



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  
NAAC Re-Accredited CGPA-3.33 'A'-Grade

Date: 13/06/2023

NOTICE

All departmental members are hereby informed that the department meeting is arranged on June 13, 2023 at 11:30 a.m.

**Agenda**

1. Conduction of Bridge Course for TYCS 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  
**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-400 768





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### Minutes of Meeting

The departmental meeting was held on June 13, 2023, at 11:30 a.m.

**Following matters were discussed and finalized as per agenda.**

#### ❖ Conduction of Bridge Course for TYCS students

It was decided that the Bridge Course should be conducted from 21/06/2023 to 30/06/2023 Total 4 subjects are included in the Bridge Course. And it was decided that it should be for 30 hours.

#### ❖ Subject Distribution

It was decided that Python and Java subject will be taken by Mrs. Janhavi Kshirsagar, Network security and Node.js subject will be taken by Mrs. Sarita Sarang, SE and ST subject will be taken by Dr. Sanjivani Nalkar and Cyber Security and Cyber forensics subject will be taken by Ms. Shakuntala Kulkarni. All the teachers were asked to design a syllabus for 7 hours each and share the syllabus by 21<sup>st</sup> June 2023.

#### ❖ Exam conduction of bridge course

After completion of lectures of bridge course on June 30, 2023 exam will be conducted for students.

Asst. Prof. Sarita Sarang will conduct exams for TYCS students.

It will be conducted on google form and the exam will be conducted at 2 pm.

And finally the Marksheet will be shared to the certificate committee for distribution of certificates.



**Following members were present:**

Dr.(Mrs.) Leena Sarkar

Asst. Prof. Janhavi Kshirsagar

Asst. Prof Sarita Sarang

Asst. Prof Sanjivani Nalkar

Asst. Prof Shakuntala Kulkarni

**Signature**

*Leena*

*JK*

*SS*

*SK*



## Course Syllabus :



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### Bridge Course for TYBsc(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 gaining beyond curriculum.



Module	Contents	Number of hours
1	<p><b>Module : Module : Introduction to Python Programming and Basic Concepts of Java</b></p> <p>Module: Basics of Python Programming Introduction to Python, Data types, PythonTokens, 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.Exception Handling Arrays: Creating Arrays, Indexing and Slicing of Arrays, Basic Array Operations, Arrays Processing, Strings: Creating Strings, Functions of Strings, Working with Strings Programs based on above topics</p> <p><b>Basic Concepts of Java:</b></p> <p>Basic programs based on these topics Introduction, Class, Object, Static Keywords, Constructors, this Key Word, Inheritance, super Key Word, Polymorphism Basic programs based on these topics Interfaces , Introduction to predefined packages (java.lang, java.util, java.io, java.sql, java.swing), User Defined Packages, Access specifiers , Exception Handling. Basic programs based on these topics</p>	6 Hours
	Assignment	1 Hour



<b>II</b>	<b>Module : Node JS and Network Security</b>  <b>Node JS :</b> Node.js (N): Introduction to Node.js. Installing Node.js. The package.json File. The Node.js Event Loop. The I/O Cycle. The Anatomy of a Node.js Module. Creating Node Modules. Exploring the Node.js HTTP Module.  <b>Network Security :</b>  Introduction: Security Trends, The OSI Security Architecture, types of Security Attacks, Security Services, Security Mechanisms, Cyber Security, Types of Cyber Security	6 Hours
	Assignment	1 Hour



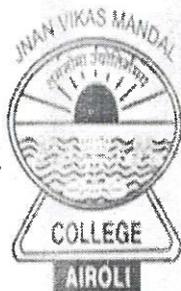
<p><b>III</b></p>	<p><b>Module : Software Testing and Software Engineering</b>  <b>Module: Software Engineering and Software Testing</b>  <b>Software Engineering:</b>  The Nature of Software, Software Engineering, The Software Process, Generic Process Model, The Waterfall Model, Incremental Process Models, Evolutionary Process Models, Concurrent Models, Component-Based Development, The Unified Process Phases, Agile Development- Agility, Agile Process, Extreme Programming,  SRS, Characteristics of SRS , Object-oriented design using the UML - Class diagram, Object diagram</p> <p><b>Software Testing</b>  Verification and Validation, Introduction to Testing, Testing Principles, Testing Objectives, Test Oracles, Levels of Testing, White-Box Testing/Structural Testing, Functional/Black-Box Testing  Test Plan, Test-Case Design</p>	<p>6 Hours</p>
	<p>Assignment</p>	<p>1 Hour</p>
<p><b>IV</b></p>	<p><b>Module : Cyber Security</b></p> <p>Security, aspects of security, need of security, basics of security, 5 elements of security, Computer security, Cyber Security Essentials and Incident Response Management, security threats, Viruses, Malware, Spyware, Steganography, cryptography, Cyber Ethics, Cyber Law and Cyber Policy</p>	



	Assignment	1 Hour
	Bridge Course Examination	2 Hours



## Time Table :



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### TYCS 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	30-06-2023
8:40-9:30	NS	SE	CS	Python	ST	CF	Node JS
9:30-10:20	SE	NS	SE	DCN	Java	ST	CF
10:20-11:10	CS	Python	NS	SE	CF	Node JS	ST
11:10-12:00	Python	CS	Python	NS	Node JS	Java	Java

Python & Java: Mrs. Janhavi Kshirsagar

NS & Node JS: Mrs. Sarita Sarang

SE & ST: Dr. Sanjivani Nalkar

CS & CF: Ms. Shakuntala Kulkarni



# Exam Paper :

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

Date : 30/06/2023

Email \*

Valid email

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

Roll No : \*

Short answer text

Name of the Student : \*

Short answer text

Communication between a computer and a keyboard involves \_\_\_\_\_ transmission. \*

- Automatic
- Half-duplex
- Full-duplex
- Simplex

Three or more devices share a link in \_\_\_\_\_ connection. \*

- Unipoint
- Multipoint
- Point to point
- Simplex



The number of layers in ISO OSI reference model is \_\_\_\_\_ \*

- 5
- 7
- 6
- 10

In OSI model, when data is sent from device A to device B, the 5th layer to receive data at B is \_\_\_\_\_ \*

- Application layer
- Transport layer
- Link layer
- Session layer

A \_\_\_\_\_ is the physical path over which a message travels. \*

- Path
- Medium
- Protocol
- Route



What are attributes of good software? \*

- Software functionality
- Software development
- Software maintainability
- Both A and C

SRS stands for \_\_\_\_\_ \*

- System requirements specification
- System respond software
- Software respond system
- Software requirements specification

Which of the following is not a desirable characteristic of SRS document ? \*

- Concise
- Ambiguous
- Traceable
- Verifiable

Testing can be applied to : \*

- Requirements
- Analysis
- Design
- Code

The process to gather the software requirements from client, analyze and document them is known as \_\_\_\_\_ \*

- Feasibility Study
- Requirement Gathering
- Requirement Engineering
- System Requirements Specification



When does Exceptions in Java arises in code sequence? \*

- Run Time
- Compilation Time
- Can Occur Any Time
- Before compilation time

Which of these keywords is used to define packages in Java? \*

- pkg
- Pkg
- package
- Package

Which of the following is the correct extension of the Python file? \*

- python
- .pl
- .py
- .p

Which keyword is used for function in Python language? \*

- Function
- def
- Fun
- Define



To add a new element to a list we use which Python command? \*

- list1.addEnd(5)
- list1.addLast(5)
- list1.append(5)
- list1.add(5)

Which of the following extension is used to save the Node.js files? \*

- .js
- .node
- .java
- .txt

What is Node.js? \*

- Node.js is a web server.
- Node.js is a JavaScript based framework/platform built on Google Chrome's JavaScript V8 Engine.
- Node.js is a java based framework.
- None of the above.

Which will not harm computer resources? \*

- Firewall
- Virus
- Trojan horse
- None of the above



Which of the following is considered an element of cyber security? \*

- Network security
- Operational security
- Application security
- All of the above

Identify the malware which does not replicate or clone through an infection? \*

- Trojan
- Worm
- Virus
- None of these

Software, such as viruses, worms and Trojan horses, that has a malicious intent is known as: \*

- spyware
- adware
- spam
- malware

Which software is mainly used to help users detect viruses and avoid them? \*

- Adware
- Antivirus
- Malware
- Antiware



Malware stands for? \*

- malicious software
- multipurpose software
- multifunctioning software
- None of these

Which of the following is considered as the unsolicited commercial email? \*

- Virus
- Malware
- Spam
- All the above

In which of the following, a person is constantly followed/chased by another person or group of several peoples? \*

- Phishing
- Stalking
- Bulling
- Identity theft





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### List of Participants

Roll No :	Name of the Student :	Score
1723	Ketna Mhatre	48 / 50
1732	Jaswant Patel	48 / 50
1701	Kumud Singh	48 / 50
1745	Sujal lodha	48 / 50
	Vinita mandal	48 / 50
1710	Smita Gavit	48 / 50
1740	Khushboo Singh	48 / 50
1705	Anushka Chavan	48 / 50
1725	Aryan Mahendra Mokashi	44 / 50
1707	Pranil dhamal	44 / 50
1724	Mhetre Ganesh Vishwanath	50 / 50
	Sapna Kapil Kewat	46 / 50
1714	Sahil Gupta	46 / 50
1714	Sahil Gupta	44 / 50
1746	Suraj Ugrasen Jaiswar	42 / 50
1741	Amit udaybhan thakur	46 / 50
1729	Shivani Pandey	48 / 50
1734	Ankit Rai	48 / 50
1709	RAVISHANKAR GAUTAM	48 / 50
1716	Aniruddh Suhas hatkar	48 / 50
1726	Sakshi Naik	50 / 50
1717	Pranay Shankar Jadhav	50 / 50
1717	Pranay Shankar Jadhav	50 / 50
1713	Rahul Gupta	44 / 50
1702	Amisha Achari	44 / 50
1715	Vinit Gupta	42 / 50



# Feedback Form :



Inan Vikas Mandal's Degree College  
NAAC Reaccredited 'A' Grade (CGPA-3.33)  
Plot No. 9, Sector 19, Airoli, Navi Mumbai, Maharashtra—400 708

## 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

CLASS \*

SYCS

TYCS

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? \*

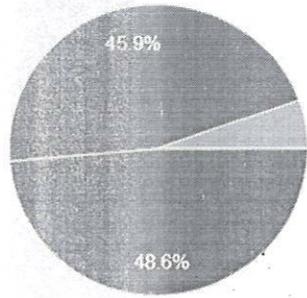
Long answer text



# Feedback Analysis :

Were the objectives of the course clear to you?

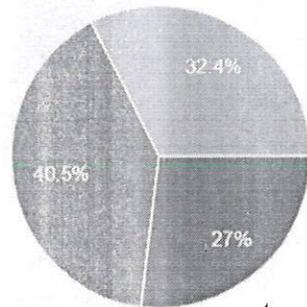
37 responses



- Very Clear
- Moderately Clear
- Not at all Clear

The lectures were clear & easy to understand.

37 responses

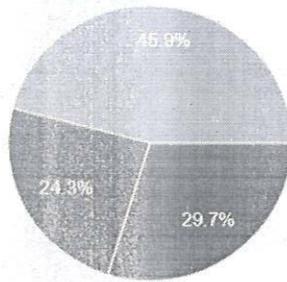


- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree



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

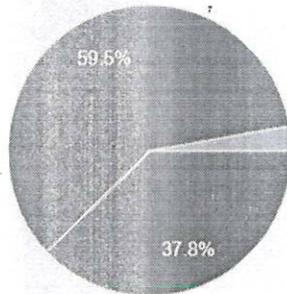
37 responses



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

How useful to you was this course?

37 responses

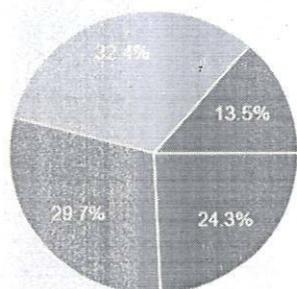


- Very Useful
- Moderately useful
- Not at all useful



How much did you learn from this course?

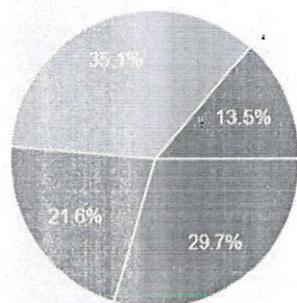
37 responses



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

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

37 responses



- Excellent
- Very good
- Good
- Fair
- Poor



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**

**Third Year Computer Science**

Date : 21th June 2023 To 30th June 2023

Duration : 30 Hours

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

Mrs. Janhavi Kshirsagar  
CS-IT Coordinator and Course Convener

Dr. B.R. Deshpande  
Vice Principal

Dr. (Mrs.) Leena Sarkar  
Principal and Chairperson



# Certificate :



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## Certificate

This certificate is awarded to

<<NAME>>

of <<CLASS>> who has successfully completed Bridge Course organized by Department of Computer Science of JVM's Degree College from 21<sup>st</sup> June 2023 to 30<sup>th</sup> June 2023.

Asst. Prof. Janhavi Kshirsagar

CS-IT Coordinator

Dr.B.R.Deshpande

Vice Principal

Dr. (Mrs.) Leena Sarkar

Principal

**PRINCIPAL**

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### Report on Bridge Course

The bridge course was conducted for Third Year computer science students from 21/06/2023 to 30/06/2023. The duration of the course was 30 hours. Total 8 subjects were included in the course. The course was conducted by Computer Science department faculty members.

Mrs. Janhavi Kshirsagar	Java and Python
Dr. (Mrs.) Sanjivani Nalkar	Software Engineering, Software Testing
Mrs. Sarita Sarang	Network Security, Node.Js
Ms. Shakuntala Kulkarni	Cyber Security, Cyber Forensics

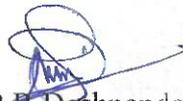
The course benefitted 26 students. Remaining students were absent due to Late admission and some medical reason. The intention of this course was to bridge the gap between subjects studied at undergraduate level and their applications. The course contents were designed to give enough knowledge of the subject as well as its application in the industry. The course also aimed at laying a strong foundation for the students to become successful in their careers.

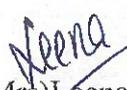
A test was conducted for all the students using Google Form. All subject teachers shared 5 questions of their respective subjects.

Due to network issues some students had not submitted papers, 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.

  
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Coordinator CS-IT DEPT

  
Dr. B.K. Deshpande  
Vice Principal

  
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Principal  
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