

TYCS - Bridge Course
sem. V

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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: 11/06/2022

NOTICE

All departmental members are hereby informed that the department meeting is arranged on June 11, 2021 at 10:30 a.m.

Agenda

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

Asst. Prof. Janhavi Kshirsagar
Coordinator CS-IT DEPT



Dr. (Mrs) Leena Sarkar

Principal
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D.M. COLLEGE OF SCIENCE
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Minutes of Meeting

The departmental meeting was held on June 11, 2022, at 10:30 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 13/06/2022 to 18/06/2022 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 Java subject will be taken by Mrs. Janhavi Kshirsagar, .Net and Web subject will be taken by Mrs. Sarita Sarang, SE and ST subject will be taken by Dr. Sanjivani Nalkar and DCN and Linux subject will be taken by Ms. Shakuntala Kulkarni and Android subject is taken by Mrs. Sarita Sarang and Dr. Sanjivani Nalkar. All the teachers were asked to design a syllabus for 7 hours each and share the syllabus by 13th June 2022.

❖ Exam conduction of bridge course

After completion of lectures of bridge course on Friday June 18th, 2022 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





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Course Syllabus

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 the upcoming future.
- 3) Understand the essence of knowledge gained beyond the curriculum.

Module	Contents	No of hours
I	Module: Java Programming Introduction to Java, History, Features of Java, Java programming format, Java Tokens, Java Statements, Java Data Types. Basic programs based on these topics Introduction, Class, Object, Static Keywords, Constructors, this Keyword, Inheritance, super Keyword, Polymorphism	6 hours



	<p>Basic programs based on these topics</p> <p>Interfaces , Introduction to predefined packages (java.lang, java.util, java.io, java.sql, java.swing), User Defined Packages, Access specifiers , Exception Handling.</p> <p>Basic programs based on these topics</p> <p>Swing: Need for swing components, Introduction to Swing components: JLabel, JTextField and JPasswordField, JTextAres, JButton, JCheckBox, JRadioButton, JComboBox and JList</p> <p>JDBC: Introduction, JDBC Architecture,</p> <p>Servlets: Introduction, Web application Architecture, Http Protocol & Http Methods, Web Server & Web Container</p> <p>JSP: Introduction</p>	
	Case study/Assignment and test	1 hour
II	<p>Module: Software Engineering and Software Testing</p> <p>Software Engineering:</p> <p>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,</p> <p>SRS, Characteristics of SRS , Object-oriented design using the UML - Class diagram, Object diagram</p> <p>Software Testing</p> <p>Verification and Validation, Introduction to Testing, Testing Principles, Testing Objectives, Test Oracles, Levels of Testing, White-Box Testing/Structural Testing, Functional/Black-Box Testing</p> <p>Test Plan, Test-Case Design</p>	6 hours



	Case study/Assignment and test	1 hour
III	<p>Module: .NET and Web Programming</p> <p>Overview of .NET Framework, Objectives, Main components of .NET Framework and their overview, Types of Applications .NET Framework Architecture—CLR, Features, Managed Execution Process, CTS, CLS Assemblies (Assembly overview, Benefits, Contents, Types), Basics of C#.NET, Data Types and Variables, Statements, Methods: Functions and Subroutines</p> <p>Introduction of HTML, HTML Tags - Formatting text by using tags, using lists and backgrounds, Creating hyperlinks and anchors, tables</p>	6 hours
	Case study/Assignment and test	1 hour
IV	<p>Module: Android</p> <p>Introduction to Android: History, Basics of Android UI, Android Versions, Open Handset Alliance, Native Android Applications, Comparison with other Operating System. Android Software Stack: Linux Kernel, Libraries, Android Runtime, Application Framework, Application Layer.</p> <p>Android Architecture Android SDK features, Android Debug Bridge, Gradle.</p> <p>Android App Software Components: Activity, Service, Content Provider, Broadcast Receiver, Intent. Android Permissions and Limitations</p> <p>Activities and Lifecycle, Fragments and Intents - Working with Activities—creating activity, starting</p>	6 hours




	<p>activity, managing life cycle of activity, applying themes and styles, displaying dialog in activity; Using Intents-exploring intent objects, filters passing data using objects in intents; Fragments, Intent Object to Invoke Built- in Application, Basic Views: TextView, Button, ImageButton, EditText, CheckBox, ToggleButton, RadioButton,</p>	
	Case study/Assignment and test	1 hour
V	<p>Module: Data Communication and Network Network Basics, Nodes, Links, Layers, Layered Tasks, OSI Model, Layers of OSI Model, TCP/IP Network Model, Packet encapsulation, Packet Forwarding, Routing, Data Communication, Components of Data Communication System, Data flow, Networks, Network criteria, Physical structures, Topology: Star, Bus, Mesh, Hybrid, Ring, LAN, MAN, WAN, Internet, Protocols LAN Topologies: Bus, Star, Ring, Switched, daisy chains, hierarchies. WAN Topologies: Peer-to-Peer WAN, Ring WANs, Star WAN, Full-Mesh WAN, Partial Mesh, Two-tiered, Three tiered, Hybrids</p>	6 hours
	Case study/Assignment and test	1 hour



Keena
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 NAVI MUMBAI-400 708

Exam Paper :

Bridge Course Examination (T.Y.B.Sc(C.S)) June - 2022	
sarita.sarang@jnanvikasmandal.com Switch account 	
* Required	
Email *	
Your email	_____
Roll No : *	
Your answer	_____
Name of the Student : *	
Your answer	_____
Communication between a computer and a keyboard involves _____ transmission.	* 2 points
<input type="radio"/> Automatic <input type="radio"/> Half-duplex <input type="radio"/> Full-duplex <input type="radio"/> Simplex	
Three or more devices share a link in _____ connection. *	2 points
<input type="radio"/> Unipoint <input type="radio"/> Multipoint <input type="radio"/> Point to point <input type="radio"/> Simplex	
The number of layers in ISO OSI reference model is _____ *	2 points
<input type="radio"/> 5 <input type="radio"/> 7 <input type="radio"/> 6 <input type="radio"/> 10	



In OSI model, when data is sent from device A to device B, the 5th layer to receive data at B is _____ * 2 points

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

A _____ is the physical path over which a message travels. * 2 points

- Path
- Medium
- Protocol
- Route

What are attributes of good software ? * 2 points

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

SRS stands for _____ * 2 points

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

Which of the following is not a desirable characteristic of SRS document ? * 2 points

- Concise
- Ambiguous
- Traceable
- Verifiable

Testing can be applied to : * 2 points

- Requirements
- Analysis
- Design
- Code



The process to gather the software requirements from client, analyze and document them is known as _____ * 2 points

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

Who invented World Wide Web (WWW)? * 2 points

- Blaise Pascal
- Charles Babbage
- Herman Hollerith
- Tim Berners-Lee

.NET framework supports unique feature of _____ * 2 points

- Garbage collection
- Development Process
- Language Interoperability
- Assemblies



What is CLR? *

2 points

- Common Language Runtime
- Compiler language runtime
- Compiler library runtime
- Common library runtime

Code that targets the Common Language Runtime is known as *

2 points

- Unmanaged
- Distributed
- Managed
- Native

Which tag is used to display Preformatted texts? *

2 points

- <pre> ... </pre>
- <prefor> ... </prefor>
- <pre text> ... </pre text>
- <pre format> ... </pre format>



Constructors are used to _____ the object. *

2 points

- Develop
- Initialize
- Delete
- Process

When does Exceptions in Java arises in code sequence? *

2 points

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

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

2 points

- pkg
- Pkg
- package
- Package



DELETE statement of an SQL is executed by *

2 points

- execute()
- executeQuery()
- executeDelete()
- executeUpdate()

_____ is responsible for managing execution of servlet *

2 points

- ServletContext
- Web Container
- JVM
- Server

Submit

Clear form



Seena

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List of Participants

Roll No :	Name of the Student :
1717	Niranjan Rane
27	Rohit yadav
1729	Vasanth
1719	Bhakti nakhwa
1710	atharv khandge
1701	Rupinder Singh bal
1704	Nilesh
1728	Vijay Gaud
1706	Mansi Das
1714	Mugale Megha Anand
1726	Suraj yadav
...	Soham surge
1709	Suvarna Suresh Kapase
1615	Nipur Pathak
1722	SHRUTI SUNIL SHIRKE
1705	Yuvraj chavan
1723	Gaurav Santkumar Singh
1721	Harshal shinde
1702	Vaishnavi bhosale
1711	Sujit khot
1704	Manoj Laxman Birajdar
1707	Dhanawade Sanket
1712	Nirmiti Narendra Mestri
1724	Vedant
1719	Ganesh sethi
1716	Vignesh Puri

Keena

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Feedback Form :



Jnan 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

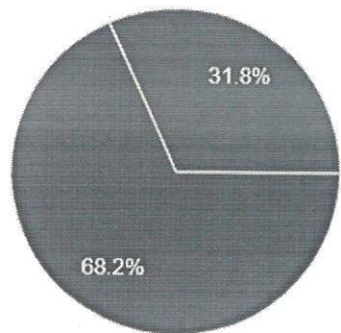


Neena
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Feedback Analysis :

Were the objectives of the course clear to you?

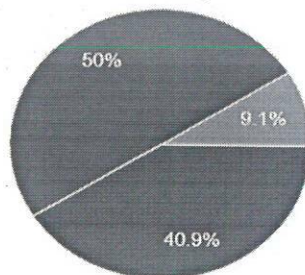
22 responses



- Very Clear
- Moderately Clear
- Not at all Clear

The lectures were clear & easy to understand.

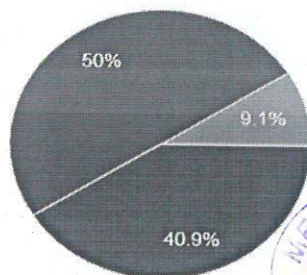
22 responses



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

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

22 responses

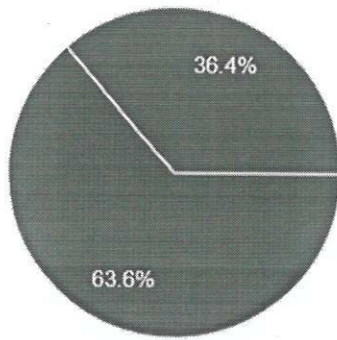


- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree



How useful to you was this course?

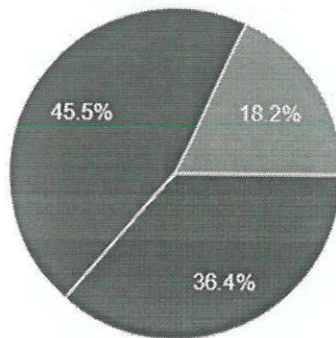
22 responses



- Very Useful
- Moderately useful
- Not at all useful

How much did you learn from this course?

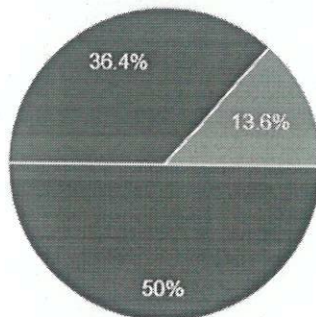
22 responses



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

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

22 responses




- Excellent
- Very good
- Good
- Fair
- Poor



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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
Third Year Computer Science**

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

**Mrs. Janhavi Kshirsagar
CS-IT Coordinator**

**Date : 13th June to 18th June 2022
Duration: 30 hours**

**Dr. Mrs. Leena Sarkar
Principal**



Leena

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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 <<CLASS>> who has successfully completed Bridge Course organized by Department of Computer Science of JVM's Degree College from 13th June 2022 to 18th June 2022.

Asst. Prof. Janhavi Kshirsagar
CS-IT Coordinator

Dr. (Mrs.) Leena Sarkar
Principal



Leena

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Report on Bridge Course

The bridge course was conducted for Third Year computer science students from 13/06/2022 to 18/06/2022. 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
Dr. (Mrs.) Sanjivani Nalkar	SE, ST, Android
Mrs. Sarita Sarang	DOT NET, WEB, Android
Ms. Shakuntala Kulkarni	DCN, LINUX


The course benefitted 26 students.

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.


Asst. Prof. Janhavi Kshirsagar
Coordinator CS-IT DEPT




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