



Lady Florence

CONVENT SCHOOL

HOLIDAY HOMEWORK

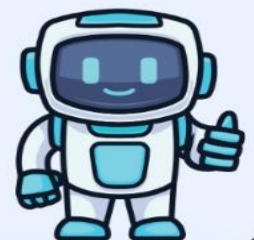
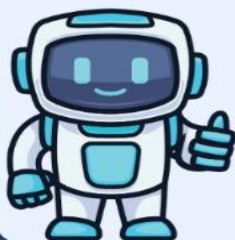
SESSION - 2026-27

GRADE XII



NAME: _____

ROLL NO: _____



Note: -

- *The school will reopen on 6th July, 2026.*
- *Parents can submit the holiday homework between 2nd July to 4th July during school working hours.*

Dear Students,

Kindly follow the given guidelines while completing your Holiday Homework:

- Complete the work neatly and systematically in a separate file/folder as instructed by the subject teacher.
- The work should be creative, innovative, research-based, and connected with real-life applications.
- Include case studies, surveys, newspaper articles, data collection, self-analysis, or experiential learning wherever applicable.
- Avoid copy-pasting from the internet. Originality and independent thinking will be appreciated.
- Use diagrams, charts, mind maps, QR codes, presentations, art integration, and digital tools to enhance your work.
- Maintain good handwriting, proper labeling, presentation, and overall organization.
- Assignments should reflect conceptual understanding, analytical skills, and subject knowledge.
- Reading newspapers, journals, biographies, educational magazines, and reference books during vacations is highly encouraged.
- Practical learning through observation, interviews, field visits, and family interaction should be included wherever possible.
- Submit the Holiday Homework on time after the vacations. Late submission may affect assessment and evaluation.
- Along with academics, students should also focus on physical fitness, hobbies, relaxation, and quality family time for holistic development.
- Complete your work sincerely and make your vacations productive and meaningful.
- Revise the PT-2 syllabus regularly during the vacations for better understanding and retention of concepts.

Holiday Assignment: "Unwind & Imagine"

Dear Students,

This vacation, step away from the academic pressure, turn off your screens, and let your mind relax. There are no strict rules, no themes, and absolutely no pressure to make a "perfect" masterpiece. Your only goal is to create something entirely from your imagination that helps you recharge.

Love and Blessings!!

Guidelines

- **What to Draw:** Anything you want. It could be a dream landscape, an abstract pattern of shapes, a character, or just a stream-of-consciousness doodle.
- **Medium of Choice:** Use whatever you have at home—watercolors, acrylics, color pencils, oil pastels, sketch pens, or just a simple graphite pencil.
- **The Canvas:** You can use a drawing sheet, a page in a sketchbook, a canvas, or even upcycle a piece of cardboard.

Important Reminders

- **Do not be in any hurry** to finish your work of art. Give it time and enjoy the process of making it.
- **Do not copy** or download designs from the internet; let the ideas be entirely your own.
- **Do not stress** about the final result or worry about making mistakes.
- **Do not treat this as a chore** or a rigid academic task—just have fun and create at your own pace.

Reflection Note

- On the back of your artwork, write a short 2-3 sentence note sharing how you felt while creating it and what your imagination brought to life.

SUBJECT – ENGLISH

PROJECT REPORT

A Project Report/ Portfolio is a compilation of the work that you produce during the process of working on a project. You are required to prepare a Project Report, based on the guidelines given, and submit the project, having minimum (15-20) pages, for evaluation.

General Instructions For Portfolio:

- Make an attractive cover page and mention school name, session, class, your own name, subject, topic and leave space for CBSE roll no.
- Use as many pictures /photographs as you require and paste them on the plain side.
- Use coloured sketch pens for headings and content.
- Use A4 size one (side plain and one side ruled) coloured/designer sheets of light color for the project.
- The project should be hand-written.
- Tweak the content, avoid plagiarism

PROJECT – A (Roll No. 1 to 15)

I. Flamingo- Poem- MY MOTHER AT SIXTY-SIX

- Index
- Acknowledgement
- Certificate of Completion
- Objectives
- About the Poetess (with photos)
- Poetess' Personal Experience - Common Paradox of Human Relationships
- Portrayal of Sensational Separation Between a Mother and a Daughter
- Plight of Old Age People: Ugly Truth About Old Age (with photos)
- Reasons Behind the Need of Old Age Homes
- Respect for Elderly Parents
- Efforts for Stress-Free and Secured Life of Aged People
- Visit to an Old Age Home (photos of some aged people living in such homes)
- Positive and Negative Opinions of Aged People Living in Old Age Homes
- How to Strike a Balance Between Duties and Responsibilities of Children and Society
- Data Regarding Miserable State of Old Age People
- Role of Youth to Improve the Plight of Aged People
- Conduct an interview with an old-aged person. Prepare a Questionnaire consisting of 10 questions, write their answers and then prepare a report in about 150 words.
- Bibliography or References

PROJECT B: Flamingo- Prose- LOST SPRING (Roll number 16 onwards)

- Index
- Acknowledgement
- Certificate of Completion
- Objective

- Definition of Child Labour
- Child labour: Causes and Consequences
- Different industries where they are employed- Diamond, Bangle making, Firework or crackers, Carpet weaving, Silk manufacturing etc.
- Hazardous Working conditions and kind of injuries and diseases they suffer from
- Initiative against child labour by Indian government and various NGOs
- International Labour Organisation
- The Child Labour Prohibition and Regulation Act ,1986
- Statistics showing child labour in India
- Ways to eliminate child labour
- Conduct an interview with any social activist working to stop Child Labour in India. Prepare a Questionnaire consisting of 10 questions, write their answers and then prepare a report in about 150 words.

Assignment-1

Q1. Read the passage given below to answer the questions that follow:

1. Too many parents these days can't say no. As a result, they find themselves raising 'children' who respond greedily to the advertisements aimed right at them. Even getting what they want doesn't satisfy some kids; they only want more. Now, a growing number of psychologists, educators and parents think it's time to stop the madness and start teaching kids about what's really important: values like hard work, contentment, honesty and compassion. The struggle to set limits has never been tougher and the stakes have never been higher. One recent study of adults who were overindulged as children, paints a discouraging picture of their future: when given too much too soon, they grow up to be adults who have difficulty coping with life's disappointments. They also have distorted sense of entitlement that gets in the way of success in the work place and in relationships.

2. Psychologists say that parents who overindulge their kids, set them up to be more vulnerable to future anxiety and depression. Today's parents themselves raised on values of thrift and self sacrifice, grew up in a culture where no was a household word. Today's kids want much more, partly because there is so much more to want. The oldest members of this generation were born in the late 1980s, just as PCs and video games were making their assault on the family room. They think of MP3 players and flat screen TV as essential utilities, and they have developed strategies to get them. One survey of teenagers found that when they crave for something new, most expect to ask nine times before their parents give in. By every measure, parents are shelling out record amounts. In the heat of this buying blitz, even parents who desperately need to say no find themselves reaching for their credit cards.

3. Today's parents aren't equipped to deal with the problem. Many of them, raised in the 1960s and '70s, swore they'd act differently from their parents and have closer relationships with their own children. Many even wear the same designer clothes as their kids and listen to the same music. And they work more hours; at the end of a long week, it's tempting to buy peace with 'yes' and not mar precious family time with conflict. Anxiety about future is another factor. How do well intentioned parents say no to all the sports gear and arts and language lessons they believe will help their kids thrive in an increasingly competitive world? Experts agree : too much love won't spoil a child. Too few limits will.

4. What parents need to find, is a balance between the advantages of an affluent society and the critical life lessons that come from waiting, saving and working hard to achieve goals. That search for balance has to start early. Children need limits on their behaviour because they feel better and more secure when they live within a secured structure. Older children learn self-control by watching how others, especially parents act. Learning how to overcome challenges is essential to becoming a successful adult. Few parents ask kids to do chores. They think their kids are already overburdened by social and academic pressures. Every individual can be of service to others, and life has meaning beyond one's own immediate happiness. That means parents eager to teach values have to take a long, hard look at their own.

Answer the following on the basis of your understanding of the passage:

- (i) What values do parents and teachers want children to learn?
- (ii) What are the results of giving the children too much too soon?
- (iii) Why do today's children want more?
- (iv) What is the balance which the parents need to have in today's world?
- (v) What is the necessity to set limits for children?
- (vi) Choose the synonym of the word 'peace' used in para 3.
(a) tranquility (b) commotion (c) havoc (d) upheaval
- vii) Choose the antonym of the word 'contentment' used in para 1.
(a) satisfaction (b) pleasure (c) fulfilment (d) misery

Q2. Assertion and Reason Based Questions

i) **ASSERTION (A):** Usually there was a great commotion when the school began.

REASON (R): The noise was produced by the opening & closing of desks, lessons repeated in unison by students and the teacher's ruler rapping on the table.

- (a) Both, A and R, are true and R is the correct explanation of A
- (b) Both, A and R, are true but R is not the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true

ii) **STATEMENT I:** The narrator feels sorry for M Hamel. **STATEMENT II:** Franz could not accept the fact that he won't be learning French any longer.

- (a) Statement I is true but Statement II is false.
- (b) Statement I is false but Statement II is true.
- (c) Both these statements can be inferred from the lesson.
- (d) Neither of the statements can be inferred from the lesson.

iii) **ASSERTION (A):** The elderly villagers occupied the back benches on the last day of French lesson.

REASON (R): This fact surprised Franz the most.

- (a) Both, A and R, are true and R is the correct explanation of A
- (b) Both, A and R, are true but R is not the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true

iv) **ASSERTION (A):** That day everything was as quiet as Sunday morning.

REASON (R): It was indeed a Sunday morning and no one was present in the school.

- (a) Both, A and R, are true and R is the correct explanation of A
- (b) Both, A and R, are true but R is not the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true

v) **ASSERTION (A):** —Will they make them sing in German, even the pigeons.

REASON (R): They had enslaved France, so they could do every impossible act.

- (a) Both, A and R, are true and R is the correct explanation of A
- (b) Both, A and R, are true but R is not the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true

Q3. Reference to Context Questions

"Together they have imposed the baggage on the child that he cannot put down. Before he is aware, he accepts it as naturally as his father. To do anything else would mean to dare. And daring is not part of his growing up. When I sense a flash of it in Mukesh, I am cheered. "I want to be a motor mechanic," he

repeats. He will go to a garage and learn. But the garage is a long way from his home.”

i) ‘They’ in the given extract refers to whom?

ii) What is not a part of ‘his’ growing up?

iii) Select the correct option to fill in the blank. The ‘baggage’ in the extract refers to_

- (a) the blame of their crimes
- (b) the job of bangle making
- (c) the bag containing bangles
- (d) the job of selling bangles

iv) Based on the above extract, choose the statement that is TRUE for ‘them’.

- (a) They are figures of authority.
- (b) They are scared of government.
- (c) They are suppressive.
- (d) Both (a) and (c)

v) Identify the textual clue that allows the reader to infer that Mukesh’s dream will require determination and sincerity.

vi) Why does the writer state that the boy accepts bangle making as naturally as his father?

Q4. Subjective Questions

i) Why were the old men of the village present in the classroom?

ii) Describe the living conditions of the rag-pickers of Seemapuri?

iii) Why does the narrator smile and what does she say while bidding goodbye to her mother?

iv) Can there be any other ending of ‘The Third Level’ ? Explain it in (120-150) words.

v) What was the misadventure and how did Douglas overcome his fear from water? (120-150 words)

vi) What happened when Douglas tried to execute his strategy last time?

Q5. As the Sports Captain of your school, write a notice in about 50 words informing budding cricketers to attend trials for Under-16 and Under-18 for final selection to the school teams. Sign off as Sunny Arora. Invent all necessary details as required.

Q6. You are a teacher. You have observed a decrease in the number of students applying for Humanities. Write an article on how the parents force their students to take up Science or Commerce in (150-200) words for the local daily.

Assignment-2

Q1. Read the following case-based passage and answer the questions that follow:

1. Urbanization has resulted in significant changes in global land use patterns. As more people migrate to cities, the need for housing, infrastructure, and resources has grown. This demand often leads to the destruction of natural ecosystems. The case study looks into how urbanization has impacted land use and the environmental consequences that follow.

2. Data from the United Nations shows that over 55% of the world’s population currently resides in urban areas, and this is expected to rise to 68% by 2050. Urbanization has been responsible for the loss of 30% of the world’s forests over the past century. Furthermore, around 3 million hectares of agricultural land are being converted into urban areas each year, raising concerns about food security.

3. The study found that urban growth significantly increases the consumption of natural resources, especially in cities:

60% of the total energy is consumed by the industrial and transportation sectors in urban areas. Urban regions are responsible for 75% of global CO2 emissions, which contributes heavily to climate change and worsening air quality.

This shows that cities, while being hubs of economic activity, are also major contributors to environmental degradation through their high levels of resource consumption.

4. Urban sprawl has fragmented natural ecosystems, with habitats being divided by roads, buildings, and other infrastructure. The loss of habitats has led to a decline in biodiversity, particularly in densely populated regions. The study highlights that 40% of species in urban areas face extinction due to habitat loss.

5. Efforts to reduce the environmental impacts of urbanization include promoting sustainable city

planning and integrating green infrastructure. Investments in public transportation can also help minimize the carbon footprint. It is projected that curbing urban sprawl could reduce CO2 emissions by 15% globally by 2050.

6. The case study emphasizes the need to balance urban development with environmental preservation. By integrating nature-based solutions into urban planning, cities can accommodate population growth while reducing environmental damage.

A. Answer the following questions, based on the passage above.

i. Complete the following suitably.

In the introduction, the researcher links urbanization with land use changes to highlight_____.

ii. What would the following be classified as?

To examine the effects of urbanization on global land use and the environmental consequences that follow.

Select the appropriate response.

(a) Secondary objective (b) Research outcome

(c) Method of analysis (d) Primary objective

iii. Give two points to support why habitat fragmentation was included as a focus in the study on urbanization.

iv. Paragraph 3 includes words – ‘energy consumption’ and ‘biodiversity loss.’

Classify the following sentences as ‘energy consumption’ or ‘biodiversity loss’:

Sentence 1: The expansion of cities has caused habitat loss for many species, reducing their populations.

Sentence 2: Industries and transportation in urban areas are the largest consumers of energy.

v. Although both rural and urban areas face environmental challenges, why is biodiversity loss more prevalent in urban regions?

vi. Analyse how integrating green infrastructure into city planning can help mitigate the environmental impacts of urbanization. (Paragraph 5)

vii. What is the ultimate goal for stakeholders, based on the insights from the study?

(a) To promote urban growth at the expense of natural ecosystems

(b) To reduce global food production for urban development

(c) To balance urbanization with environmental conservation

(d) To limit urbanization to rural regions

viii) Data from the UN shows that over _____of the world’s population currently resides in the urban areas

(a) 50% (b) 35% (c) 55% (d) 45%

ix) Which word in para 4 means the same as ‘vanishing’?

Q2. Assertion and Reason Based Questions

i) Assertion : Charley believed he had traveled back in time to the 1890s.

Reason: He found old-fashioned currency in the station.

(a) Both assertion and reason are true, and the reason is the correct explanation of the assertion.

(b) Both assertion and reason are true, but the reason is not the correct explanation of the assertion.

(c) Assertion is true, but the reason is false.

(d) Assertion is false, but the reason is true.

ii) Assertion: Charley's wife was supportive of his belief in time travel.

Reason: She also experienced the third level with Charley.

(a) Both assertion and reason are true, and the reason is the correct explanation of the assertion.

(b) Both assertion and reason are true, but the reason is not the correct explanation of the assertion.

(c) Assertion is true, but the reason is false.

(d) Assertion is false, but the reason is true.

iii) Assertion: Charley's friend Sam went missing, leaving a letter encouraging Charley to believe in the third level.

Reason: Sam found the third level and wanted Charley to join him. (a) Both assertion and reason are true, and the reason is the correct explanation of the assertion.

(b) Both assertion and reason are true, but the reason is not the correct explanation of the assertion.

(c) Assertion is true, but the reason is false.

(d) Assertion is false, but the reason is true.

iv) Assertion: Charley's psychiatrist friend Sam thought Charley was hallucinating.

Reason: Sam wanted Charley to face the realities of the modern world.

(a) Both assertion and reason are true, and the reason is the correct explanation of the assertion.

(b) Both assertion and reason are true, but the reason is not the correct explanation of the assertion.

(c) Assertion is true, but the reason is false.

(d) Assertion is false, but the reason is true.

v) Assertion: Charley withdrew his savings and converted them into the 1890s currency.

Reason: He wanted to buy tickets to Galesburg, Illinois, in the past.

(a) Both assertion and reason are true, and the reason is the correct explanation of the assertion.

(b) Both assertion and reason are true, but the reason is not the correct explanation of the assertion.

(c) Assertion is true, but the reason is false.

(d) Assertion is false, but the reason is true.

Q3. Reference to

Context Questions " I

saw my mother, beside

me,

doze, open mouthed, her face ashen like that of

a corpse And realised with pain

that she was as old as she looked but soon put that thought away"

i) Which option displays the poetic device used in the third and fourth lines?

(a) The dazzling dames comes one by one

(b) Nature is God's gift to us

(c) As quick as a fox

(d) Life is full of ups and downs

ii) What is the cause of pain and ache that the poet feels?

iii) Select the correct option from those given in brackets, to fill in the blank. "Her face ashen like that of a corpse" means that to the poet's mother's face was (pale and lifeless/ bright and lively).

iv) Read the assertion and the reason below, with reference to the given extract. Assertion : The poet experiences a painful realization about her mother's aging and frailty.

reason : The sight of her mother dozing with an ashen, corpse-like face reminds the poet of her mother's old age and mortality.

Choose the correct option regarding their relationship:

(e) Both the assertion and the reason are true, and the reason is the correct explanation of the assertion.

(f) Both the assertion and the reason are true, but the reason is not the correct explanation of the assertion.

(g) The assertion is true, but the reason is false.

(h) The assertion is false, but the reason is true.

v) Why did the poet put the thought away?

vi) The poet's mother look like a corpse because _____

Q4. Subjective Questions

i) What does the title "Lost Spring" convey? (40-50 words)

ii) Describe the difficulties the bangle makers of Firozabad have to face in their lives in (120-150) words.

iii) How did Douglas develop fear from water?

iv) Compare and contrast scene outside the car v/s scene inside the car.

v) Why did the booking clerk refuse to accept the money from Charley?

Q5. You have realised the necessity of education and financial independence of women for their family, society and in turn for the nation. Write a letter to the Editor, 'The National Times' highlighting your ideas on the importance of education of women leading to a better status for them. You are Tarun/Taruna, B-7/9, Mall Road, Delhi (120-150) words.

Q6. Modern Public School, Delhi is organising an inter school music competition. You have de- cided to invite noted classical musician. Mohan Gandhi as the judge and guest of honour. Draft a formal invitation for him in 50 words. You are Neeraj/Neetu, Cultural Secretary.

SUBJECT – GEOGRAPHY

Worksheet -1 (Roll no.1 to 15)

Multiple Choice Questions (MCQs)

1. Human Geography mainly studies the relationship between:

- a) Plants and animals
- b) Humans and environment
- c) Rocks and minerals
- d) Oceans and rivers

2. Which continent has the highest population density?

- a) Africa
- b) Asia
- c) Europe
- d) Australia

3. Human Development Index was introduced by:

- a) UNO
- b) UNDP
- c) WHO
- d) IMF

4. Which activity belongs to the primary sector?

- a) Banking
- b) Farming
- c) Teaching
- d) Transport

5. The most populated state of India is:

- a) Maharashtra
- b) Uttar Pradesh
- c) Rajasthan
- d) Bihar

6. Which settlement pattern develops along roads and rivers?

- a) Circular
- b) Linear
- c) Clustered
- d) Dispersed

7. Shifting cultivation is also known as:

- a) Dairy farming
- b) Jhumming
- c) Mixed farming
- d) Plantation farming

8. Which factor mainly affects population distribution?

- a) Climate
- b) Soil
- c) Water availability
- d) All of these

9. Human development includes:

- a) Economic growth only
- b) Social welfare only
- c) Improvement in quality of life
- d) Industrial growth only

10. Which crop is known as a plantation crop?

- a) Wheat
- b) Rice
- c) Tea
- d) Bajra

11. Assertion (A): Population distribution is uneven in the world.

Reason (R): Physical and economic factors influence settlement patterns.

12. Assertion (A): Agriculture is a primary activity.

Reason (R): It directly depends on natural resources.

CASE STUDY

Read the passage carefully and answer the questions:

“Human development is the process of enlarging people’s choices and improving their quality of life.

Education, healthcare and income are important indicators of development.”

A. What is meant by human development?

B. Name any two indicators of human development.

C. Which organisation publishes the Human Development Report?

MAP Work

On the outline map of India, locate and label:

- a. Punjab – Wheat producing state
- b. Assam – Tea producing state

- c. Mumbai – Metropolitan city
- d. Uttar Pradesh – Highest population state
- e. Chota Nagpur Plateau

Worksheet -2 (Roll no-16 onwards)

Multiple Choice Questions (MCQs)

1. Which branch of geography studies human activities?

- a) Physical Geography
- b) Human Geography
- c) Oceanography
- d) Climatology

2. Which country has the highest population in the world?

- a) India
- b) China
- c) USA
- d) Russia

3. HDI stands for:

- a) Human Development Index
- b) Human Density Index
- c) Human Distribution Index
- d) Human Demographic Indicator

4. Fishing is an example of:

- a) Secondary activity
- b) Tertiary activity
- c) Primary activity
- d) Quaternary activity

5. Which state has the highest density of population in India?

- a) Bihar
- b) West Bengal
- c) Uttar Pradesh
- d) Kerala

6. Urban settlements mainly depend on:

- a) Agriculture
- b) Non-agricultural activities
- c) Hunting
- d) Fishing

7. Which type of farming is practised on large estates?

- a) Mixed farming
- b) Plantation farming
- c) Subsistence farming
- d) Nomadic herding

8. Which factor is most important for human settlement?

- a) Water supply
- b) Forests
- c) Minerals
- d) Mountains

9. Literacy rate is an indicator of:

- a) Climate
- b) Human development
- c) Soil fertility
- d) Population density

10. Which crop requires high temperature and rainfall?

- a) Wheat
- b) Rice
- c) Gram
- d) Mustard

11. Assertion (A): Urban settlements are more developed than rural settlements.

Reason (R): Urban areas provide better facilities and employment opportunities.

12. Assertion (A): Population growth creates pressure on resources.

Reason (R): Increasing population raises the demand for food, water and land.

CASE STUDY

Read the passage carefully and answer the questions:

“Agriculture is the backbone of the Indian economy. A large percentage of India’s population depends on agriculture for livelihood.”

- a. Which activity is referred to in the passage?
- b. Why is agriculture important in India?
- c. Name one problem faced by Indian farmers.

Map Work

On the outline map of India, locate and label:

- a. Karnataka – Coffee producing state
- b. Gujarat – Cotton producing state

- c. Kolkata – Metropolitan city
- d. Kerala – High literacy state
- e. Damodar Valley Region

ACTIVITY WORK

General Instructions

- All work should be handwritten and creatively presented.
- Use maps, diagrams, flowcharts, newspaper cuttings, and pictures wherever required.
- Maintain neatness, proper headings, and attractive presentation.
- Submit the work in a decorated file/folder.

Activity: Research Paper

(Group 1 – Roll No. 1 to 10)

Topics (Any One):

1. Human Development and Quality of Life
2. Population Distribution in India and the World
3. Importance of Agriculture in India
4. Human Settlements and Urbanisation

Instructions:

Prepare a handwritten research paper (8–10 pages).

Include:

- Introduction
- Main Features
- Case Study/Examples
- Diagrams and Maps
- Conclusion
- Paste newspaper or magazine cuttings related to population, agriculture, or development issues.

Activity: Creative Poster Making

(Group 2 – Roll No. 11 to 20)

Topics (Any One):

1. Save Agricultural Land
2. Population Awareness
3. Sustainable Human Development
4. Rural and Urban Settlements

Instructions:

- Prepare a colourful poster on A3 sheet.
- Use slogans, maps, sketches, graphs, and creative illustrations.
- Posters should be informative, attractive, and related to geographical issues.

Activity: Chart / Booklet Making

(Group 3 – Roll No. 21 onwards)

Topics (Any One):

1. Types of Human Settlements
2. Population Growth in India
3. Land Resources and Conservation
4. Primary Activities and Occupations

Instructions:

Students may prepare either:

An informative chart OR A creative booklet (5–6 pages).

Include:

- Important points

- Diagrams and flowcharts
- Maps and graphs
- Pictures and key geographical terms
- Make the work neat, creative, and informative.

Common Activity for All Groups

- Newspaper Reading & Weekly Reflection
- Students are encouraged to read newspapers regularly during the holidays.
- Write one weekly reflection based on any important environmental, geographical, economic, agricultural, or international news.

Include:

- Date of the news
- Heading/Title
- Summary in 5–6 lines
- Your opinion/reflection

Worksheet 1

Choose the correct option from the alternatives given below.

Q1. The Mauryan Empire was founded by which ruler in c. 321 BCE?

- a) Ashoka
- b) Chandragupta Maurya
- c) Bindusara
- d) Samudragupta

Q2. The Arthashastra, a treatise on statecraft and economic policy, is attributed to:

- a) Megasthenes
- b) Kautilya (Chanakya)
- c) Patanjali
- d) Fa Hien

Q3. Which of the following best describes the term 'janapada' in early Indian history?

- a) A type of coin used in the Mauryan period
- b) A territorial unit or early kingdom
- c) A class of merchants
- d) A religious text of the Vedic period

Q4. The Ashokan edicts were inscribed mainly in which script?

- a) Sanskrit and Devanagari
- b) Brahmi and Kharosthi
- c) Tamil Brahmi only
- d) Pali and Sanskrit

Q5. Which dynasty followed the Mauryas and ruled over the Deccan and central India (c. 230 BCE – 220 CE)?

- a) Kushanas
- b) Guptas
- c) Satavahanas
- d) Pallavas

Short Answer Questions

Q6. What are the 'mahajanapadas'? Name any four important mahajanapadas mentioned in early Buddhist and Jain texts.

Q7. Explain the significance of Ashoka's Dhamma. How did he try to spread it across his empire?

Q8. What was the role of the 'grama' (village) in the agrarian economy of early India? What was the position of the gramabhojaka?

Q9. How did the use of iron technology transform agriculture and urbanisation in early India?

Q10. Describe the administrative system of the Mauryan Empire. Who were the amatyas and how were they appointed?

Q11. What evidence do historians use to study the history of early Indian towns and kingdoms?

Name at least three types of sources.

Q12. Who were the Kushanas? Describe any two contributions they made to the Indian subcontinent.

Q13. What do the Ashokan inscriptions tell us about the nature of the Mauryan state and its relationship with its subjects?

14. Case Study Based Question

Read the following passage carefully and answer the questions that follow.

Source: Adapted from NCERT — Themes in Indian History Part I, Class XII, Chapter 2

"Ashoka, the most celebrated of Mauryan rulers, was the first ruler in the history of the world to give up conquest after victory. His edicts, inscribed on rocks and polished sandstone pillars across the empire, are among the most remarkable documents of ancient governance. He spoke of a policy of Dhamma — a set of humane and ethical principles. Dhamma included respect for elders, generosity to Brahmanas and the poor, non-violence towards animals, and truthfulness. Ashoka appointed special officials called Dhamma Mahamattas to spread these values. The edicts were written in Prakrit and used the Brahmi script in the subcontinent; in the northwest, they appeared in Aramaic and Greek. Through these inscriptions, Ashoka communicated directly with his subjects — something no earlier ruler had attempted. Historians have, however, debated whether Dhamma was a political strategy to unify a diverse empire or a genuine expression of Buddhist ethics. Megasthenes, the Greek ambassador to the Mauryan court, left his own account of the empire in his work Indica, which provides a valuable external perspective."

Answer the following questions based on the passage above:

(i) What was Ashoka's Dhamma? Name any two principles it included according to the passage.

(ii) Who were the Dhamma Mahamattas? What was their role in the Mauryan Empire?

(iii) In which scripts and languages were Ashoka's edicts written? What does this suggest about the geographical spread of his empire?

(iv) Who was Megasthenes and what was the Indica? Why is it considered an important historical source?

SECTION D — Map Work

On the given outline map of the Indian subcontinent, locate and label the following features. S.No.

Feature / Place to
be Located Marks
Examiner

1.

Mark and label the city of Pataliputra (capital of the Mauryan Empire; near present-day Patna, Bihar) 1 Mark

Ans: _____

2.

Locate and label the ancient city of Taxila (present-day Pakistan) — a major centre of learning 1 Mark

Ans: _____

3.

Shade and mark the approximate extent of the Mauryan Empire at its peak under Ashoka 1 Mark

Ans: _____

4.

Mark and label the River Ganga — the lifeline of the Gangetic plain and early kingdoms 1 Mark

Ans: _____

5.

Identify and label the Deccan region — territory associated with the Satavahana dynasty 1 Mark

Ans: _____

Worksheet 2

Choose the most appropriate option.

1. The Mahabharata is attributed to which sage-author according to tradition?

- (a) Valmiki
- (b) Vyasa
- (c) Narada
- (d) Parasara

2. In the varna system, which varna was associated with agricultural work and cattle-rearing?

- (a) Kshatriya
- (b) Vaishya
- (c) Shudra
- (d) Brahmin

3. The practice of 'gotra' in ancient India primarily referred to:

- (a) Land revenue system
- (b) A system of patrilineal descent used to regulate marriage
- (c) A military unit of the Mauryan army
- (d) A class of untouchables

4. Which text is the primary source for understanding the social norms of early India, containing over 2,000 verses on duties, law and conduct?

- (a) Arthashastra
- (b) Manusmriti
- (c) Rigveda
- (d) Upanishads

5. The term 'jati' in the context of Indian social history refers to:

- (a) A broad varna category
- (b) An endogamous kinship group based on birth and occupation
- (c) A clan of Kshatriya warriors
- (d) A religious sect within Hinduism

6. Which of the following is NOT one of the four varnas described in ancient Indian texts?

- (a) Brahmin
- (b) Kshatriya
- (c) Vaishya
- (d) Kayastha

7. The Pandavas and Kauravas of the Mahabharata represent a conflict between:

- (a) Two rival kingdoms of north and south India
- (b) Cousin-brothers of the Kuru clan over succession to the throne
- (c) Brahmin priests and Kshatriya warriors
- (d) Merchants and farmers over trade rights

8. According to early Sanskrit texts, the ideal form of marriage was the 'Brahma vivaha', which involved:

- (a) Marriage by elopement
- (b) Gift of a daughter to a learned and virtuous man
- (c) Marriage through exchange of cattle
- (d) Marriage decided by combat

9. Which community was referred to as 'chandalas' in ancient Indian texts and was considered outside the varna system?

- (a) Merchants from foreign lands
- (b) Forest-dwelling tribes
- (c) Those who handled the dead and lived on the outskirts of settlements
- (d) Landless agricultural labourers

10. The Mahabharata was composed over a long period and reached its present form approximately by:

- (a) 500 BCE
- (b) 200 CE
- (c) 300 CE
- (d) 600 CE

Short Answer Questions

Answer any 8 of the following questions.

Q11. What is the varna system? Describe the duties assigned to each of the four varnas according to Brahmanical texts.

Q12. Explain the difference between 'varna' and 'jati'. How did jati differ from the four-fold varna order? Q13. What were the rules regarding 'gotra' in early India? Why were marriages within the same gotra prohibited?

Q14. How did the Mahabharata portray the position of women in early Indian society? Give two examples from the epic.

Q15. Who were the 'chandalas'? What does the Manusmriti say about their position in society?

Q16. Why did the authors of Dharmashastra texts divide society into four varnas? What purpose did this serve?

Q17. Explain the concept of 'endogamy' and 'exogamy' as practised in the context of jati and gotra systems respectively.

Q18. How do historians use the Mahabharata as a historical source? What are its limitations as a historical document?

Case Study Based Question

Read the following passage carefully and answer the questions that follow.

Source: Adapted from NCERT — Themes in Indian History Part I, Class XII, Chapter 3

"The Brahmanical texts prescribed different norms of behaviour for men and women of different varnas. The Manusmriti, compiled between c. 200 BCE and 200 CE, was one of the most influential of these texts. It outlined the duties of various social groups and codified rules governing marriage, inheritance, and the conduct of daily life. According to the Manusmriti, the highest dharma of a woman was to be devoted to her husband, regardless of his qualities. Women were not permitted to own property independently, nor could they study the Vedas. The Manusmriti also reinforced the purity rules between varnas, stating that marriage between a higher-varna man and a lower-varna woman (anuloma) was generally acceptable, but the reverse (pratiloma) was strongly condemned. At the same time, the text reveals significant social anxieties — the careful policing of women's sexuality and the strict regulations on intercaste unions suggest that the social realities of the time were far more fluid and complex than the prescriptive rules would indicate. Historians caution against reading these texts as straightforward descriptions of society, since they represent the ideals of the Brahmanical order rather than universal practice."

Answer the following questions based on the passage above:

- What does the Manusmriti prescribe regarding the status and duties of women in ancient Indian society? Mention any two specific restrictions it imposed.
- Explain the terms 'anuloma' and 'pratiloma' as used in the context of marriage in the Manusmriti. Which was considered acceptable and which was condemned?
- What does the passage suggest about the gap between Brahmanical prescription and actual social practice? How do historians interpret this difference?
- Why do historians caution against using texts like the Manusmriti as direct descriptions of society? What kind of source does it actually represent?

Worksheet -1

Part A: Macroeconomics

1. Define macroeconomics.
2. Differentiate between microeconomics and macroeconomics.
3. Explain the meaning of an economy.
4. What are the major functions of money?
5. Define consumption and investment expenditure.
6. Explain the concept of circular flow of income.
7. Differentiate between stock and flow variables.
8. Define Gross Domestic Product (GDP).
9. Explain the meaning of final goods and intermediate goods.
10. State any four limitations of GDP as a measure of welfare.

Part B: Indian Economic Development

11. Explain the meaning of economic development.
12. State any four features of the Indian economy at the time of independence.
13. What were the main goals of Indian economic planning?
14. Differentiate between economic growth and economic development.
15. Explain the importance of agriculture in the Indian economy.

Case Study Questions

Case Study – 1

A country experienced a rise in production of goods and services during the year. As a result, employment opportunities increased and people's income also improved.

16. Identify the macroeconomic concept highlighted in the above case.
17. Explain how increased production affects employment and income in an economy.

Case Study – 2

After independence, India faced several economic challenges such as low agricultural productivity, poor industrial development, and widespread poverty. The government introduced five-year plans to improve economic conditions.

18. Name the strategy adopted by the government for economic development.
19. State any two objectives of this strategy.
20. Explain one major economic challenge faced by India after independence.

Real-Life Based Activities

Activity 1 (For Even Roll No.)

Prepare a report on how your family uses money in daily life for buying goods and services. Mention the functions of money involved in different transactions.

Activity 2 (For Odd Roll No.)

Collect information from newspapers or the internet about any recent government scheme introduced for economic development in India. Write its objectives and benefits in 100–120 words.

PROJECTS

INSTRUCTIONS:-Students are required to make a CBSE project taking into account the Collection, Organisation and Presentation of data.

The expectations are: Project should have good content with sufficient material (3,500-4,000 words (excluding diagrams & graphs)), hand-written & an independent, self-directed piece of study.

Learners may work along the following lines as a

suggested: Choose a title/topic

Collect the research material/data

Organize material/data Present

material/data Analyze the

material/data for conclusion Draw

the relevant conclusion

Presentation of the Project

Work Total 20 Marks

Suggested List of Projects:

- Micro and Small Scale Industries
- Food Supply Channel in India
- Contemporary Employment situation in India
- Disinvestment policy of the government
- Goods and Services Tax Act and its Impact on GDP
- Health Expenditure (of any state)
- Human Development Index
- Inclusive Growth Strategy
- Self-help group
- Trends in Credit availability in India
- Monetary policy committee and its functions
- Role of RBI in Control of Credit
- Government Budget & its Components
- Trends in budgetary condition of India
- Exchange Rate determination – Methods and Techniques
- Currency War – reasons and repercussions
- Livestock – Backbone of Rural India
- Alternate fuel – types and importance
- Sarva Siksha Abhiyan – Cost Ratio Benefits
- Golden Quadrilateral- Cost ratio benefit
- Minimum Support Prices
- Relation between Stock Price Index and Economic Health of Nation
- Waste Management in India – Need of the hour
- Minimum Wage Rate – Approach and Application
- Digital India- A Step towards the future
- Rain Water Harvesting – A solution to water crises
- Vertical Farming – An alternate way

- Silk Route- Revival of the past
- Make in India – The way ahead
- Bumper Production- Boon or Bane for the farmer
- Rise of Concrete Jungle- Trend Analysis
- Organic Farming – Back to the Nature
- Any other newspaper article and its evaluation on basis of economic principles

ASSIGNMENT

Q1. Calculate GNP at FC:

Particulars	in Crores
(i) Net domestic fixed capital formation.	350
(ii) Closing stock	100
(iii) Government final consumption expenditure	200
(iv) Net indirect taxes	40
(v) Opening stock	60
(vi) Consumption of fixed capital.	50
(vii) Net exports	(-10)
(viii) Private final consumption expenditure.	1500
(ix) Imports.	20
(x) Net factor income from abroad	(-30)

Q2. Calculate 'Gross Domestic Product of Factor Cost' from the following data:

Particulars	in Crores
(i) Private final consumption expenditure.	800
(ii) Net domestic capital formation.	150
(iii) Change in stock.	30
(iv) Net factor income from abroad.	(-20)
(v) Net indirect tax.	120
(vi) Government final consumption expenditure.	450
(vii) Net Exports.	(-30)
(viii) Consumption of fixed capital.	50

Q3. Calculate Factor Income to abroad:

Particulars	in crores
(i) GNP at FC.	4280
(ii) Subsidies.	80
(iii) Factor income from abroad.	400
(iv) Depreciation.	480
(v) Indirect Taxes.	100
(vi) NDP at MP.	3700

Q4. Calculate Subsidies:

Particulars.	in crores
(i) GDP at FC.	55000
(ii) Indirect Taxes.	4400
(iii) Net Factor Income from abroad.	700
(iv) NNP at MP.	55500
(v) Depreciation.	2500

Q5. Calculate the value of 'Change in Stock' from the following data:

Particulars.	in crores
(i) Sales.	400
(ii) Net Value Added at Factor Cost (NVA)	200
(ii) Subsidies.	10
(iv) Change in Stock.	?
(v) Depreciation.	40
(vi) Intermediate Consumption.	100

Q6. From the following data, calculate: (a) Value of output; (b) Intermediate Consumption; (c) Net value added at factor cost.

Particulars.	in crores
(i) Purchase of raw materials from domestic market	400
(ii) Increase in the unsold stock.	60
(iii) Import of raw material.	120
(iv) Domestic Sales.	1200

(v) Replacement of Fixed Capital.	50
(vi) Power Charges.	20
(vii) Exports.	200
(viii) Import of Machinery.	40
(ix) Goods and Services Tax (GST).	10
(x) Subsidy.	30
(xi) Goods used for self-Consumption	10

Q7. In an economy, the following transactions take place and the final sale is for private consumption. A.B.C and D are four industries. A sells to B for Rs. 20000. B whose value added is 40000, sells half of its output to C and another half to D. C sells all its output to D. D's whose value added is 30,000, sells all its output to final product for 1,30,000. What is value added by C?

Q8. Calculate National Income by Income and Expenditure method.

(i) Compensation of employees	600
(ii) Government final consumption expenditure.	550
(iii) Net factor income from abroad.	(- 10)
(iv) Net exports	(-15)
(v) Profit	400
(vi) Net indirect tax	60
(vii) Mixed income of self-employed	350
(viii) Rent	200
(ix) Interest	310
(x) Private final consumption expenditure	1000
(xi) Net domestic capital formation	385
(xii) Consumption of fixed capital.	65

Q9. How will you treat the following items in the calculation of 'Domestic Income' and 'National Income of India'? Give reasons for your answer.

- (i) Profits earned by a branch of Foreign Company in India.
- (ii) Salaries of Indian employees working in Chinese Embassy in India.
- (iii) Retained Earnings of Foreign Companies from India.
- (iv) Salary of residents of France working in Indian Embassy in France.
- (v) Profits of Tata Industries from its business in Australia

Q10. Discuss the effect of sale of firecrackers on GDP and welfare of the economy.

Q11. Suppose the Gross Domestic Product (GDP) of Nation X was 2,000 crores in 2018-19, whereas the Gross Domestic Product of Nation Y in the same year was 1,20,000 crores. If the Gross Domestic Product of Nation X rises to 4,000 crores in 2019-20 and the Gross Domestic Product of Nation Y rises to 2,00,000 crore in 2019-20. Compare the rate of change of GDP of Nations X and Y, taking 2018-19 as base year

Q12. Covid vaccine to be free for 'most prioritised' beneficiaries: Vardhan. 3 Cr Frontline & Health Workers Part -The Times of India: 3rd January, 2021 of List

Does the given statement mean that welfare of such beneficiaries will increase along with increase in its GDP? Comment

Q13. "Management of a water polluting oil refinery says that it (oil refinery) ensures welfare through its contribution to Gross Domestic Product. Defend or refute the argument of management with respect to GDP as a welfare measure of the economy.

SUBJECT –PHYSICAL EDUCATION

Worksheet-1

Chapter 1: Management of Sporting Events

1. Define sports management.
2. Explain the objectives of intramural tournaments.
3. Differentiate between intramural and extramural tournaments.
4. What are the committees required for conducting a sports event?
5. Explain the importance of proper planning in sports events.
6. What is a fixture? Explain its importance.
7. Differentiate between knockout tournament and league tournament.

Chapter 2: Children and Women in Sports

8. Explain the importance of physical activities for children.
9. Define female athlete triad.
10. What are the common postural deformities in children?
11. Explain the causes of obesity among children.
12. State any four benefits of participation of women in sports.
13. What corrective measures can be taken for knock knees?
14. Explain the role of physical education in improving health and fitness among children.

Chapter 3: Yoga as Preventive Measure for Lifestyle Disease

15. Define lifestyle diseases.
16. Explain the importance of yoga in daily life.
17. State any four benefits of pranayama.

Case Study Questions

Case Study – 1

A school organised an annual sports meet. Different committees were formed for ground preparation, refreshments, discipline, and first aid to ensure smooth conduct of the event.

18. Identify the concept related to sports management highlighted in the above case.
19. Why is teamwork important in organising sports events?

Case Study – 2

Riya spends most of her time using mobile phones and watching television. She rarely participates in outdoor games and has started gaining excess weight.

20. Suggest any two physical activities or yoga practices that can help improve her fitness and health.

Real-Life Based Activities

Activity 1

Observe a sports event conducted in your school or locality. Write a short report mentioning the committees involved and their responsibilities.

Activity 2

Practice any two yoga asanas daily for one week and prepare a record of their benefits on your body and mind.

SUBJECT – MATHEMATICS

1. Prove that the function $f(x) = \frac{1}{(1+e^{-x})}$ is one-one and onto from \mathbb{R} to $(0, 1)$.
2. Let $A = \{1, 2, 3\}$, define a relation R on $A \times A$ by $(a, b) R (c, d)$ if $a + d = b + c$. Prove that R is an equivalence relation.
3. Show that the function $f: \mathbb{R} \rightarrow \mathbb{R}$ given by $f(x) = x^3$ is invertible and find its inverse.
4. Let $A = \{1, 2, 3\}$. Define a function $f: A \rightarrow A$. How many such functions are: a) One-one? b) Onto?
5. Let $A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$ $B = \begin{bmatrix} 2 & 0 \\ 1 & 3 \end{bmatrix}$, find AB and BA .
6. If A is a square matrix such that $A^2 = I$, prove that $(A^{-1}) = A$.
7. Solve for X : $\begin{bmatrix} 2 & 1 \\ 3 & 4 \end{bmatrix} X = \begin{bmatrix} 7 & 5 \\ 18 & 16 \end{bmatrix}$
8. If $A = \begin{bmatrix} 0 & 1 \\ -1 & 0 \end{bmatrix}$ show that $A^4 = I$.
9. Verify that matrix multiplication is not commutative with a suitable example.
10. For a 3×3 matrix A , prove that $(kA)' = kA'$, where $'$ denotes transpose.
11. If $A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$, show that $\text{adj}(A) = \begin{bmatrix} d & -b \\ -c & a \end{bmatrix}$
12. If A and B are symmetric matrices, show that $A + B$ is symmetric.
13. Find the value of $\begin{vmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{vmatrix}$
14. If $A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$, use the determinant to find whether A is invertible.
15. Evaluate $\begin{vmatrix} x & x^2 & 1 \\ 1 & x & x^2 \\ x^2 & 1 & x \end{vmatrix}$
16. Show that the determinant of a matrix remains unchanged under transpose.
17. Use properties of determinants to prove that: $\begin{vmatrix} a & b & c \\ a+b & b+c & c+a \\ a^2+b^2 & b^2+c^2 & c^2+a^2 \end{vmatrix} = 0$
18. Find the area of the triangle with vertices $A(1, 2)$, $B(3, 4)$, and $C(5, 6)$ using determinant.
19. Show that if two rows (or columns) of a determinant are identical, the value of the determinant is zero.
20. Using matrices, solve the following system of equations.

$$x - y + 2z = 7$$

$$3x + 4y - 5z = -5$$
 and
$$2x - y + 3z = 12$$
21. Case Study : A city's traffic management department is planning to optimize traffic flow by analyzing the connectivity between various traffic signals. The city has five major spots labelled $A, B, C, D,$ and E .



- The department has collected the following data regarding one-way traffic flow between spots:
1. Traffic flows from A to B , A to C , and A to D .
 2. Traffic flows from B to C and B to E .
 3. Traffic flows from C to E .
 4. Traffic flows from D to E and D to C .

The department wants to represent and analyze this data using relations and functions.

Use the given data to answer the following questions:

- I. Is the traffic flow reflexive? Justify. [1]
- II. Is the traffic flow transitive? Justify. [1]
- III. III A. Represent the relation describing the traffic flow as a set of ordered pairs. Also state the domain and range of the relation.

OR

- III B. Does the traffic flow represent a function? Justify your answer. [2]

22. For two matrices $A = \begin{bmatrix} 3 & -6 & -1 \\ 2 & -5 & -1 \\ -2 & 4 & 1 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & -2 & -1 \\ 0 & -1 & -1 \\ 2 & 0 & 3 \end{bmatrix}$, find the product AB and hence solve the system of equations:

$$\begin{aligned} 3x - 6y - z &= 3 \\ 2x - 5y - z + 2 &= 0 \\ -2x + 4y + z &= 5 \end{aligned}$$

23. Case-Study

Students of a school are taken to a railway museum to learn about railways heritage and its history.

An exhibit in the museum depicted many rail lines on the track near the railway station. Let L be the set of all rail lines on the railway track and R be the relation on L . defined by $R = \{(l_1, l_2) : l_1 \text{ is parallel to } l_2\}$

On the basis of the above information, answer the following questions

- (i) Find whether the relation R is symmetric or not.
- (ii) Find whether the relation R is transitive or not.
- (iii) If one of the rail lines on the railway track is represented by the equation $y = 3x + 2$ then find the set of rail lines in R related to it.

OR

- (iii) Let S be the relation defined by $S = \{(l_1, l_2) : l_1 \text{ is perpendicular to } l_2\}$. Check whether the relation S is symmetric and transitive.

24. If $A = \begin{bmatrix} 2 & 1 \\ 1 & 2 \end{bmatrix}$ Find: $A^2 - 2A + I$

25. Show that the function $f: N \rightarrow N$ defined by $f(x) = ax + b$, $a, b \in N$ is one one but not onto

SUBJECT – INFORMATION TECHNOLOGY

Worksheet-1

Section A – Objective Questions

- 1. What is the full form of RDBMS?**
 - a) Relational Database Management System
 - b) Record Database Management System
 - c) Relational Data Managing Software
 - d) Record Data Management Service
- 2. Which key uniquely identifies each record in a table?**
 - a) Foreign Key
 - b) Candidate Key
 - c) Primary Key
 - d) Alternate Key
- 3. Which SQL command is used to retrieve data from a table?**
 - a) INSERT
 - b) UPDATE
 - c) SELECT
 - d) DELETE
- 4. Which clause is used to filter records in SQL?**
 - a) ORDER BY
 - b) GROUP BY
 - c) WHERE
 - d) FROM
- 5. Which normal form removes partial dependency?**
 - a) 1NF
 - b) 2NF
 - c) 3NF
 - d) BCNF
- 6. Which operator is used for comparison in SQL?**
 - a) +
 - b) *
 - c) =
 - d) %
- 7. Which of the following is a valid Java keyword?**
 - a) function
 - b) define
 - c) class
 - d) module
- 8. Which method is the entry point of a Java program?**
 - a) start()
 - b) execute()
 - c) main()
 - d) run()
- 9. Which symbol is used to end a statement in Java?**
 - a) :
 - b) ;
 - c) ,
 - d) .
- 10. Which data type is used to store decimal numbers in Java?**
 - a) int
 - b) char
 - c) float
 - d) boolean
- 11. Which loop is guaranteed to execute at least once?**
 - a) for loop
 - b) while loop
 - c) do-while loop
 - d) nested loop
- 12. Which keyword is used to inherit a class in Java?**
 - a) implement
 - b) import
 - c) extends
 - d) package

Section B – Subjective Questions

1. Define RDBMS. Explain its advantages.
2. Differentiate between Primary Key and Foreign Key.
3. Explain the following SQL commands with examples:
 - SELECT
 - INSERT
 - UPDATE
 - DELETE
4. What is normalization? Explain 1NF, 2NF, and 3NF.
5. Explain the features of Java programming language.
6. Differentiate between compiler and interpreter.
7. Explain different data types used in Java.
8. What are loops in Java? Explain any two looping statements with syntax.
9. Explain the concept of inheritance in Java.
10. Write the difference between method overloading and method overriding.

Section C – Case Study Based Questions

Case Study 1

A school stores student details such as Roll Number, Name, Class, and Marks in a database table. The Roll Number is unique for every student.

Questions

1. Which type of database system is used in the above case?
2. Which field can be used as the Primary Key?
3. Which SQL command is used to display all student records?
4. Why is a Primary Key important in a table?

Case Study 2

Rohan is developing a Java program to calculate the sum of numbers entered by the user. He uses loops and conditional statements in the program.

Questions:

1. Which programming language is used in the case?
2. Name any one looping statement in Java.
3. Which method is mandatory in every Java program?
4. Which data type can be used to store integer values?

Case Study 3

A company maintains employee records in multiple database tables such as Employee, Department, and Salary. The tables are connected using common fields.

Questions:

1. What type of relationship exists between the tables?
2. Which key is used to connect tables in RDBMS?
3. Name one advantage of normalization.
4. Which SQL clause is used to filter specific employee records?

Activity Based Task

Task 1 – Basic Java Program (For Even roll no)

Write a Java program to:

1. Input marks of five subjects.
2. Calculate:
 - Total marks
 - Percentage
 - Grade

Task 2 – Basic SQL commands (For Odd roll no)

Objective

To create a database system for storing and managing student records using RDBMS and SQL commands.

Introduction

A Student Management System is used to store student details such as roll number, name, class, marks, and phone number.

RDBMS helps organize data into tables and allows easy searching, updating, and deletion of records.

Software Used:

- MySQL / LibreOffice Base
- Computer System
Database name – Student DB

Instructions: Write down all command related to above database.

SUBJECT – BUSINESS STUDIES

Worksheet-1

Work Sheet 1

Q 1. Sohan is the owner of a printing press. The size of his organisation has increased during the recent past. There are many employees who work in his organisation. The organisation is considered good and has earned a lot of reputation in the market. However when it comes to making key decisions in the organisation related to many things he never considers the opinions of his subordinates. Even though the size of the organisation has increased yet he tries to take all the key decisions on his own. Which principle of Fayol has been violated by him?

Q 2.: A company manufacturing light bulbs incurred heavy expenditure on scientific Research and Development and discovered a technology that made it possible to produce an energy efficient light bulb that lasts at least twenty times as long as a standard bulb. It resulted in growth and profitability of the company. Identify and state the dimension of the business environment mentioned above.

Q 3. Just after the declaration of Lok Sabha Elections 2014 results, the Bombay stock exchange's price index (Sensex) rose by 1000 points in a day. Identify the environmental factor which led to this rise giving reason. Also explain any two other dimensions of the business environment.

Q4 Identify and explain the types of plans.

- (a) A plan to achieve 50%. Return on Investment.
- (b) A plan used in defence to combat the plan of the opponent.
- (c) A plan which does not allow for any discretion.
- (d) A type of plan which serves as a controlling device.

Q5. "Planning is certainly important as it tells us where to go, it provides direction and reduces the risk of uncertainty by preparing forecasts." Do you agree with this statement? Give any four reasons in support of your answer as well.

Q 6. Rohit Enterprises is facing huge losses. The owner of the company is an MBA pass out. Even then many things in the organisation are happening which are indicative of lack of proper management in the company. First of all there is no specific sharing of work and any time any employee is asked to do anything. This has led to wastage of efforts. Further due to negligence in proper work sharing there has been no specialisation development in the nature of the jobs done by the employees. There are no clear and fair agreements between the workers and the management. This has led to a lot of frustration in the workers. Management has quite often been found to be ignorant of not fulfilling promises done by it. There are also no strict rules and regulations binding on the conduct of the workers. The departmental heads who are middle level managers in the company and hold key positions always favour their relatives. They quite often don't turn up for jobs on time. They are always looking for special relaxations from the top management. This has led to feelings of resentment among the employees who are also demanding special

favors and threatening strike in the coming days. Identify the three principles of Fayol violated in the above case.

Q 7. The management of Asha Ltd. strongly believes that the members of an organization should work towards fulfilling the common organizational goals. This requires team work and integration of efforts of all individuals, departments and specialists. This is because all the individuals and departments depend on each other for information and resources to perform their respective activities. Managers need to reconcile differences in approach, timing, effort or interest. At the same time it should enable all its members to grow and develop. Thus, there is a need to harmonize individual goals and organizational goals.

1. Identify the concept of management discussed above.
2. State any three features of the concept identified in (a)

Q8. Abc Tech Ltd. is a company producing IT services. The company's profits are enough for survival and growth. The management of the company believes that a satisfied employee creates a satisfied customer, who in turn creates profits that lead to satisfied shareholders. So, it pays competitive salaries and perks to its employees. All the employees are happy working in the organization because of personal growth and development. The company has a strong sense of social responsibility. It has set up an engineering college in which one-third of the students are girls to whom the company gives 50% scholarship. Is the management of H. Tech Ltd. fulfilling its objectives? Justify your answer by giving reasons.

Work sheet 2

Project work :

Students are supposed to select one unit out of four and are required to make only ONE project from the selected unit.

1. Principles of Management
2. Marketing
3. Elements of Business Environment.
4. Stock exchange

The following sequence needs to be followed for writing the project-report:

- 1) Front page/cover page -Coloured print-out (uniform format will be provided)
- 2) Certificate (uniform format will be provided).
- 3) Acknowledgement (uniform format will be provided).
- 4) Index with page numbers.
- 5) Aim (Main subject line/topic of the project).
- 6) Required Content (TOPIC WISE) (pages depends on the topic)
- 7) Printed Surveys
- 8) Interpretation/analysis/ discussion (through diagrams & checklist)
- 9) Conclusion
- 10) Bibliography

विषय – हिंदी

कार्यपत्र – 1

प्रश्न 1. अपठित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर दीजिए।

विद्यालय केवल शिक्षा प्राप्त करने का स्थान नहीं होता, बल्कि यह वह पवित्र संस्था है जहाँ विद्यार्थियों के व्यक्तित्व का सर्वांगीण विकास होता है। विद्यालय में विद्यार्थियों को ज्ञान के साथ-साथ अनुशासन, नैतिकता, समय का महत्व, सहयोग, सहनशीलता तथा अच्छे संस्कारों की शिक्षा भी दी जाती है। विद्यालय की एक विशेष मर्यादा होती है, जिसका पालन प्रत्येक विद्यार्थी के लिए आवश्यक माना जाता है। विद्यालय की मर्यादा ही उसे एक आदर्श शिक्षण संस्था बनाती है। विद्यालय की मर्यादा का सबसे महत्वपूर्ण आधार अनुशासन है। विद्यार्थियों को प्रतिदिन समय पर विद्यालय पहुँचना चाहिए तथा प्रार्थना सभा में नियमित रूप से भाग लेना चाहिए। प्रार्थना सभा विद्यार्थियों में एकता, आत्मविश्वास और सकारात्मक सोच का विकास करती है। विद्यार्थियों को अपने शिक्षकों का सम्मान करना चाहिए और उनके निर्देशों का पालन करना चाहिए। कक्षा में शांति बनाए रखना तथा ध्यानपूर्वक अध्ययन करना एक अच्छे विद्यार्थी का गुण माना जाता है।

विद्यालय में स्वच्छता का विशेष महत्व होता है। विद्यार्थियों को अपने विद्यालय परिसर, कक्षा-कक्ष, पुस्तकालय और खेल मैदान को स्वच्छ रखना चाहिए। कूड़ा इधर-उधर फेंकना, दीवारों पर लिखना या विद्यालय की वस्तुओं को नुकसान पहुँचाना विद्यालय की मर्यादा के विरुद्ध है। स्वच्छ वातावरण विद्यार्थियों के स्वास्थ्य और अध्ययन दोनों के लिए लाभदायक होता है।

विद्यालय की वर्दी भी विद्यालय की मर्यादा का महत्वपूर्ण भाग है। निर्धारित वर्दी पहनने से विद्यार्थियों में समानता और अनुशासन की भावना उत्पन्न होती है। सभी विद्यार्थी एक समान दिखाई देते हैं और उनमें भेदभाव की भावना कम होती है। विद्यार्थियों को साफ-सुथरी वर्दी पहनकर विद्यालय आना चाहिए।

विद्यालय में खेलकूद, सांस्कृतिक कार्यक्रम तथा अन्य गतिविधियाँ भी आयोजित की जाती हैं। इन गतिविधियों में भाग लेने से विद्यार्थियों का मानसिक और शारीरिक विकास होता है। विद्यार्थियों को इन कार्यक्रमों में अनुशासन और उत्साह के साथ भाग लेना चाहिए।

आज के आधुनिक युग में मोबाइल फोन और अन्य इलेक्ट्रॉनिक उपकरणों का प्रयोग तेजी से बढ़ रहा है। विद्यालय में इनका अनावश्यक उपयोग पढ़ाई में बाधा उत्पन्न करता है। इसलिए विद्यार्थियों को विद्यालय के नियमों का पालन करते हुए शिक्षा पर अधिक ध्यान देना चाहिए।

विद्यालय की मर्यादा बनाए रखने से विद्यालय का वातावरण शांत, स्वच्छ और शिक्षाप्रद बनता है। इससे विद्यार्थियों के चरित्र का विकास होता है और वे अच्छे नागरिक बनते हैं। प्रत्येक विद्यार्थी का कर्तव्य है कि वह विद्यालय की मर्यादा का पालन करे तथा विद्यालय का नाम गौरवान्वित करे।

प्रश्न:

- i. विद्यालय को किस प्रकार की संस्था कहा गया है?
- ii. विद्यालय में विद्यार्थियों को किन-किन गुणों की शिक्षा दी जाती है?
- iii. विद्यालय की मर्यादा का सबसे महत्वपूर्ण आधार क्या है?
- iv. प्रार्थना सभा से विद्यार्थियों में किन गुणों का विकास होता है?
- v. विद्यार्थियों को अपने शिक्षकों के प्रति कैसा व्यवहार करना चाहिए?
- vi. विद्यालय में स्वच्छता बनाए रखना क्यों आवश्यक है?
- vii. विद्यालय की मर्यादा के विरुद्ध कौन-कौन से कार्य बताए गए हैं?
- viii. विद्यालय की वर्दी पहनने से विद्यार्थियों में कौन-सी भावना उत्पन्न होती है?
- ix. विद्यालय में आयोजित गतिविधियों से विद्यार्थियों को क्या लाभ होता है?

x. प्रत्येक विद्यार्थी का क्या कर्तव्य बताया गया है?

प्रश्न 2. पत्रकारिता के विभिन्न आयाम

- i. पत्रकारिता किसे कहते हैं?
- ii. पत्रकारिता का मुख्य उद्देश्य क्या है?
- iii. प्रिंट मीडिया क्या है?
- iv. इलेक्ट्रॉनिक मीडिया के दो उदाहरण लिखिए।
- v. (टीवी पत्रकारिता की एक विशेषता

प्रश्न 3. अप्रत्याशित विषयों पर लेख लिखिए।

- i. "जल ही जीवन है"
- ii. प्रदूषण के कारण

प्रश्न 4.

- i. भक्तिन का वास्तविक नाम क्या है?
- ii. भक्तिन के चरित्र की प्रमुख विशेषताएँ लिखिए।
- iii. बाजार दर्शन पाठ का कर अपने शब्दों में लिखिए।
- iv. दिन जल्दी-जल्दी कविता में कवि ने क्या सीख दी है?

क्रियात्मक कार्य

एक पोर्टफोलियो तैयार कीजिए

1. हरिवंश राय बच्चन जी (1-11)
2. जैनेंद्र कुमार (12-22)
 - प्रस्तावना
 - भूमिका
 - साहित्य के क्षेत्र में उनका स्थान

SUBJECT – PHYSICS

1. Prepare an Investigatory Project on any one of the following topics or any other topic of your choice based on the concept of Physics (as per CBSE guidelines).

POINTERS FOR MAKING PROJECT REPORT

The material should be placed and bound in the following order:

1. Top Sheet of transparent plastic –The top page of your report should carry the following information in printed form or handwritten in neat block letters:

Title of Project:

Name of Student:

Roll Number:

2. Aim of Project
3. Apparatus Required
4. Principle/Theory
5. Construction with Labelled Diagram
6. Working
7. Observations
8. Calculations
9. Result/ Conclusions
10. Applications / Future scope
11. Graph if any
12. References/Bibliography
13. Back cover of plastic: may be opaque or transparent

2. Make a project on any of the following topics:

To investigate how a series of capacitors charges and discharges

To Research and Build a Capacitor Storage Circuit LED

To learn about resistance and the Ohm law

To Research the Bar Magnet as a Comparative Solenoid

3. Do following questions:

- i. Define electric dipole moment . Is it a scalar or a vector? Derive the expression for the electric field of a dipole at a point on the equatorial line of the dipole .
- ii. State Gauss theorem . Using Gauss's law deduce the expression for the electric field due to a uniformly charged spherical conducting shell of radius R at a point (i) outside & (ii) inside the shell . Plot a graph showing variation of electric field as a function of $r > R$ and $r < R$ (r being the distance from the centre of the shell) .

- iii .(a) Define electric flux . Write its S.I . unit .
(b) Using Gauss's law ,prove that the electric field at a point due to a uniformly charged infinite plane sheet is independent of the distance from it .
(c) How is the field directed if (i) the sheet is positively charged (ii)negatively charged ?
- iv. (a) Derive an expression for the torque experienced by an electric dipole kept in a uniform electric field. When is this torque maximum.
- v . Sketch the electric lines of force of
- (a) a point charge $q > 0$.
(b) a point charge $q < 0$.
(c) an electric dipole or two equal & opposite charges separated by a small distance.
(d) two equal positive charges placed small distance apart in air.
- vi. What is meant by quantisation of electric charge?
- vii. Why does the electric field inside a dielectric decrease when it is placed in an external electric field ?
- viii. How much is the electric potential of a charge at a point at infinity.
- ix .The work done in moving a charge of 3 Coulomb between two points is 6 J. What is the potential difference between the two points ?
- x . The electric potential at 0.9 m from a point charge is +50 V. What is the magnitude and sign of the charge.
- xi. Derive an expression for the potential at a point along the axial line of a short dipole.
- xii. Derive an expression for the electric potential at a distance 'r' from a point charge 'q'.
- xiii. Derive an expression for the potential energy of a dipole rotated in a uniform electric field.
- xiv. Deduce expressions for the potential energy of a system of two point charges and three point charges and hence generalise the result for a system of 'N' point charges.
- xv. Two point charges $+10\mu\text{C}$ and $-10\mu\text{C}$ are separated by a distance of 2.0 cm in air.
Calculate the potential energy of the system.

SUBJECT – ACCOUNTANCY

Work sheet 1

1. B and C were partners sharing profits and losses in the ratio of 2 : 2 : 1. Books are closed on 31st March every year. C dies on 5th November, 2018. Under the partnership deed, the executors of the deceased partner are entitled to his share of profit to the date of death, calculated on the basis of last year's profit. Profit for the year ended 31st March, 2018 was Rs.2,40,000. C's share of profit will be:

- (A) Rs.28,000 (B) Rs.32,000
(C) Rs.28,800 (D) Rs.48,000

2. A and B are partners in a firm sharing profits and losses in the ratio of 3 : 2. A new partner C is admitted. A surrenders 1/15th share of his profit in favour of C and B surrenders 2/15th of his share in favour of C. The new ratio will be:

- (A) 8:4:3 (B) 42:26:7
(C) 4:8:3 (D) 26:42:7

3 : A, B and C are partners sharing in the ratio of 5:4:3. They admit D for 1/7th share. It is agreed that B would retain his original share. Sacrificing ratio will be:

- (A) A, B and C – 5:4:3 (B) A and C – 4:3
(C) A and C – 5:4 (D) A and C – 5:3

4.: Assertion (A): In case of admission of a partner, the old firm is dissolved and a new firm comes into existence.

Reason (R): After admission of a new partner, old partners along with the new partner constitute the new firm. As such, the old firm is dissolved and a new firm comes into existence.

- (A) Both (A) and (R) are correct and (R) is the correct reason for (A).
(B) (A) and (R) are correct but (R) is not the correct reason for (A).
(C) (A) is wrong Only (R) is correct.
(D) Both (A) and (R) are wrong

5: Assertion (A): Admission of a partner does not mean dissolution of the firm but dissolution of old partnership.

Reason (R): Admission of a partner means reconstitution of the partnership whereby old partnership ceases to exist and new partnership comes into existence However, the firm continues.

- (A) (A) and (R) both are correct and (R) correctly explains (A).
(B) Both (A) and (R) are correct and (R) does not explain (A).
(C) Both (A) and (R) are incorrect.
(D) Both (A) and (R) are wrong

6.:Assertion (A): At the time of death of a partner the deceased partner will get his share in General Reserve and credit balance in Profit & Loss Account

Reason (R): Deceased partner will get his share of Workmen Compensation Reserve remaining after claim if any in the context of above two statements, which of the following is correct?

- (A) Assertion (A) and Reason (R) are correct and Reason (R) is the correct explanation
(B) Assertion (A) and Reason (R) are correct but Reason (R) is not the correct explanation
(C) Assertion (A) is correct but Reason (R) is not correct

(D) Assertion (A) is not correct but Reason (R) is correct.

7. X and Y are partners in a firm sharing profits in the ratio of 5:3. On March 1st, 2021 they admitted Z as a new partner. The new profit-sharing ratio will be 4:3:2. Z brought in Rs. 1,00,000 in cash as his share of capital but could not bring any amount for goodwill in cash. The firm's goodwill on Z's admission was valued at Rs. 1,80,000. X and Y decided that Z can bring his share of premium for goodwill later or it can be adjusted against his share of profits. At the time of Z's admission goodwill existed in the books of the firm at Rs. 2,40,000. You are required to pass necessary journal entries in the books of the firm on Z's admission. Leeta and Meeta were partners in a firm sharing profits and losses in the ratio of 5:3. On 1st April, 2024 they admitted Omi as a new partner. On the date of Omi's admission, the balance sheet of Leeta and Meeta showed a balance of Rs. 1,60,000 in General reserve and Rs. 2,40,000 (Cr.) in Profit and Loss Account. Record necessary journal entries for the treatment of these items on Omi's admission. The new profit-sharing ratio between Leeta, Meeta and Omi was 5:3:2.

8. A and B are partners sharing profits and losses in the ratio of 3:2. They admitted C into partnership for $\frac{1}{4}$ share. Goodwill of the firm was to be valued at 3 years' purchase of super profits. Average net profits of the firm were Rs. 20,000. Capital invested in the business was Rs. 50,000 and Normal Rate of Return was 10%. Calculate the amount of goodwill C has to bring.

9. A and B are equal partners with fixed capitals of Rs. 90,000 and Rs. 60,000 respectively. They admit C as a partner with $\frac{1}{4}$ th share in the profit of the firm. C brings Rs. 16,000 to acquire his right to share profits of the business and Rs. 80,000 to acquire the right to share the firm's assets. Give Journal Entries at the time of C's admission.

Q 10. Calculate the Current Ratio and Quick Ratio from the following information:

Working Capital = RS1,50,000, Current Ratio = 2.5 : 1, Inventory = RS90,000, Prepaid Expenses = RS10,000

Work sheet 2

One specific project based on financial statement analysis of a company covering any two aspects from the following:

1. Comparative and common size financial statements
2. Accounting Ratios
3. Cash Flow Statements

Ratio Analysis: Analyze financial statements of companies like Tata Motors Limited, Infosys Limited, Hindustan Lever (HLL), or Indian Tobacco Company (ITC) to calculate and interpret various ratios.

Cash Flow Statement: Prepare a cash flow statement for a company, highlighting its inflows and outflows of cash.

Comparative and Common Size Financial Statements: Compare financial statements of two or more companies or analyze a company's performance over time using common-size statements.

Some specific project ideas:

Financial Analysis of Tata co.: Examine Tata's financial performance using ratios, cash flow statements, and comparative analysis.

To complete your project, consider the following:

- Refer to CBSE guidelines for project work.

- Use textbooks like T.S Grewal, DK Goel, and NCERT for reference. And Explore online resources, such as Scribd, for sample projects and templates

SUBJECT – CHEMISTRY

Worksheet-1

Write the chemistry of recharging the lead storage battery, highlighting all the materials that are involved during recharging.

Suggest two materials other than hydrogen that can be used as fuels in the fuel cells.

Explain how rusting of iron is envisaged as setting up of an electrochemical cell.

1. Define and Calculate (a) molality (b) molarity and (c) mole fraction of KI if the density of 20% (mass/mass) aqueous KI solution is 1.202 g mL^{-1} .
2. H_2S , a toxic gas with rotten egg like smell, is used for the qualitative analysis. If the solubility of H_2S in water at STP is 0.195 m, calculate Henry's law constant.
3. Henry's law constant for CO_2 in water is $1.67 \times 10^8 \text{ Pa}$ at 298 K. Calculate the quantity of CO_2 in 500 mL of soda water when packed under 2.5 atm CO_2 pressure at 298 K.
4. The vapour pressures of pure liquids A and B are 450 mm and 700 mm of Hg respectively at 350 K. Calculate the composition of the liquid mixture if total vapour pressure is 600 mm of Hg. Also find the composition in the vapour phase.
5. Vapour pressure of pure water at 298 K is 23.8 mm Hg. 50 g of urea (NH_2CONH_2) is dissolved in 850 g of water. Calculate the vapour pressure of water for this solution and its relative lowering.
6. Boiling point of water at 750 mm Hg is 99.63°C . How much sucrose is to be added to 500 g of water such that it boils at 100°C .
7. Calculate the mass of ascorbic acid (vitamin C, $\text{C}_6\text{H}_8\text{O}_6$) to be dissolved in 75 g of acetic acid to lower its melting point by 1.5°C . (K_f for CH_3COOH) = $3.9 \text{ K kg mol}^{-1}$)
8. Calculate the osmotic pressure in Pascals exerted by a solution prepared by dissolving 1.0 g of polymer of molar mass 185,000 in 450 mL of water at 37°C .
9. Calculate the depression in the freezing point of water when 10g of $\text{CH}_3\text{CH}_2\text{CHClCOOH}$ is added to 250g of water. $K_a = 1.4 \times 10^{-3} \text{ Kg} = 1.86 \text{ K kg mol}^{-1}$.
10. 19.5g of CH_2FCOOH is dissolved in 500g of water. The depression in the freezing point of water observed is 1.0°C . Calculate the van's Hoff factor and dissociation constant of fluoroacetic acid.
11. Vapour pressure of water at 293 K is 17.535 mm Hg. Calculate the vapour pressure of water at 293 K when 25 g of glucose is dissolved in 450 g of water.
12. Henry's law constant for the molality of methane in benzene at 298 K is $4.27 \times 10^5 \text{ mm Hg}$. Calculate the solubility of methane in benzene at 298 K under 760 mm Hg.

13. 100g of liquid A (molar mass 140 g mol^{-1}) was dissolved in 1000g of liquid B (molar mass 180 g mol^{-1}). The vapour pressure of pure liquid B was found to be 500 torr. Calculate the vapour pressure of pure liquid A and its vapour pressure in the solution if the total vapour pressure of the solution is 475 torr.
14. What role does the molecular interaction play in solution of alcohol in water?
15. Why do gases always tend to be less soluble in liquids as the temperature is raised?
16. State Henry's law and mention some of its important applications.
17. The partial pressure of ethane over a solution containing $6.56 \times 10^{-3} \text{ g}$ of ethane is 1 bar. If the solution contains $5.00 \times 10^{-2} \text{ g}$ of ethane, then what shall be the partial pressure of the gas?
18. According to Raoult's law, what is meant by positive and negative deviations and how is the sign of $\Delta_{\text{sol}} H$ related to positive and negative deviations from Raoult's law?
19. An aqueous solution of 2 percent non-volatile solute exerts a pressure of 1.004 bar at the boiling point of the solvent. What is the molecular mass of the solute?
20. State Raoult's law for volatile solute and non-volatile solute. Write the difference between positive and negative deviation with graph and 3-3 examples?

Worksheet-2

1. How would you determine the standard electrode potential of the system $\text{Mg}^{2+} | \text{Mg}$?
2. Can you store copper sulphate solutions in a zinc pot?
3. Consult the table on standard electrode potentials and suggest three substances that can oxidise Fe^{2+} ions under suitable conditions.
4. Calculate the potential of hydrogen electrode in contact with a solution whose pH is 10.
5. Calculate the emf of the cell in which the following reaction takes place:
 $\text{Ni(s)} + 2\text{Ag}^+ (0.002 \text{ M}) \rightarrow \text{Ni}^{2+} (0.160 \text{ M}) + 2\text{Ag(s)}$ Given that $E^{\ominus}_{(\text{cell})} = 1.05 \text{ V}$.
6. The cell in which the following reaction occurs: $2\text{Fe}^{3+} (\text{aq}) + 2\text{I}^- (\text{aq}) \rightarrow 2\text{Fe}^{2+} (\text{aq}) + \text{I}_2 (\text{s})$ has $E^{\ominus}_{\text{cell}} = 0.236 \text{ V}$ at 298 K. Calculate the standard Gibbs energy and the equilibrium constant of the cell reaction.
7. Why does the conductivity of a solution decrease with dilution?
8. Suggest a way to determine the value of water.
9. The molar conductivity of 0.025 mol L^{-1} methanoic acid is $46.1 \text{ S cm}^2 \text{ mol}^{-1}$. Calculate its degree of dissociation and dissociation constant Given $\lambda^{\circ}(\text{H}^+) = 349.6 \text{ S cm}^2 \text{ mol}^{-1}$ and $\lambda^{\circ}(\text{HCOO}^-) = 54.6 \text{ S cm}^2 \text{ mol}^{-1}$.
10. If a current of 0.5 ampere flows through a metallic wire for 2 hours, then how many electrons would flow through the wire?
11. Suggest a list of metals which can be extracted electrolytically.
12. Consider the reaction: $\text{Cr}_2\text{O}_7^{2-} + 14\text{H}^+ + 6\text{e}^- \rightarrow 2\text{Cr}^{3+} + 7\text{H}_2\text{O}$ What is the quantity of electricity in

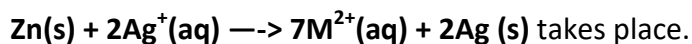
coulombs needed to reduce 1 mol of $\text{Cr}_2\text{O}_7^{2-}$?

13. Write the chemistry of recharging the lead storage battery, highlighting all the materials that are involved during recharging.

14. Suggest two materials other than hydrogen that can be used as fuels in the fuel cells.

15. Explain how rusting of iron is envisaged as setting up of an electrochemical cell.

16. Depict the galvanic cell in which the reaction



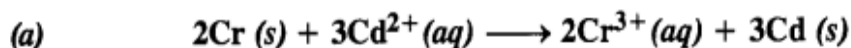
Further show:

(i) Which of the electrode is negatively charged?

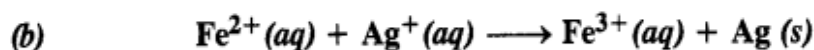
(ii) The carriers of the current in the cell.

(iii) Individual reaction at each electrode.

17. Calculate the standard cell potentials of the galvanic cells in which the following reactions take place.



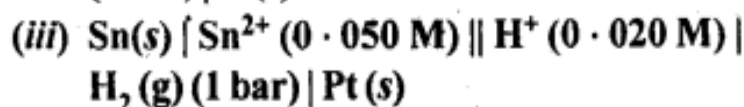
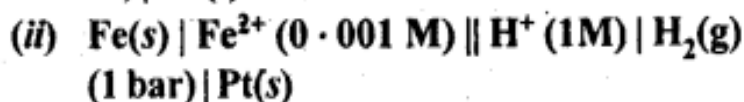
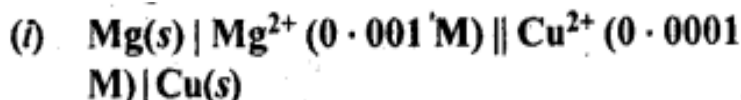
$$\text{Given } E_{\text{Cr}^{3+}/\text{Cr}}^\circ = -0.74 \text{ V}; E_{\text{Cd}^{2+}/\text{Cd}}^\circ = -0.40 \text{ V}$$



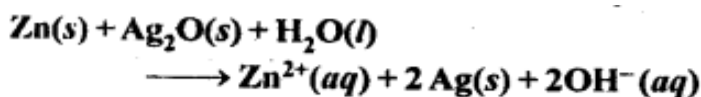
$$\text{Given } E_{\text{Ag}^+/\text{Ag}}^\circ = 0.80 \text{ V}; E_{\text{Fe}^{3+}/\text{Fe}^{2+}}^\circ = 0.77 \text{ V}$$

Also calculate ΔG° and equilibrium constant for the reaction.

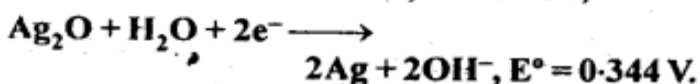
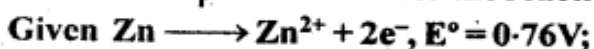
18. Write the Nernst equation and emf of the following cells at 298 K:



19. In the button cells widely used in watches and other devices the following reaction takes place:



Determine $\Delta_r G^\ominus$ and E^\ominus for the reaction.



20. Define conductivity and molar conductivity for the solution of an electrolyte. Discuss their variation with concentration.

21. The conductivity of 0.20 M solution of KCl at 298 K is 0.0248 S cm^{-1} . Calculate its molar conductivity.

22. The resistance of a conductivity cell containing 0.001 M KCl solution at 298 K is 1500Ω . What is the cell

constant if conductivity of 0.001 M KCl solution at 298 K is $0.146 \times 10^{-3} \text{ S cm}^{-1}$?

23. The conductivity of NaCl at 298 K has been determined at different concentrations and the results are given below:

Concentration/M	0.001	0.010	0.020	0.050	0.100
$10^2 \times \kappa/\text{S m}^{-1}$	1.237	11.85	23.15	55.53	106.74

Calculate Λ_m for all concentrations and draw a plot between Λ_m and $c^{1/2}$. Find the value of Λ_m^0 .

24. Conductivity of 0.00241 M acetic acid is $7.896 \times 10^{-5} \text{ S cm}^{-1}$. Calculate its molar conductivity. If Λ_{m0} , for acetic acid is $390.5 \text{ S cm}^2 \text{ mol}^{-1}$, what is its dissociation constant?

25. How much charge is required for the following reductions:

(i) 1 mol of Al^{3+} to Al?

(ii) 1 mol of Cu^{2+} to Cu ?

(iii) 1 mol of MnO_4^- to Mn^{2+} ?

26. How much electricity in terms of Faraday is required to produce :

(i) 20.0 g of Ca from molten CaCl_2

(ii) 40.0 g of Al from molten Al_2O_3 ?

27. A solution of $\text{Ni}(\text{NO}_3)_2$ is electrolyzed between platinum electrodes using a current of 5 amperes for 20 minutes. What mass of Ni is deposited at the cathode?

28. Three electrolytic cells A, B, C containing solutions of ZnSO_4 , AgNO_3 and CuSO_4 , respectively are connected in series. A steady current of 1.5 amperes was passed through them until 45 g of silver deposited at the cathode of cell B. How long did the current flow? What mass of copper and zinc were deposited?

SUBJECT – PSYCHOLOGY

Worksheet-1

Part A: Case Study Foundation

In preparation for your CBSE Practical examination, select a 'Case Study' subject. The subject could be a child, adolescent, or adult. Prepare a preliminary report including:

Demographic Details (Name (pseudo), Age, Gender, Education).

Reason for selection and brief history of the subject.

A plan for data collection (e.g., Interview, Observation, or Psychological Testing).

Part B: Mind Mapping & Theory

Create detailed and colourful Mind Maps for the following chapters to aid in quick revision:

Chapter 1: Variations in Psychological Attributes (Focus on Theories of Intelligence).

Chapter 2: Self and Personality (Focus on Type and Trait Approaches).

Part C: Psychological Analysis of Media

Watch a film or read a book that explores human behavior, mental health, or social influence. Examples:

'Taare Zameen Par' (Learning Disabilities), 'The Pursuit of Happyness' (Motivation/Resilience), or 'A Beautiful Mind' (Schizophrenia).

Write a report (approx. 800 words) covering:

Summary of the plot/theme.

Analysis of the lead character's psychological attributes.

Accuracy of the depiction compared to DSM-5 or textbook descriptions.

Your personal takeaway as a student of psychology.

Part D: The Mindful Explorer Journal

Maintain a daily 'Stress and Coping' log for 10 consecutive days. Use the following format:

Day/Date Stressful Event (Stressors) Coping Strategy Used

SUBJECT – VALUE EDUCATION

Grade 12

Values & Life Skills Assignment

1. Integrity – “The House Captain Election”

Case Study:

During the annual school elections, Aanya was contesting for House Captain. A day before voting, she found out that a few students were planning to distribute chits with false promises in the name of the opposing candidate to influence voters. Her own supporters suggested doing the same to level the field. Aanya refused. She addressed the class and reminded everyone that the election should reflect genuine choice and trust. She reported the incident to the teacher-in-charge. The false chits were stopped, and the election was conducted fairly. Though the campaign was tougher, Aanya won and later used her position to introduce a student code of conduct for future elections.

Tick the correct answer:

1. What unethical act was being planned before the election?
 - a) Copying in exams
 - b) Skipping the assembly
 - c) Distributing chits with false promises to mislead voters
 - d) Changing the election date
2. Why did Aanya refuse her supporters' suggestion?
 - a) She was afraid of getting caught
 - b) She believed the election should reflect genuine choice and trust
 - c) She thought it wouldn't work
 - d) She didn't want to compete
3. What action did Aanya take?
 - a) She ignored the issue
 - b) She retaliated with similar tactics
 - c) She withdrew from the election
 - d) She reported it to the teacher-in-charge
4. What does this case highlight about integrity in school leadership?
 - a) Integrity guarantees winning
 - b) Integrity is only needed outside school
 - c) Integrity builds trust and sets standards for others
 - d) Integrity makes leadership harder

Short Answer & Reflection:

1. Write 8-10 sentences: Discuss how integrity affects trust in a school environment. Give one example where short-term gain from dishonesty could damage long-term reputation.
2. Activity: Integrity in Leadership – Identify one leadership role you hold or have observed in school. Write 4-5 lines on how integrity influences decision-making and team trust in that role.

2. Discipline – “The Independent Project”

Case Study:

Neha decided to build a small app for her school’s library as a personal project before college. No teacher was grading it, and no deadline was enforced. Initially, she worked consistently, but as exam pressure increased, she delayed it for weeks. She realized that without external accountability, discipline had to come from internal systems. She set fixed 45-minute daily slots, used a public GitHub repo to track progress, and shared weekly updates with a mentor. Even when motivation dropped, the system kept her moving. She completed the app 2 weeks before board exams and used it in her portfolio.

Tick the correct answer:

1. Why did Neha struggle to maintain progress initially?
 - a) The project was too difficult
 - b) She lacked coding skills
 - c) There was no external deadline or accountability
 - d) Her school banned the project
2. What systems did Neha implement to stay on track?
 - a) Hiring a tutor
 - b) Reducing the scope to one feature
 - c) Working only on weekends
 - d) Fixed time slots, public tracking, and mentor updates
3. What did Neha learn about discipline without external pressure?
 - a) It’s impossible without teachers
 - b) It only works for short projects
 - c) It requires self-designed systems and accountability
 - d) It’s unnecessary for personal projects
4. What was the outcome of Neha’s disciplined approach?
 - a) She abandoned the project
 - b) She failed her board exams
 - c) She handed it over to someone else
 - d) She completed the app and strengthened her college portfolio

Short Answer & Activity:

1. Write 10 sentences: Analyze a goal you have for the next 6 months where no one will check on you. What systems and accountability measures will you put in place to stay disciplined?
2. Activity: Discipline Dashboard – Create a simple weekly tracker for 4 weeks with 3 columns: Goal, Time Committed, Actual Time Spent. At the end, write a 3-line reflection on the gap between planned and actual effort.

Note for Parents:

Grade 12 students need to connect values to real-life independence and future responsibilities. Use these cases to discuss reputation, self-management, and ethical leadership. Focus on reflection and application over memorization.

Students are instructed to complete the Holiday Homework neatly in their Moral Education Notebook and on the worksheets provided only.

SUBJECT – BIOLOGY

WORKSHEET 1

1. How many microspore mother cells are required to produce 1000 microspores/pollen grains?
a) 100 b) 150 c) 200 d) 250
2. Which of the following represents the female gametophyte:
a) Embryo b) Embryo sac c) Synergid d) Endosperm
3. When the pollen of the flower is transferred to the stigma of another flower on the same plant the process is called as:
a) autogamy b) geitonogamy c) xenogamy d) cleistogamy
4. From among the situations given below choose one that prevents both autogamy and geitonogamy
a) monoecious plant bearing unisexual flowers
b) dioecious plant bearing only male and female flowers
c) monoecious plant with bisexual flowers
d) dioecious plant with bisexual flowers
5. In a fertilized embryo sac, the haploid, diploid and triploid structures are:
a) Synergid, zygote and primary endosperm nucleus.
b) Synergid, antipodal and polar nuclei.
c) Antipodal, synergid and primary endosperm nucleus
d) Synergid, polar nuclei and zygote.
6. In an embryo sac, the cells that degenerate after fertilization are
a) Synergids and primary endosperm cells.
b) Synergids and antipodals
c) Antipodals and primary endosperm cell
d) Egg and antipodals
7. Which of the following floral parts forms the pericarp after fertilization?
a) Nucellus b) Outer integument c) Ovary wall d) Inner integument

Practice questions

1. Describe the structure of a typical embryo sac found in flowering plants? Why is it generally referred to as monosporic?
2. Describe the structure of a mature angiospermic pollen grain.
3. Name the three parts of pistil and mention one function of each of them.
4. Differentiate between albuminous and non-albuminous seeds, with an example for each.
5. What are parthenocarpic fruits? Give an example. Mention one characteristic feature of such fruits.
6. Differentiate between true fruits and false fruits, with an example of each.
7. (i) Draw a neat labelled diagram of the longitudinal section of an anatropous ovule.

ii) Which cell of the ovule gets transformed into a megaspore mother cell ?

8. (i) Draw a neat labelled diagram of the vertical section of maize grain.

ii) Why can we not use the term seed for the maize grain.

9. What develops into a microspore mother cell in a flower ? Trace the development of this cell into a pollen grain, which is ready for germination . Draw a labelled figure of a mature pollen grain.

10. Trace the development of a megaspore mother cell of a flower into a mature ovule. Give a labelled diagram of the final stage.

WORKSHEET 2

1. Which of the following is a male reproductive structure?

(A) fallopian tubes (B) Ovaries (C) Testes (D) Vagina

2. Which structure does the sperm mature and get stored?

(A) Penis (B) Testes (C) Urethra (D) Vas deferens

3. Which of the following are female reproductive structures?

I Ovaries II Urethra III Uterus IV Vas deferens

(A) I and III (B) II and III (C) II and IV (D) III and IV

4. Which one of the following processes happens during the first trimester of human embryonic development?

(A) Fat accumulates (B) Organ formation (C) Eyelids open (D) Zygote formation

5. By the end of the _____ trimester, the embryo will begin to resemble an adult.

(A) first (B) second (C) third (D) none of the above

6. The third trimester is characterized by

(A) the embryo's heart being formed (B) hair covering the body

(C) growth of the fetus to 3400 g (D) all of the above

7. An embryo is called a fetus when

(A) it first begins to develop specialized cells (B) the zygote begins to divide

(C) the organs of the body begin to form (D) it begins to resemble the adult

8. Once an egg is fertilized, cell division will occur only when certain conditions are met.

Which one of the following is not a general requirement for embryo development?

(A) Nutrients (B) A uterus (C) Moderate temperature (D) Protection from predators

9. In human beings, the correct sequence of events during reproduction is

(A) gamete formation, fertilization, zygote, embryo

(B) embryo, zygote, fertilization, gamete formation

(C) fertilisation, gamete formation, embryo, zygote

(D) gamete formation, fertilization, embryo, zygote

10. In a fetus, the brain and spinal cord are starting to form at

(A) two weeks (B) four weeks (C) eight weeks (D) twelve weeks

11. Fetal movements are felt at

(A) four weeks (B) eight weeks (C) twelve weeks (D) sixteen weeks

FOR QUESTIONS 12 AND 13

- I - the first and second month after fertilization
II - the third and fourth month after fertilization
III - the fifth and sixth month after fertilization
IV - the seventh and eighth month after fertilization

12. Embryonic development occurs during

- (A) I only (B) I and II only (C) I, II, and III only (D) I, II, III, and IV 10.

13. Fetal development occurs during

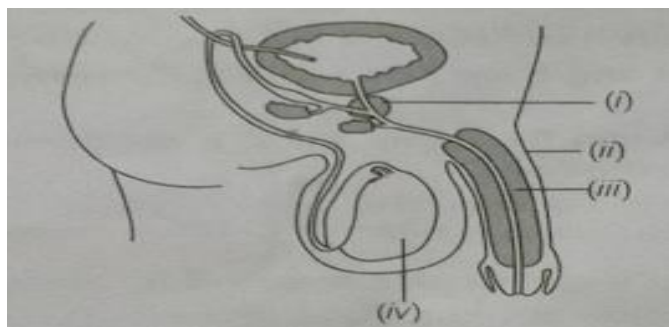
- (A) I only (B) II and III only (C) II, III, and IV only (D) I, II, III, and IV

14. Which of the following might indicate that you are pregnant ?

- (A) Your feet hurt (B) Loose weight (C) You want to eat different food (D) Menstruation stops

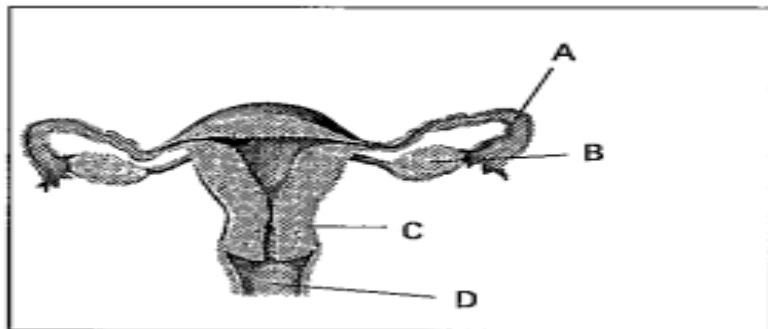
1. Male Reproductive System

Instructions: Label the diagram and write the function of each part below.



2. Female Reproductive System

Instructions: Label the diagram and write the function of each part below.



1. What happens during each of the three trimesters?

Trimester

What is happening at this stage of fetal development?

- (a) First
(b) Second
(c) Third

WORKSHEET 3

1. Amniocentesis is a process to:

- (a) Determine any disease in the heart (b) Know about diseases of brain
(c) Determine any hereditary disease in the embryo (d) All of these

2. 'Saheli' a female antifertility pill, is used:

- (a) Daily (b) Weekly (c) Quarterly (d) Monthly

3. Central drug Research Institute (CDRI), Lucknow has developed a contraceptive named?

(a) Mala-D (b) Combined pills (c) Saheli (d) Condoms

4. Which of these is caused by a retrovirus

(a) Gonorrhoea (b) AIDS (c) Trichomoniasis (d) Syphilis

5. Surgical removal of testis of male of control the human population is:

(a) Castration (b) Tubectomy (c) Laparoscopy (d) Vasectomy

Q.6. Why are non-medicated methods not as effective as the copper ions releasing IntraUterine Devices?

Q.7. Justify the ban on amniocentesis in our country?

Q.8. Explain in-vitro fertilization and embryo transfer in brief.

Q.9. What are the important features of an ideal contraceptive?

Q. 10. Describe any three assisted reproductive techniques practised to treat infertility.

WORKSHEET 4

1. In a typical monohybrid cross the F₂ population ratio is written as 3:1 for phenotype but expressed as 1:2:1 for genotype. Explain with the help of an example.

2. A baby girl has been reported to suffer from haemophilia. How is it possible? Explain with the help of a cross.

3. Pea seeds with BB alleles have round seeds and large starch grains, while seeds with bb alleles have wrinkled seeds with small starch grains. Work out the cross between these two parents. Explain the phenotypic ratio of the progeny with respect to seed shape and the starch grain size of the progeny produced.

4. (a) Work out a cross up to F₂ generation between two pure breeding pea plants, one bearing violet flowers and the other white flowers.

(b) (i) Name this type of cross.

(ii) State the different laws of Mendel that can be derived from such a cross.

5. (a) Do you agree to the perception in our society that the woman is responsible for the gender of the offspring? Substantiate your answer scientifically.

(b) How did Morgan explain linkage of genes?

6. Give the genetic make-up of Klinefelter's syndrome.

7. Crossing with a recessive parent which helps to analyse the genotype of an organism is known as -----

8. What do you mean by linkage groups?

9. If a genetic disease is transferred from a phenotypically normal but carrier female to only some of the male progeny, the disease is -----

10. Name the law which Mendel proposed after two gene inheritance.

CASE BASED QUESTIONS:

1. Read the following passage and answer questions:

Transfer of pollen grains (from anther) to the stigma of a pistil is termed pollination. Flowering plants have evolved an amazing array of adaptations to achieve pollination. They make use of external agents to achieve pollination. In Autogamy pollination is achieved within the same flower. Transfer of pollen grains from the anther to the stigma of the same flower. Geitonogamy is transfer of pollen grains from anther to stigma of another flower of the same plant. Xenogamy is transfer of pollen grains from anther to stigma of a different plant. Plants use two abiotic (wind and water) and one biotic (animals) agent to achieve pollination. Majority of plants use biotic agents for pollination. Only a small proportion of plants use abiotic agents.

i) Pollination between two flowers present on the same plant is called....

- a) Geitonogamy b) Xenogamy
c) Autogamy d) Dichogamy

ii) The type of pollination in dioecious plants is.....

- a) Herkogamy b) Autogamy c) Geitonogamy d) Xenogamy

iii) In waterhyacinth pollination takes place by.....

- a) Water b) Wind c) Wind or Insects d) Birds

iv) Morphologically cross pollination but genetically self pollination....

- a) Xenogamy b) Geitonogamy
c) Autogamy d) Cleistogamy

2. Read the following passage and answer questions:

The ovule is a small structure attached to the placenta by means of a stalk called a funicle. The body of the ovule fuses with a funicle in the region called hilum. Thus, hilum represents the junction between ovule and funicle. Each ovule has one or two protective envelopes called integuments. Integuments encircle the nucellus except at the tip where a small opening called the micropyle is organised. Opposite the micropylar end, is the chalaza, representing the basal part of the ovule.

i) Ovary with many ovules are present in....

- a) Wheat b) paddy c) Sun flower d) Papaya

ii) Each cell of pollen tetrad consists of 12 chromosomes, what is the number of chromosomes present in its nucellus cell of its ovule ?

- a) 12 b) 6 c) 24 d) 16

iii) Identify the plants from the following pair in which former is having single ovuled ovaries and later with many ovuled ovaries....

- a) paddy, sunflower b) papaya, orchids c) wheat, orchids d) papaya, paddy

iv) Ovule with 180° of body curvature is....

- a) Orthotropous ovule b) Anatropous ovule c) Hemi – anatropous ovule d) Amphitropous ovule

3. Read the following passage and answer questions:

The reproductive cycle in the female primates (e.g. monkeys, apes and human beings) is called menstrual cycle. The first menstruation begins at puberty and is called menarche. In human females, menstruation is repeated at an average interval of about 28/29 days, and the cycle of events starting from one menstruation till the next one is called the menstrual cycle. One ovum is released (ovulation) during the middle of each menstrual cycle. The cycle starts with the menstrual phase, when menstrual flow occurs and it lasts for 3-5 days.

I) The first menstruation is called as
a) Menopause b) Menarche c) Viropause d) Andropause

II) Identify the incorrect statement

- a) Lack of menstruation may be indicative of pregnancy
- b) LH & FSH increases gradually during follicular phase
- c) Corpus luteum acts as a temporary endocrine gland
- d) Oestrogens maintain endometrium

III) Ovulation occurs during

- a) Beginning of each menstrual cycle
- b) End of each menstrual cycle
- c) Middle of first menstrual cycle only
- d) Middle of each menstrual cycle

IV) Read the following

- i. Menstruation cycle has 4 phases
- ii. Luteal phase is called secretory phase
- iii. Follicular phase is also called proliferative phase
- iv. Primary Follicles grow to fully mature graafian follicle in follicular phase

The correct combinations....
a) Only i & ii b) Only i & iii c) Only i & iv d) All

V) Assertion (A) : Endometrium undergoes cyclical changes during menstrual cycle.
Reason (R) : Degeneration & regeneration of endometrium takes place during menstrual cycle.

- a) A and R are true and R is the correct explanation of A
- b) A and R are true and R is not the correct explanation of A
- c) A is true, R is false
- d) A is false, R is true

4. Assisted Reproductive Technologies (ART)

Passage: Infertility affects 8-12% of couples globally, with 40-50% of cases stemming from male factors. Modern ARTs help couples conceive when conventional methods fail. Techniques like IVF, GIFT, and ICSI have revolutionized treatment.

- a) What is ART?
- b) Identify: Transfer of an ovum from a donor to the fallopian tube of another female.
- c) Identify: The process where sperm is directly injected into the ovum.
- d) How is artificial insemination (AI) useful?

INVESTIGATORY PROJECT TOPICS HAS BEEN ASSIGNED TO THE STUDENTS INDIVIDUALLY.

SUBJECT – POLITICAL SCIENCE

Worksheet 1: Contemporary South Asia (Chapter 3)

Section A: Very Short Answer

1. What is SAARC?
2. Name any two countries of South Asia.
3. Which country in South Asia has a monarchy system?
4. What is meant by military rule?
5. Who are the Taliban?

Section B: Short Answer

1. Explain the role of SAARC in South Asia.
2. What are the major political conflicts in South Asia?
3. Describe the democratic status of Pakistan.
4. What challenges does Bangladesh face in politics?
5. Explain the ethnic conflict in Sri Lanka.

Section C: Long Answer (4–5 marks each)

1. Discuss the political developments in Nepal.
2. Explain why democracy has been difficult to sustain in South Asia.
3. Analyze India's role in maintaining peace and cooperation in South Asia.

Section D: Case-Based Question

Read the case and answer:

“South Asia is one of the most densely populated and politically diverse regions in the world. Despite shared culture and history, conflicts and political instability remain.”

- a) Why is South Asia considered politically unstable?
- b) Suggest two measures to improve cooperation among South Asian countries.

Section E: Map Work

Locate and label the following on the map of South Asia:

- India
- Pakistan
- Nepal
- Sri Lanka
- Bangladesh

Section A: Very Short Answer

1. What is meant by one-party dominance?
2. Which party dominated Indian politics after independence?
3. Who was the first Prime Minister of India?
4. What is coalition politics?
5. What was the Congress system?

Section B: Short Answer

1. Explain the reasons for Congress dominance in early years.
2. What role did opposition parties play during one-party dominance?
3. Describe the challenges faced by Congress after independence.
4. What led to the decline of Congress dominance?
5. Explain the importance of regional parties.

Section C: Long Answer

1. Discuss the nature of Congress dominance in India after independence.
2. Explain how opposition parties contributed to democracy despite weak presence.
3. Analyze the factors responsible for the end of one-party dominance.

Section D: Assertion–Reason Questions

Assertion (A): Congress dominated Indian politics for a long time.

Reason (R): It had strong leadership and mass support.

- a) Both A and R are true and R is correct explanation
- b) Both A and R are true but R is not correct explanation
- c) A is true but R is false
- d) A is false but R is true

Section E: Case-Based Question

Read the passage:

“After independence, Congress emerged as a dominant political force, but gradually its hold weakened due to internal conflicts and the rise of regional parties.”

- a) Why was Congress dominant in early years?
- b) Mention two reasons for its decline.

Project work**Make project file in the given topics:**

1. NAM- 1961 to present times.
2. Division of Germany with special focus on the construction and dismantling of the Berlin Wall
3. Disintegration of USSR with special focus on Gorbachev.
4. Cover the negative as well as positive aspects of relationship between India and the different countries.

Focus on any one of the following (current updates should be highlighted):

- a) Relationship between India and Russia
- Relationship between India and China
- Relationship between India and Pakistan
- Relationship between India and Bangladesh

5. European Union and India

6. India's Nuclear Policy

7. United Nations with focus on India's candidature in Security Council.

8. UN Agencies- UNICEF, UNESCO, WHO

9. Pandemics: Covid 19- Its global impact (focus on worldwide cooperation and prepare

10. Partition of India- Theory behind it and its legacy

11. Election Commission of India and Electoral Roll and its revision

12. Elections 2019- Rise of BJP and Downfall of Congress (1989-2019)

13. Imposition of Emergency in India