

**(P.G. DEPARTMENT OF COMPUTER SCIENCE)**

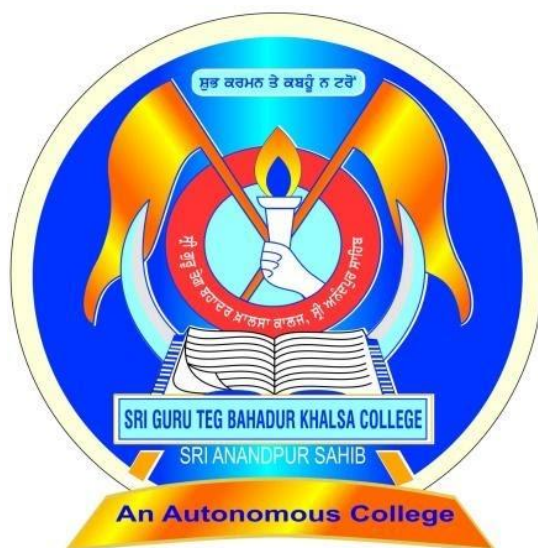
**OUTLINES OF TESTS,  
SYLLABI AND COURSES OF READING**

**FOR**

**BACHELOR OF VOCATION SOFTWARE DEVELOPMENT  
(SEMESTER SYSTEM)**

**THIRD YEAR (Semester V & VI)  
(2021-22, 2022-23 & 2023-24 Sessions)**

**FACULTY OF COMPUTING SCIENCES**



**SRI GURU TEG BAHADUR KHALSA COLLEGE**

**Sri Anandpur Sahib**

**An Autonomous College**

**Affiliated to Punjabi University, Patiala**

**APPROVED**

Board of Studies Meeting held on 19<sup>th</sup> June 2021

**PROGRAMME OF STUDY  
BACHELOR OF VOCATION SOFTWARE DEVELOPMENT  
PART III (SEMESTER V)**

**Sessions: 2021-2022, 2022-23 & 2023-24**

<b>Code</b>	<b>Title of Paper</b>	<b>Credits</b>	<b>University Examination</b>	<b>Internal Assessment</b>	<b>Max. Marks</b>	<b>Exam. Duration Hours</b>
<b>BVSD-311</b>	Programming using Python	4	70	30	100	3
<b>BVSD-312</b>	Web Development using ASP.NET	4	70	30	100	3
<b>BVSD-313</b>	Software Engineering & Testing	4	70	30	100	3
<b>BVSD-314</b>	Presentation Skills & Personality Development	4	70	30	100	3
<b>BVSD-315</b>	Software Lab-VIII (Based on BVSD-311)	4	70	30	100	3
<b>BVSD-316</b>	Software Lab-IX (Based on BVSD-312)	4	70	30	100	3
<b>BVSD-317</b>	Workshop on Corel Draw	4		50	50	--
<b>BVSD-318</b>	Workshop (Based on BVSD-314)	2		50	50	--
<b>Total</b>		<b>30</b>	<b>420</b>	<b>280</b>	<b>700</b>	

**1. The breakup of marks for the practical will be as under:**

- i. Internal Assessment 30 Marks
- ii. Viva Voce (External Evaluation) 40 Marks
- iii. Practical Performance & write up (External Evaluation) 30 Marks

**2. The breakup of marks for the internal assessment for theory Subjects will be as under:**

<b>Mid semester test – I</b>	10 Marks
<b>Mid semester test – II</b>	10 Marks
<b>Attendance</b>	5 Marks
<b>Assignment</b>	5 Marks

B. Voc. Programme has been designed as per National Skill Qualification Framework (NSQF) emphasizing on skill based education.

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### **BVSD-311 Programming using Python**

**Maximum Marks: 100**

**External Examination: 70 Marks**

**Internal Assessment: 30 Marks**

**Credits: 4 (4L)**

**Time Allowed: 3 Hours**

**Pass Percentage: 35%**

**Teaching Hours per week: 4**

#### **A) Instruction For The Paper Setter**

The question paper will consist of three sections A, B and C. Section A and B will have four questions from the respective section of the syllabus carrying 10.5 marks for each question. Section C will consist of 5-10 short answer type questions carrying a total of 28 marks, which will cover the entire syllabus uniformly. Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

#### **B) Instructions For The Candidates**

Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

**Course Objectives:** The main objectives of this course are:

- i. To learn and understand Python programming basics and paradigm.
- ii. To learn and understand Python looping, control statements and string manipulations.
- iii. To write simple Python programs for solving problems.
- iv. Decompose a Python program into functions, lists etc.

#### **Section A**

**Basics of Python:** History, Features, Strength and Weakness, Different Versions, Working with Python, Basic Syntax, indentation; keywords, identifiers, assignment statements, expressions, Variable and Data Types, Data Types Conversion, Printing on screen, Reading data from keyboard.

**Operators:** Arithmetic, Comparison, Assignment, Bitwise, Logical, Membership, Identity, Operators Precedence,

**Conditional Statements:** if, if- else, Nested if-else.

**Looping:** for, while, Nested loops, break and continue statements.

**Lists:** Introduction, Accessing list, Operations, Working with lists, Function and Methods.

**Tuple:** Introduction, Accessing tuples, Operations, Working Functions and Methods.

**Dictionaries:** Introduction, Accessing values in dictionaries, Working with dictionaries, Properties.

**Python Functions:** Function introduction, Types of functions, Functions with parameters, Keywords and optional parameters, Scope of variables (Global and Local), Anonymous function – Lambda, In-build function, List Comprehension.

#### **Section B**

**String Manipulation:** Accessing Strings, len, min, max functions, indexing, slicing, concatenation, in / not in operator, comparing strings. Substring search and split functions.

**Formatting:** the format() method, arguments- format field names. Formatting numbers and strings: rounding, precision, scientific notation, percentage, width and justify.

**Python Modules:** Modules, Standard Modules (Math, Sys module), Import Statement, from statement, Dir() functions.

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**OOPs concepts in Python-** Class and object, Encapsulation, Data Abstraction, Inheritance, Polymorphism; Creating and accessing objects attributes and methods, Python Constructors, Python Inheritance- multiple and multilevel, overriding and overloading.

**Course Learning Outcomes:** At the end of this course, students will be able:

- i. Define and demonstrate the use of built-in data structures lists, tuples and dictionary.
- ii. Design and implement a program to solve a real world problem.
- iii. To learn how to build and package Python modules for reusability.
- iv. To learn how to design object-oriented programs with Python classes.

**Text Books:**

1. Paul Gries, Jennifer Campbell, Jason Montojo, Practical Programming- An Introduction to Computer Science Using Python 3.6, Shroff Publications and Distributors.

**Reference Books:**

1. John V Guttag, Introduction to Computation and Programming Using Python“, Revised and expanded Edition, MIT Press.
2. Robert Sedgewick, Kevin Wayne, Robert Dondero, —Introduction to Programming in Python: An Inter-disciplinary Approach, Pearson India Education Services Pvt. Ltd.
3. Timothy A. Budd, Exploring Python, Mc-Graw Hill Education (India) Private Ltd.
4. Paul Gries, Jennifer Campbell and Jason Montojo, Practical Programming: An Introduction to Computer Science using Python 3, Second edition, Pragmatic Programmers, LLC.
5. Rossum, Introduction To Python ,Shroff Publications and Distributors
6. Downey,Think Python 2/ED, Shroff Publications and Distributors
7. Lutz, Learning Python, 5/ED, Shroff Publications and Distributors
8. Campbell ,Practical Programming: An Introduction to Computer Science Using Python, Shroff Publications and Distributors.

## BVSD-312 Web Development using ASP.NET

**Maximum Marks: 100**

**External Examination: 70 Marks**

**Internal Assessment: 30 Marks**

**Credits: 4 (4L)**

**Time Allowed: 3 Hours**

**Pass Percentage: 35%**

**Teaching Hours per week: 4**

### A) Instruction For The Paper Setter

The question paper will consist of three sections A, B and C. Section A and B will have four questions from the respective section of the syllabus carrying 10.5 marks for each question. Section C will consist of 5-10 short answer type questions carrying a total of 28 marks, which will cover the entire syllabus uniformly. Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

### B) Instructions For The Candidates

Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

**Course Objectives:** The primary objectives of this course are:

- i. To give an introduction to the .net framework.
- ii. Explain how to create dynamic Web pages by using ASP.NET.
- iii. Create a user interface on an ASP.NET page by using standard Web server controls.
- iv. Create a user control and a custom server control and add them to an ASP.NET page.
- v. Able to create your own Website, enhanced by using Master pages and Themes.
- vi. Display dynamic data from a data source by using ADO.Net and data binding.

### Section-A

**Introduction to .net framework:** - Genesis of .NET, Features, Advantages and disadvantages of .net framework. Common Language Runtime:-Common Type System, Common Language Specification, .Net binaries, Microsoft Intermediate Language, Meta Data, .Net types and .net namespaces.

**Basics of ASP. NET:** - Introducing ASP .NET– Creating ASP .NET applications using command line compiler and visual studio .net IDE.

**Introduction to C#:-** variables, Constants, Data Types, Operators, Control Structures and loops, Arrays, events.

**Introduction to Classes and objects.**

**Web forms, Standard Controls:** - Display information, Accepting user input, Submitting form data, displaying images, using the panel control, using the hyperlink control.

**Validation Controls:** required field validation control, range validator Control, compare validator control, regular expression validator control, custom validator control, validation summary controls.

### Section-B

**Rich Web Controls:** -Accepting file uploads, displaying a calendar, Displaying advertisement, displaying different page views, displaying a wizard. List Controls: Dropdown list control, Radio button, list controls. Grid View Controls: Grid view control fundamentals, using field with the grid view control, working with grid view control events extending the grid view control. Debugging, caching and deploying ASP .NET pages.

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**Master Pages:** - Designing Website with Master Pages: Creating master pages, Modifying master page content, Loading master page dynamically. ASP.NET security, localizing ASP.NET applications.

**ADO.NET:-** Changes from ADO to ADO.NET, ADO .NET Managed Providers – OleDb and SQL Managed Providers – OleDb Data Adapter Type. SQL Data Source Control: Creating database connections, executing database commands, Using ASP.NET parameters with the SQL data source controls, programmatically executing SQL data source commands, Caching database data with the SQL data Source controls.

**Course Learning Outcomes:** At the end of this course, students will be able to:

- i. Understand the Microsoft .NET Framework and ASP.NET page structure
- ii. Design web application with variety of controls
- iii. Access the data using inbuilt data access tools
- iv. Use Microsoft ADO.NET to access data in web Application
- v. Configure and deploy Web Application
- vi. Develop secured web application

**References:**

1. ASP.NET 3.5: Stephen Walther, Pearson Education, 2005
2. Andrew Troelsen – “C# and the .Net Platform” – Apress – 2001.(Unit I and II)
3. David S. Platt – “Introducing .Net” – Microsoft Press – 2002
4. ASP.NET Bible” – MridulaParihar – Wiley-Dreamtech India Pvt. Ltd
5. Visual Basic .net Comprehensive Concepts and Techniques’ Shelly, cashman, QuasneyCengage learning, 2012
6. Murach's Beginning Visual Basic .NET Anne Prince Murach

## **BVSD-313 Software Engineering and Testing**

**Maximum Marks: 100**

**External Examination: 70 Marks**

**Internal Assessment: 30 Marks**

**Credits: 4 (4L)**

**Time Allowed: 3 Hours**

**Pass Percentage: 35%**

**Teaching Hours per week: 4**

### **A) Instruction For The Paper Setter**

The question paper will consist of three sections A, B and C. Section A and B will have four questions from the respective section of the syllabus carrying 10.5 marks for each question. Section C will consist of 5-10 short answer type questions carrying a total of 28 marks, which will cover the entire syllabus uniformly. Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

### **B) Instructions For The Candidates**

Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

**Course Objectives:** The main objectives of this course are:

- i. To introduce the students with basic principles of Software Engineering.
- ii. To learn the Software Engineering concepts, methodologies and best practices.
- iii. To understand the different phases in Software Engineering Process such as SRS, Software Design and Software Coding.
- iv. To discuss various software testing issues and solutions in software unit test, integration and system testing.
- v. To expose the advanced software testing topics, such as object-oriented software testing methods.

### **Section-A**

**Introduction:** The Software Problem and the Software Engineering Approach.

**Software Process:** Introduction, Characteristics of Software Process, **Software Development Process**

**Models:** Waterfall, Prototyping, Iterative & Spiral. Project management process, Software configuration management process.

**Software Requirements Analysis:** Software Requirement Specifications, Need of SRS, Steps for constructing good SRS, Characteristics and Components of SRS, Validation, Metrics.

**Software Design:** Design Concepts & Principle, problem partitioning, abstraction, and top down and bottom up-design, Cohesion & Coupling, How to measure degree of Cohesion and Coupling, Function Oriented Design, DFDs, Structure Chart, Object Oriented Design.

**Software Coding:** Programming Principles and Guidelines, Top-Down and Bottom-Up programming, Structured programming, Programming style, Do's and Don'ts for Coding.

### **Section-B**

**Fundamentals of Software Testing:** Basic concepts of testing, Human and errors, Testing and Debugging, Objectives of Testing, General Principles of Testing, Roles of Tester, Software Quality Assurance (SQA).

**Testing Techniques:** Structural versus Functional Technique Categories, Verification versus Validation, Static versus Dynamic Testing, Examples of Specific Testing Techniques, Equivalence Partitioning,

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Boundary value analysis, cause-effect graphing technique, Control flow and Data flow based testing, mutation testing, Levels of testing.

**Testing Process:** Understand the Characteristics of the Software Being Developed, Purpose and components of Test plan, Build and Write the Test Plan, Basics of manual testing, Designing and Execution of test cases, Bug Life Cycle, Bug reporting and Agile Methodology.

**Software Maintenance & Reliability.**

**Course Learning Outcomes:** At the end of this course, students will be able to:

- i. Learn different software testing techniques and strategies and be able to apply specific (automated) unit testing method to the projects.
- ii. Distinguish characteristics of structural testing methods.
- iii. Demonstrate the integration testing which aims to uncover interaction and compatibility problems as early as possible.
- iv. Demonstrate testing process such as writing and executing test plans.

**References:**

1. An Integrated approach to Software Engineering, Third Edition 2005 ,Pankaj Jalote, Narosa Publications.
2. Software Engineering, Revised Second Edition, K.K. Aggarwal, Yogesh Singh, New Age International Publishers.
3. Software Engineering – A Practitioner’s Approach, Fifth Edition, Roger. S. Pressman, McGraw Hill.
4. Software Testing Foundations, Andreas Spillner, Tilo Linz, Hans Schaefer, Shoff Publishers and Distributors.
5. Software Testing: Principles and Practices by Srinivasan D and Gopalswamy R, PearsonEd, 2006.



**Session 2021-22, 2022-23 & 2023-24**

**B.VSD-314: Presentation Skills and Personality Development**

**Maximum Marks: 100**

**External Examination: 70**

**Internal Assessment: 30**

**Credits: 4**

**Time Allowed: 3 Hours**

**Pass Percentage: 35**

**Teaching Hours: 60**

**Course Objective:** To help students to identify personality types and traits, to evaluate interpersonal skills and to learn the importance of stress and time management.

**Instruction for the Paper Setter:**

1. The question paper will carry 70 marks and will be of three hours duration.
2. The paper will consist of three sections- A, B and C.
3. Section A and B will have four questions from Unit I and carry 10 marks each with internal choice.
4. Section C will consist of 10 short answer type questions from the entire syllabus and will carry 30 marks in all.

**Instruction for the candidates:**

Candidates are required to attempt all questions from section A, B and C.

**Pedagogy:** Lecture methodology and technology aids will be used to teach this course. To evoke the interest of the students in the curriculum due emphasis will be laid on assignments, homework and periodic tests.

**Course Content:**

**Unit I**

**1. Personality Development:** Meaning and Definition of Personality, Personality types, Personality traits.

**2. Interpersonal Skills:** Communication, Presentation Skills, Body Language, Emotional Intelligence Skills, Group Discussion

**Unit II**

**1. Stress Management:** Introduction to stress causes of stress, impact of stress, managing stress.

**Conflict Management:** Introduction to conflict, causes of conflict, managing conflict.

**2. Time Management:** Time as a resource, identify important time management wasters, techniques for better time management.

**Testing:**

**Section A**

**I.** One long answer type question with internal choice to be set from part 1 of Unit I. (10 marks)

**II.** One long answer type question with internal choice to be set from part 2 of Unit I. (10 marks)

**Section B**

**III.** One long answer type question with internal choice to be set from part 1 of Unit II. (10 marks)

**IV.** One long answer type question with internal choice to be set from part 2 of Unit II. (10 marks)

**Section C**

**V.** Ten short questions to be attempted out of the given thirteen from the entire syllabus.

(3X10=30 marks)

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**Course learning outcome:**

The students will be able to distinguish between different types of personalities and learn the techniques to combat with stress, conflict and anger.

**Reference Books:**

Lall & Sharma- *Personal Growth training & Development.*

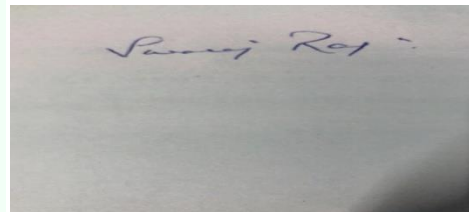
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**BVSD -315 Software Lab–VIII**  
**(Based on BVSD-311: Programming using Python)**

**Time allowed: 3 hours**  
**Number of Lectures: 60**  
**Pass Marks: 35%**  
**Credits: 4 (4P)**

**Max Marks: 100**  
**External Marks: 70 marks**  
**Internal Assessment: 30 marks**

This laboratory course will comprise as exercises to supplement what is learnt under paper BVSD-311: Programming using Python.

**Students are required to practices the following practical with internal documentation:**

1. Write a program to perform arithmetic operations.
2. Write a program to display various types and their values.
3. Write a program to display string operations.
4. Write a program to find area of rectangle.
5. Write a program to find cube.
6. Write a program to compare two numbers is greater, smaller and equal.
7. Write a program to find greater of three numbers.
8. Write a program to find grade of a student.
9. Write a program to implement for loop.
10. Write a program print the even numbers upto a given range.
11. Write a program to find sum of first n numbers.
12. Write a program to find factorial of first numbers.
13. Write a program to display the pyramid.
14. Write a program to display matrix addition.
15. Write a program to display matrix multiplication.
16. Write a program to create a list of 10 numbers and multiply each element by 2 and display the list.
17. Write a program to create dictionary and display it.
18. Write a program to add, delete and iterating the dictionary.
19. Write a program to find the cube of number using function.
20. Write a program to find area of rectangle using function.
21. Write a program to make a class.
22. Write a program to show the concept of overriding.

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**BVSD -316 Software Lab–IX**  
**(Based on BVSD-312: Web Development using ASP.NET)**

**Time allowed: 3 hours**  
**Number of Lectures: 60**  
**Pass Marks: 35%**  
**Credits: 4 (4P)**

**Max Marks: 100**  
**External Marks: 70 marks**  
**Internal Assessment: 30 marks**

This laboratory course will comprise as exercises to supplement what is learnt under paper BVSD-312: Web Designing using ASP.NET.

**Students are required to practice the following practical with internal documentation:**

1. Write a program to show the use of standard controls in a web form.
2. Write a program containing the list controls and its functions.
3. Write a program to show the use of file upload and calendar control.
4. Write a program to display advertisement on a web page.
5. Write a program to create an admission form for a college.
6. Write a program to demonstrate the master page.
7. Write a program to create login page which accepts user name and password, then check for authentication of the user.
8. Write a program that demonstrate a textbox for a user input name and validate it for RequiredField Validation.
9. Create a user control that displays the current date and time. Include it in a Web Form and refresh it each time a button is clicked.
10. Create a user control that receives the user name and password from the user and validates them. If the user name is “Radiant” and the password is “asp.net” then the user is authorized, otherwise not.
11. Write a program to demonstrate ADO.NET controls.
12. Write a program to demonstrate submits data in database by using the ado.net controls.

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## **BVSD -317 Workshop on Corel Draw**

**Time allowed: 3 hours**  
**Number of Lectures: 60**  
**Pass Marks: 35%**

**Max Marks: 50**  
**Internal Evaluation: 50**  
**Credits: 4 (4P)**

**Course Objectives:** The very purpose of learning CorelDraw is that of forming object-based logo's designs, company identities, brochures and catalogs with fine skills and depth of creativity. Corel draw training might be either entry-level or advanced level. The objective of either of the programs is imparting you the proper knowledge of concepts right from the basic level to the mastering of the elements depending upon your requirements and time period you can invest. It focuses on coverage of the minute concepts of advertising and graphic designing with efficiency in skills and completion of projects within the bounded time meeting the deadlines.

### **Section A**

**Introduction to Corel draw:** Creating your first New Document , Exploring the user interface of Corel Draw, Device Central, working with Templates, Import, Export, Tools of Corel draw, pick tool, crop tool, text tool, freehand tool, rectangular tool(circle, star, Polygon), Interactive tool, Eyedropper tool, outline tool, Fill tool, interactive Fill tool.

Working with text and lines in Corel draw, Artistic text, Formatting text, changing shape of the text, Paragraph text, Working with Lines, Fitting text to a path, Applying effects to text.

**Working with shapes:** Creating Rectangle and Squares, Creating Circles and Ellipse, Drawing Polygons, Creating Star, Rotating shapes, Selecting fill and outline color

**Working with object:** Handling Objects in Corel draw, Positioning objects, Aligning and distributing objects, sizing and scaling objects, rotating and mirroring objects, combining and breaking objects, Grouping, Creating Graphical special effects.

### **Section B**

**Working with curves:** Drawing with Freehand Tool, Drawing Closed Curves, Bezier tool, Drawing with the Artistic Media tool, Pen tool, 3-Point Curve tool, Special Effect of corel draw, Blending tool, Contouring the Object, Distorting Objects, Envelope tool, Extruding of the Object, Drop Shadow, Applying Transparency Effect.

**Working with Colors and Bitmaps:** Color Slider, Color viewers, Fixed Palettes, Color Pallete Browser Docker, Using Color style Dockers, Converting Objects to Bitmap, 3D Effect, Art Effect,Blur Effect, Color Transformation Effect, Contour Effect, Creative Effect, Distort Effect, Noise Effect

**Working with tables:** Selecting, moving and navigating table components, Inserting and deleting table rows and columns, Resizing table cells, rows, and columns, formatting tables and cells, working with text in tables, Merging and splitting tables and cells, Corel Draw and Web, Saving the file as webpage, publishing your drawing as a webpage, Creating Rollover Buttons.

**Course Learning Outcomes:** On the completion of course, the student will have sufficed knowledge about the entire software. He will be well versed with drawing grids, segments, using rulers, coloring, manipulating effects, moderating shapes etc. He will be familiar with objects and drawings in CorelDraw. Using the gradient tool and mesh tool, one will be able to make objects look real.

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**References:**

1. Corel Draw X5 in simple steps by Kogent Learning Solutions.
2. Corel Draw X5 The Official Guide by Tata McGraw Hill written by Gary David Bouton.

**BVSD -318 Workshop**  
**(Based on BVSD-314 Presentation Skills and Personality Development)**

**Time Allowed: 3 Hours**

**Periods per week: 4**

**Credits: 02**

**Max. Marks: 50**

**Internal Assessment: 50**

**Pass Percentage: 35%**

**Instructions for the Paper Setter:** The question paper will carry two 30 marks and will be of two hours duration. There will be a practical of 20 marks. The paper will consist of four Units. Following shall be the unit wise marks division:

- Unit-I – 10 Marks
- Unit-II – 10 Marks
- Unit-III – 10 Marks

\*Unit-IV will consist of practical and viva-voce. (Details are given below in Unit-IV of testing section)

\*The records as per the instructions given in testing section shall be maintained by the internal evaluator/class teacher and shall be submitted to the examination branch after the evaluation.

**Note:** - It is highly recommended that before setting the paper, the paper setter shall consult the testing pattern given in testing section.

**Instructions for the candidates:** Candidates are required to attempt all the questions as per the instructions given in the testing section.

**Course Objective:**

The objective of the paper is to introduce the students to the theory, fundamentals and tools of communication. The course aims at developing the vital personality traits among the students. Besides, it is also the objective of the course to inculcate time and stress management among the students. The emphasis is also laid on communication skills for personal, social and professional interactions.

**Pedagogy:** Lecture methodology and technology aids will be used to teach this course. To evoke the interest of the students in the curriculum due emphasis will be laid on seminars, group discussions, assignments, homework and periodic tests.

**Unit I**

**Personality Development:**

1. Meaning and Definition of Personality
2. Personality types
3. Personality traits.

**Interpersonal Skills:**

1. Meaning and definition of Communication
2. Presentation Skills

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3. Body Language
4. Emotional Intelligence Skills
5. Group Discussion

## Unit II

### Stress Management:

1. Introduction to Stress Management
2. Causes of stress
3. Impact of stress
4. Managing stress.

### Conflict Management:

1. Introduction to Conflict Management
2. Causes of conflict
3. Managing conflict.

### Time Management:

1. Time as a resource
2. Identification of important Time Wasters
3. Techniques for better Time Management.

## Testing

### Unit-I

1. The internal evaluator shall set one essay type question with an internal choice from Unit-I of the syllabus. 10 marks

### Unit-II

2. The internal evaluator shall set one essay type question with an internal choice from Unit-II of the syllabus. 10 marks

### Unit-III

3. The internal evaluator shall set 10 very short answer type questions from the entire syllabus. There shall be no internal choice. Each correct answer shall carry 1 mark. 1X10=10 marks

### Unit-IV

4. The internal evaluator shall conduct the practical and viva-voce. Marks distribution will be as under:
  - a. Oral Viva : 5 Marks
  - b. Assignment : 5 Marks
  - c. Practical : 5 Marks
  - d. Attendance : 5 Marks

### Course Learning Outcomes:

1. Students will gain knowledge about different of personalities.
2. Students will learn about time management.
3. Students will learn how to manage stress.

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**Suggested Readings:**

Lall & Sharma- *Personal Growth training & Development.*

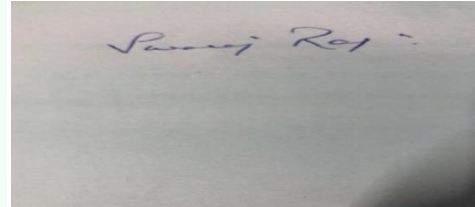
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**B. Voc. (Software Development) Third Year ( Semester VI)**

**Sessions: 2021-22, 2022-23 & 2023-24**

<b>B.VSD-321</b>	<b>PROJECT</b>	<b>400</b>
	<b>TOTAL</b>	<b>400</b>

**6-month Industrial Training: 18 Credits**

**Internal Assessment: 150 Marks**

**External Viva: 250 Marks**

**1. Student have to submit any Three certificates from the below activities for 12 Credits of General Studies .Each certificate has 4 credits.**

- a) NSS
- b) NCC
- c) Red Cross
- d) Youth Club

**Project Marks Distribution**

1. The evaluation committee will distribute these marks for seminar/viva/project report and for any other activity, which the committee thinks to be proper.
2. Joint projects will be allowed and joint project reports will also be accepted. Individual project reports will be recognized and the students should highlight their contributions in a joint project report.
3. The Students must prefer doing Industrial Training and try to avoid the training in the computer Institutes where there is no software development work and mere training is given. In case students are not able to find training in any Industry, they may opt for doing this project training in the Department on some live project related to the automation of any University Department functionality or any Project given by the concerned teacher.

**Committee for Evaluation of project report/work:**

- i. Head of the Department
- ii. Internal Guide (if any)
- iii. One or two nominee(s) of Dean, Academic Affairs
- iv. External Examiner

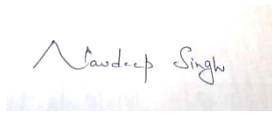
**APPROVED**

Board of Studies Meeting held on 19<sup>th</sup> June 2021

**Quorum will be of any three members.**

**Members of Board of Studies**

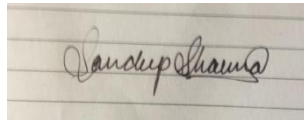
**1. Dr. Surender Kumar**



**4. Dr. Navdeep Singh**

**7. Prof. Tajinder Kaur**

**2. Dr. Dharamveer Sharma**



**5. Mr. Sandeep Sharma**

**8. Prof. Paramjit Kaur**

**3. Dr. Major Singh Goraya**



**6. Mr. Rakesh Kumar**

**9. Prof. Amandeep Kaur**

**APPROVED**

Board of Studies Meeting held on 19<sup>th</sup> June 2021