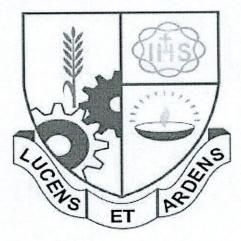
N.B. Provisional syllabus for Minor from Vocational/discipline (MN-2A)



**NEP 2020** 

#### **FYUGP**

# MINOR FROM VOCATIONAL/ DISCIPLINES For Semester-II. IV, VI, VI

ST. XAVIER'S COLLEGE RANCHI
(AN AUTONOMOUS COLLEGE AFFILIATED TO RANCHI UNIVERSITY, RANCHI)

FOR UNDERGRADUATE COURSES

Implemented from Academic Session 2022-2026

# MEMBERS OF BOARD OF STUDIES FOR VOCATIONAL STUDIES

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- 7. UNIVERSITY REPRESENTATIVE- Dr. RAJ KR. SHARMA-UNIVERSITY DEPT. OF ENGLISH
- 8. INDUSTORY REPRESENTATIVE-BINAY SARAWGI

SEM II (IV, VI, VIII)

Credits: Theory-03) 45 Hours (Practical-01) 15 hours

Marks: 15 (5 Attd. + 10 SIE: 1Hr) + 60 (ESE: 3Hrs) = 75

Pass Marks: Th (SIE + ESE) = 30

Marks: Pr (ESE: 3Hrs) = 25 Pass Marks: Pr (ESE) = 10 (Credits: Practicals-01) 15 Hours

### **MN-2A-A FISHERIES**

Course Objectives: The main objective of this course is to give comprehensive exposure, knowhow and importance about the conventional as well as recent trends in fisheries science to the students. To aware the students about the significance of Fish as an important renewable nutritional resource. To increase the awareness about the upcoming technologies and futuristic approach in Fisheries Science which will revolutionize our Indian economic sector.

Course Learning Outcomes: Fisheries Sector is a carbon neutral and eco-friendly activity. Imparting education in this field will promote youth entrepreneurship development, skill development, self-employment generation and also rendering employment to the others. This course learning will help in the promoting India's economic growth and accelerating the pace of attainment of many sustainable development goals which will strengthen all the three, economic, social and environmental pillars of the Sustainable development.

#### **Course Content**

#### Unit 1. Introduction/Basic Concepts

(5 lectures)

Aquaculture: its types and importance with special reference to Pisciculture, Scope of fisheries in India, current status, Identification of cultivable fishes, economic importance and Importance of small and big fishes as Nutritional Resource and in Economic sector, ICAR institutes in Fisheries Sector. Ecological concerns of introduction of exotic fishes in Indian water bodies.

#### Unit 2. Concept of Conventional Breeding Techniques

(5 lectures)

Physical and chemical parameters controlling fish culture, Bundh breeding, Types of bundh breeding techniques and problems of bundh breeding. Integrated fish farming, Monoculture, Composite or Polyculture, Cage Culture, Pen Culture, Race away Culture and its status in Jharkhand.

# Unit 3. Concept of Induced Breeding and Fish seed production technology. (7 lectures)

Basic knowledge of life cycle of cultivable fishes, spawn, fry and fingerling. Use of different synthetic hormones and analogues for induced breeding, spawning, stripping and fertilization, pond fertilization. Transport of fish seeds and brood fishes. Hatchery Technology for Indian Major Carps.

# Unit 4. Fishing Craft and Gear technology

(5 lectures)

Fishing craft materials and its types. Fishing gear and its types. Fish finding devices: GPS navigator, sonar, net sonde, gear monitoring equipment; remote sensing. Fish aggregating devices and artificial reefs.

#### Unit 5. Fisheries Post Harvest Technology.

(6 lectures)

Fish product and by-product. Modern day fish preparation and Dry fish preparation. Fish spoilage, principles and methods of fish preservation. Quality Assurance and Export of Fishery Products.

# Unit 6. Ornamental Fish Technology

(5 lectures)

Freshwater Ornamental Fishes and their commercial production of ornamental fishes. Home and Public aquarium design, construction, accessories and management. World aquarium trade and present status.

# Unit7: Status of Fish and Fisheries in Jharkhand

(5 lectures)

Important fishes of Jharkhand - Special reference to Hill stream fishes. Challenges faced by Pisciculturein Jharkhand, soil characteristics, rainfall characteristics. Schemes run by government, allocation of funds for training to farmers and entrepreneurship, current status of demand and production, role of NABARD in fisheries development blue revolution in Jharkhand.

# Unit 8. Revolutionizing Fish Technology

(7 lectures)

Biofloc and Recirculating Aquaculture System (RAS) Fish technologies, history, construction, management and advantages of Biofloc and RAS, Status of Biofloc and RAS fish farming in Jharkhand

#### **Practical Course**

Credit: 01

- 1. Identification, Classification of ornamental fishes and cultivable fishes with special reference to Jharkhand. (9 lectures)
- 2. Study of fishing devices: crafts, nets and gear

(6 lectures)

3. Institutional/Field/Fish Farm Visit.

(15 lectures)

# PATTERN OF EXAMINATION FOR PRACTICAL

- 1. Identify and comment upon the provided spots [10]
- 2. Institutional visit report [8]
- 3. Practical record [3]
- 4. Viva [4]

#### **FYUGP**

# ST. XAVIER'S COLLEGE RANCHI

### **MINOR COURSE MN-2A**

SEM II (IV, VI, VIII)

Credits: Theory-03) 45 Hours (Practical-01) 15 hours

Marks: Pr (ESE: 3Hrs) = 25 Pass Marks: Pr (ESE) = 10 (Credits: Practicals-01) 15 Hours

Marks: 15 (5 Attd. + 10 SIE: 1Hr) + 60 (ESE: 3Hrs) = 75 Pass Marks: Th (SIE + ESE) = 30

MN-2A-B BANKING AND INSURANCE

Theory: 45 Lectures; Practical: 15 Lectures

<u>Objectives</u>: To make the students understand the various services offered by banks & insurance companies and various risk involved with them. Students are also appraised regarding various technological aspects for modern banking & insurance operations.

<u>Course Learning Outcomes</u>: After completion of this course students will be very much versatile with different types of banking and insurance terminologies along with operation procedures of banking & insurance industries.

Unit -1 Lectures: 15

Introduction, Evolution and structure Indian Banking system: Role and functions of Banks, Regulatory provisions/enactments, Governing Banks, Major functions of RBI.

Retail, Wholesale and International Banking: Nature and scope of retail banking, Wholesale & International banking services.

Unit -2 Lectures: 10

Deposit: Banker-Customer Relation, Different deposit products, Services rendered by banks, Mandate and Power of Attorney, Banker's lien-Right of set off, Garnishee Order, Income Tax Attachment Order etc. Credit: Principles of lending, various credit facilities, Working capital and term loans, Credit appraisal techniques, Approach to lending. Credit Management, Credit Monitoring, NPA (Non-Performing Asset)

Unit -3 Lectures: 05

Insurance-meaning, purpose and need uses and its role in financial planning, Human Life value, Types of Insurance, Life insurance contract-definition and special features, Role and types of Intermediaries, Tax benefits.

Unit – 4 Lectures: 15

Life Insurance Products, Policy Form-Contents of a typical life insurance policy-Conditions and privileges-free look period, payment of premium, grace days auto cover, forfeiture, proof of age, revival of lapsed policy, non-forfeiture regulations, indisputable policy assignment and nomination.

Introduction to General Insurance, Various types of general insurances-Motor Insurance, Fire Insurance, Marine Insurance, Rural Micro Insurance, Personal Accident & Travel Insurance etc.

Unit – 6 (Practical)

Lectures: 15

 Representation of Bank Pass book, Cheque book, Withdrawal form, E-Fund transferring Form

Representation of Debit & Credit Card along with different banks operating Apps

- Representation Retail Banking with different retail loan facilities for consumer durable & consumer non durable products through banks Apps and direct demand at the banks service counters.
- Proposal Form fill up and apply for different Insurance needs.
- Claim procedures of insurance companies under various categories.
- Live application of miscellaneous insurances needs and demands.

# **Recommended Books:**

1. Know your Banking Series—Taxman

2. Principles of Banking—Taxman

3. Principles and Practice of Banking and Insurance—O. P. Agarwal

4. Principles & Practices of Insurance—M. N. Mishra

5. Principles of Insurance—Tripathi and Reddy

6. IC-38—Insurance Institute of India

Note: Latest edition of textbooks may be used

#### ST. XAVIER'S COLLEGE RANCHI

# **MINOR COURSE MN-2A**

SEM II (IV, VI, VIII)

Credits: Theory-03) 45 Hours (Practical-01) 15 hours

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#### LIBRARY AND INFORMATION SCIENCE MN-2A-C

Theory: 45 Lectures; Practicals: 15 Lectures

Objectives: To make the students understand the various aspects of Library and Information Sciences and its applications in different mode and forms in different types of libraries.

Course Learning Outcomes: After completion of this course students will be very much versatile with different types of technical & amp; non technical terminologies uses in library management and information sciences. Students will also be capable of handling different types of libraries i.e. School & Emp; Media Libraries, Public Libraries etc. Students are also capable to handle different information centres also of private and public interests.

Unit-I-Introduction to Library and Information Sciences

Lectures: 10

Lectures: 05

The concept of library and its types are explained in this subject. An introduction to Library Legislation and Acts and other related acts and laws are also provided in it. It also talks about national and global library associations.

Unit-II-Knowledge Organisation: Classification

The concept of Library Classification along with the need for it and its objectives are described in it. Different types of classification are also explained along with the latest trends in classification and organisation of web resources.

Unit-III-Knowledge Organisation: Cataloguing

Lectures: 05

Forms of library catalogue, subject cataloguing and catalogue entries, and latest trends in cataloguing are included in it.

Unit-IV-Management of Library and Information Centres

Lectures: 05

Fundamental rules of management, scientific management principles and their application in Library and Information Sciences, collection development and access management, etc. are the key concepts covered in it.

Unit-V-Basics of Information and Communication Technology

Lectures: 15

The basics of ICT and its scope and meaning along with the details on CPU, hardware and software systems, input and output devices, word processor, etc. are included in it. It also gives an overview on basic features of Windows OS and mobile operating system, and

includes a few networking concepts like introduction to WAN, LAN, MAN, etc. Finally, the concept of digital library and its properties are described in this subject.

### Unit-VI-Information Sources and Services

Lectures: 10

Documentary sources of information, print and non-print i.e. electronic sources, information services and products, implications of social networking sites on Library Services, and related concepts are covered in this course.

Practical:	Lectures: 15
☐ Knowledge Organisation: Classification and Cataloguing	
Classification of documents as per CC (Colon Classification) and DDC classification),	(Dewey decimal
Anglo American Cataloguing rules, Classify Catalogue Code are the print in this practical subject	ncipal subjects taught
☐ Visit to any one School Library and prepare project documents	
☐ Visit to any one College Library and prepare project documents	
☐ Visit to any Public Library and prepare project documents	

#### Recommended Books:

- 1. Evaluation of Library and Information Services- J. Crawford
- 2. Library Information Technology- D. N. Phadke
- 3. Academic Library Management: Universities, Colleges, and Institutions- A. R. Christian
- 4. Developing Library and Information Centre Collection- E. G. Edwards
- 5. Theory of Library Classification- P. Dhyani
- 6. Cataloguing Practice- S. R. Ranganathan
- 7. Theory of Library Classification- P. Dhyani
- 8. The Theory and Practice of Dewey Decimal Classification System M. P. Satija

Note: Latest edition of textbooks may be used

SEM II (IV, VI, VIII)

Credits: Theory-03) 45 Hours (Practical-01) 15 hours

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Pass Marks: Th (SIE + ESE) = 30

# MN-2A-D DATA ANALYSIS (MODULE 1)

# **Course Objectives:**

- 1. Introduce students to the foundational concepts of data analysis, including data types, datastructures, and the importance of data-driven decision-making.
- 2. Develop students' proficiency in using Microsoft Excel as a primary tool for data analysis, including data entry, manipulation, and organization.
- 3. Enable students to perform basic statistical analysis using Excel, including calculating descriptive statistics, such as mean, median, mode, standard deviation, and variance.
- 4. Familiarize students with various data visualization techniques in Excel, including creatingcharts, graphs, and pivot tables to visually represent and explore data.
- 5. Introduce students to advanced Excel functions and tools for data analysis, such as IF statements, VLOOKUP, HLOOKUP, PivotTables, and statistical functions.
- 6. Apply data analysis techniques to real-world datasets and scenarios to help students understandhow to extract meaningful insights and make informed decisions based on data.

# **Course Learning Outcomes:**

- 1. Students will be able to efficiently manage and organize large datasets within Excel, including importing, cleaning, and formatting data for analysis.
- 2. Students will be able to calculate and interpret descriptive statistics, such as measures of centraltendency (mean, median, mode) and measures of variability (standard deviation, variance), to summarize datasets.
- 3. Students will be able to create various types of charts, graphs, and pivot tables in Excel to visually represent and explore data, enhancing their ability to identify patterns, trends, and relationships within datasets.
- 4. Students will be proficient in using advanced Excel functions and features for data analysis, such as VLOOKUP, HLOOKUP, IF statements, and PivotTables, to efficiently manipulate and analyze data.
- Students will be able to effectively communicate data analysis findings and insights to stakeholders through clear and concise visualizations, reports, and

presentations created in Excel.

6. Students will recognize the importance of continuous learning and improvement in data analysisskills and seek out opportunities to further develop their Excel proficiency and data analysis capabilities beyond the course.

# **Course Content:**

# Unit 1: Introduction to Data Analysis

(5 lectures)

Definition, Types of Data Analysis- Data Mining, Business Intelligence, Statistical Analysis, Predictive Analytics and Text Analytics, Data Analysis Process.

# **Unit 2: Methods of Data Analysis**

(15 lectures)

**Charts and Graphs:** Creating Charts, Different types of chart, Formatting Chart Objects, Changing the Chart Type, Showing and Hiding the Legend, Showing and Hiding the Data Table

Conditional Formatting: Changing the format of cells depending on their value. Graphical conditional formats. Writing conditional format formulas.

**Sorting and Filter:** Techniques for sorting and filtering data, including controlling the order of precedence in a sort, advanced filters, and an introduction to PivotTables. Using sorting and filtering tocheck and 'clean' data.

Controlling user input (Data Validation): Controlling the way users can enter data into a spreadsheet toreduce risk of error and increase efficiency.

# Unit 3: Formulas, Lookup and Pivot Tables

(15 lectures)

**Creating Formulas:** Functions used for Data Analysis: Mathematical Functions, Logical Functions, Statistical Functions, Date and Time Functions, Text Functions

**Lookup & Reference:** Looking up information in a basic table. Using VLOOKUP(), HLOOKUP() and INDEX()/MATCH() combination.

**Pivot Tables:** Creating PivotTables, Manipulating a PivotTable, Using the PivotTable Toolbar, ChangingData Field, Properties, Displaying a PivotChart, Setting PivotTable Options, Adding Subtotals to PivotTables

# **Unit 4: Statistical Analysis**

(10 lectures)

**Introduction to Statistical Analysis:** Overview of statistical analysis concepts, Role of statistics indecision-making.

**Descriptive Statistics in Excel:** Measures of central tendency (mean, median, mode), Measures of dispersion (range, variance, standard deviation), Skewness and kurtosis analysis, Finding anova and performing regression analysis

SEM II (IV, VI, VIII)

Credits: Theory-03) 45 Hours (Practical-01) 15 hours

Marks: Pr (ESE: 3Hrs) = 25 Pass Marks: Pr (ESE) = 10 (Credits: Practicals-01) 15 Hours

Marks: 15 (5 Attd. + 10 SIE: 1Hr) + 60 (ESE: 3Hrs) = 75

Pass Marks: Th (SIE + ESE) = 30

# MN-2A-E E-FILING OF TDS AND GST

Course Objectives:

Course Learning Outcomes:

#### **Course Content:**

# **UNIT- I** TDS and e-filing of TDS returns

Introduction to the concept of TDS; provision regarding returns of TDS: types of forms for filing TDS returns;

### UNIT- II Fundamental of GST

Introduction: GST Basics, Objective of implementation of GST, Benefits of GST, Component of GST, Important Definitions, Meaning and Scope of Supply.

### **UNIT-III** Tax

Levy and Collection of Tax: Tax Liability on Composite and Mixed Supply, Levy and Collection of Tax, Composition Levy, Exemption from Tax.

#### UNIT- IV GST and E-filing of GST returns

Introduction to GST, Registration; relevant notifications regarding e-filing of GST returns: steps for preparing GST returns: practical workshop on-filing of GST returns.

#### E-FILING OF RETURNS PRACTICAL

Marks: Pr (ESE: 3Hrs) =25

Pass Marks: Pr (ESE) = 10

#### PRACTICALS:

**60 Lectures** 

The student shall be required to write a Project Report based on the case study of any aspect of either of Income Tax or GST. He/She shall focus on a particular problem area and prepare a report based on the study of the course by taking one particular problem faced by the different assesses.

SEM II (IV, VI, VIII)

Credits: Theory-03) 45 Hours (Practical-01) 15 hours

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#### MN-2A-F EVENT MANAGEMENT

# Theory: 45 Lectures; Practicals: 15 Lectures

<u>Objectives</u>: To make the students understand the various types of events and its different operational systems.

<u>Course Learning Outcomes</u>: After completion of this course students will be very much versatile with launching, development and operation of different kinds of events including application of physical and human resources. Students will also develop abilities for event planning, marketing and event liasioning and event budgeting & cost management.

- 1. Introduction to Event Management-Scope, Significance and Need of Event Management.

  Lectures: 05
- 2. Strategic Market Planning in Events, Event Management in socio-economic development of the society, Evaluation of Event Performance.

3. Strategic Critical approach in events—PREP Model (Predatorial Strategy, Retaliatory Strategy, Enrichment Strategy, Proactive Strategy), Risk vs. Return Matrix.

4. Event Manager—Role, Objective and Responsibilities, Role of Event Management in different organization.

Lectures: 05

- 5. Various aspects of Event Management—Concept and Design, Feasibility, Legal Compliance, Promotion, Financial aspects, Risk Management, Protocol, Staging, Staffing, Leadership, Operation and Logistics, Safety and Security, Crowd Management and Evacuation, Monitoring and Control, Resource generation and application Lectures: 15
- **6.** Event Marketing Mix and Promotion, Event positioning, Planning & Processing of Events Marketing, Strategy of Event Marketing

# 7. Practicals

Lectures: 05.

Lectures: 05

Lectures: 10

- ❖ Live video demonstration of 3 Sports events and discussion of its various aspects.
- ❖ Live video demonstration of 3 Social events and discussion of its various aspects.
- Live video demonstration of 3 Product launching events and discussion of its various aspects.
- Live video demonstration of 3 Political & delegation events and discussion of its various aspects.
- ❖ Live video demonstration of 3 Scientific events and discussion of its various aspects.

#### **Recommended Books:**

- 1. Event Management—Lynn Van Der Wagen & Brenda R. Carlos
- 2. Event Marketing & Management—Sanjay Singh Gaur & Sanjay V. Saggere
- 3. Successful Event Management—Anton Shone & Bryn Parry

Note: Latest edition of textbooks may be used

#### **FYUGP**

#### ST. XAVIER'S COLLEGE RANCHI

# MINOR COURSE MN-2A

Credits: Theory-03) 45 Hours (Practical-01) 15 hours

Marks: Pr(ESE: 3Hrs) = 25 Pass Marks: Pr(ESE) = 10

(Credits: Practicals-01) 15

SEM II (IV, VI, VIII)

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Pass Marks: Th (SIE + ESE) = 30

Hours

#### MN-2A-G STILL PHOTOGRAPHY

### Aims and Objectives:

Photography has been an art with potentials of employment in number of areas.

A trained photographer can join a newspaper, can work as a freelancer, can take to wedding photography, event photography, wildlife photography, nature photography etc. All these areas offer wide range of employability.

Further, a trained photographer can make use of his skill as a hobby, even if he is in some other profession.

# Unit-I: Elements of Photography (2 Credit Theory+ 2 Credit Practical)

#### Theory (15 Classes)

- Photography elements and principles visual language -composition of photography subject and light
- 2. Lighting- different types of lighting- natural light and artificial light, the reflection of light
- 3. Indoor lighting and equipments for outdoor lighting
- 4. Shots focus shutter speed selection of subject different types of photographs
- 5. Photo editing, cropping, composition, colours, caption writing, placement of photographs

#### Practical (30 classes)

- Hands-on practical to learn different parts still camera
- Learning how to set the still camera for photo-shoot
- Hands-on practical with camera to shoot different types of shots
- Making a project on different shots

# Unit-II: Photo Editing Theory (15 Classes)

1. Photo editing software- Microsoft Picture Manager, Corel Draw, Adobe Photoshop

- 2. Correcting imperfect image-picture orientation, cropping, levels, red eye
- 3. News values for pictures photo-essays photo features; qualities essential for photo journalism; picture magazines
- 4. Avenues and Opportunities for Photo Journalists

# Practical (30 Classes)

- Understanding photo-editing softwares (Microsoft Picture Manager, Corel Draw, Adobe Photoshop etc)
- Editing on the desktop
- Making a project of edited photographs

**BOOKS RECOMMENDED:** All About Photography- Ashok Dilwali, Digital Photojournalism- Balakrishna Aiyaer, Photo Patrakarita- Ek Visheshlanatmak Adhayan – Abhishek Saxena, Photo Patrakarita – Gulab Koithari.

#### **FYUGP**

#### ST. XAVIER'S COLLEGE RANCHI

# **MINOR COURSE MN-2A**

SEM II (IV, VI, VIII)

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MN-2A-H TEXTILE AND TAILORING

#### Theory: 45 Lectures; Practicals: 15 Lectures

**Course Objectives:** This course will give a brief understanding of textile and different process that apply in making apparel made up and home furnishing. To understand the concept of design and to apply hands on experience in tailoring skills.

#### **Course Learning Outcomes:**

- It will make students to identify different types of fabric. Dyeing and printing techniques.
- This course will make students to know how designing and colour is applied on fabric.
- This will make students identify surface embellishment techniques.
- Students will be able to do basic stitching on machine and develop product related to home furnishing.
- Students will know the process that follow from fibre to fabric product.

# **Course Content: Theory**

Unit I-Fibres: classification of fibres and characteristics, types of fibres-cotton, wool, Silk, Polyester, Nylon, Rayon, Lenin, Jute, Spandex, Yarn and types of yarn.

Lectures: 08

Unit II-Techniques of fabric construction- Weaving, Knitting, Knotting and Braiding, Felting Lectures: 07

Unit III- Introduction to dyeing and Printing – fabric dyeing methods, yarn dyeing methods Brief Study on Different Styles of Printing.

Lectures: 08

Unit IV-Introduction to surface techniques-running stitch, back stitch, split stitch, French Knot, bullion knot, stem stitch, satin stitch, lazy daisy, blanket stitch. Lectures: 07 Unit V-Design development and design process, textile repeats types, textile print development, Introduction to home furnishing products. Lectures: 06 Unit VI- Principle of design, Elements of design, Colour theory Lectures: 06 Unit VII- Introduction to textile and apparel industry in India. Lectures: 03 Practical Lectures: 15

> Introduction to sewing machine (single needle lock stitch machine) operations, handling of machine, Motorise machine practice on paper, Paper punching exercise (straight line, curve line, zigzag, shapes).

> Stitching on fabric for straight stitches, stitching of paper punching exercise on fabric. Seams and application of decorative stitches and design elements –frills, pleats, tucks flayers, appliqué, and lay

> Final project- Stitching of Simple home furnishes products (curtains or screen, cushion covers and floor cushion, table cloth, bed cover etc) with a theme, colour combination and fabric manipulation techniques applied.

#### **Recommended Books:**

- 1. Textiles: Fiber to Fabric-Bernard P. Corbman, International student, edition, McGraw Hill International Edition book
- 2. Fabric Science-Joseph, J. P. Et.al. Fairchild publications, New York (1990)
- 3. Technology of textile processing-Shenai. V.A. Vol I, II, V, VII, Sevak publications
- 4. Technology of Clothing Manufacturing-Carr & Lathan

Note: Latest edition of textbooks may be used