

# Tika Ram Girls College Sonipat (Haryana)



Certificate Course on  
Artificial Intelligence and Machine Learning

Conducted by  
Computer Science Department

# **Tika Ram PG Girls College, Sonapat**

*(Affiliated to MDU , Rohtak )*

**Scheme of Course And Syllabus For Online Course**

**On**

**Artificial Intelligence And Machine Learning**

**Duration : 30 Hours**

## **Learning Objectives :**

On completion of this course, Students will be able to :

- Understand the basic theory underlying Artificial Intelligence and its various applications
- Understand range of Machine Learning concepts
- Appreciate importance of visualization in the data analytics solution .
- Develop and appreciation for what is involved in learning from data .

# Syllabus For Course

## Unit 1

**Data Mining** : Introduction to Data Mining and information retrieval systems, RDBMS, Data Warehouses, History and Objectives of Information Extraction , Basics of Data Structure, File Structure, HTML,XML Concept of Data Mining, KDD, Classification And Clustering, Data Mining Tool –Weka .

## Unit 2

**Artificial Intelligence** : Introduction to AI, History, Agents And Environment ,Problem Solving, Searching Strategies : Uninformed Search Strategies, Informed Search strategies ,Heuristic Functions , Reasoning and Uncertain knowledge, Decision Making

**Fuzzy Systems** : Crisp Set , Fuzzy Set , Basic Type and Concepts, Fuzzyfication and Defuzzyfication

## Unit 3

**Machine Learning And Python Programming**: Introduction to Machine Learning, Machine learning Application ,Types of Learning, Supervised, Un-Supervised .

**Programming With Python**: Data Types, variables, Basic Input Output Operations, Basic Operators ,Conditional Execution , Tuples , Dictionaries, String , List ,Packages ,Object Oriented Approach , Classes and Objects Exception Handling.

# **Tika Ram Girls College Sonipat (Haryana)**



**Certificate Course on  
Introduction to electricity and magnetism**

**Conducted by  
Physics Department**

## CERTIFICATE COURSE

*Introduction*  
COURSE TITLE: Intro to electricity and magnetism

**Total hour: 30**

**Trainer:** Prominent, sales, servicers, and manufacturer of scientific instruments.

### **Course objective:**

- I. Learn the fundamental concepts, electric charge and electric field, that help the rest of the course go more smoothly.
- ii. Explain how the electric field is independent of the test charge.
- III. Solve problems involving electric charge moving through electric fields.

### **SYLLABUS**

**UNIT1: ELECTRIC CHARGE AND ELECTRIC FORCE**

**UNIT 2: ELECTRIC FIELDS**

**UNIT3: DC CIRCUIT WITH CAPACITOR**

**UNIT4: MAGNETIC FIELD**

## CERTIFICATE COURSE REPORT

The Certificate course 'Intro to Electricity and Magnetism' has been started on 20<sup>th</sup> January 2023 to 02 March 2023. In this course 40 students have enrolled. The students get benefit from this course for general academic purpose. Certificates were distributed to the students after the completion of the course.

Jyoti  
Physics Dept.

Mouss

**TIKA RAM GIRLS COLLEGE  
SONIPAT (HARYANA)**



**Certificate Course on  
Software tool for Molecular Modelling: ChemDraw**

**Conducted by  
Chemistry Department**

Course duration: 30 hours

Course timing: 1:30 P.M to 2:30 P.M

**About Course:** -

ChemDraw is a vital drawing tool designed for scientists, students, and researchers for illustrating chemical concepts. It is powerful yet easy way for producing chemical drawing featuring chemical structure to name conversion, chemical name to structure conversion, NMR ( $^1\text{H}$  &  $^{13}\text{C}$ ) spectrum stimulation & mass spectrum stimulation.

**Objectives:** -

- Allow students to draw chemical structures & reactions.
- Predict properties such as melting and boiling point as well as spectra of structures.

**Unit I:** -

Introduction, ChemDraw tutorials, ChemDraw user interface, toolbars, documents.

**Unit II:** -

The drawing area, the document type, printing, saving page setup settings, viewing drawings.

**Unit III:** -

Basic drawings, bonds, atoms, captions, drawing rings, chains, objects, clean-up structure.

**Unit IV:** -

Advanced drawing techniques, colouring objects, labels, attachment points, atom numbering, template drawing reactions.

**Course Outcome:** -

- Understand scientific graphing by applying chemDraw softwares for writing structures
- Understand calculation of several molecular parameters.



# Tika Ram Girls College Sonipat (Haryana)



Certificate Course on  
Advanced Vedic Maths

Conducted by  
Mathematics Department

### Advanced Vedic Maths

#### What is Vedic Math?

Vedic mathematics is the name given to the ancient system of Indian mathematics which was rediscovered from the vedas between 1911 and 1918 by Sri Bharti Krishna Tirthaji. The system is based on the 16 sutras and 13 sub sutras derived from the Atharva Veda. Mathematical sutras provide simple, straight forward alternates to calculate the otherwise cumbersome and complicated calculation.

Vedic Math is one of the Ancient and the most effective method to learn math in the easiest way possible. It has plenty of benefits in store for every person willing to master this method. Vedic mathematics or simply vedic math. Find its applications not only in arithmetic but also in algebra, geometry, trigonometry, calculus and applied mathematics.

#### About the Course:

This course has 36 lectures. Each topic is explained extensively by solving multiple questions along with the student during the lectures. The students are also provided and encouraged to solve the practise questions and quizzes provided at the end of the each topic.

It is designed to teach the algebra during the vedic sutras using the methods that are fast and effective because they rely on mental calculations. In many of the techniques answers are found in just one line! It provides more systematic, simplified and faster techniques than the conventional system.

This course is a system of the polynomial calculations which are simpler and more enjoyable than the equivalent algorithms of modern algebra.

#### Topics covered in the course:

- Dividing a polynomial by another without actually dividing.
- Multiplication of polynomials using vertically and crosswise techniques.
- Factorization of quadratics.
- Factorization of cubic polynomials.
- Factorization of homogeneous expressions of second degree.
- Solving quadratics by calculus and many other special techniques.
- Solving system of simultaneous linear equations.
- Solving simple equations by first principle.
- Solving many times of simple equations using Sunyam Samya Samucaya Technique.

#### You will get:

Mathematics converts our tedious subject algebra into a playful and a blissful one which anyone can learn with smiles it has unique and effective benefits that make it an easy choice for learners to adopt.

## Certificate course report

The certificate course having the title 'advanced vedic mathis' has been started 2 nov 22. to 08 dec 22. In this course 30 students have enrolled the students get benefit from this course for general and the treadmill purpose E certificates were distributed to the students after the completion of the course.

*Son's  
mathsolyth  
works*

# Tika Ram Girls College Sonipat (Haryana)



Certificate Course on  
Modern Approaches in History

Conducted by  
History Department

## Course Contents:

The Course Content includes the following:

### Unit - I

Modern approaches in History

- A) Positivist    B) Classical Marxist    C) Later Marxist

### Unit - II

Modern approaches in History

- A) Gender in History    B) Environment in History    C) Annals

### Unit - III

Modern approaches in History

- A) Colonial History writing    B) Nationalist History writing  
C) Communalist History writing

### Unit - IV

Modern approaches in History

- A) Marxist History writing    B) Cambridge School  
C) Subaltern School

## Learning Outcomes

Students developed their ability to assess critically historical analysis and argument, past and present.

Students gained understanding of the development of the academic study of history throughout the world since the later eighteenth century.

Students gained an awareness of recent and contemporary debates in the theory, practice of historical writing and gained debate in History thinkers.

Students gained insight into how historical arguments have been and are made become aware of historiographical traditions outside the west.

## Relevant Information:

The Course would be seen in Computer Lab from  
2: Pm to 3:00 P.M

2. Total duration of course will be of 30 Hours.
3. Course is free of Cost.

**TIKA RAM P.G GIRLS COLLEGE**  
**SONIPAT(HARYANA)**



**CERTIFICATE COURSE IN BASIC OF REMOTE SENSING**  
**CONDUCTED BY: ART**  
**DEPARTMENT OF GEOGRAPHY**

**CERTIFICATE COURSE IN BASIC OF REMOTE SENSING**

**Learning objective**

The aim of this course is to apprise the students of various aspects of remote sensing which are important elements of geospatial technology.

**Learning outcome**

Students will be familiarized and enhance knowledge about the remote sensing technology. They will understand the technology along with application value as well as its importance in the earth observation

**Unit I**

Remote sensing technique means basic principles and concepts

Remote sensing system and relevance in geography and other subjects

Remote sensing platform types and characteristics

Satellite orbits near polar and geostationary orbits sensors types

**Unit II**

Remote sensing applications in land use, land cover, urban, water resources, environment studies, disaster management.

Remote sensing set up and programmers in India



Psy. Dept

2022-2023

PSY101

Certificate Course

**TIKA RAM GIRLS COLLEGE**

**SONIPAT (HARYANA)**



**CERTIFICATE COURSE**

**PSYCHOTHERAPY**

**SESSION**

**2022-2023**

**Conducted By**

**PSYCHOLOGY DEPARTMENT**

# Certificate Course In Psychology

## Unit - I

### Cognitive Therapy

#### Affectively Oriented Approaches:

1. Existential therapy
2. Person-centred therapy
3. Gestalt therapy
4. Theoretical

analysis of affective approaches

5. Cognitively Oriented Approaches
6. Rational Emotive Therapy
7. Beck's Model
8. Transactional Analysis
9. Theoretical analysis of cognitive approaches.

## UNIT - II

### Behavioural Therapy

Behaviourally Oriented Approaches: Behaviour Therapy:

1. Meaning & Goals,
2. Behavioural Connections
3. Systematic Desensitization
4. Relaxation
5. Flooding Therapies
6. Behavioural Contingencies
7. Reinforcement
8. Punishment
9. Shaping
10. Modelling Techniques
11. Self Instructional Training
12. Self Inoculation
13. Theoretical analysis of behavioural approaches.

Course outcome :

After completion of the course, students will be awarded with certificate to work with well known therapies.

## CERTIFICATE COURSE REPORT

The certificate course having "PSYCHOTHERAPY" has been started on 16<sup>th</sup> Feb.2023, 6 April 2023. In this course 38 students have enrolled. The students get benefit from this course to general academic purpose and personal purpose. Certificate were distributed to the students after the completion of the CERTIFICATE COURSE REPORT course.

*Dr. Anu*

TIKARAM GIRLS COLLEGE  
SONIPAT (HARYANA)



Certificate Course on  
Gandhian Peace Studies  
Session: 2022-2023

Conducted by:  
Department of Political Science

# Certificate Course on Gandhian Peace Studies

## Unit I

Mahatma Gandhi's Life , Family Background, Early Life and Education in India and England , Impact of various religions

## Unit II

Gandhi in South Africa , The origin of Satyagraha, Struggle against Racial discrimination, Injustice and Exploitation .

## Unit III

Impact on Gandhi : Leo Tolstoy , John Ruskin , Henry David Thoreau , Vinobha Bhave, Gopal Krishna Gokhale , Aurobindo Ghosh .

## Unit IV

Main Principles of Gandhi : Truth , Non – Violence, Satyagraha , Swarajya, Religion , Means and Ends.

Religion , Means and Ends .

Internal Assessment Procedure : Viva – Voice , Group Discussion

## Learning Outcome

- \*Understanding the dynamics of Indian politics since independence and demonstrate processes of continuity and change in Indian Politics .
- \* Critical appraisal of competing theoretical perspectives and empirical analyses on the transformation of Indian Politics and society since Independence
- \*Situating Indian domestic and foreign politics in a broader comparative perspective , especially by drawing comparison with other developing states , situating India within comparative

understandings of state-market-society relations, comparative theories of state and nation-building, comparative federalism, comparative theories for governing divided societies.

\* Development of research, analytical and presentation skills, through guided research in preparation for assessment and tutorial presentations

**Other Relevant Information:-**

1. The course would be run in Computer lab from 2.00 PM to 3.00 PM.
2. Total duration of the course will be of 30 Hours.
3. Course is free of cost.

**TIKA RAM GIRLS COLLEGE**

**SONIPAT (HARYANA)**



**Yoga Certificate Course**

**Conducted by**

**Physical Education Department**



### **About the Course:**

This certificate course is made to learn yoga beyond mat .It will establish structure and habits for healthy body and mind . It will experience authentic yogic lifestyle with like minded community.Students will reach new level in their personal yoga and meditation practice.

### **Objectives of the Course:**

1. To give basic knowledge of yoga asanas.
2. To bring healthy lifestyle in Students.
3. Make students mind calm and physically fit.

### **COURSE CONTENT:**

The course content includes the following:

#### **Unit – 1**

Introduction to yoga , History of yoga , Importance of yoga in modern society, correct time for yoga practise, Uniform for yoga abhyasa, yogic diet, sadhak tattvas and badhak tattvas.

#### **Unit – II**

Vedas, Upanishadas, Gita, Aurveda introduction , Ashtanga yoga and its eight limbs , introduction to hath yoga, surya and chandra swara, pranayama techniques.

#### **Unit – III**

Introduction to asnas, basic sukshama vayayamas, sitting postures, standing postures, introduction to Patanjali yoga sutras, Introduction to pranayamas, meditation

## Unit – IV

Tadasana, surya namshkara, pawanmuktasana, uttanpadasana, vajrasana, vakrasana, bhujangasana, katichakjrasana, naukasana, jaunusirasana, kandhrasana, padmasana, kapotasana, gaumukhasana, trikonasana, nadittanasana, nadishodhan pranayama, sheetali pranayama, sheetkari pranayama, trartaka .

### Course Outcome

1. After successfully completed the course, students will be awarded certificate .
2. Students can improve their lifestyle by implementing yoga practice in their rouine.

### Topic coverage day to day

Sr. no.	Date	Topic
1	2nd November	Introduction to yoga
2	3 <sup>rd</sup> November	History of yoga
3	4 <sup>th</sup> November	Importance of yoga in modern society
4	5 <sup>th</sup> November	Correct time for yoga practise
5	7 <sup>th</sup> November	Uniform for yoga abhyasa.
6	9th November	Yogic diet
7	10 <sup>th</sup> November	Sadhak tattva
8	11th November	Badhak tattva
9	12 <sup>th</sup> November	Yogic ahara
10	14 <sup>th</sup> November	Vedas
11	15 <sup>th</sup> November	Upanishads
12	16 <sup>th</sup> November	Ayurvedas
13	17 <sup>th</sup> November	Introduction to Asthang Yoga
14	18 <sup>th</sup> November	8 limbs of ashtanga yoga
15	19 <sup>th</sup> November	Introduction to hath yoga
16	21 <sup>st</sup> November	Introduction to asanas
17	22 <sup>nd</sup> November	Basic sukshama vayamas and sitting postures
18	23 <sup>rd</sup> November	Standing postures
19	24 <sup>th</sup> November	Introduction to pranayamas
20	25 <sup>th</sup> November	Meditation
21	26 <sup>t</sup> November	Tadasana, Surya namashkara, Pawanmuktasana, Uttanpadasna
22	28 <sup>th</sup> November	Vajrasana, Bhujangasana, Katichakrasana, Naukasana

23	29 <sup>th</sup> November	Jnursirasana, Kandhrasana, Padmasana , Kapotasana
24	30 <sup>th</sup> November	Gaumukasana, Trikonasana, Nadishodhan pranayama, Sheetal and sheetkari pranayamas

**TIKA RAM GIRLS COLLEGE**

**SONIPAT (HARYANA)**



**Certificate Course**

**On Entrepreneurship Development Programme**

**Conducted by**

**Economics Department**

**Course Contents:**

Sr. No.	Course Component	Key Learning Outcomes	Learning Hours
1	Introduction to Entrepreneurship	Understand, appreciate and develop positive thinking and self – confidence embarking on self – employment/entrepreneurship.	4
2	Knowledge of Achievement Motivation and Positive Psychology	Student is able to appreciate the importance of systematic planning in setting up and managing a business enterprise	6
3	Ability to develop understanding of self and do SWOT Analysis	Engage in Process of self understanding (to limited extent) through reflection and peer feedback	7
4	Business Opportunities Identification Techniques	Ability to engage in the exercise of indentifying business opportunities in chosen sector/sub – sector/ area of work by gathering and analyzing information from multiple sources	6
5	Conducting Market Survey	Skills and ability to conduct market survey in local area on a limited scale and Ability to	7

3

	and Preparation of Business Plan	prepare simple business plan as per given instructions/provided. Student is able to analyze major trends in a given economic sector/sub-sector and identify Business Opportunities	
--	----------------------------------	--	--

**Course duration: 30 hours****Course type: certificate course**

**TIKA RAM GIRLS COLLEGE  
SONIPAT (HARYANA)**



**Certificate Course  
On Tally**

**Conducted by  
Commerce Department**

## **About the Course:**

Today, Tally is important in our education system for enhancing accounting data management creativity in students' minds. Students can learn by using tally for converting raw data into meaningful information. The Programme on Accounting with Tally would enable the students to record the business transactions and manage the accounts information for an organization using the popular Tally Business Accounting Software. In addition, students will be able to solve his/her day to day tasks efficiently by using the various Office productivity tools such as Microsoft Word and Microsoft Excel, generally used for financial analysis and report making. Tally Course with GST covers in-depth knowledge to meet the accounting requirements of the industry.

## **Objectives of the Course:**

1. This course helps students to work with well-known accounting software i.e. Tally
2. Student will learn to create company, enter accounting voucher entries including advance voucher entries, do reconcile bank statement, do accrual adjustments, and also print financial statements, etc. in Tally software
3. Accounting with Tally certificate course is not just theoretical program, but it also includes continuous practice, to make students ready with required skill for employability in the job market.

## **COURSE CONTENT:**

The course content includes the following:

### **Unit – 1**

Introduction: introduction of tally prime, company creation, alteration, select remote computer, select from drive, shut company. Master creation alteration, accounting master. Inventory master, taxation chart of accounts, taxation, charts of accounts, voucher entries, contra, location, journal, stock journal, physical stock, payment, receipts.

### **Unit – II**

Accounts payable and receivable: Purchase, Sale, GST, cost centre and categories, predefined (cost centre class), Batchwise details, manufacturing and expiry dates, standard rates, price list (multi price level) set credit limit, budget maintain, ,

### **Unit – III**

Taxation and compliance: Purchase order processing, Sale order processing, Debit and Credit note, multi-currency with entry, bill of material, TDS, TCS, VAT, point of sale, actual and billed quantity, interest calculation, bank reconciliation,

## Unit – IV

Payroll and advance feature : Bank reconciliation, post-dated cheque, provision entries, adjustment and closing entries, check all reports export closing, payroll, job order, job work, cost tracking,

### Course Outcome

1. After successfully completed the course, students will be awarded certificate to work with well-known accounting software i.e. Tally
2. Student will do by their own create company, enter accounting voucher entries including advance voucher entries, do reconcile bank statement, do accrual adjustments, and also print financial statements, etc. in Tally software

### Topic coverage day to day

Sr. no.	Date	Topic
1	31 <sup>st</sup> October	introduction of tally prime
2	2 <sup>nd</sup> November	Advantage of tally in business
3	3 <sup>rd</sup> November	Application of tally
4	4 <sup>th</sup> November	company creation, alteration, select remote computer, select from drive, shut company.
5	7 <sup>th</sup> November	Master creation alteration, accounting master.
6	10 <sup>th</sup> November	Inventory master, taxation chart of accounts, taxation, charts of accounts,
7	11 <sup>th</sup> November	Purchase sale
8	14 <sup>th</sup> November	GST, cost centre and categories, predefined (cost centre class),
9	15 <sup>th</sup> November	Batchwise details, manufacturing and expiry dates,
10	16 <sup>th</sup> November	standard rates,
11	17 <sup>th</sup> November	price list (multi price level) set credit limit
12	18 <sup>th</sup> November	Budget maintain,
13	19 <sup>th</sup> November	Purchase order processing,
14	21 <sup>st</sup> November	Sale order processing,
15	22 <sup>nd</sup> November	Debit and Credit note,
16	23 <sup>rd</sup> November	multi-currency with entry, bill of material,
17	24 <sup>th</sup> November	TDS,
18	25 <sup>th</sup> November	TCS,
19	26 <sup>th</sup> November	VAT,
20	28 <sup>th</sup> November	point of sale,
21	29 <sup>th</sup> November	actual and billed quantity,
22	30 <sup>th</sup> November	interest calculation,
23	1 <sup>st</sup> December	Bank reconciliation,
24	2 <sup>nd</sup> December	post-dated cheque,
25	3 <sup>rd</sup> December	provision entries,
26	4 <sup>th</sup> December	adjustment and closing entries



27	5 <sup>th</sup> December	check all reports export closing,
28	6 <sup>th</sup> December	payroll,
29	7 <sup>th</sup> December	job order, job work,
30	8 <sup>th</sup> December	cost tracking.

**Other relevant information**

Course duration: 30 hours

Course timing: 1:30 P.M to 2:30 P.M

# Tika Ram Girls College Sonipat (Haryana)



Certificate Course on  
प्रयोजनमूलक हिंदी: पत्रकारिता के परिप्रेक्ष्य

Conducted by  
Hindi Department

## सर्टिफिकेट कोर्स

विषय: प्रयोजनमूलक हिंदी: 'पत्रकारिता के परिप्रेक्ष्य'

संबंधित पाठ्यक्रम:

### इकाई-1

1. प्रिंट मीडिया में हिंदी: समाचार पत्र, पत्र-पत्रिकाएं, लघु पत्रिकाएं
2. इलेक्ट्रॉनिक मीडिया में हिंदी: टी.वी., फेसबुक, आकाशवाणी

### इकाई-2

3. संपादन लेखन: संपादक के गुण, संपादन की प्रक्रिया
4. फीचर लेखन: फीचर लेखन की विशेषताएं, फीचर के प्रकार

### इकाई-3

5. समाचार पत्र: समाचार पत्र लेखन, समाचार पत्र के प्रकार
6. ब्लॉग लेखन: ब्लॉग, लेखकीय गुण

आंतरिक मूल्यांकन प्रक्रिया:

1. वाद-संवाद
2. मौखिकी

संदर्भ ग्रंथ:

1. हिंदी पत्रकारिता का इतिहास, जगदीश प्रसाद चतुर्वेदी,
2. हिंदी पत्रकारिता, डॉ कृष्ण बिहारी मिश्र

# **Tika Ram Girls College Sonipat (Haryana)**



**Certificate Course on  
Literary Ages and Major Works**

**Conducted by  
English Department**

# **CERTIFICATE COURSE IN LITERARY AGES AND MAJOR WORKS**

## **UNIT - 1**

The Age of Chaucer, Post Chaucerian  
Poet, The Canterbury Tales, The Early Renaissance

## **UNIT - 2**

Age of Shakespeare, Historical Plays, Poetry and Essay, Milton, Metaphysical  
Poets and The Age of Pope

## **UNIT - 3**

Revival of Romanticism, French Revolution, The Victorian Age its Qualities

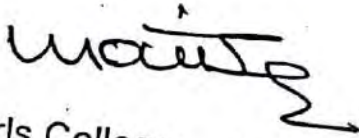
## **UNIT - 4**

The Pre-Raphaelite movement, The Oxford Movement, The Modern Age,  
Theatre of Absurd

## Certificate Course Report

The certificate course having title 'Literary Ages and Major Works has been started on 3rd November December 2022 to 15th December 2022. In this course 40 students have enrolled. The students get benefit from this course for general and academic purpose. E-certificates were distributed to the students after the completion of the course.

Principal  
Tika Ram Girls College  
Sonapat



# **Tika Ram Girls College Sonipat (Haryana)**



**Certificate Course on  
Instrumentation Basics and Technical  
Development**

**Conducted by  
Physics Department**



## CERTIFICATE COURSE

**Course Title:** Instrumentation basics & Technical skill development

**Total hours:** 30

**Trainers:** PROMINENT, sales, servicer and manufacturer of scientific instruments.

**Course Objectives:**

- Understand the basic working principles of important electrical and electronic circuit components.
  - Troubleshooting the laboratory equipments.
  - Develop the skill of simple electronic circuit fabrication and instrumentation.
- 

### SYLLABUS

**Module 1:** Familiarisation of electronics circuit components - Resistor, Capacitor, Diodes, Transistor, Inductor, Integrated Circuits.

**Module 2:** Characteristics of AC and DC signals.

**Module 3:** Familiarisation of Galvanometer, Ammeter, Voltmeter, DC power supplies, AC signal generator, CRO.

## CERTIFICATE COURSE REPORT

The Certificate course 'Instrumentation Basics & Technical Development' has been started on 28th December 2021 to 4 February 2022. In this course 40 students have enrolled. The students get benefit from this course for general academic purpose. E Certificates were distributed to the students after the completion of the course.

Syati  
myisdeh  
course

# **Tika Ram Girls College Sonipat (Haryana)**



Certificate Course on  
Advance Vedic Mathematics

Conducted by  
Mathematics Department

## Certificate Course in Mathematics

### Advanced Vedic Maths

What is Vedic Math?

Vedic mathematics is the name given to the ancient system of Indian mathematics which was rediscovered from the vedas between 1911 and 1918 by Sri Bharti Krishna Tirthaji. The system is based on the 16 sutras and 13 sub sutras derived from the Atharva Veda. Mathematical sutras provide simple, straight forward alternates to calculate the otherwise cumbersome and complicated calculation.

Vedic Math is one of the Ancient and the most effective method to learn math in the easiest way possible. It has plenty of benefits in store for every person willing to master this method. Vedic mathematics or simply vedic math. Find its applications not only in arithmetic but also in algebra, geometry, trigonometry, calculus and applied mathematics.

#### About the Course:

This course has 36 lectures. Each topic is explained extensively by solving multiple questions along with the student during the lectures. The students are also provided and encouraged to solve the practise questions and quizzes provided at the end of the each topic.

It is designed to teach the algebra during the vedic sutras using the methods that are fast and effective because they rely on mental calculations. In many of the techniques answers are found in just one line! It provides more systematic, simplified and faster techniques than the conventional system.

This course is a system of the polynomial calculations which are simpler and more enjoyable than the equivalent algorithms of modern algebra.

#### Topics covered in the course:

- Dividing a polynomial by another without actually dividing.
- Multiplication of polynomials using vertically and crosswise techniques.
- Factorization of quadratics.
- Factorization of cubic polynomials.
- Factorization of homogeneous expressions of second degree.
- Solving quadratics by calculus and many other special techniques.
- Solving system of simultaneous linear equations.
- Solving simple equations by first principle.
- Solving many times of simple equations using Sunyam Samya Samucaya Technique.

#### You will get:

Mathematics converts our tedious subject algebra into a playful and a blissful one which anyone can learn with smiles it has unique and effective benefits that make it an easy choice for learners to adopt.

## Certificate course report

The certificate course having the title 'advanced vedic maths' has been started 16 nov 21. to 24 dec 21. In this course 30 students have enrolled the students get benefit from this course for general and the treadmill purpose. E certificates were distributed to the students after the completion of the course.

Soni  
Heathdeptl -  
Wolsey

**TIKA RAM GIRLS COLLEGE**  
**SONIPAT (HARYANA)**



**Yoga Certificate Course**

**Conducted by**  
**Physical Education Department**

### **About the Course:**

This certificate course is made to learn yoga beyond mat .It will establish structure and habits for healthy body and mind . It will experience authentic yogic lifestyle with like minded community.Students will reach new level in their personal yoga and meditation practice.

### **Objectives of the Course:**

1. To give basic knowledge of yoga asanas.
2. To bring healthy lifestyle in Students.
3. Make students mind calm and physically fit.

### **COURSE CONTENT:**

The course content includes the following:

#### **Unit – 1**

Introduction to yoga , History of yoga , Importance of yoga in modern society, correct time for yoga practise, Uniform for yoga abhyasa, yogic diet, sadhak tattvas and badhak tattvas.

#### **Unit – II**

Vedas, Upanishadas, Gita, Aurveda introduction , Ashtanga yoga and its eight limbs , introduction to hath yoga, surya and chandra swara, pranayama techniques.

#### **Unit – III**

Introduction to asnas, basic sukshama vayayamas, sitting postures, standing postures, introduction to Patanjali yoga sutras, Introduction to pranayamas, meditation

## Unit – IV

Tadasana, surya namshkara, pawanmuktasana, uttanpadasana, vajrasana, vakrasana, bhujangasana, katichakjrasana, naukasana, jaunusirasana, kandhrasana, padmasana, kapotasana, gaumukhasana, trikonasana, nadittanasana, nadishodhan pranayama, sheetal pranayama, sheetkari pranayama, trartaka .

### Course Outcome

1. After successfully completed the course, students will be awarded certificate .
2. Students can improve their lifestyle by implementing yoga practice in their rouine.

### Topic coverage day to day

Sr. no.	Date	Topic
1	8th January	Introduction to yoga
2	10 <sup>th</sup> January	History of yoga
3	11 <sup>th</sup> January	Importance of yoga in modern society
4	12 <sup>th</sup> January	Correct time for yoga practise
5	13 <sup>th</sup> January	Uniform for yoga abhyasa.
6	14th January	Yogic diet
7	15 <sup>th</sup> January	Sadhak tattva
8	17th January	Badhak tattva
9	18 <sup>th</sup> January	Yogic ahara
10	19 <sup>th</sup> January	Vedas
11	20 <sup>th</sup> January	Upanishads
12	21 <sup>th</sup> January	Ayurvedas
13	15 <sup>th</sup> January	Introduction to Asthang Yoga
14	16 <sup>th</sup> January	8 limbs of ashtanga yoga
15	17 <sup>t</sup> January	Introduction to hath yoga
16	18 <sup>t</sup> January	Introduction to asanas
17	19 <sup>th</sup> January	Basic sukshama vayamas and sitting postures
18	21 <sup>st</sup> January	Standing postures
19	22 <sup>nd</sup> January	Introduction to pranayamas
20	24 <sup>th</sup> January	Meditation
21	25 <sup>t</sup> January	Tadasana, Surya namashkara, Pawanmuktasana, Uttanpadasna
22	27 <sup>th</sup> January	Vajrasana, Bhujangasana, Katichakrasana, Naukasana



23	28 <sup>th</sup> January	Jnursirasana, Kandhrasana, Padmasana , Kapotasana
24	29 <sup>th</sup> January	Gaumukasana, Trikonasana
25	31st January	Nadishodhan pranayama
26	1 <sup>st</sup> February to 6th February	Sheetali and sheetkari pranayamas

# **Tika Ram Girls College Sonipat (Haryana)**



**Certificate Course on  
Web Designing**

**Conducted by  
Computer Science Department**

## **UNIT-I**

**Web Designing using HTML: Understanding HTML, XHTML Syntax and Semantics, HTML Elements: Paragraph, Lists, Tables, Images, Frames, Forms, Linking to other Web Pages: and Internal linking, E-mail Links; Working with Background colors and Images; Marquee; Text Alignment and Text Formatting, Advanced Layout with Tables; Publishing HTML Pages.**

## **UNIT-II**

**Cascading Style Sheets: Introduction, Inline, Internal, External CSS, Linking CSS to Web Page. Client-Side Programming: Introduction to JavaScript, Basic Syntax, Variables and Data types, Statements, Operators, Literals, Functions, Objects, Arrays.**

## **UNIT-III**

**XML: Relation between XML and HTML, Goals of XML, Structure and Syntax of XML, Well Formed XML, DTD and its Structure, tree structures in data organization.**

TIKA RAM GIRLS COLLEGE

SONIPAT (HARYANA)



Certificate Course

Communicative Grammar

Session

1<sup>st</sup> APRIL 2022 – 11<sup>th</sup> MAY 2022

Conducted by

English Department

## CERTIFICATE COURSE IN COMMUNICATIVE GRAMMAR

### Course Outcomes:

- C.O.1. Knowledge of the scope and significance of communication
- C.O.2. Acquisition of English language used in the professional world
- C.O.3. Enhanced communicative skills – both general and academic

### Theory

#### Unit-I

### Communicative Grammar and Lexis

#### A. Lexis: -

- i. Idioms & Phrases, one word substitute, Spotting errors, confused words, comprehensives.
- ii. Foreign Words  
ad hoc, ad hominem, avant-garde, bona fide, bon voyage, eureka, ex gratia, ex officio, ex parte, exempli gratia, homo sapiens, ibidem, id est, inter alia, in toto, in absentia, laissez-faire, monsieur, modus operandi, nouveau riche, per se, post meridian, prima facie, pot pourri, status quo, sub judice, tete a tete, verbatim, versus, vice versa, volte-face, entrepreneur, faux pas, gaffe, rendezvous, repertoire.

#### A. Communication: -

- i. Introduction to verbal and nonverbal communication
- ii. Principles of effective communication-Effective listening

### UNIT-II

#### WRITTEN COMMUNICATION

- A. Writing skills, Dialogue writing, Interpreting Pictures
- B. Technical writing  
Business Letters  
E-mail Writing

### Practical

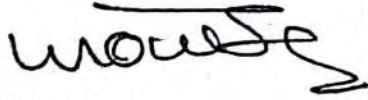
#### Developing Speaking & Listening Skills Through

1. Role Play Activities
2. Group Discussions
3. Speeches/Extempore
4. Viewing & Reviewing TV Programmes.

## Certificate Course Report

The certificate course having title 'Communicative Grammar' has been started on 1<sup>st</sup> April 2022 to 11<sup>th</sup> May 2022. In this course 30 students have enrolled. The students get benefit from this course for general and academic purpose. E- certificates were distributed to the students after the completion of the course.

Principal  
Tika Ram Girls College  
Sonapat



# Tika Ram Girls College Sonipat (Haryana)



Certificate Course on  
कंप्यूटर और हिंदी भाषा

Conducted by  
Hindi Department

## कम्प्यूटर और हिंदी भाषा

### **इकाई-1 : कम्प्यूटर का विकास और हिंदी**

- कम्प्यूटर का परिचय और विकास
- कम्प्यूटर में हिंदी का आरम्भ एवं विकास
- हिंदी के विविध फॉन्ट
- कम्प्यूटर में हिंदी की चुनौतियाँ और संभावनाएँ

### **इकाई-2 : हिंदी भाषा और प्रौद्योगिकी**

- इंटरनेट पर हिंदी
- यूनिकोड, देवनागरी लिपि और हिंदी भाषा
- हिंदी और वेब डिजाइनिंग
- हिंदी की वेबस्टैंडर्स

### **इकाई-3 : हिंदी भाषा, कम्प्यूटर और गवर्नेंस**

- राजभाषा हिंदी के प्रसार में कम्प्यूटर की भूमिका
- ई-गवर्नेंस, इंटरनेट
- हिंदी भाषा सिध्दान्त और ई-सर्जिंग
- सरकारी और गैर-सरकारी संस्थाएँ

### **सहायक ग्रंथ**

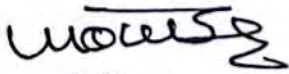
- आधुनिक जनसंचार और हिंदी - हरिमोहन
- कम्प्यूटर के भाषिक अनुप्रयोग - विजय कुमार मल्लोमा
- कम्प्यूटर और हिंदी -
- हिंदी भाषा और कम्प्यूटर - संतोष गोयल
- कम्प्यूटर के सत्य प्रस्तुतिकरण और भाषा-सिद्धांत - पी.के. शर्मा
- पीडिया : भूमंडलीकरण और समाज - संपा. संजय द्विवेदी
- सोशल नेटवर्किंग : नए समय का संवाद - संपा. संजय द्विवेदी



## रिपोर्ट

दिनांक - 01-04-2022 को हिंदी विभाग द्वारा  
कम्प्यूटर और हिंदी भाषा' विषय पर सर्टिफिकेट  
कोर्स शुरू किया गया। इसमें 40 छात्राओं  
ने इस कोर्स में भाग लिया। कोर्स की  
समाप्ति पर छात्राओं को प्रमाण पत्र प्रदान किए गए

Principal  
Tika Ram Girls College  
Sonepat



डॉ. नीलम देवी  
हिंदी - विभा

TIKARAM GIRLS COLLEGE  
SONIPAT(HARYANA)



Value Added Course  
Statistical Analysis with MS Excel

Conducted by:  
Department of Commerce

### About the Course:-

Today, Microsoft Excel is important in our education system for enhancing data management creativity in students' minds. Students can learn by using excel for converting raw data into meaningful information. They will learn by doing exercises in Excel on how to perform calculations faster for visualizing data. Microsoft Excel formulas, formatting options, and other data management and visualization tools can help students to perform complex mathematical, logical and financial calculations faster with accuracy.

Microsoft Excel Tools such as conditional formatting, sorting, filters, use of chart and illustration in data visualization, use of pivot table, logical formulas such as SUMIF, IF, OR, NOT, AND and various other types of text-based options in Excel is really important for researchers. By using such a tool they will learn how to validate, consolidate, group, import and explore data and information in a computer using Microsoft Excel faster with accuracy.

### Objectives of the Course:-

Certificate Course in MS-Excel in Statistical Analysis is very beneficial for budding researchers to handle large amount of data and information easily and accurately. Microsoft Excel contains various educational and business tools and features. It means if students start learning and start working on Excel from the earlier as possible then it will be easier for them in the future to handle and understand the pattern of data.

Microsoft Excel formulas, formatting options, and other data management and visualization tools can help students to perform complex mathematical, logical and financial calculations faster with accuracy. They can become good and proficient in dealing with data and information while working in organizations and companies.

## This Course seeks to help the students:

- To learn the fastest way to do the calculation with accuracy.
- To validate, consolidate, group, import and explore data and information in a computer.
- To visualize the data.
- To build strong analytical thinking and skills.

## Course Contents:-

The course content includes the following:

### Unit – 1

Data collection – Meaning, Experiments and Surveys, Collection of Primary data Questionnaires, schedules, Collection of Secondary Data, Selection of appropriate methods of data collection. Data preparation process, missing values and outliers.

### Unit – II

Descriptive statistics and steps involved in calculation of descriptive statistics in MS Excel, Mean, Median, Mode, Range, Standard deviation, Skewness, Kurtosis. Sampling and Statistical inference – Parameter and Statistic, Sampling and non – Sampling errors, Sampling distribution of mean and proportion, degree of freedom, standard error, central limit theorem.

### Unit – III

Testing of Hypothesis with the help of MS Excel; hypothesis testing – meaning, types, type 1 and type 2 errors, level of significance, two tailed and one tailed tests. Procedure for hypothesis testing for mean, proportion and variance, limitations of the test of hypothesis.

### Unit – IV

Chi – square test and analysis of variance with the help of MS Excel

## Course Outcome

After completing the course students are able to explore productive creativity in their minds. Finance and economics is the most important part of our life. Later they have to work in companies, HR departments, they will run their own business and they have to manage their own daily life finance. That's why Excel can help to build strong financial thinking by managing, performing business and daily life financial calculation. The program prepares the students to become a good researcher in analyzing and interpretation of data.

## Other Relevant Information:-

1. The course would be run in Computer lab from 2.00 PM to 3.00 PM.
2. Total duration of the course will be of 30 Hours.
3. Course is free of cost.

"Statistical Analysis With MS EXCEL"  
Session - 2021-22 (1 April 22 to 7 May 2022)  
Report

The certificate course having title "Statistical Analysis with MS EXCEL" has been started on 1 April 2022 to 7 May 2022. In this course 42 students have enrolled. The students get benefit from this course and this would help them to learn how to work on statistical method with MS-Excel. It helps the student to analyse all the data in your worksheet so as to make better business transactions.

Certificates were distributed to the students after the completion of the course.

Suman  
(Commerce Dept)  
Wong

2021-22

**TIKA RAM GIRLS COLLEGE**  
**SONIPAT (HARYANA)**



**ENVIRONMENT STUDIES COURSE**

**Conducted by:ART**

**Department of Geography**

## **About the Course:-**

Environmental Studies is an interdisciplinary Course including topics from various subjects like geology, ecology, earth science and many others . The course focuses on the environment and different process that take place on earth Relevant issues of global warming, pollution, floods, earth quake, waste management and sustainable development have been given a lot of importance in a course. Environmental Studies course is offered at different levels from UG Programs. Environmental Studies course has recently been very popular among students because of its relevance and career of opportunities.

## **Objectives of the Course:-**

The object of environmental studies are a creating the awareness about environmental problems among people.

Imparting basic knowledge about the environment and its allied problems.

Developing an attitude of concern for the environment

## **This Course seeks to help the students:**

It helps individuals to develop an understanding of living and physical environment and how to resolve challenging environmental issues affecting nature.

## **Course Contents:-**

### **Unit – 1**

The Multidisciplinary Nature of Environmental Studies

Definition, Scope and Importance. Need for Public Awareness.

### **Unit – II**



## **Nature Resources**

### **Renewable and Non -renewable Resources**

(a) Forest resources-Used and over exploitation deforestation,case studies,Timber extraction,mining,dams and their effects on forest and tribal people.

(b) Water resources-Use and over utilization of surface and ground water, floods/drought,conflicts over water,dams-benefits and problems.

## **Unit – III**

### **Environmental Pollution**

**Definition,Causes,effects and Control measures of**

(a) Water Pollution

(b) Air Pollution

(c) Soil Pollution

(d) Noise Pollution

(e) Nuclear hazards

## **Course Outcome**

**Appreciate concepts and method from ecological and physical science and their application in environmental problem solving. Appreciate the ethical cross cultural and historical context of environmental issues and the links between human and natural system.**

### **Other Relevant Information:-**

- 1. The course would be run in computer lab from 2.00PM.**
- 2. Total duration of the course will be 30 Hours.**
- 3. Course is free of cost.**

### Certificate course report

The certificate course having the title 'Environment studies' has been started 3 nov. 21. To 16 dec. 21. In this course 30 students have enrolled the students get benefit from this course for general and the treadmill purpose. E- certificates were distributed to the students after the completion of the course.

Sangeeta / HOD / Dept.  
Wouse

**TIKA RAM GILS COLLEGE**  
**SONIPAT (HARYANA)**



**Certificate Offline Course On**  
**UNDERSTANDING HARYANA CULTURE**  
**Session - 2021-22**

**Conducted by :**  
**Department of History**

## Course Contents:

Course content includes the following:

### Unit 1:

Ancient history of Haryana: Harappan Civilization, Vedic Civilization, Historicity of Mahabharata War

### Unit 2:

Medieval history of Haryana: Turks invasion, Battle of Panipat ( I,II,III), Delhi sultanate, Mughal dynasty

### Unit 3:

Modern history of Haryana: Revolt of 1857, Deen Bandhu Sir Chhotu Ram, National Movement Non- cooperation movement, Quit India Movement, Civil Disobedience Movement

### Unit 4:

Haryana culture: Important rivers and dams of Haryana, religion language, geography, important lakes of Haryana, flora and fauna, fairs, festival, art and crafts, dance forms, food, economic life, sports.

## Learning Outcomes

Students will be able to know about the culture students are expected to know and be capable of using literary knowledge to cope with socio-individualistic problem in society.

Student will recognize the importance of their culture. Learning outcome is achieved through learner's participation in extracurricular activities.

### **Relevant Information:**

The course would be run in computer lab from 2:00-3:00 PM.

Total duration of course will be of 30 hours. Course is free of cost.

## Certificate Course Report

The certificate course having title "Haryana Culture" has been started on 20 December 2021 to 2 February 2022. In this course 30 students have enrolled. The students get benefit from this course for general and academic purpose. E-certificate was distributed to the students after the completion of the course.

Principal  
Tika Ram Girls College  
Sonapat

**TIKARAM GIRLS COLLEGE**  
**SONIPAT (HARYANA)**



**Certificate Online Course On**  
**UNDERSTANDING INDIAN POLITICAL SYSTEM**  
**Session : 2021-2022**

**Conducted by:**  
**Department of Political Science**

## **Course Contents:-**

The course content includes the following:

### **Unit – I**

Indian Constitution Feature , Preamble,, Fundamental Rights, Fundamental Duties and Directive Principals of State Policy

### **Unit – II**

Constitutionalism : Difference between constitution and Constitutionalism ;Concepts, problems and limitations

### **Unit – III**

Union and state executives : President, Prime ministers , Council of ministers ; state executives, Governor , chief minister and council of ministers.

### **Unit – IV**

Union and State legislature: Parliament Composition and functions ; State Legislature: Vidhan Sabha ; Panchayati Raj , Bureaucracy role and importance.

## **Learning Outcome**

Understanding the dynamics of Indian politics since Independence, and demonstrate processes of continuity and change in Indian politics

- \* Critical appraisal of competing theoretical perspectives and empirical analyses on the transformation of Indian politics and society since Independence
- \* Situate Indian domestic and foreign politics in a broader comparative perspective, especially by drawing comparisons with other developing states, situating India within comparative

understandings of state-market-society relations, comparative theories of state and nation-building, comparative federalism, comparative theories for governing divided societies.

\* Development of research, analytical and presentation skills, through guided research in preparation for assessment and tutorial presentations

**Other Relevant Information:-**

1. The course would be run in Computer lab from 2.00 PM to 3.00 PM.
2. Total duration of the course will be of 30 Hours.
3. Course is free of cost.



## Certificate course Report

The certificate course having title "Understanding Indian Political System" has been started on 12<sup>th</sup> May 2021 to 11<sup>th</sup> June 2021. In this course 40 have been enrolled. The students get benefit from this course for general and academic purpose. E-Certificate were distributed to the students after the completion of the course.

Pranam  
Mouli

**TIKA RAM GIRLS COLLEGE**  
**SONIPAT (HARYANA)**



**Certificate Course**  
**consumer protection**

**Conducted by**  
**Economics Department**

# Course Content

Sr no	Course component	Key learning outcome	Learning hours
1	Need for consumer protection	Understand appreciate and develop knowledge about consumer protection	4
2	Sale of goods act 1930	Understand about the act and its relevance in current time	6
3	International coordination	Skill and ability to understand the international relations and joint efforts toward consumer protection	7
4	Competition act 2002	Origin development the article and rules of competition act 2002	6
5	E commerce and its significance	Student is able to understand and appreciate the consumers right its significance in e commerce	7

course duration  $\Rightarrow$  30 Hours.

Course type  $\Rightarrow$  Certificate Course.

*J. S. D.*  
*12*

# Certificate Course Report

The Certificate Course having title 'Consumer Protection' has been started on 2nd Nov. 2021 to 4<sup>th</sup> Dec. 2021. In this course 20 students have enrolled. The students get benefit from this course for general and academic purpose. E-Certificates were distributed to the students after the completion of this course.

Saurabh  
Mishra

**TIKA RAM GIRLS COLLEGE  
SONIPAT (HARYANA)**



**Certificate Course  
Instrumentation in Lab**

**Session**

December 2021- February 2022

Conducted By

**Chemistry Department**

## Certificate Course Instrumentation in a Lab

### Course outcomes:

- To learn in detail about conductometer , Potentiometer and pH meter.
- To study about principles of all instruments.
- To know experimentally how to do the potentiometric and conductimetric titrations.

### **Theory**

#### **Unit -I**

#### Potentiometer and Conductometer –

Potentiometry and Conductometry-

- Introduction, calibration and its types and working.
- Redox titrations.
- Titrations of different compositions, determine the  $K_a$  of weak acid and heat of neutralisation of strong acid by a strong base.

#### Unit- II

#### pH Meter –

- Principle, calibration, type of PH meter, measurement, application and conclusion.

### LABORATORY DEMONSTRATION:

- 1) Test of samples
- 2) Calibration
- 3) Titrations

## Certificate course Report

The certificate course having "Instrumentation" has been started on 11<sup>th</sup> December 2021 to 26 Feb. 2022. In this course 34 students have enrolled. The students get benefit from this course for general academic purpose. E- Certificates were distributed to the students after the completion of the course.

Manita  
Wojta

# **Tika Ram Girls College**

## **Sonipat (Haryana)**



Certificate Course on  
Measuring Instrument

Conducted by  
Physics Department





## **CERTIFICATE COURSE ON MEASURING INSTRUMENT**

**Conducted by : Department of Physics**

**About course:** In modern scientific age study of experimental physics is of great importance. Main object of laboratory practice is to familiarize the students with the various instruments which they come across in everyday life and to understand their working. The course is designed so that students are able to handle instruments carefully; students are able to determine least count of various instruments.

**Objectives of this course:**

- Acquire confidence in using instruments available.
- Recognize basic knowledge of handling instruments.
- Understand working principle of each instrument.

### **Course Certificate in Measuring Instruments**

#### **UNIT 1**

Vernier callipers, vernier constant, how to use vernier callipers, zero error.  
Screw gauge, principle of screw gauge, construction, pitch and least count, to read a screw gauge, zero error.

#### **UNIT 2**

Travelling microscope, least count of travelling microscope, read travelling microscope, zero error, spectrometer.  
Stop watch, digital and electronic stop watch.

#### **UNIT 3**

Common electronic testing and measuring instruments: ammeter, least count of ammeter, voltmeter, least count of voltmeter, how to use multimeter.

## **CERTIFICATE COURSE REPORT**

The Certificate course 'Measuring Instruments ' has been started on 7th December 2020 to 18 January 2021. In this course 40 students have enrolled. The students get benefit from this course for general academic purpose. E Certificates were distributed to the students after the completion of the course.

# **Tika Ram Girls College Sonipat (Haryana)**



Certificate Course on  
Application of Mathematics

Conducted by  
Mathematics Department

## **Certificate course in Mathematics**

### **Applications of Mathematics**

#### **Unit -1**

**Introduction to statistics :measure of central tendency, measure of dispersion measure of skewness ,Index numbers correlation analysis,Interpolation extra polation**

#### **Unit-2**

**Introduction to probability :theory of probability probability distribution, binomial distribution ,poison distribution normal distribution ,sampling techniques applications of operation research and techniques.**

#### **Unit-3**

**Variational problems with fixed and moving boundaries: functionals euler's equations ,necessary and sufficient conditions of extreme isoparametric problems, Lagrange equations ,condition for the variable and points one sided variation.**

#### **Unit-4**

**Applications of derivatives :Extreme value of functions ,the mean value theorem ,monotonic function and the first derivative test, applied optimisation problems newtons method anti derivatives moments and centre of mass areas of the surface of revolution and theorems of pappu's.**

## **Certificate course report**

The certificate course having the title 'advanced maths : applications of mathematics' has been started 15 dec 20. to 24 jan. 21. In this course 30 students have enrolled the students get benefit from this course for general and the treadmill purpose. E certificates were distributed to the students after the completion of the course.

# **Tika Ram Girls College Sonipat (Haryana)**



**Certificate Course on  
Online web Designing Course**

**Conducted by  
Computer Science Department**

# Tika Ram PG Girls College, Sonapat

*(Affiliated to MDU. Rohtak)*

## Scheme of Course And Syllabus For Online Course

On

## Online Web Designing Course

Duration : 30 Hours

### **OBJECTIVES :**

- Web Designing is a skilled field in IT sectors. The course is designed in such a manner to offer sufficient knowledge and expertise to work on different software
- The course helps students think uniquely. The course focuses on innovative research out of concept standard development by numerous stages of research.

## **UNIT-I**

**Web Designing using HTML: Understanding HTML, XHTML Syntax and Semantics, HTML Elements: Paragraph, Lists, Tables, Images, Frames, Forms, Linking to other Web Pages: and Internal linking, E-mail Links; Working with Background colors and Images; Marquee; Text Alignment and Text Formatting, Advanced Layout with Tables; Publishing HTML Pages.**

## **UNIT-II**

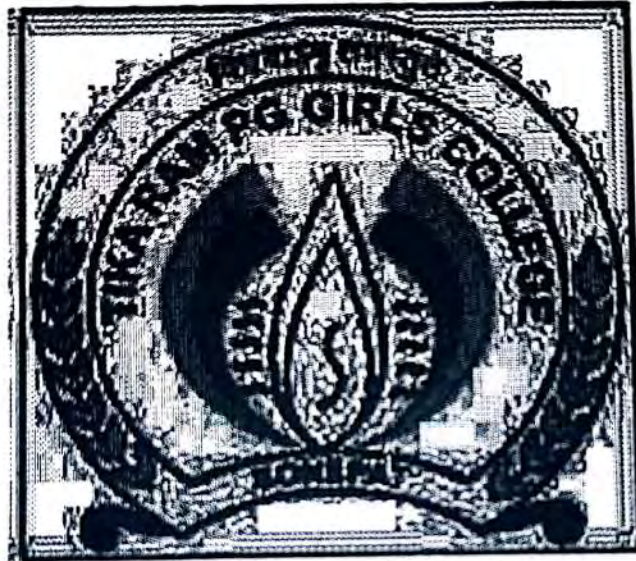
**Cascading Style Sheets: Introduction, Inline, Internal, External CSS, Linking CSS to Web Page. Client-Side Programming: Introduction to JavaScript, Basic Syntax, Variables and Data types, Statements, Operators, Literals, Functions, Objects, Arrays.**

## **UNIT-III**

**XML: Relation between XML and HTML, Goals of XML, Structure and Syntax of XML, Well Formed XML, DTD and its Structure, tree structures in data organization.**



**TIKA RAM GIRLS COLLEGE  
SONIPAT (HARYANA)**



**Certificate Course  
Communicative Grammar**

**Session  
December 2020- January 2021**

**Conducted by  
English Department**

# CERTIFICATE COURSE IN COMMUNICATIVE GRAMMAR

## Course Outcomes:

- C.O.1. Knowledge of the scope and significance of communication
- C.O.2. Acquisition of English language used in the professional world
- C.O.3. Enhanced communicative skills – both general and academic

## Theory

### Unit-I

#### Communicative Grammar and Lexis

##### A. Lexis: -

- i. Idioms & Phrases, one word substitute, Spotting errors, confused words, comprehensives.
- ii. Foreign Words  
ad hoc, ad hominem, avant-garde, bona fide, bon voyage, eureka, ex gratia, ex officio, ex parte, exempli gratia, homo sapiens, ibidem, id est, inter alia, in toto, in absentia, laissez-faire, monsieur, modus operandi, nouveau riche, per se, post meridian, prima facie, pot pourri, status quo, sub judice, tete a tete, verbatim, versus, vice versa, volte-face, entrepreneur, faux pas, gaffe, rendezvous, repertoire.

##### A. Communication: -

- i. Introduction to verbal and nonverbal communication
- ii. Principles of effective communication-Effective listening

## UNIT-II

### WRITTEN COMMUNICATION

- A. Writing skills, Dialogue writing, Interpreting Pictures
- B. Technical writing  
Business Letters  
E-mail Writing

## Practical

### Developing Speaking & Listening Skills Through

- 1. Role Play Activities
- 2. Group Discussions
- 3. Speeches/Extempore
- 4. Viewing & Reviewing TV Programmes.

### Topic Coverage day to day

Sr. no.	Date	Topic
1	10 <sup>th</sup> December	Idioms & Phrases
2	11 <sup>th</sup> December	Idioms & Phrases2
3	12 <sup>th</sup> December	One word substitute
4	16 <sup>th</sup> December	Spotting errors
5	17 <sup>th</sup> December	Spotting errors
6	18 <sup>th</sup> December	Spotting errors
7	19 <sup>th</sup> December	confused words
8	21 <sup>st</sup> December	Comprehensives
9	22 <sup>nd</sup> December	Comprehensives
10	23 <sup>rd</sup> December	Foreign Words
11	24 <sup>th</sup> December	Foreign Words
12	26 <sup>th</sup> December	Introduction to verbal communication
13	28 <sup>th</sup> December	Non-verbal communication
14	29 <sup>th</sup> December	Non-verbal communication
15	30 <sup>th</sup> December	Principles of effective communication
16	31 <sup>st</sup> December	Principles of effective communication
17	1 <sup>st</sup> January	Writing skills
18	2 <sup>nd</sup> January	Writing skills
19	4 <sup>th</sup> January	Dialogue writing
20	5 <sup>th</sup> January	Interpreting Pictures
21	6 <sup>th</sup> January	Technical writing
22	7 <sup>th</sup> January	Business Letters
23	8 <sup>th</sup> January	E-mail Writing
24	9 <sup>th</sup> January	Role Play Activities
25	11 <sup>th</sup> January	Group Discussions
26	12 <sup>th</sup> January	Speeches/Extempore
27	13 <sup>th</sup> January	Speeches/Extempore
28	14 <sup>th</sup> January	Viewing & Reviewing TV Programmes.
29	15 <sup>th</sup> January	Viewing & Reviewing TV Programmes.
30	16 <sup>th</sup> January	Viewing & Reviewing TV Programmes.

### Other Relevant Information

Course duration: 30 hours

Course Timing: 1:30 p.m to 2:20 p.m

## **Certificate Course Report**

**The certificate course having title ' Communicative Grammar' has been started on 10<sup>th</sup> December 2020 to 16<sup>th</sup> January 2021. In this course 25 students have enrolled. The students get benefit from this course for general and academic purpose. E- certificates were distributed to the students after the completion of the course.**



टीका राम पी.जी. कन्या महाविद्यालय

सोनीपत(हरियाणा)

सर्टिफिकेट-कोर्स

कंप्यूटर और हिन्दी

सत्र

दिसम्बर २०२०-जनवरी २०२१

*Monica*

नीलम

डॉ नीलम देवी

संयोजिका

डॉ. मोनिका वर्मा

प्राचार्या



विषय सूची दिन -प्रतिदिन

सत्र -२०२०-२०२१

क्र.सं	दिनांक	विषय
१	१० दिसम्बर	कंप्यूटर और हिन्दी
२	११ दिसम्बर	कंप्यूटर का सामान्य परिचय
३	१२ दिसम्बर	कंप्यूटर का महत्व
४	१६ दिसम्बर	कंप्यूटर का विकास क्रम
५	१७ दिसम्बर	कंप्यूटर का सामान्य जीवन महता
६	२८ दिसम्बर	कंप्यूटर में हिन्दी का आरम्भ
७	२९ दिसम्बर	कंप्यूटर में हिन्दी का विकास
८	२१ दिसम्बर	हिन्दी के विविध फॉन्ट
९	२२ दिसम्बर	कंप्यूटर में हिन्दी की चुनौतियाँ
१०	२३ दिसम्बर	कंप्यूटर में हिन्दी की संभावनाएँ
११	२४ दिसम्बर	कंप्यूटर से रोजगार के अवसर
१२	२६ दिसम्बर	हिन्दी भाषा और प्रोग्रामिंग
१३	२८ दिसम्बर	इंटरनेट का परिचय
१४	२९ दिसम्बर	इंटरनेट पर हिन्दी
१५	३० दिसम्बर	कंप्यूटर में देवनागरी लिपि
१६	३१ दिसम्बर	यूनिकोड और हिन्दी
१७	१ जनवरी	हिन्दी की वेबसाइट
१८	२ जनवरी	सोशल मिडिया में हिन्दी
१९	४ जनवरी	हिन्दी में वेब डिजाइनिंग
२०	५ जनवरी	हिन्दी भाषा, कंप्यूटर और गवर्नेंस
२१	६ जनवरी	हिन्दी भाषा परिचय
२२	७ जनवरी	हिन्दी के प्रसार में कंप्यूटर की भूमिका
२३	८ जनवरी	हिन्दी में ई- गवर्नेंस
२४	९ जनवरी	सरकारी दफ्तरों में हिन्दी
२५	११ जनवरी	ई-सर्विस
२६	१२ जनवरी	हिन्दी भाषा शिक्षण और गैर-सरकारी संस्थाएँ
२७	१३ जनवरी	हिन्दी ई-सर्टिफिकेट कोर्स
२८	१४ जनवरी	सरकारी संस्थाओं में हिन्दी
२९	१५ जनवरी	गैर- सरकारी संस्थाओं का हिन्दी को बढ़ावा
३०	१६ जनवरी	कंप्यूटर और हिन्दी का भेल

कोर्स संबंधित जानकारी

कोर्स अवधि :- ३० घंटे

कोर्स समय :- १:३०-२:२० दोपहर

### इकाई-1 : कम्प्यूटर का विकास और हिंदी

- कम्प्यूटर का परिचय और विकास
- कम्प्यूटर में हिंदी का आरम्भ एवं विकास
- हिंदी के विविध फॉन्ट
- कम्प्यूटर में हिंदी की चुनौतियाँ और संभावनाएँ

### इकाई-2 : हिंदी भाषा और प्रौद्योगिकी

- इंटरनेट पर हिंदी
- यूनिकोड, देवनागरी लिपि और हिंदी भाषा
- हिंदी और वेब डिजाइनिंग
- हिंदी की वेबस्टैंडर्स

### इकाई-3 : हिंदी भाषा, कम्प्यूटर और गवनेस

- राजभाषा हिंदी के प्रसार में कम्प्यूटर की भूमिका
- ई-गवनेस, इंटरनेट
- हिंदी भाषा शिक्षण और ई-लर्निंग
- सरकारी और गैर-सरकारी संस्थाएँ

### सहायक ग्रंथ

- आधुनिक जनसंचार और हिंदी - हरिमोहन
- कम्प्यूटर के भाषिक अनुप्रयोग - विजय कुमार मल्होत्रा
- कम्प्यूटर और हिंदी -
- हिंदी भाषा और कम्प्यूटर - संतोष गोपल
- कम्प्यूटर के दाय प्रस्तुतिकरण और भाषा-सिद्धांत - पी.के. शर्मा
- मोडिया : भूमंडलीकरण और समाज - संच. संवय द्विवेदी
- सोशल नेटवर्किंग : नए समय का संवाद - संच. संवय द्विवेदी

**TIKA RAM GIRLS COLLEGE**  
**SONIPAT (HARYANA)**



**Yoga Certificate Course**

**Conducted by**  
**Physical Education Department**



## **About the Course:**

This certificate course is made to learn yoga beyond mat .It will establish structure and habits for healthy body and mind . It will experience authentic yogic lifestyle with like minded community.Students will reach new level in their personal yoga and meditation practice.

## **Objectives of the Course:**

1. To give basic knowledge of yoga asanas.
2. To bring healthy lifestyle in Students.
3. Make students mind calm and physically fit.

## **COURSE CONTENT:**

The course content includes the following:

### **Unit – 1**

Introduction to yoga , History of yoga , Importance of yoga in modern society, correct time for yoga practise, Uniform for yoga abhyasa, yogic diet, sadhak tattvas and badhak tattvas.

### **Unit – II**

Vedas, Upanishadas, Gita, Aurveda introduction , Ashtanga yoga and its eight limbs , introduction to hath yoga, surya and chandra swara, pranayama techniques.

### **Unit – III**

Introduction to asnas, basic sukshama vayayamas, sitting postures, standing postures, introduction to Patanjali yoga sutras, Introduction to pranayamas, meditation

## Unit – IV

Tadasana, surya namshkara, pawanmuktasana, uttanpadasana, vajrasana, vakrasana, bhujangasana, katichakjrasana, naukasana, jaunusirasana, kandhrasana, padmasana, kapotasana, gaumukhasana, trikonasana, nadittanasana, nadishodhan pranayama, sheetali pranayama, sheetkari pranayama, trartaka .

### Course Outcome

1. After successfully completed the course, students will be awarded certificate .
2. Students can improve their lifestyle by implementing yoga practice in their rouine.

### Topic coverage day to day

Sr. no.	Date	Topic
1	1st september	Introduction to yoga
2	2 <sup>nd</sup> september	History of yoga
3	3 <sup>rd</sup> september	Importance of yoga in modern society
4	4 <sup>th</sup> september	Correct time for yoga practise
5	5 <sup>th</sup> september	Uniform for yoga abhyasa.
6	7th september	Yogic diet
7	8 <sup>th</sup> september	Sadhak tattva
8	9 <sup>th</sup> september	Badhak tattva
9	10 <sup>th</sup> september	Yogic ahara
10	11 <sup>th</sup> september	Vedas
11	12 <sup>th</sup> september	Upanishads
12	14 <sup>th</sup> september	Ayurvedas
13	15 <sup>th</sup> september	Introduction to Asthang Yoga
14	16 <sup>th</sup> september	8 limbs of ashtanga yoga
15	17 <sup>th</sup> september	Introduction to hath yoga
16	18 <sup>th</sup> september	Introduction to asanas
17	19 <sup>th</sup> september	Basic sukshama vayamas and sitting postures
18	21 <sup>th</sup> september	Standing postures
19	22 <sup>th</sup> september	Introduction to pranayamas
20	23 <sup>th</sup> september	Meditation
21	24 <sup>th</sup> september	Tadasana, Surya namashkara, Pawanmuktasana, Uttanpadasna

22	25 <sup>th</sup> september	Vajrasana, Bhujangasana, Katichakrasana, Naukasana
23	26 <sup>th</sup> september	Jnursirasana, Kandhrasana, Padmasana , Kapotasana
24	28 <sup>th</sup> september	Gaumukasana, Trikonasana
25	29th september	Nadishodhan pranayama
26	30 <sup>th</sup> september	Sheetali and sheetkari pranayamas

**TIKARAM GIRLS COLLEGE**

**SONIPAT (HARYANA)**



**Certificate Online Course On**  
**UNDERSTANDING HARYANA CULTURE**

**Session : 2020-21**

**Conducted by:**

**Department of History**

## **Course Contents:-**

The course content includes the following:

### **Unit – 1**

Ancient History of Haryana : Harappan civilization, Vedic civilization, Historicity of Mahabharata war.

### **Unit – II**

Medieval History of Haryana : Turks invasion, Battle of Panipat, (I,II,III), Delhi Sultanate, Mughal Dynasty.

### **Unit – III**

Modern History of Haryana: Revolt of 1857, Deen Bandhu Sir Chhotu Ram, National Movement (Non-Cooperation movement, Quit India Movement, Civil Disobedience Movement)

### **Unit – IV**

Haryana Culture : Important rivers and dams of Haryana, religion, language, geography, important, takes of Haryana, Flora and fauna, fairs, festivals, art and crafts, dance forms, food, economic, life, sports.

## **Learning Outcome**

Students will be able to know about the culture, Students are expected to know and be capable of using literary knowledge to cope with socio-individualistic problems in society.

Students will recognize the importance of their culture. Learning outcome is achieved through learner's participation in extra-curricular activities.

## **Other Relevant Information:-**

1. The course would be run in Computer lab from 2.00 PM to 3.00 PM.
2. Total duration of the course will be of 30 Hours.
3. Course is free of cost.

## Certificate Course Report

The certificate course having title, "Haryana Culture" has been started on 19th December<sup>to</sup> 25 January 2021. In this course 40 students have enrolled.

The students get benefit from this course for general and academic purpose. E-Certificate were distributed to the students after the completion of the course.

Gita

**TIKA RAM GIRLS COLLEGE**

**SONIPAT (HARYANA)**



**ENVIRONMENT STUDIES COURSE**

**Conducted by:ART**

**Department of Geography**

## **About the Course:-**

Environmental Studies is an interdisciplinary Course including topics from various subjects like geology, ecology, earth science and many others . The course focuses on the environment and different process that take place on earth Relevant issues of global warming, pollution, floods, earth quake, waste management and sustainable development have been given a lot of importance in a course. Environmental Studies course is offered at different levels from UG Programs. Environmental Studies course has recently been very popular among students because of its relevance and career of opportunities.

## **Objectives of the Course:-**

The object of environmental studies are a creating the awareness about environmental problems among people.

Imparting basic knowledge about the environment and its allied problems.

Developing an attitude of concern for the environment

## **This Course seeks to help the students:**

It helps individuals to develop an understanding of living and physical environment and how to resolve challenging environmental issues affecting nature.

## **Course Contents:-**

### **Unit – 1**



## **The Multidisciplinary Nature of Environmental Studies**

**Definition, Scope and Importance. Need for Public Awareness.**

### **Unit – II**

#### **Nature Resources**

##### **Renewable and Non -renewable Resources**

**(a) Forest resources-Used and over exploitation deforestation, case studies, Timber extraction, mining, dams and their effects on forest and tribal people.**

**(b) Water resources-Use and over utilization of surface and ground water, floods/drought, conflicts over water, dams-benefits and problems.**

### **Unit – III**

#### **Environmental Pollution**

**Definition, Causes, effects and Control measures of**

**(a) Water Pollution**

**(b) Air Pollution**

**(c) Soil Pollution**

**(d) Noise Pollution**

**(e) Nuclear hazards**

### **Course Outcome**

**Appreciate concepts and method from ecological and physical science and their application in environmental problem solving. Appreciate the ethical cross cultural and historical context of environmental issues and the links between human and natural system.**

**Other Relevant Information:-**

- 1. The course would be run in computer lab from 2.00PM.**
- 2. Total duration of the course will be 30 Hours.**
- 3. Course is free of cost.**

## **Certificate course report**

The certificate course having the title 'Environment studies' has been started 15 dec 20. to 24 jan. 21. In this course 30 students have enrolled the students get benefit from this course for general and the treadmill purpose. E certificates were distributed to the students after the completion of the course.

**TIKARAM GIRLS COLLEGE**

**SONIPAT (HARYANA)**



**Certificate Online Course On**

**UNDERSTANDING INDIAN POLITICAL SYSTEM**

**Session : 2020-21**

**Conducted by:**

**Department of Political Science**

## **Course Contents:-**

The course content includes the following:

### **Unit – 1**

Indian Constitution Feature , Preamble,, Fundamental Rights, Fundamental Duties and Directive Principals of State Policy

### **Unit – II**

Constitutionalism : Difference between constitution and Constitutionalism ;Concepts, problems and limitations

### **Unit – III**

Union and state executives : President, Prime ministers , Council of ministers ; state executives, Governor , chief minister and council of ministers.

### **Unit – IV**

Union and State legislature: Parliament Composition and functions ; State Legislature: Vidhan Sabha ; Panchayati Raj , Bureaucracy role and importance.

## **Learning Outcome**

Understanding the dynamics of Indian politics since Independence, and demonstrate processes of continuity and change in Indian politics

- \* Critical appraisal of competing theoretical perspectives and empirical analyses on the transformation of Indian politics and society since Independence
- \* Situate Indian domestic and foreign politics in a broader comparative perspective, especially by drawing comparisons with other developing states, situating India within comparative

understandings of state-market-society relations, comparative theories of state and nation-building, comparative federalism, comparative theories for governing divided societies.

\* Development of research, analytical and presentation skills, through guided research in preparation for assessment and tutorial presentations

**Other Relevant Information:-**

1. The course would be run in Computer lab from 2.00 PM to 3.00 PM.
2. Total duration of the course will be of 30 Hours.
3. Course is free of cost.

# Certificate Course Report

The certificate course having title "Understanding Indian Political System" has been started on 12<sup>th</sup> December 2020 to 18<sup>th</sup> January 2021 . In this course 39 have been enrolled . The students get benefit from this course for general and academic purpose. E-Certificate were distributed to the students after the completion of the course .

Banam

**TIKA RAM GIRLS COLLEGE**

**SONIPAT( HARYANA)**



**CERTIFICATE COURSE**

**YOGA AND RELXATION**

**Session**

**December 2020 -January 2021**

**Conducted By**

**PSYCHOLOGY DEPARTMENT**



# CERTIFICATE COURSE IN YOGA

## Course Outcome:

- C.O.1 Benefits of Yoga
- C.O.2 Application of Yoga

## Theory

### Unit - 1 Yoga Asanas

1. Bhujangasana
2. Trikonasana
3. Uttanasana
4. Adho Mukh Svanasana
5. Dhanurasana
6. Paschimottanasana
7. Tadasana
8. Shavasana
9. Navasana
10. Balasana
11. Vrikshasana
12. Baddha konasana
13. Salabhasana
14. Sarvangasana

### Unit-II Pranayama

1. Bhastrika pranayama
2. Kapal Bhati pranayama
3. Nadi Shodhan pranayama
4. Bhramari pranayama
5. Anuloma pranayama
6. Lotus Position
7. Sukhasana
8. Ustrasana
9. Sirsasana
10. Ashtang Vinyas
11. Gomukhasana
12. Setu Bandhasana
13. Bakasana
14. Sun Salutation

*Unit 1  
(Psychology Dept.)*

## CERTIFICATE COURSE REPORT

The certificate course having "YOGA AND RELAXATION TECHNIQUE" has been started on 20<sup>th</sup> December, 2020 to 22 January, 2021. In this course 36 students have enrolled. The students get benefit from this course to general academic purpose and personal purpose. E-Certificate were distributed to the students after the completion of the course.

Unit: (Psychology Dept.)

**TIKA RAM GIRLS COLLEGE**

**SONIPAT (HARYANA)**



**Certificate Course**  
**On Entrepreneurship Development Programme**

**Conducted by**  
**Economics Department**

**Course Contents:**

Sr. No.	Course Component	Key Learning Outcomes	Learning Hours
1	Introduction to Entrepreneurship	Understand, appreciate and develop positive thinking and self – confidence embarking on self – employment/entrepreneurship.	4
2	Knowledge of Achievement Motivation and Positive Psychology	Student is able to appreciate the importance of systematic planning in setting up and managing a business enterprise	6
3	Ability to develop understanding of self and do SWOT Analysis	Engage in Process of self understanding (to limited extent) through reflection and peer feedback	7
4	Business Opportunities Identification Techniques	Ability to engage in the exercise of indentifying business opportunities in chosen sector/sub – sector/ area of work by gathering and analyzing information from multiple sources	6
5	Conducting Market Survey	Skills and ability to conduct market survey in local area on a limited scale and Ability to	7

	and Preparation of Business Plan	prepare simple business plan as per given instructions/provided. Student is able to analyze major trends in a given economic sector/sub-sector and identify Business Opportunities	
--	----------------------------------	--	--

Course duration: 30 hours

Course type: certificate course

## Certificate course Report

The certificate course having title 'Entrepreneurship Development Programme.'

has been started on 18<sup>th</sup> Dec 2020 to 23<sup>rd</sup>

Jan 2021. In this course 20 students

have enrolled. The students get benefit

from this course for general and academic

purpose. E-certificates were distributed to

the students after the completion of the course.

**TIKA RAM GIRLS COLLEGE  
SONIPAT (HARYANA)**



**Certificate Course**

**On Tally**

**Session December 2020 to January 2021**

**Conducted by**

**Commerce Department**

## **About the Course:**

Today, Tally is important in our education system for enhancing accounting data management creativity in students' minds. Students can learn by using tally for converting raw data into meaningful information. The Programme on Accounting with Tally would enable the students to record the business transactions and manage the accounts information for an organization using the popular Tally Business Accounting Software. In addition, students will be able to solve his/her day to day tasks efficiently by using the various Office productivity tools such as Microsoft Word and Microsoft Excel, generally used for financial analysis and report making. Tally Course with GST covers in-depth knowledge to meet the accounting requirements of the industry.

## **Objectives of the Course:**

1. This course helps students to work with well-known accounting software i.e. Tally.
2. Student will learn to create company, enter accounting voucher entries including advance voucher entries, do reconcile bank statement, do accrual adjustments, and also print financial statements, etc. in Tally software
3. Accounting with Tally certificate course is not just theoretical program, but it also includes continuous practice, to make students ready with required skill for employability in the job market.

## **COURSE CONTENT:**

The course content includes the following:

### **Unit – 1**

Introduction: introduction of tally prime, company creation, alteration, select remote computer, select from drive, shut company. Master creation alteration, accounting master. Inventory master, taxation chart of accounts, taxation, charts of accounts, voucher entries, contra, location, journal, stock journal, physical stock, payment, receipts.

### **Unit – II**

Accounts payable and receivable: Purchase, Sale, GST, cost centre and categories, predefined (cost centre class), Batchwise details, manufacturing and expiry dates, standard rates, price list (multi price level) set credit limit, budget maintain, ,

### **Unit – III**

Taxation and compliance: Purchase order processing, Sale order processing, Debit and Credit note, multi-currency with entry, bill of material, TDS, TCS, VAT, point of sale, actual and billed quantity, interest calculation, bank reconciliation,

## **Unit – IV**

Payroll and advance feature: Bank reconciliation, post-dated cheque, provision entries, adjustment and closing entries, check all reports export closing, payroll, job order, job work, cost tracking.

### **Course Outcome**

1. After successfully completed the course, students will be awarded certificate to work with well-known accounting software i.e. Tally
2. Student will do by their own create company, enter accounting voucher entries including advance voucher entries, do reconcile bank statement, do accrual adjustments, and also print financial statements, etc. in Tally software

### **Other relevant information**

- Course duration: 30 hours
- Course timing: 1:30 P.M to 2:30 P.M
- Free of cost



**TIKA RAM GIRLS COLLEGE  
SONIPAT (HARYANA)**



**Certificate Course  
FOOD ADULTRATION**

**Session**

**December 2020- January 2021**

**Conducted By**

**Chemistry Department**

## CERTIFICATE COURSE IN FOOD ADULTRATION

Course Outcomes:

- To educate students about common food adulterates and their detection.
- To make students skilled in food adulteration testing and analytical instrumentation.
- Comprehend certain basic skills of detecting adulteration in common foods.

### Theory

#### Unit – I

##### Food Adulteration Practices –

Adulteration – Definition, types, causes and method of food adulteration.

General impact on health.

Detection and prevention

Mitigation measures for addressing food adulteration.

#### Unit – II

##### Food Safety Management Systems-

Importance and application of food regulation in Indian and global context.

Responsibilities for maintaining and enforcing food safety FSSAI, HACCP.

Auditing accreditation (BIS).

#### Unit – III

Adulteration of Common Food and Methods of their Detection.

LABORATORY DEMONSTRATION:

- 1) To detect sugar as an adulteration in honey.
- 2) To detect the adulterates like fats, oil and ghee.
- 3) To detect the adulteration Red lead salt / Brick powder in chilli and dried papaya seeds in pepper.

## Certificate course Report

The certificate course having "Food Adulteration" has been started on 20<sup>th</sup> December 2020 to 22 Jan.2021. In this course 29 students have enrolled. The students get benefit from this course for general academic purpose. E- Certificates were distributed to the students after the completion of the course.

Mandya

Mouise