

HOLIDAY HOMEWORK (2026-27) CLASS XI- COMMERCE

THEME: EMPOWERING WOMEN

General Instructions:

- Part A, B, C are compulsory subjects for all. Parts D-E are to be attempted as per your subject.
- Follow the instructions for each subject.
- Each Part has to be done individually, under the concerned subject teacher's supervision.
- **Note:** Regular study and practice are essential for the Pre Mid-Term Examination.
- **For project based HHW** (English Core, Business Studies, Accountancy, Economics ,Applied Maths and Legal Studies), the same instructions given below have to be followed:

Methodology- Students are required to conduct independent research and prepare a detailed project report. The following steps should be followed:

- ✓ Select an appropriate topic related to women empowerment.
- ✓ Gather information from reliable sources such as books, newspapers, journals, interviews, surveys, magazines, and authentic websites.
- ✓ Write a clear Statement of Purpose explaining the aim of the project.
- ✓ Support the project with facts, examples, references, surveys, or case studies wherever relevant.
- ✓ Organize the content under proper headings and sub-headings.
- ✓ Include creative elements such as posters, illustrations, poems, articles, interviews, or photographs wherever suitable.
- ✓ Conclude the project with your personal analysis and understanding of the topic.
- ✓ Mention all sources and references used for research.

Project Requirements

- ✓ The project file should be handwritten.
- ✓ Minimum length: 20 pages (excluding cover page and bibliography).
- ✓ Use proper headings, spacing, and presentation.
- ✓ Include relevant pictures, newspaper clippings, charts, survey findings, or literary extracts wherever possible.
- ✓ The work should reflect originality, creativity, and understanding of the topic.

Prescribed Format of the Project

- Cover Page
- Acknowledgement
- Certificate
- Index
- Statement of Purpose

- Introduction
- Main Content/Research
- Survey / Interview
- Reflection/ Conclusion
- Bibliography/ References

Important Instructions

- ✓ Submit the completed project file after the summer vacation as per the teacher’s instructions. ✓ Ensure neatness, creativity, and timely submission.
- ✓ Projects copied directly from the internet will not be accepted.
- ✓ The project should reflect independent thinking, creativity, and meaningful research.

PART A (ENGLISH CORE)

PROJECT WORK Objectives of the Project

The project work aims to help students:

- Develop reading, writing, speaking, and research skills through independent learning.
- Enhance creativity, critical thinking, and analytical abilities.
- Improve communication skills through surveys, interviews, article writing, and presentations. - Understand the role of literature and language in promoting social awareness and change.

Suggested Areas for Research. (Choose any one or frame your own)

1. “Voices of Change: Women Empowerment in Contemporary Society”
2. “Breaking Barriers: The Journey of Women Towards Equality”
3. “Women and Education: The Key to Empowerment”
4. “Portrayal of Women in Literature and Society”
5. “From Silence to Strength: Women Finding Their Voice”
6. “The Changing Role of Women in Modern India”

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PART B (BUSINESS STUDIES)

- Choose any one Indian woman entrepreneur (for example: Kiran Mazumdar-Shaw, Falguni Nayar, Vineeta Singh, etc.)
- Introduction of the entrepreneur--Name, business, background, nature of Business.
- Identify the type of business (manufacturing/service/trading) Industry classification
- Entrepreneurship Traits; Risk-taking, Innovation, Leadership.
- Business Objectives --Profit, growth, social responsibility. Challenges Faced-- Financial, social, market-related, etc.

PART C (ACCOUNTS)

Students are required to take the Business Organisation of the Woman Entrepreneur, as selected by them in 'Business Studies Project'. For the Accountancy Project:

- ◆ Comment on the Financial Performance of the organisation selected as above. Show the last three years' comparative profitability of the organisation by way of Pie diagrams/ Bar graphs.
- ◆ Also state how the organisation is Performing in relation to other organisations in the same Industry.
- ◆ Discuss how and why Accounting Information is beneficial for the interested Parties.

PART D (ECONOMICS)

Relate the same entrepreneur with the following concepts:

- Role in Economic Development-- Employment generation, Contribution to GDP.
- Women empowerment --Production & Resources What factors of production are used? (Land, Labour, Capital, Entrepreneur)
- Market Structure (Basic Idea) Is it competitive or monopoly-based.
- Government Support. Any schemes supporting women entrepreneurs (like Mudra Yojana, Start-up India)

PART D (HINDUSTANI MUSIC)

Create and Publish a Book:

Create a 50–60-page formal manuscript in Times Roman 12 font, titled:

"The Fundamentals of Hindustani Sangeet" featuring:

- Preface - first opening statement
- Writer's note- second statement
- A detailed index- mentioning chapters and pg. no.

The content must be organised into six academic chapters covering:

1. The definition of Music (Gayan, Vadan, Nritya),
2. The science of Naad (Aahat and Anahat Naad),
3. The 22 microtones of Shruti,
4. The classification of Swar (Shuddha and Vikrit),
5. The structural rules of Raga (including Time Theory),
6. Concluding with a practical section on notation and diagrams.

Submissions should be formal, well-illustrated with flowcharts, and maintain a professional scholarly tone throughout.

PART E (APPLIED MATHEMATICS)

Collect the names of ten women entrepreneurs and classify them into three sets: A (Beauty/Fashion), B (Health/Wellness), and C (Technology).

Write each set in roster form and perform operations such as union, intersection, and difference.

Find the number of elements in each set and draw a Venn diagram for any two sets on a coloured sheet.

Analyse whether any set is a subset of another and whether the sets are disjoint or overlapping.

Conclude which sector has the highest representation.

Finally, solve the following problem using set formulas: Out of 50 customers, 28 buy skincare products, 22 buy handmade jewellery, and 10 buy both. Let A represent skincare buyers and B represent jewellery buyers. Find how many buy at least one product and how many buy neither.

PART E (MATHEMATICS)

TASK- "The Spiral of Strength"

Objective : This project uses the **Fibonacci Spiral** to represent the compounding growth of female influence and leadership throughout history.

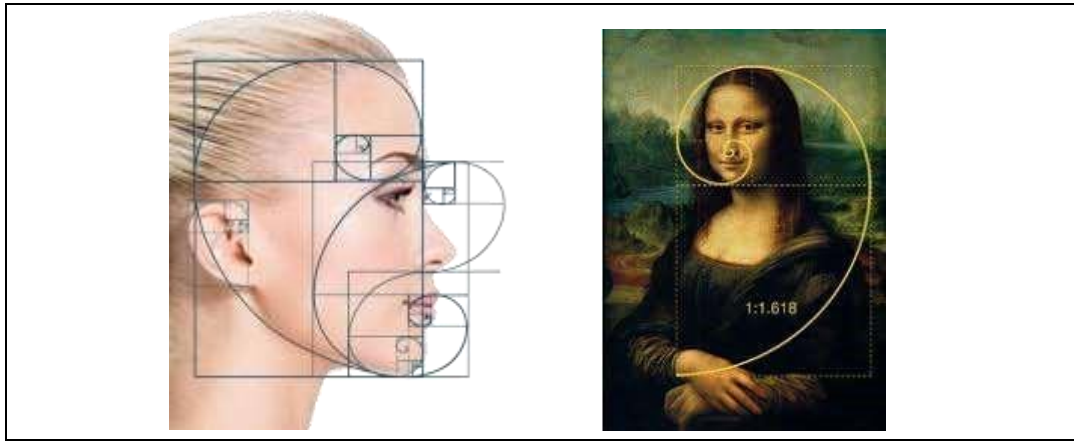
The Fibonacci sequence

A sequence where each term is the sum of the two preceding ones.

Instructions:

- **Geometric Visualization:** Construct the **Golden Spiral** using squares with side lengths equal to Fibonacci numbers (1x1, 2x2, 3x3, etc.).
- **Real-world Connection:** Write examples of Fibonacci in nature with pictures (sunflowers, shells)
- **Creative Component:** Use the spiral to frame a portrait of an **empowered woman**, highlighting how mathematical "divine proportions" exist in her natural features, symbolizing inherent strength
- **Progression::** Place a silhouette of a woman at the **center of the spiral** (the smallest square). This represents the seed of potential.
- As the spiral expands, fill each larger square with icons or names of trailblazing women (e.g., Savitribai Phule, Marie Curie, Mary Kom) to show how one woman's progress leads to a "larger" impact for the next.

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Important Guidelines:

- Make separate project file for maths
- It include Acknowledgement, Certificate, Index, Introduction, Main Content &References
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- The project file should be handwritten, It contains 10-15 pages (include relevant pictures, figures.
- It ensure originality, neatness, creativity, and timely submission

TASK2: GIVEN ASSIGNMENT CAN BE ATTEMPTED IN SAME FILE.

ASSIGNMENT (MATHEMATICS)

1. For any two sets A and B prove by using properties of sets that:

- (i) $(A \cup B) - (A \cap B) = (A - B) \cup (B - A)$
- (ii) $(A \cap B) \cup (A - B) = A$
- (iii) $(A \cup B) - A = B - A$

2. If $A = \{1,2,3\}$, $B = \{3,4\}$ and $C = \{4,5,6\}$, find

- (i) $A \times (B \cap C)$ (ii) $(A \times B) \cap (A \times C)$
- ii) $A \times (B \cup C)$ (iv) $(A \times B) \cup (A \times C)$

3. Let $A = \{1, 2, 3, 4, 5, 6\}$. Define a relation R on set A by

$$R = \{(x, y): y = x + 1\}$$

- (i) Depict this relation using an arrow diagram.
- (ii) Write down the domain, co-domain and range of P.

4. Prove that :

$$\frac{\sin A + \sin 3A + \sin 5A}{\cos A + \cos 3A + \cos 5A} = \tan 3A$$

5. Prove that :

$$\frac{\sin 2\theta}{1 + \cos 2\theta} = \tan \theta$$

6. .If $\sin x = \frac{\sqrt{5}}{3}$ and x lies in second quadrant ,find the values of $\cos \frac{x}{2}, \sin \frac{x}{2}, \tan \frac{x}{2}$.

7. Let R be a relation on Q defined by

$R = \{(a, b) : a, b \in Q \text{ and } a - b \in Z\}$ Show that:

(i) $(a, a) \in R$ for all $a \in Q$ (ii) $\{a, b\} \in R \Rightarrow (b, a) \in R$

(iii) $(a, b) \in R$ and $(b, c) \in R \Rightarrow (a, c) \in R$.

8. If $A = \{1, 2, 3, 4, 5\}$, $B = \{1, 3, 5, 8\}$, $C = \{2, 5, 7, 8\}$,

Verify that $A - (B \cup C) = (A - B) \cap (A - C)$.

9. Prove that:

$$(i) \sin 65^\circ + \cos 65^\circ = \sqrt{2} \cos 20^\circ \quad (ii) \sin 47^\circ + \cos 77^\circ = \cos 17^\circ$$

10. Prove that:

$$\cos 3A + \cos 5A + \cos 7A + \cos 15A = 4 \cos 4A \cos 5A \cos 6A$$

11. Prove that

$$\sin A + \sin 2A + \sin 4A + \sin 5A = 4 \cos \frac{A}{2} \cos \frac{3A}{2} \sin 3A$$

12. Prove that:

$$(i) \sin 65^\circ + \cos 65^\circ = \sqrt{2} \cos 20^\circ \quad (ii) \sin 47^\circ + \cos 77^\circ = \cos 17^\circ$$

13. Prove that:

$$(i) \cos 3A + \cos 5A + \cos 7A + \cos 15A = 4 \cos 4A \cos 5A \cos 6A$$

14. Prove that

$$\sin A + \sin 2A + \sin 4A + \sin 5A = 4 \cos \frac{A}{2} \cos \frac{3A}{2} \sin 3A$$

15. Prove that $\sin^4 \frac{\pi}{8} + \sin^4 \frac{3\pi}{8} + \sin^4 \frac{5\pi}{8} + \sin^4 \frac{7\pi}{8} = \frac{3}{2}$

PART E (LEGAL STUDIES)

PROJECT WORK

Objectives of the Project

The project work aims to help students:

- Identify a legal issue and understand the remedies available under law.
- Develop research and analytical skills through the study of legal sources.
- Differentiate between various types of legal cases and issues.
- Apply relevant statutory provisions and case laws to real-life situations.
- Understand the role of law in bringing social change and justice in society.

Suggested Areas for Research

Students may choose any recent legislation, amendment, or legal reform that has contributed to social change. Some suggested topics are:

- Consumer Protection Act
- Right to Information Act
- Information Technology Act
- Protection of Children from Sexual Offences (POCSO) Act
- Domestic Violence Act
- Juvenile Justice Act
- Cyber Laws in India
- Environmental Protection Laws
- Data Protection and Privacy Laws
- Laws relating to Women's Rights

PART E (ARTIFICIAL INTELLIGENCE)

1. Earn a credential on IBM SkillsBuild on the topic Artificial Intelligence Fundamentals using

the link: <https://students.yourlearning.ibm.com/activity/PLAN-CC702B39D429>

2. This is a game built with machine learning. We draw, and a neural network tries to guess

what you're drawing. Draw: 'Doctor', 'Scientist', 'Teacher', 'Pilot', 'Nurse', 'Police'.

<https://quickdraw.withgoogle.com/>

Did AI guess 'female doctor' when you drew a woman?

3. The experiment based on the computer vision domain of AI. It identifies that you draw and suggests the related images. To play the game, visit the following link on any computing device with speakers.

<https://www.autodraw.com/>

4. What are common job roles in AI, and how do women in these roles help society?

PART E (PHYSICAL EDUCATION)

Practical – 1: Fitness Test Administration (SAI KheloTest India)

Students are required to prepare a detailed practical record on the administration, procedure, scoring method, and significance of the SAI Khelo India Fitness Test.

Practical – 2: Asanas for Lifestyle Diseases

Write the procedure, benefits, and contradictions of any two asanas for each lifestyle disease prescribed in the syllabus. Include proper presentation and explanation.

Practical – 3: IOA Recognized Sport/Game

Select any one IOA-recognized sport or game of your choice.

Include:

- Labelled diagram of the field/court
- Equipment specifications
- Important rules and regulations
- Terminology used in the game
- Fundamental skills and techniques.