St. Xavier's College–Autonomous Mumbai
Syllabus
For 3rd Semester Courses in
B.Voc (Tourism)
and
B. Voc (Software Development)
From June 2015 onwards

General Education Component

Theory Syllabus for Courses:

S.BVS.**3.01**/A.BVT.3.0
1   Media & society

S.BVS.**3.02**/A.BVT.3.0
2   Social analysis

S.BVS.**3.03**/A.BVT.3.0
3   Economic analysis

S.BVS.**3.04**/A.BVT.3.0
4   Human rights

SEMESTER - III   **COURSE : S.BVS.3.01/A.BVT.3.01**

MEDIA & SOCIETY

LEARNING OBJECTIVE:

- ▪ Introduce students to history, evolution and development of mass communication around the world with specific reference to India
- ▪ Study evolution of mass media as an important social institution
- ▪ Critically analyse media messages
- ▪ Develop understanding of media's role in the contemporary world

[Total Lectures 45]

Unit I: Introduction to Mass Communication   (8 lectures)

- ▪ Meaning and definitions of communication
- ▪ Types of Communication: Intrapersonal, Interpersonal, group, public, mass
- ▪ Elements and Process of Communication
- ▪ Models of Communication
- ▪ Functions of Mass Communication

Unit II: Introduction to Mass Media   (6 lectures)

- ▪ Meaning and definition of mass media
- ▪ Difference between mass communication and mass media
- ▪ Tools of mass communication: Traditional and Folk
  - Print- Newspapers, Books, Magazines
  - Broadcast- Radio and Television
  - Films

Internet
Advertising and PR

Unit III: Understanding Contemporary Media (Part 1)   (12 lectures)

- News:
  a) Newspapers   -Components of a newspaper
                   -Yellow Journalism
                   -Inverted Pyramid
                   -Normative Theories
                   -Impact of ownership on news agenda
  b) News Channels –News as entertainment
                   -"Breaking News"
                   -Twitter the new source
- Image Analysis – Basics of Semiotics
                   -John Berger: Ways of Seeing
- Advertising-Types of advertisements
                   -Issues of representation, stereotypes, gender roles
                   -Persuasion and Consumerism
                   -Changing trends in advertising messages

Unit IV: Understanding Contemporary Media (Part 2)   (13 lectures)

- Indian (Hindi) Films –Issues of representation
                   -Changing image of "Hero" in Hindi Films
                   -Bollywood outside India
                   -Minority representation and Indian cinema
- Television-Understanding target audience
                   -Depiction of "Indian culture", family values, women's status and role
                   -Reality shows
- Internet-Impact on communication, freedom of speech
                   -Internet and youth culture
                   -Social Networking sites, anonymity and identity
                   -Hate messages and abuses on Twitter

Unit V: Important Debates   (6 lectures)
(Optional, if the above mentioned syllabus falls short. Or instead of a separate unit, these can be added as case studies in Unit 3 and 4)

- Beef ban in Maharashtra

- Cricket and Nationalism (special focus on India-Pakistan)
- AIB Roast Controversy, internet, censorship, social significance
- Media's depiction of war and terrorism

Note:

Units 3,4 and 5 will involve reading materials and classroom discussions. The concepts mentioned in outline will be taught from application point of view instead of the theoretical aspect.

SEMESTER - III   COURSE : S.BVS.3.02/A.BVT.3.02

SOCIAL ANALYSIS

LEARNING OBJECTIVES:

a. To introduce students to a basic conceptual understanding of society to enable social analysis
b. To create an awareness of social realities among students
c. To apply this skill in the vocation opted for by the students by using examples from their relevant fields of study

[Total Lectures: 45]

1. An introduction to the structure of society   [5]
   - Evolution of society
   - Social Groups
   - Social Interaction

2. Social Analysis   [4]
   - Importance of social analysis
   - Sociological Imagination as a tool of analysis
     (biography and history, private and public issues)

3. Understanding Culture   [8]
   ● Components of culture
   ● Popular Culture
   ● Cultural diversity

4. Social Institutions -   [12]
   ● Family
   ● Religion
   ● Education

5. Social Stratification   [12]
   ● Gender
   ● Caste
   ● Class
   ● Race

6. Tourism, Technology and Society   [4]
   ● ideas of the tourist gaze, tourism and leisure in society
   ● software technology and its impact on society

REFERENCES

1. Abraham,Francis *Sociology*
2. Mill,C.W. *'The Promise'* excerpt from The Sociological Imagination
3. Nayar,Pramod, *An Introduction to Cultural Studies*
4. Storey,John, *Popular Culture*
5. Mohanty, Manoranjan (ed) *Caste, Class & Gender*

SEMESTER - III   **COURSE : S.BVS.3.03/A.BVT.3.03**

ECONOMIC ANALYSIS

LEARNING OBJECTIVES:

1. To introduce students to basic microeconomics and macroeconomics concepts
2. To encourage students to relate macro theory to the real world and in particular newspaper economics before their exposure to the microeconomic approach.
3. To enable the students to understand the impact of current Indian and International macroeconomic policy on their lives.

[Total Lectures: 45]

UNIT I: (7 lectures)

Introduction to Economics:

Basic / Common concepts/terminology in economics frequently used in newspapers/financial /economic dailies/weeklies e.g., free/economic goods ,white goods, factors of production, infrastructure ,etc.

UNIT II: (7 lectures)

National Income : **:**

    i. Circular flow of economic activities.

    ii. National Income: concepts of GDP, NNP etc. and measurement

    iii Case Study: Contribution of tourism and IT sectors to the national income.

UNIT III: (7 lectures)

Price Movements:

    i. Meaning , types and causes(demand pull, cost push and wage –price spiral)

    ii. Effects of inflation. Measures to control/ mitigate inflation, Index Numbers,

      techniques, wholesale and consumer price indices.

    iii. Case Study: Inflationary pressures in the neighbourhood.

UNIT IV: (8 lectures)

Banking and Financial Markets:

    i. Money Market ,Capital Market and Commercial Banks ;Types ,Functions

    ii. Central Bank: Role, Monetary Authority.

    iii. Case Study: A comparative study of a Commercial and Co-operative bank

UNIT V: (8 lectures)

International Economics:

    i. Balance of payments: Concepts of current and capital account, trade deficits . (current and capital).

    ii. Foreign Exchange: Determination of foreign exchange rate. Concepts of . devaluation, depreciation, appreciation, revaluation, quantitative easing.

iii. Case Study: An analysis of working of forex dealers.

UNIT VI: (8 lectures)

Globalisation:

i. Issues connected to liberalization and privatization policies.

ii. WTO: Accords (AoA, TRIMs, TRIPs and GATS)

iii. Case Study: An analysis of an IT firm and travel company in India.

First C.I.A.:MCQ Test

Second C.I.A.: Project (designed to test application of theory to reality)

List of Recommended Reference Books:

Basic Reference Book:

Mankiw,N.G.(2002), *Principles of Macroeconomics*. Thomson Asia Pte. Ltd. ,Singapore.

Additional References:

1.Begg,Dornbusch and Fisher, *Macro Economics*,

2.Dwivedi,D.N.,*Principles of Economics* , Vikas Publishing House ,New Delhi,2008

8.Froyen,R.T.*Macroeconomics: Theories and Policies*, Delhi :Pearson Education Asia,2001

HUMAN RIGHTS

Learning Objectives:

1. To familiarize the students with the philosophy and the concept of Human Rights. ▢
2. To create an understanding of the various systems and provisions that can foster ▢Human Rights. ▢
3. To sensitize students to the diverse Human Rights issues in terms of their complex ▢nature.

Number of lectures: 45

UNIT– I CONTEXTUALIZING HUMAN RIGHTS   [10 Lectures]

a. Meaning and Characteristics ▢

b. Origin and development of the discourse. ▢

c. Changing philosophies ▢

(Handouts to be given to the students on the history of the development of human rights as a concept and practice)

UNIT– II ISSUES AND VULNERABLE GROUPS   [23 Lectures]

This module will be analysed at the macro and micro dimensions in terms of the significance

of the issues and their relevance to the meaning and characteristics of human rights.

Women, children, minorities (ethnic, linguistic and religious), sexual minorities, refugees, victims of state-sponsored violence, prisoners of conscience, displaced communities, prisoners and under trials, abortion, euthanasia, capital punishment, HIV/AIDs patients, Dalits, Tribals, senior citizens, differently-abled persons and the rights of consumers.

UNIT– III ISSUES AND VULNERABLE GROUPS   [12 Lectures]

Monitoring and Safeguarding Mechanisms

This unit looks at monitoring and safeguarding mechanisms both at the international and national (Indian) levels.

The Indian Context

a. Legal Framework   b. NHRC   c. Repressive Laws

International Mechanisms: Conventions, treaties and global bodies Role of Civil Society and Non-Governmental Organisations. Freedom of expression and the media.

Continuous Evaluation: Group projects and presentations primarily from Units Two and Three.

List of Recommended Reference Books

1.   Ackerly, B., A. (2008). Universal human rights in a world of difference. Cambridge, Cambridge University Press. ▫

2.   Avonius, L. D. K. (2008). Human rights in Asia: a reassessment of the Asian values debate. Hampshire, UK, Palgrave Macmillan Ltd. ▫

3.   Christie, K. D. R. (2001). The politics of human rights in East Asia. London, Pluto Press. ▫

4.   Heard, A. (1997). Human Rights: Chimeras in Sheep's Clothing? http://www.sfu.ca/~aheard/intro.html, accessed on January 1, 2011. ▫

5.   Makau, M. (2002). Human Rights: A Political and Cultural Critique. Pennsylvania, University of Pennsylvania Press. ▫

6.   Nirmal, C. J., Ed. (2000). Human Rights in India. New Delhi, Oxford University Press. ▫

7.   O'Byrne, D., J. (2003). Human rights: an introduction. New Delhi, Pearson. ▫

8.   Pereira, W. (1997). Inhuman Rights. New Delhi, Other India Press. ▫

9.   Phillips, D., A. (2009). Human Rights. New York, Chelsea House: An Imprint of ▫Infobase Publishing. ▫

10.   Poonacha, V. (1995). Gender within the Human Rights Discourse. Mumbai, Research ▫Centre for Women Studies, SNDT University. ▫

11.   Raman, K. (1998). Universality of the Human Rights Discourse: An Overview.

Mumbai, Department of Civics and Politics, University of Mumbai.

12.   Sen, A. (1997) Human Rights and Asian Values. Sixteenth Morgenthau Memorial Lecture on Ethics & Foreign Policy . New York, Carnegie Council on Ethics and International Affairs. http://www.carnegiecouncil.org/resources/publications/ morgenthau/254.html/_res/id=sa_File1/254_sen.pdf., accessed on January 1, 2011.

13. Shabbir, M., Ed. (2008). Human Rights in the 21st Century: Challenges Ahead. Jaipur & New Delhi, Rawat Publications.

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Syllabus
For 3rd Semester Courses in B. Voc (Software Development)
From June 2016 onwards

Skill Component courses

Theory Course Syllabus for:

S.BVS.3.05   Quantitative techniques

S.BVS.3.06   Advanced SQL with Oracle

.S.BVS.3.07   Advanced Java

.S.BVS.3.08   Open Source Platforms (Linux, RoR)

Practical Course Syllabus for:

B. Voc. (Software Development) Semester – III   **COURSE : S.BVS.3.05**

QUANTITATIVE TECHNIQUES

LEARNING OBJECTIVE:

To learn basics of counting principals and statistics to prepare students for Quantitative analysis which is useful in advanced IT applications.

[Total Lectures: 45]

UNIT 1 : COUNTING PRINCIPLES   [15]

Permutations

Combinations

Probability

Conditional probability

Bayes theorem

Applications of Bayes theorem

Operations on sets

The inclusion Exclusion Principle

UNIT 2 : BASICS OF STATISTICS   [18]

Classification and tabulation

Frequency distribution

Measures of central tendency

Arithmetic average

Median

Mode

Geometric mean

Measures of dispersion

Range

Mean deviation

Inter quartile range

Standard deviation

Coefficient of variation

Skewness introduction

Measures of Skewness

Correlation

Methods of studying correlation

UNIT 3: THEORETICAL DISTRIBUTION [12]

Binomial distribution

Probability functions of binomial distributions

Constants of binomial distributions

Poisson distributions

Characteristics of poisson distributions

Constants of poisson distributions

Fitting of poisson distributions

Normal distributions

Properties of normal distributions

Importance of normal distributions

Standard normal distributions.

Continuous Internal Assessment
Assignments / Project
Mid Term test.

Text Books

1. Statistics by V.K .Kapoor and D.C.Sancheti
2. Discrete Structures by B kolman,R.C.Busby.

B. Voc. (Software Development) Semester – III   **COURSE : S.BVS.3.06**

ASQL WITH ORACLE

LEARNING OBJECTIVE:

To develop the skill of data base programming using advanced SQL concepts.

[Total Lectures: 45]

UNIT 1 : Advanced SQL Concepts   **[7]**
Writing Basic SQL Select Statements,
Joins (Displaying Data from Multiple Tables),
Aggregating Data using Group Functions,
Creating Views, inline views,

Controlling User Access, grant, revoke, rollback.
Creating Other Database Objects (Sequences, Indexes and Synonyms)

UNIT 2 : Procedural language   [15]
Types of PL/SQL blocks,
Identifiers, types of Identifiers,
Declarative Section, variables,
Scalar Data Types, The %TYPE Attribute,
PL/SQL Block Syntax,
Deployment of SQL Functions in PL/SQL, Nested Blocks, Operators
Control Structures:
Conditional processing using IF Statements and CASE Statements, Loop
Statement, While Loop Statement, For Loop Statement,
the Continue Statement, Composite Data Types,
Handle Exceptions with PL/SQL

Unit 3   [15]
Stored Procedures
What is procedure? Syntax of creating procedure,
Creating procedure with parameters, IN parameter, OUT parameter, methods of
passing parameter, Invoking procedure from other procedure,
The PL/SQL Execution Environment, Differences between Anonymous Blocks
and Subprograms, Declaring subprograms, Handled exceptions, removing
procedures
Functions:
Basic concept of functions, different types of functions,
Advantages of using Stored Functions,
The steps to create a stored function,
Invoke User-Defined Functions in SQL Statements,
Restrictions when calling Functions,
Control side effects when calling Functions,
View Functions Information, Functions and Procedures

Unit 4 : Dynamic SQL   [8]
Triggers:
Definition, the Trigger Event Types and Body,
Business Application Scenarios for Implementing Triggers,
Create DML Triggers using the CREATE TRIGGER Statement and SQL
Developer, Body, and Firing (Timing),
Statement Level Triggers and Row Level Triggers,
Creating Compound, DDL and Event Database Triggers,
Compound Trigger Structure for Tables and Views,
instead of trigger, DDL trigger.
Comparison of Database Triggers and Stored Procedures

Continuous Internal Assessment
Assignments / Project
Mid Term test.

Text Books
1.Murach's Oracle SQL and PLSQLby Joel Murach, Murach and Associates.

2.Oracle Database 11g PL/SQL Programming Workbook By: Michael Mc Laughlin,John Harper

3.Oracle PL/SQL Programming Fifth Edition By Steven Feuerstein, Bill Pribyl

B. Voc. (Software Development) Semester – III   **COURSE : S.BVS.3.07**

ADVANCED JAVA

LEARNING OBJECTIVE:

To equip the students with skills required in software industry. Students will learn the latest of Java and apply the skill learnt for projects.

[Total Lectures: 45]

UNIT 1 Java Database Connectivity [JDBC]   **[10]**
Introduction to JDBC Architecture,
Type I Driver (JDBC-ODBC Bridge), Types of Driver,
Understanding Statement,
PreparedStatement,
 CallableStatement Interface through examples,

Understanding ResultSet,
ResultSetMetadata interface through examples,
Difference between execute(), executeUpdate(), executeQuery() method, Transactions,
Commits, Rollbacks, and Savepoints Batch Processing

UNIT 2 Servlet [10]
What is a Servlet?**,** Servlet Lifecycle**,** Servlet API**,** GenericServlet and HttpServlet,
ServletConfig & ServletContext, Handling Form data with get and post request**,**
Initializing a servlet**,** Filtering Requests and Responses**,** Redirecting Request**,** Finalizing a
servlet**,** Using cookies and session tracking

UNIT 3 JSP [15]
What is JSP page?, Lifecycle of JSP page, JSP syntax usingDirective, Declaration,
Expression, Scriplet, Comment, Using javabean and Action Tag in JSP, JSP implicit
objects, Using JSP standard tag library (JSTL), Session management, Exception handling,
Custom tag, Transferring Control to Another Web Component, Using JDBC in JSP

UNIT 4 Basic of Struts2 [10]
Understanding MVC architecture, Struts2 framework
Working with Struts2 Action – Introducing Struts 2 actions**,** Packaging your actions,
Implementing actions

Continuous Internal Assessment
Assignments / Project
Mid Term test.
Text Books
1. Java Servlet Programming, Author: Jason Hunter, O'Reilly Publication
2. Struts 2 Black Book
3. Database Programming with JDBC and Java – O'Relly Publication

B. Voc. (Software Development) Semester – III   **COURSE : S.BVS.3.08**

OPEN SOURCE PLATFORMS: LINUX AND ROR

Learning Objective:

To encourage open source product usage for developing programs. Ruby on Rails is used for faster web development in Linux platform.

[Total Lectures: 45]

UNIT 1   **(15 lectures)**
Linux Basic
History of Linux, Comparison of Linux with Windows, Linux as Layered structure.
Linux commands
ls, rm, cp,cd, mkdir, mv, more, head, tail, pwd, chmod, tar, gzip, echo, date, cal, bc, cut, paste, sort command. grep with all options, awk with all options, man, info, ps, kill, fg,bg, redirection and pipe command. Linux Tree Structure, Creating user and assigning password, creating user defined command.
Linux shell scripts
vi Editor Basic Concepts, Shell Programming, Types of Shell, Environment Variables, Programming Construct: loops, conditions, logical operators, case constructs, if statement. Using regular expression in shell programming.

UNIT 2   **(15 lectures)**
Features of Ruby, variables in Ruby-global variable, instance variable, local variable
Creating class. Initialize method, accessor and setter methods. Class methods, to_s method, access control, class inheritance, method overriding. Using Object oriented features in Ruby. What is Regular Expression? Using Regular Expression in Ruby. DBI Architecture, CRUD operation with database in Ruby.

UNIT 3   **(15 lectures)**
RoR Framework, Directory structure. Advantages of using RoR.
creating view in RoR, creating layout in RoR, Integrating RoR with database.
 Scaffolding in RoR, Integrating CSS with RoR. Using gems in RoR. Validation on server and client side. Creating reports in RoR.

Continuous Internal Assessment
Assignments / Project
Mid Term test.

TEXT BOOKS
1. The Ruby Programming Language – David Flanagan – O'Reilly Publication
2. Linux and Unix –Sumitbha Das—TMH

REFERENCES BOOKS

1. Ruby On Rails Up And Running—O'relly publication

Websites

1) http://www.tutorialspoint.com/ruby 2) https://rubymonk.com/

3) https://www.railstutorial.org/book

BVOC SOFTWARE DEVELOPMENT   **COURSE : S.BVS.3.PR**

PRACTICALS

PRACTICAL LIST for ASQL with Oracle

I) Select queries and joins
      a. Select queries on single table using alias, where and order by clause.
      b. Select queries on single table using aggregate functions and group by clause.
      c. Querying data from multiple Tables using ROLLUP ,CUBE operators.

II) Sub queries, DML and DDL
      a. Querying single and multiple tables using sub queries.
      b. Manipulating data (Insert, update and delete)
      c. Creating simple tables and tables with constraints.

III) Creating database objects, Controlling user access and using set operators
      a. Creating Views, Sequences, Indexes and synonyms.
      b. Granting and revoking privileges on user objects.

IV)Working with advanced sub queries
      a. Multiple column sub queries, sub queries in from clause,
      b. Scalar sub queries and correlated sub queries,

V) Basic PL/SQL,
      a. Creating anonymous PL/SQL blocks.
      b. manipulating data using PL SQL
      c. Process a number of rows from a table and populate another table with the results using a FOR loop.

VI) Functions and Stored Procedures
      a. Creating and invoking functions from SQL statements.
      b. Creating and invoking stored procedures.

VII)Working with triggers
      a. create a trigger to update a table only during office timing.
      b. Create row triggers for updating values.
      c. Create procedures that will be invoked from the triggers.

VIII) Working with INSTEAD OF triggers, business rules and recompiling procedures, functions, packages and views.
      a. Create instead of triggers for views.
      b. Implement business rules.
      c. create trigger for automatic updating tables..

PRACTICAL LIST FOR ADVANCED JAVA

Learning Objective: To equip the students with skills required in software industry. Students will learn the latest of Java through Servlets, JSP, JSTL. Students can apply the skill learnt for projects.

I)   Write a program to insert/update the records of the table using JDBC. Make use of the PreparedStament interface.

II)   Write a servlet to demonstrate session handling .

III)   Write a servlet which displays the cookie name and the value.

IV)   Create an application using JSP declaration, scriptlet, expression and JSP directive tags

V)   Create an application which connects the Java Bean to a JSP page by using the JSP action tags.

VI)   Create an html page with fields, eno, name, age, desg, salary. Now on submit this data to a jsp page which will update the employee table with matching eno.

VII)   Write JSP code to do login authentication from database and redirect to new JSP page as per the role assigned in the database.

VIII)   Create an application to make use of JSTL core tags and formatting tags.

IX)   Create an application to connect to the database and retrieve the records using JSTL sql tags.

X)   Using struts validation framework do validation for 1)email 2)phone 3)emp no 4)emp name 5)age

Note: Complete any 8 from the above list.

PRACTICAL LIST FOR LINUX AND ROR

Learning Objective:

To encourage open source product usage for developing programs. Ruby on Rails is used for faster web development.

Practical No 1

Create text file using vi editor in Linux with following details about emp with at least 10 records eno ename dept designation age salary.

Using AWK as a reporting tool with proper header and footer to find
   a) All employee who work for sales dept
   b) Average salary of all employees
   c) Name and designation of all employees who earn more that Rs. 40000
   d) Average salary of employees working with HR dept
   e) Sum of salary of all the employees
   f) Name the emp who all work for HR dept and earn less than Rs.20000

Practical No 2

Using Ruby find
   a) factorial of a number
   b) Sum of digits of a number
   c) Reverse a given string

Practical No 3

Using Ruby display the contents of a file.

Practical No 4

Create table student(rno,name,dob,course,photo) in MySQL. Now from Ruby using store corresponding information of 5 student. Now display information of particular student whose rno is asked.

Practical No 5

Create a registration form in html and develop a ruby/RoR application to accept Registration Details form user and Store it into the database table.

Practical No 6

Create a web application to show the form and apply corresponding validation.

username:
password:
email:
gender: Select Gender
postalcode:
Submit

Practical No 7

Create class called student and demonstrate inheritance, polymorphism, encapsulation on it using ruby.

Practical No 8

Demonstrate the use of Scaffolding in RoR.

Practical No 9

Demonstrate creating blog using RoR.