlal Raichand Mehta College of Commerce
Padmashree (Dr.) R.T. Doshi Degree College of Computer Science
Plot no.9, Sector -19, Airoli Navi Mumbai

Date: 19th July 2023

NOTICE

All FYCS Students are hereby informed that the department is conducting Bridge Course from 20th June 2023 to 27th June 2023.

Mrs. Janhavi Kshirsagar

Co-ordinator CS-IT Dept

Dr. B.R. Deshpande

Vice-Principal

Dr.(Mrs.) Leena Sarkar

Principal

PRINCIPAL
JNAN VIKAS MANDAL'S
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Plot no.9, Sector -19, AiroliNavi Mumbai

Date: 17th July 2023

NOTICE

All departmental members are hereby informed that a departmental meeting is arranged on 18th July 2023 at 1:30 p.m. in CS lab.

Agenda

1. Conduction of Bridge Course for FYCS students
2. Exam Conduction of Bridge Course

Mrs. Janhavi Kshirsagar

Co-ordinator CS-IT DEPT

Dr. B.R. Deshpande

Vice Principal

Dr.(Mrs.) Leena Sarkar

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Date: 18th July 2023

Minutes of Meeting

July 18, 2023

The departmental meeting was held on July 18, 2023 at 01:30 p.m. in CS Lab.

Following matters were discussed and finalized as per agenda.

❖ **Conduction of Bridge course of FYCS students**

It was decided that the Bridge Course for FYCS should be conducted from 20th July 2023 to 27th July 2023. Total 4 subjects are included in the Bridge Course. And it was decided that it should be 30 hours separately for each class.

❖ **Exam conduction of bridge course**

After completion of lectures of bridge course on 27th July 2023, exam will be conducted for students in online mode.

It was decided to share Google Form link with students at 3:00 p.m. Students who pass the examination will be given E-Certificate.

Adjournment: Meeting was adjourned at 2:30 pm.

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Plot no.9, Sector -19, AiroliNavi Mumbai

Date: 18/07/2023

Following members were present: **Signature**

Dr. Leena Sarkar

Dr.B.R.Deshpande

Mrs. Janhavi Kshirsagar

Asst. Prof Sarita Sarang

Dr. Sanjivani Nalkar

Asst. Prof Shakuntala Kulkarni

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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
FIRST YEAR COMPUTER SCIENCE

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

Date : 20th July 2023 to 28th July 2023

Duration : 30 Hours

Mrs. Janhavi Kshirsagar
CS-IT Coordinator

Dr. B. R. Deshpande
Vice-Principal

Dr.(Mrs.) Leena Sarkar
Principal

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

SYLLABUS OF BRIDGE COURSE

Duration: - 30 hours

Objectives-

1. To understand the structure and operation of modern processors and their instruction sets.

2. To introduce various concepts of programming to the students

3. To familiarize the prospective learners with mathematical structures that are fundamentally discrete

4. To familiarize students with the basics of Statistics

Outcome-

Students will be able to

1. Understand the basics of digital electronics needed for computers.

2. Understand the concepts of programming before actually starting to write programs.

3. Understand the concepts of Permutation, Combination and Probability

4. Enable learners to know descriptive statistical concepts

Module	Contents	Number of hours
I	**Operating Systems** Overview of operating systems, functionalities and characteristics of OS. Hardware concepts related to OS, CPU states I/O channels, memory hierarchy, microprogramming	6 hours
	Assignment	1 hour
II	**Introduction of Programming Language** Introduction: Types of Programming languages, History, features and application. Simple program logic, program development cycle, flowchart symbols, desirable programs on flowcharts. Fundamentals: Structure of a program. Compilation and Execution of a Program.	6 hours
	Assignment	1 hour
III	**Basics of Digital Electronics** Computer Abstractions and Technology: Basic structure and operation of a computer, functional	6 hours

	units and their interaction. Representation of numbers and characters. Logic circuits and functions: Combinational circuits and functions:. Basic logic gates and functions, truth tables; logic circuits and functions. Synthesis of logic functions with and-or-not gates, NAND gates, nor gates. Executing arithmetic/logic, memory access and branch instructions	
	Assignment	1 hour
IV	**Discrete Mathematics** Permutation, Combination, Probability **Statistics** Introduction to Statistics, Mean, Median, Mode, Variance, Standard Deviation, Coefficient of Variance, Skewness and Kurtosis	6 hours
	Assignment	1 hour
	Test on all subjects	2 hours

Time Table :

FYCS Bridge Course Time Table 2023

Date	20-07-2023	21-07-2023	22-07-2023	24-07-2023	25-07-2023	26-07-2023	27-07-2023
8:40-9:30		OS	DMS	DE	OS	PLS	DE
9:50-10:40	PLS	DE	DE	OS	DE	OS	DMS
10:40-11:30	DMS	DMS	PLS	DMS	OS	OS	PLS
11:30-12:20	DE	PLS	DMS	PLS	DE	PLS	DMS
12:30-1:20	OS						

Programming Language Skills (PLS) - Mrs. Janhavi Kshirsagar Basics of Digital Electronics (DE) - Dr. Sanjivani Nalkar
Operating Systems (OS) - Mrs. Sarita Sarang , Discrete Mathematics and Statistics (DMS) - Ms. Shakuntala Kulkarni
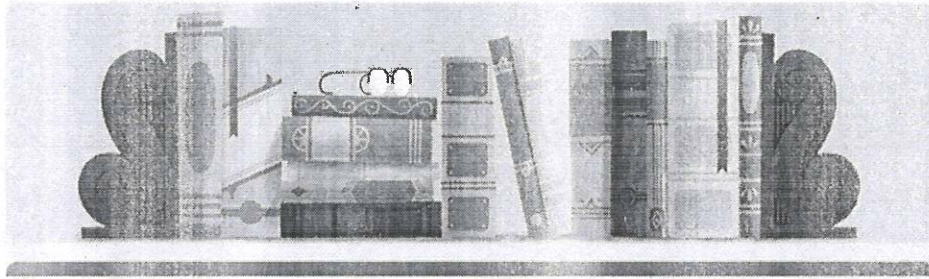
Mrs. Janhavi Kshirsagar
CS-IT Coordinator

Dr. B. R. Deshpande
Vice-Principal

Dr. Leena Sarkar
Principal

Exam Paper :

FYCS BRIDGE COURSE TEST 2023-24

STATISTICS, OPERATING SYSTEM, DIGITAL ELECTRONIC, & BASIC PROGRAMMING
CONCEPTS

jvmcsitdeptofficial@gmail.com Switch account

* Indicates required question

Email *

Your email

NAME *

Your answer

STATISTICS

Calculate the mean of the data. 1,0,1,5,6,3,4 *

○ 3.33

○ 2.85

○ 3

○ 3.5

Find the mode. 12,10,10,10,13,12,11,13,10 *

○ 10

○ 11

○ 12

○ 13

Find the median of these numbers:4,2,7,4,3 *

○ 2

○ 5

○ 7

○ 4

A data set can have more than one mode *

○ True

○ False

In a colony, there are 55 members. Every member posts a greeting card to all the members.
How many greeting cards were posted by them?

○ 990

○ 890

○ 2970

○ 1980

OPERATING SYSTEM

Description (optional)

Which of the following is true about Communication? *

◯ The OS handles routing and connection strategies, and the problems of contention and security.

◯ Two processes often require data to be transferred between them

◯ Communication may be implemented by two methods, either by Shared Memory or by Message Passing.

◯ All of the above

_____ is a way for programs to interact with the operating system. *

◯ GUI Interface

◯ System Call

◯ Protection

◯ Communication

Which is used to keep track of information, its location and status? *

◯ Memory management

◯ Device management

◯ Storage management

◯ Both a and b

_____structures of the operating system by removing all nonessential components from the kernel and implementing them as system and user-level programs.

◯ Multilithic kernel

◯ Monolithic kernel

◯ Micro kernel

◯ Mini kernel

Program responsible for keeping track of all devices is known as _____ *

◯ Job Accounting

◯ I/O Controller

◯ Process Scheduling

◯ File System

Digital Electronics

Description (optional)

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

○ 00 .

○ 01

○ 10

○ 11

A universal logic gate is one which can be used to generate any logic function. Which of the *
following is a universal logic gate?

○ OR

○ AND

○ XOR

○ NAND

Logic Gates are the building blocks of all circuits in a computer. *

○ True

○ False

A _____ gate gives the output as 1 only if all the inputs signals are 1. *

○ AND

○ OR

○ XOR

○ NOR

The gate which is called an inverter is called _____ *

○ NOR

○ NAND

○ EXOR

○ NOT

Programming Language Skills

Description (optional)

Finding and solving errors in the source code is called _____.

○ Desk checking

○ Debugging

○ Decoding

○ Testing

The step by step procedure for solving a problem is called _____ *

○ Algorithm

○ Program

○ Flowchart

○ Planning

The Communication medium used between user and the computer system is
_____

◯ English Language

◯ Syntax

◯ Hardware

◯ Programming Languages

Which of the following is a programming language? *

◯ Python

◯ Photoshop

◯ Microsoft Word

◯ Adobe Illustrator

_____ translates the program into object code as a whole in one go, *

◯ Linker

◯ Interpreter

◯ Compiler

◯ Debugger

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List of Participants

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22	Navin S. K. Mathi	mathinavin14@gmail.com
23	rushikesh kadam	rushikeshkadam0911@gmail.com

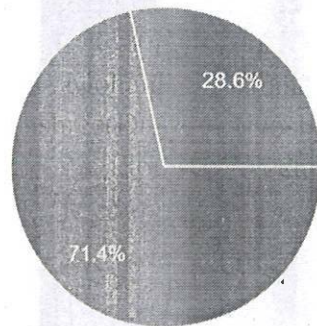| 24	roshan omprakash chauhan	chauhanroshan8097@gmail.com
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50	Krish sunil Pandhare	krishpandhare2@gmail.com
51	Shreyash	shreyashshete900@gmail.com
52	shraddha more	shraddhamore2528@gmail.com
53	Nikhil yadav	ny777608@GMAIL.COM
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55	ADITYA RAO	adityarao0711@gmail.com
56	Nakul	nakulpanchal621@gmail.com

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Feedback Form :

Were the objectives of the course clear to you? *
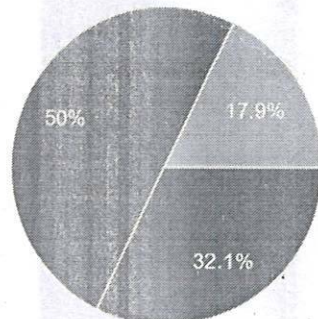
◯ Very Clear

◯ Moderately Clear

◯ Not at all Clear
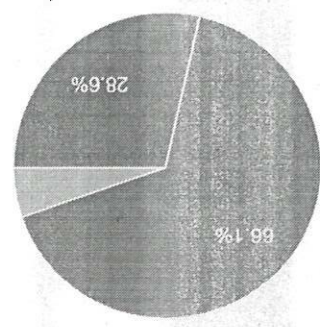
The lectures were clear & easy to understand. *

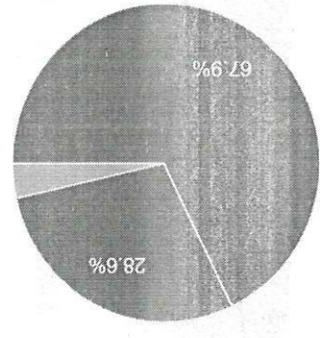◯ Strongly Agree

◯ 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

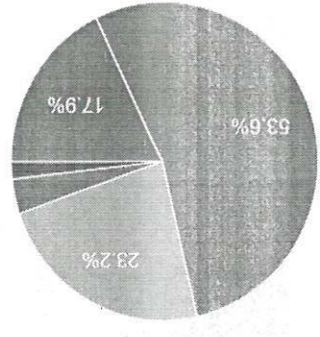How useful to you was this course? *
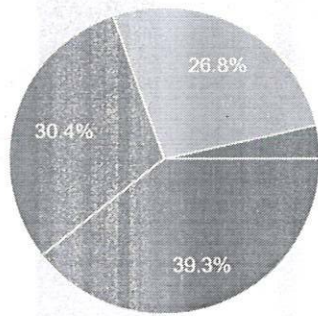
○ Very Useful

○ 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

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Feedback Analysis :

Bridge course Feedback Analysis FYCS Sem-I July 2023-24

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

- Very Clear
- Moderately Clear
- Not at all Clear

28.6%

71.4%

The lectures were clear & easy to understand.
56 responses

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

50%

17.9%

32.1%

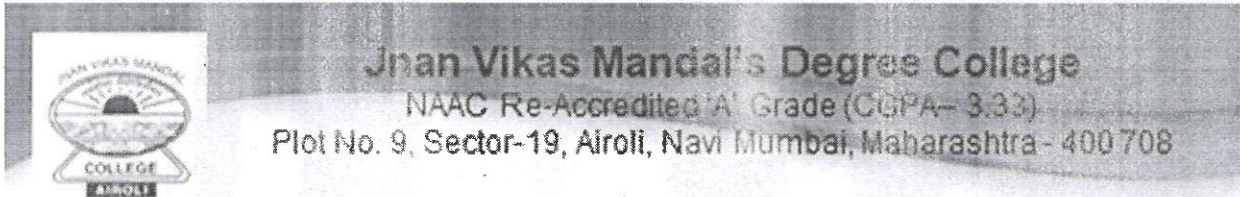Overall, how would you describe the quality of the instruction in this course?

56 responses

- Excellent
- Very good
- Good
- Fair
- Poor

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Certificate :

Jnan Vikas Mandal's Degree College
NAAC Re-Accredited 'A' Grade (CGPA– 3.33)
Plot No. 9, Sector-19, Airoli, Navi Mumbai, Maharashtra - 400 708

Certificate

This certificate is awarded to

<<NAME>>

of F.Y.B.Sc (C.S) who has successfully completed Bridge Course organized by Department of Computer Science of JVM's Degree College from 20th July 2023 to 28th July 2023

Asst. Prof. Janhavi Kshirsagar
CS-IT Coordinator and Course Convener

Dr. (Mrs.) Leena Sarkar
Principal

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Report on Bridge Course

Department of Computer Science organized Bridge Course for FYCS students from 20th July 2023 to 28th July 2023. The objective of this course was to bridge the gap between courses learned at a lower level and subjects that students will learn in the graduation. The course materials were created to provide sufficient knowledge of the subject as well as its application in the industry. The course also sought to provide students with a solid foundation. The duration of the course was 30 hours. Programming Language Skills, Digital Electronics, Operating Systems and Discrete Mathematics, Statistics were included in the course.

The course was conducted by Computer Science department faculty members.

Mrs. Janhavi Kshirsagar	Programming Language Skills
Dr. (Mrs.) Sanjivani Nalkar	Digital Electronics
Mrs. Sarita Sarang	Operating System
Ms. Shakuntala Kulkarni	Discrete Mathematics and Statistics

Total 56 students benefitted from the Bridge Course.

A test of 40 marks was conducted for all the students using Google Form by teachers on 28th July 2023. Student scoring above 40% marks was awarded with E-Certificate.

Mrs. Janhavi Kshirsagar   **Dr. B.R. Deshpande**   **Dr.(Mrs.) Leena Sarkar**

Co-ordinator CS-IT DEPT   Vice Principal   Principal

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