WINTER VACATION

ASSIGNMENT

SESSION: 2025-2026

HIGH WING

HAVE A GREAT WINTER BREAK

Winter Vacation Assignments High Wing (2025-26)

"Winter wonder awaits! A break full of fun and learning."

DEAR STUDENTS

The winter holidays are approaching. This period offers an ideal opportunity to relax, rejuvenate, and return to school prepared to give your best. Your abundant energy should be directed toward activities that enhance observation, confidence, and enthusiasm for learning.

To maintain academic engagement during the break, we have prepared a *Practice Sample Paper*. This resource will assist you in revising the topics covered thus far and in building confidence for the forthcoming assessments.

SUBMISSION GUIDELINES

You are required to submit your completed assignment on the designated date. Late submissions will not be accepted. Your work will be evaluated on neatness, creativity, and originality, and the marks obtained will be incorporated into your internal assessment.

Parents are kindly requested to guide their children while they complete the assignment, ensuring that the work remains the student's own.

A FEW TIPS TO FOLLOW :-

- Allocate extra time each day for practicing problems,especially in subjects you find challenging.
- Cultivate a habit of reading advanced texts, journals, or literature to broaden knowledge.
- Divide your schedule wisely between study sessions and recreational activities, ensuring sufficient rest.
- Review the entire syllabus, giving particular attention to weak subjects and seeking help from teachers or peers as needed.
- Use the winter break to consolidate what you have learned and draft a study plan for the upcoming term.

As per Govt. Order No. 458-DSEJ OF 2025, dated 13-12-2025, for winter vacation, our school will observe Winter Break of CLASS 9TH & 10TH w.e.f.
29-12-2025 to 10-1-2026. Regular classwork will commence from 12-1-2026.Kindly ensure that the homework is submitted to the class teacher by the mentioned submission date, i.e...,
10-01-2026
TIME :- 9:00 AM TO 10:00 AM
ENTRY :- GATE NO. 5

Note:- The office will remain open from 9:00a.m. to 2:00p.m. for all working days during the winter break.

WISHING YOU AND YOUR FAMILY A VERY HAPPY AND PROSPEROUS NEW YEAR.

REGARDS
ADMINISTRATOR

SHIKSHA NIKETAN SENIOR SECONDARY SCHOOL JEEVAN NAGAR JAMMU

WINTER VACATION WORK
(2025-26)

SUBJECT: ENGLISH   **(80 Marks)**

1. Read the question paper carefully
2. Attempt all questions section wise.
3. This question paper consists of four sections:- A,B,C,D
4. Write neat and clean.
5. Avoid cutting and overwriting.

SECTION: - A (Reading Comprehension)

A. Read the extract and answer the following questions that follows :- (1x6=6)

"Lightly, O lightly we bear her along,

She sways like a flower in the wind of our song;

 She skims like a bird on the foam of a stream,

She floats like a laugh from the lips of a dream."

Q1. Who are the speakers in the above lines?
a) Soldiers
b) Farmers
c) Palanquin bearers
d) Courtiers

Q2. The bride is compared to a flower and a bird to show her:
a) Strength
b) Heaviness
c) Lightness and grace
d) Fear

Q3. The literary device used in "She sways like a flower" is:
a) Metaphor
b) Simile
c) Alliteration
d) Personification

Q4. The mood of the extract is:
a) Sad
b) Angry
c) Joyful and musical
d) Fearful

Q5. How do the palanquin bearers treat the bride?

Q6:- Name the poem and the poet from where these lines have been taken

Q2:- Read the passage carefully and answer the following questions that follows :-(1x6=6)

In the modern world, students are expected to balance academics, sports, and personal interests. While this helps in overall development, it can also cause stress if not managed properly. Many students try to do too much at the same time, which affects their health and concentration. Learning to priorities tasks, maintaining a proper sleep schedule, and taking regular breaks can reduce stress.

Encouragement from parents and teachers helps students stay motivated and confident.

Questions:

Q1. What are students expected to balance in the modern world?

Q2. Why do many students feel stressed according to the passage?

Q3. How does trying to do too many things affect students?

Q4. Mention any two ways suggested to reduce stress.

Q5. How does encouragement from parents and teachers help students?

Q6. Give a suitable title to the passage.

Q3:-Look at the poster carefully and answer the following questions that follows: - (1x6=6)

Questions:-

Q1. Which word in the poster has the same meaning as 'disturbance'?
   a) Attention
   b) Avoid
   c) Distraction
   d) None of these

Q2. What should one do before crossing the road?
   a) Check the phone
   b) Look both ways
   c) Walk quickly
   d) Listen to Music

Q3. What should be avoided while driving?
   a) Talking on the phone
   b) Adjusting the radio
   c) Texting
   d) Obeying the speed limits

Q4. How can accidents be prevented in residential areas?
   a) By speeding up
   b) By slowing down
   c) By ignoring traffic lights
   d) By racing with friends

Q5. What should be done to be alert and safe while on the road?
   a) Listening to loud music
   b) Daydreaming
   c) Paying attention to the surroundings
   d) Speeding the limit

SECTION: - B (Grammar)

Q1. Change the following sentences into Indirect Speech :-(5 × 1 = 5 marks)

1. The teacher said to the students, "You must complete your homework today."
2. Riya said, "I am preparing for my examination."
3. The boy said to his mother, "Please help me with this project."
4. The doctor said, "You should take this medicine twice a day."
5. The coach said to the players, "Do not lose hope and keep practicing."

Q2. Edit the following passage by filling in the blanks with suitable tenses, punctuation marks and parts of speech. (5 Marks)

Yesterday our school_____(organise) a cleanliness drive_____ the nearby park. The students (participate) with great enthusiasm _____ they _____ (collect) garbage and(throw)it _____ dustbins. The teachers _____ (guide) them properly _____ (encourage) them. The programme _____ (end) a short speech the principal.

SECTION –C (WRITING SKILLS)

Q1. You are Ali/Alia, Head girl / Head boy of your school. You are deeply disturbed by the rising cases of aggressive behaviour of students in your school. You decide to speak during the morning assembly about it. Write a speech on 'Indiscipline in Schools'. (150 – 200 words)

(5marks)

Q2.Taking help from the information given below and inventing your own ideas, write an article on 'Swachha Bharat Abhiyan' or 'Clean India Campaign'.

Hints: • 'Swachha Bharat Abhiyan' • announced by the PM on 15th August, 2014 • launched on 2nd October • addressed public rally at Raj path • himself swept a parking at Mandir Marg Police Station and pavement in Valmiki Basti • aims to accomplish the vision 'Clean India' by 2019 • 3 million govt, employees and students to participate

responsibility of all 1.25 billion Indians • not only the responsibility of 'Safai Kaamgar' • mission beyond politics • inspired by patriotism • good response on the social media. (6marks)

Q3. You are a member of the social awareness team of your school and you have to participate in an awareness drive regarding the importance of water. Prepare a poster highlighting the importance and ways of rainwater harvesting that can be implemented by the residents of the area. (2marks)

Q4. Create a slogan for a disaster relief fundraiser to encourage people to donate and support affected communities. (2marks)

SECTION-D (LITERATURE)

Q1.Do any three questions from prose section (3×3=9marks)
   a) How does Tommy describe the old kind of school?
   b) What did Rustomji consider to be the greatest cause for the shame to him?
   c) What kind of teachers did Margie and Tommy have?
   d) Why did Gandhiji have to go to the Attorney General as well as to the Customs officer?
   e) How does he describe the old kind of teachers?

Q2. Do any three questions from poetry section (3×3=9marks)
   a) What does the phrase "She sways like a flower" suggest?
   b) What is the central theme of the poem," Palanquin Bearers"
   c) Define Simile with three examples from the poem, "Palanquin Bearers"
   d) Why do the palanquin bearers move softly?
   e) Define Refrain along with examples?

Q3. Do only one long question from short stories (1× 6=6marks)
   a) Wars have an adverse effect on our lives how does the story brings out this truth?
   b) 'It's better not to think about the others'. What does the old man means by the "the

others"? Why does he say so?

Q4. Do only one long question from the Play   (1×6=6marks)
   a) What is Gerrard's profession? Why does the intruder choose Gerrard as the man whose identity he wants to take on?
   b) How does the play convey the message that intelligence is more powerful than violence?

विषय हिंदी

सामान्य निर्देश ०:-

०   सभीं प्रश्नों के उत्तर लिखना अनिवार्य है।

०   ध्यानपूर्वक सा

(खंड-क)

प्रश्न १:-निम्नलिखित अपठित गद्यांश को पढ़कर दिए गए प्रश्नों के उत्तर लिखिए :-

एक भेड़िया बीमारी की वजह से कुछ कमजोर हो गया। जंगल में शिकार कर अपने लिए भोजन जुटाना भी उसके लिए अब असंभव हो रहा था। उसको कहीं से भेड़ की खाल मिल गई। उसने एक चाल चली। भेड़ की खाल ओढ़कर में भेड़ों के एक झुंड में घुस गया। चरवाहे को इसका पता ना चला । बस, अब क्या था ! भेड़िए को अब भरपेट भोजन मिल रहा था। भेड़िया चुपके से एक भेड़ के बच्चों को अलग ले जाता और खा लेता। कुछ रोज तक यह व्यक्ति चलती रही। एक दिन चरवाहे के घर पर कुछ मेहमान आने वाले थे। उसने एक बड़ी सी भेड़ सी काटकर उसका सालन बनाने का निश्चय किया । अचानक उसकी नजर भेड़ की खाल ओढ़कर भेड़ बने भेड़िए पर गई। चरवाहे ने तुरंत उसकी गर्दन धड़ से अलग कर दी।

(1) भेड़िया शिकार क्यों नहीं कर पा रहा था?

(2) भेड़िए ने क्या चाल चली?

(3) भेड़ों के बीच रहकर भेड़िए ने क्या किया?

(4) चरवाहे ने भेड़ को काटने का निश्चय क्यों किया?

(5) "संभव" शब्द का विलोम शब्द क्या है?

(खंड-ख)

 प्रश्न २ निर्देशानुसार करें :-

(क) निम्नलिखित शब्दों के अर्थ लिखिए:-
    1.परमधाम   2. नम्बरदार   3.आलीशान 4.सभ्रांत महिला

(ख)निम्नलिखित मुहावरों का अर्थ लिखिए :-

1.ओखली में सिर देना

 2.एक की चार लगाना

(ग)दिए गए शब्दों में विलोम लिखिए :-
      1.तीव्र 2.कर्कश

(घ) वाक्यांश के लिए एक शब्द लिखिए :-

1.पृथ्वी पर रहने वाला   _____

2.अनुभव प्राप्त   _____

(ङ)निम्नलिखित वाक्यों को विराम चिन्ह लगाकर दोबारा लिखिए :-

1.अरे रोहन भी गीत गा लेता है

2.ढेर सारे फल कौन लाया

(च) क्रिया किसे कहते हैं ?इसके भेद इसके कितने भेद होते हैं ?

(छ) " आई"तथा "आकू" प्रत्यय लगाकर दो –दो शब्द बनाओ।

(ज) नीचे दी गई संज्ञाओं की क्रिया लिखें:–

 1.रंगाई   2.कटाई

(झ) भाववाचक संज्ञा बनाये;– कड़वा, बच्चा

(ञ) विशेषण की परिभाषा भेदो साहित लिखों।

(ट) निम्नलिखित शब्दों के पर्यायवाची लिखें :–

 1.धन   2.नारी

(ठ) निम्नलिखित के अनेक आर्थिक शब्द लिखें

 1.वर्ण _____

 2.रसाल_____

(ड) दिए गए वाक्यों को शुद्ध करके लिखिए:–

1. मजदूरी दिन भर काम करती रहा

2. स्टेशन मेरा घर से दूर है

(खंड –ग)

प्रश्न ३.निम्नलिखित काव्याश को पढ़कर पूछे गए प्रश्नों के उत्तर दें०:–

"माँ की से मुलाक़ात हुई या नहीं कहना मुश्किल है पर वे जताती थी जैसे ईश्वर से उसकी बातचीत होती रहती है और उसने प्राप्त लोगों के अनुसार ज़िंदगी जीने और दुख बर्दाश्त करने के रास्ते खोज लेती है"

(क) प्रस्तुत काव्य है कि इस कविता से लिया गया है?

(ख) माँ क्या जताती थी?

(ग) किस से प्राप्त सलाहों के अनुसार माँ ज़िंदगी जीने और दुख बर्दाश्त करने के रास्ते खोज लेती थी?

(घ) उपर्युक्त पंक्तियाँ ये रचयिता कौन है?

प्रश्न ३,निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों को उत्तर लिखें०:–

सुभद्रा जी छात्रावास छोड़कर चली गयी। तब उनकी जगह एक मराठी लड़की जैबुन्निसा कमरे में आकर रही ।वह कोल्हापुर से आयी थी। जेबुन मेरा सारा काम कर देती थी ।वह मेरे डैसक साफ़ कर देती थी ।किताबें ठीक है रख देती थी और इसी तरह मुझे कविता के लिए कुछ और अवकाश मिल जाता था। जेबुन मराठी शब्दों से मिली जुली हिन्दी बोलती थी। मैं भी उससे कुछ कुछ मराठी सीखने लगी थी ।

(क) कौन छात्रावास छोड़कर चली गयी थी?

(ख) कौन लेखिका के सारे काम कर देती थी?

(ग) उपर्युक्त गधाश किस कविता से लिया गया है?

(घ) उपर्युक्त गद्याश की लेखिका कौन है?

प्रश्न४:- निम्नलिखित प्रश्नों के उत्तर विस्तारपूर्वक लिखिए:-

 (क) आनंदी ने बड़े घर की बेटी होने का परिचय कैसे दिया?

(ख) पठान के स्वाभाव का वर्णनअपने शब्दों मे करो?

(ग) लेखिका उर्दू फ़ारसी क्यों नहीं सीख पाई?

प्रश्न५०:- निम्नलिखित प्रश्नों के उत्तर विस्तारपूर्वक लिखिए:-

(क) कवि ने मनुष्य को अविवेकी क्यों कहा है ?

(ख) कवि के अनुसार आज दक्षिण दिशा क्यों है?

(ग) रहीम के अनुसार प्रेम का बंधन टूटने के बाद जोड़ दिया जाए ,तो क्या होता है?

(खंड -घ)

प्रश्न ६ मोहल्ले की सफाई के लिए स्वास्थ्य अधिकारी को पत्र।

या
उपहार के लिए चाचा जी को धन्यवाद पत्र लिखें
प्रश्न७ निम्नलिखित विषय पर अनुच्छेद लिखिए:
जम्मू कश्मीर के धार्मिक स्थलों की यात्रा
या
विद्यार्थी और अनुशासन
प्रश्न ८ निम्नलिखित लघु प्रश्नों के उत्तर लिखें ○:-
(क) जाबिर हुसैन का जन्म कबऔर कहाँ हुआ ?
(ख) आनंदी का पिता जी का क्या नाम था ?
(ग) चन्द्रकांत देवालय की किन्हीं तीन रचनाओ के नाम लिखो?
(घ) विनय पद किस भाव की रचना है?
(ङ)" मेघ आए " कविता के कवि कौन है ?
(च) प्रेम चंद के फटे जूते " के लेखक कौन है?
(छ) सालिम अली को थे?
(ज) कवि के लिए किस दिशा को लाँघ लेना सम्भव नहीं था?
(झ) श्री राम के पिता जी का क्या नाम था ?
(ङ) तुलसीदास के माता - पिता का क्या नाम था?

Subject: Maths

Section A

Objective type questions

Q1. Which of the following is an irrational number?
(a)½   (b) $\sqrt{2}$ (c) 3   (d) 0.25   (e) None of these

Q2. The graph of a linear equation in two variables is always:
(a)A point   (b) A line   (c) A curve   (d) Q Circle

Q3. The Polynomial $5x^2 - 2x + 7$ is classified as
(a)Linear (b) Quadratic   (c) Cubic   (d) Constant

Q4. A diagonal of a parallelogram divides it into two _____Triangles
(a)Equal   (b) right   (c) Congruent   (d) None of these

Q5. If a triangle has sides of length 7cm, 8cm, and 9cm. What is the semi-perimeter(s)?
(a)12cm   (b) 13cm   (c) 14cm   (d) None of these

Q6. In Euclid's geometry, how many fundamental postulates are there
(a)3   (b) 7   (c) 5   (d) None of these

Q7. A Polynomial can have negative exponents (T/F).

Q8. The solution of a system of linear equations is the set of all points that satisfy both equations (T/F).

Q9. All the rational and irrational numbers make up the collection of real numbers (T/F).

Q10. Diagonals of rectangle bisects each other but are not equal (T/F).

Q11. To use Heron's formula, you need to know at least one angle (T/F).

Q12. If two lines are parallel, they will intersect at same point (T/F).

Q13. In the polynomial $7x^4 + 2x^3 - x + 11$, the coefficient of x^3 is ....

Q14. The general form of a linear equation in two variable is ....

Q15. The decimal expansion of rational numbers is either .... or ....

Q16. A quadrilateral is a _____if a pair of opposite sides is equal and parallel.

Q17. The semi-perimeter's' is calculated using formula $s = a + b + c / 2$, where a, b and c are the_____of the triangle.

Q18. Define Kite (a kind of quadrilateral).
Q19. Define Heron's formula.
Q20. Define liner pair of angles.

Section B

Very Short Answer type Question

Q21. Find five rational numbers between the rational numbers 5/7 and 9/11.
Q22. If the semi-perimeter of a triangle is 10cm and the length of two sides are 6cm and 8cm. What is the length of the third side.
Q23. The cost of a notebook is twice the cost of a pen. Write a linear equation in two variables to represent this statement.
Q24. State Euclid's fifth postulate.
Q25. Prove that if two lines intersect each other, then the vertically opposite angles are equal.
Q26. Define parallelogram and its properties.

Section C

Short Answer type Questions

Q27. Show that how $\sqrt{3}$ can be represented on the number line?
Q28. If the point (3,4) lies on the graph of the equation $3y = ax + 7$, find the value of a.
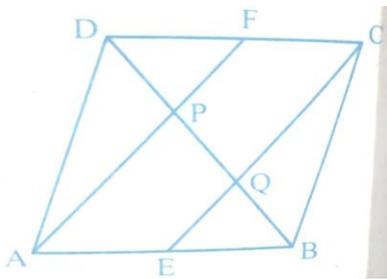Q29. Verify that $x^3 + y^3 + z^3 - 3xyz = ½ (x + y + z) [(x-y)^2 + (y − z)^2 + (z − x)^2]$.
Q30. It is given that $\angle XYZ = 64°$ and XY is produced to point P. Draw a figure from the given information. If ray YQ bisects $\angle ZYP$, find $\angle XYQ$.
Q31. Find the area of a triangle, two sides of which are 8cm and 11cm and perimeter is 32cm?
Q32. Prove that in a parallelogram, opposite sides are equal.
Q33. Sides of a triangle are in rational of 3:5:7 and it's perimeter is 300m. Find its area?
Q34. In a parallelogram ABCD, E and F are the mid-points of sides AB and CD respectively. Show that the line segments AF and EC trisects the diagonal BD.
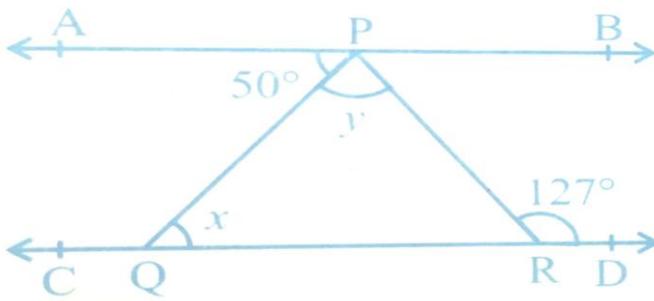

Section D

Long type answer Questions

Q35. State and prove mid-point theorem.
Q36. An isosceles triangle has perimeter 30cm and each of the equal sides is 12cm. Find the area of the triangle.

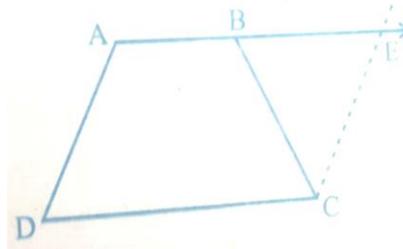Q37. If AB|| CD, $\angle APQ = 50°$ and $\angle PRD = 127°$, find x and y.

Q38. The triangular side walls of a flyover have been used for advertisements. The sides of the walls are 122m, 22m and 120m. The advertisements yield and earning of ₹ 5000 per m² per year. A company hired one of its walls for 3 months. How much rent did it pay.

Q39. ABCD is a trapezium in which AB || CD and AD = BC. Show that
∠A = ∠B
∠C = ∠D
Δ ABCD ≅ Δ BDA

Q40. Evaluate each of the following using suitable identities.
(102)² (ii) (999)³

SUBJECT: S.St   M.M: 80

GENERAL INSTRUCTIONS

1. The question paper contains 36 questions in 4 Sections.
2. Section A: Q.1 to Q.20 — Objective/MCQs (20 marks)
3. Section B: Q.21 to Q.30 — Short Answer Questions (20 marks)
Q.27 is Case-Based
4. Section C: Q.31 to Q.35 — Long Answer Type Questions (5×5=25 marks)
Q.35 is an Extract .
5. Section D: Q.36 — Map Skill Question (5 marks)
6. All questions are compulsory.

SECTION A – OBJECTIVE TYPE QUESTIONS (1 × 20 = 20 marks)

1. The French Revolution started in the year:
a) 1789   b) 1794   c) 1815   d) 1776
2. Which estate in France paid all taxes?
a) Clergy   b) Nobility   c) Third Estate   d) Aristocrats
3. Who led the Bolsheviks?
a) Lenin   b) Stalin   c) Trotsky   d) Kerensky

4. Which system believes in collective ownership?
a) Socialism   b) Capitalism   c) Fascism   d) Feudalism

5. Hitler became Chancellor in:
a) 1930   b) 1933   c) 1936   d) 1942

6. Forests were cut by the British mainly for:
a) Temples   b) Railways   c) Houses   d) Recreation

7. The Instrument of Accession of J&K was signed by:
a) Sheikh Abdullah   b) Maharaja Hari Singh
c) Jawaharlal Nehru   d) Sardar Patel

8. India's southernmost point (excluding Kanyakumari) is:
a) Indira Point   b) Palk Strait   c) Port Blair   d) Rameshwaram

9. The Himalayas were formed due to:
a) Volcanic activity   b) Folding
c) Collision of plates   d) Erosion

10. The Ganga river originates from:
a) Yamunotri   b) Gangotri   c) Amarkantak   d) Mansarovar

11. Retreating monsoon occurs during:
a) June–July   b) July–August   c) Oct–Nov   d) Jan–Feb

12. Evergreen forests are found in:
a) Rajasthan   b) Ladakh
c) Western Ghats   d) Punjab

13. Ladakh is a:
a) Hot desert   b) Cold desert   c) Coastal area   d) Wetland

14. Democracy means:
a) Rule by king   b) Rule by army
c) Rule by people   d) Rule by rich

15. Elections in India are conducted by:
a) Supreme Court   b) Parliament
c) Election Commission   d) State Government

16. Rule of law means:
a) King rules
b) Law applies equally to all
c) Police have special powers
d) Rich make rules

17. Who makes laws in India?
a) Legislature   b) Judiciary   c) Executive   d) Media

18. Fundamental Rights are written in Articles:
a) 1–10   b) 12–35   c) 50–60   d) 100–150

19. First elections in J&K were held in:
a) 1951   b) 1965   c) 1977   d) 1996

20. Which of the following is a Peninsular river?
a) Ganga   b) Brahmaputra   c) Krishna   d) Indus

SECTION B – Q no 21 to 30 (SHORT ANSWER QUESTIONS (40-60 words) (3 × 10 = 30 marks)

21. What were the two immediate causes of the French Revolution?
22. Explain any two features of socialism in Europe.
23. State any two reasons for the rise of Hitler.
24. Mention two ways in which British forest laws affected tribals.
25. Give two reasons for the accession of J&K to India.

26. Mention two points showing India's strategic location.

27. CASE-BASED QUESTION

A Bill on "School Safety and Disaster Management" was introduced in the Lok Sabha. Members from different political parties discussed the bill and suggested important amendments to strengthen safety measures in schools. After a detailed debate, the Lok Sabha passed the bill by majority vote and sent it to the Rajya Sabha.

In the Rajya Sabha, the bill again went through discussion, and a few more changes were recommended. Once both Houses agreed on the final draft, the bill was forwarded to the President for approval. The President examined the bill and then gave assent, after which it became an Act and was implemented in all schools across the country.

Answer the following:

a) Which institution has the power to introduce, discuss and pass bills?

b) Why is the Rajya Sabha's role important even after the bill is passed in the Lok Sabha?

c) What happens after both Houses pass the bill?

28. What is climate? How does it differ from weather?

29. What are mangrove forests? Name one state where they are found.

30. Mention any two features of electoral politics in the erstwhile state of J&K

SECTION C – Q no 31 to Q NO 35 (80 -100) words .... (5 × 5 = 25 marks)

31. Describe the major events of the French Revolution from 1789 to 1794.

32. Describe the causes, events and results of the Russian Revolution.

33. Discuss Hitler's rise to power and the main features of Nazi ideology.

34. Explain the drainage system of India with reference to Himalayan and Peninsular rivers.

35. EXTRACT-BASED QUESTION (From Chapter)

Read the extract and answer the questions:

"Under colonial rule, the British framed forest laws that restricted the customary rights of forest-dwellers. Large areas were declared Reserved Forests where grazing, hunting and collection of forest produce were forbidden. Tribals who depended on forests were treated as trespassers. Many communities protested against these unjust laws."

a) Why did the British create Reserved Forests?

b) How were forest-dwelling communities affected?

c) Name one tribal group that revolted against forest restrictions.

d) What are 'customary rights'?

e) How did these forest laws change the relationship between people and forests?

SECTION D – MAP SKILL (1 × 5 = 5 marks)

36. On the outline map of India, show the following:

a) Areas receiving less than 20 cm of rainfall

b) Areas receiving more than 400 cm of rainfall

SUBJECT: SCIENCE   M.M: 80

General instructions

1. The question paper has four sections in all. Section A,B,C& D. There are 40 questions in all.
2. Section A (Q1 to Q18) are objective type questions in the form of M.C.Q's
3. Section B (Q19 to Q28) are very short answer type questions carrying 2 marks each.
4. Section C (Q29 to Q37) are short answer type questions carrying 3 marks each.

5. Section D (Q38 to Q40) are long answer type questions carrying 5 marks each.

SECTION – A (1 × 18 = 18)

Q1. Which plant tissue provides mechanical strength?
   (a) Parenchyma   (b) Collenchyma   (c) Sclerenchyma   (d) Phloem

Q2. Which of the following is a living element of phloem?
   (a) Phloem fibre   (b) Vessel   (c) Companion cell   (d) Tracheid

Q3. Green manure helps in increasing:
(a) Soil erosion (b) Soil fertility (c) Soil salinity (d) Soil acidity

Q4. Which disease is transmitted through unprotected sexual contact?
(a) Malaria (b) Typhoid   (c) AIDS   (d) none of these

Q5. Excessive use of drugs mainly affects the:
(a) Digestive system
(b) Nervous system
(c) Respiratory system
(d) Skeletal system

Q6. Which of the following is a change of state?
(a) Burning of paper
(b) Rusting of iron
(c) Melting of ice
(d) Digestion of food

Q7. The SI unit of mass is:
(a) Gram   (b) Quintal   (c) Kilogram   (d) Tonne

Q8. Law of conservation of mass states that mass is:
(a) Created
(b) Destroyed
(c) Neither created nor destroyed
(d) Doubled

Q9. Atomic number of an element is equal to the number of:
(a) Neutrons   (b) Protons   (c) Nucleons   (d) Protons and neutrons

Q10. Isotopes of an element have the same:
(a) Mass number
(b) Number of neutrons
(c) Chemical properties
(d) Atomic mass

Q11. SI unit of force is:
(a) Dyne   (b) Joule   (c) Newton   (d) Watt

Q12. The inertia of an object depends upon its:
(a) Shape   (b) Volume   (c) Mass   (d) Density

Q13. Acceleration due to gravity on Earth is approximately:
(a) 4.9 m/s²   (b) 8.9 m/s²   (c) 9.8 m/s²   (d) 98 m/s²

Q14. Unit of work is:
(a) Joule   (b) Newton   (c) Watt   (d) Pascal

Q15. Sound cannot travel through:
(a) Solids   (b) Liquids   (c) Gases   (d) Vacuum

Assertion–Reason Questions

(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.

Q16. Assertion : Pressure in a liquid increases with depth. Reason: Pressure depends on the height of the liquid column.

Q17. Assertion : Atoms of the same element may have different mass numbers. Reason: Atoms of the same element can have different numbers of neutrons.

Q18. Assertion : Balanced use of fertilizers improves crop yield. Reason: Excessive use of fertilizers decreases soil fertility.

SECTION – B (2 × 10 = 20)

Q19. Define inertia. Write its three types.

Q20. State the formula for pressure in liquids. Mention two factors affecting it.

Q21. What is echo? State one condition necessary for hearing an echo.

Q22. Define evaporation. Mention two factors affecting it.

Q23. State the law of conservation of mass.

Q24. Define atomic mass unit (amu).

Q25. Define tissue. Name any two types of plant tissues.

Q26. What is green manure? State two advantages of green manuring.

Q27. What are sexually transmitted diseases (STDs)? Name any two STDs.

Q28. Write two harmful effects of drug abuse.

SECTION – C (3 × 9 = 27)

Q29. State Newton's second law of motion and write its mathematical expression.

Q30. Derive an expression for acceleration due to gravity.

Q31. Explain the phenomenon of buoyancy with an example.

Q32. Define saturated and unsaturated solution.

Q33. State the law of conservation of mass with a suitable example.

Q34. Describe Rutherford's model of an atom. Mention any two limitations.

Q35. Differentiate between parenchyma and sclerenchyma.

Q36. Explain mixed cropping and crop rotation.

Q37. Describe the causes and prevention of drug abuse.

SECTION – D (5 × 3 = 15)

Q38. Derive the relationship for work energy theorem.

Q39. Make a table for the electronic distribution of first 20 elements.

Q40. Describe the structure and function of neuron with a well labelled diagram.