The Wisdom School, Sirsa
Holiday Homework

THE WISDOM SCHOOL
"Shape your Future"

Grade –9th

Subjects	Homework

English	1. Complete all Worksheets of letter writing and Analytical Paragraph
	2. Write a speech - " Is Materialism more important than values" based on the story ' The Necklace '.
	3. Write a diary entry from the perspective of the narrator ' The Black Aeroplane'.
	4. Poetic Device Collage - Create a visual representation (PPT / On A3 size sheet)of at least 5 poetic devices.
	Each device should have:
	   • A definition.
	   • An example from the syllabus.
	   • An example of the student's own.
	   • Illustrations or visuals to represent it.
	Example:
	Device: Alliteration
	Definition: Repetition of consonant sounds at the beginning of words.
	Example from poem: "Some say the world will end in fire" (Fire and Ice).
	5. Do the given worksheet in a thin notebook

Hindi	1. ई-मेल लेखन
	आप मयंक/महक गुसा हैं ।आप प्रकाशक से ऑनलाइन पुस्तकें मंगवाना चाहते हैं । ऑनलाइन पुस्तक मंगवाने हेतु प्रकाशक को ई– मेल लिखिए ।
	2.अनुच्छेद लेखन
	  *जैसी संगति बैठिए, तेसो ही फल दीन ।
	  * सोशल साइट्स और विद्यार्थी
	3.विज्ञापन लेखन
	प्रदूषण से बचने के लिए जनहित में जारी एक विज्ञापन पर्यावरण विभाग की ओर से तैयार कीजिए ।(A4शीट par)
	4. याद कीजिए
	क्षितिज गद्य खंड –
	पाठ - नेता जी का चश्मा
	क्षितिज पद्य खंड -
	कविता- उत्साह , अट नहीं रही ।
	कृतिका-
	साना साना हाथ जोड़ी ।
	अलंकार, पद -परिचय।
	क्षितिज काव्य खंड
	कोई दस प्रश्न/उत्तर शीट पर सुंदर - सुंदर लिखिए ।

Mathematics	Do worksheets and Ch – 9, Ch – 12 examples in the separate notebook.

Science	1. Make a project report on A4 size sheet with proper title – page, acknowledgment and atleast 4 to 5 pages of content according to the following Roll. No. • Roll no. 1 to 10 :Make a project report on Ch- Sound ,explaining production & propagation of sound, types of waves and characteristics of sound waves • Roll no. 11 to 20 : Make a project report on the topic - plant tissue, explaining their types, occurrence, function and diagrams. • Roll no. 21 onwards : Make a project report on the topic Structure of atom, explaining their models, distribution of electrons in orbits of 1-20 elements. 2. Solve the worksheet in a fair note book given in the pdf attached.
S.SC.	**Learn the following chapters thoroughly:** Ch- Nationalism in India Ch- Minerals and Energy Resources Ch- Money and Credit Students are also required to practice the given worksheets on a separate thin notebook or on loose sheets.
Punjabi	ਸਾਹਿਤ ਮਾਲਾ:-ਕਵਿਤਾ ਭਾਗ:- ਪਾਠ- 1 ਤੋਂ 4 ਤੱਕ ਦੀ ਦੁਹਰਾਈ ਕਰੋ ਅਤੇ ਯਾਦ ਕਰੋ। ਵਾਰਤਕ-ਭਾਗ ਪਾਠ-1 ਤੋਂ 3 ਤੱਕ **ਵੰਨਗੀ** -ਕਹਾਣੀ-ਕੁਲਫੀ ਅਤੇ ਅੰਗ -ਸੰਗ ਨੂੰ ਯਾਦ ਕਰੋ। ਇਕਾਂਗੀ 'ਜ਼ਫਰਨਾਮਾ' ਯਾਦ ਕਰੋ । **ਵਿਆਕਰਨ** **ਲੇਖ ਰਚਨਾ :-** • ਆਨਲਾਈਨ ਪੜ੍ਹਾਈ ਅਤੇ • ਨਵੇਂ ਸੰਚਾਰ ਦੇ ਸਾਧਨਾਂ ਦੀ ਭੂਮਿਕਾ **ਰਸਮੀ ਪੱਤਰ-** ਕਿਸੇ ਬੈਂਕ ਦੇ ਮੈਨੇਜਰ ਨੂੰ ਆਪਣੇ ਆਧਾਰ ਕਾਰਡ ਨੂੰ ਬੈਂਕ ਅਕਾਊਂਟ ਨਾਲ ਜੋੜਨ ਲਈ ਬੇਨਤੀ ਕਰੋ। **ਗੈਰ-ਰਸਮੀ ਪੱਤਰ** ਮੰਨ ਲਓ ਤੁਹਾਡਾ ਨਾਂ ਏਕਮ ਹੈ ਤੁਹਾਡੇ ਪਿਤਾ ਜੀ ਵਿਦੇਸ਼ ਰਹਿੰਦੇ ਹਨ ਇਸ ਵਾਰ ਤੁਸੀ ਆਪਣਾ ਜਨਮ ਦਿਨ ਕੁਝ ਵੱਖਰੀ ਤਰ੍ਹਾਂ ਨਾਲ ਮਨਾਉਣਾ ਚਾਹੁੰਦੇ ਹੋ ਇਸ ਸਬੰਧੀ ਆਪਣੇ ਪਿਤਾ ਜੀ ਨੂੰ ਇੱਕ ਚਿੱਠੀ ਲਿਖੋ। ਮੁਹਾਵਰੇ- ਕ ਤੋਂ ਝ ਤੱਕ ਹਰ ਅੱਖਰ ਨਾਲ ਸਬੰਧਤ ਪੰਜ-ਪੰਜ ਮੁਹਾਵਰੇ ਲਿਖੋ। (A4 size sheet) ਕਿਰਿਆ ਵਿਸ਼ੇਸ਼ਣ, ਸਮਾਸੀ ਸ਼ਬਦ ਅਤੇ ਅਗੇਤਰ-ਪਿਛੇਤਰ ਦੀ ਦੁਹਰਾਈ ਕਰੋ।
I.T.	Solve sample paper Learn ch-13 to 15 and do questions answers from grade -10 syllabus.

Worksheet 1 (Social Studies)
Ch- Natinalism in india

Five Mark Questions

1. Explain the idea of Satyagraha according to Gandhiji.
2. Why did Mahatma Gandhi decide to withdraw the Non-Cooperation Movement in 1922
3. Explain the role of Mahatma Gandhi in the Indian National Movement.
4. Describe the main features of the Non-Cooperation Movement.
5. How did the Civil Disobedience Movement start? Explain any four features.
6. Explain the impact of the First World War on India.
7. Why was the Simon Commission opposed in India?
8. Describe the main events of the Dandi March (Salt March).
9. How did different social groups participate in the Civil Disobedience Movement?
10. Explain the importance of the Lahore Session of Congress, 1929.

3 MARK QUESTIONS

11. What was the Rowlatt Act? Why was it opposed?
12. What was the Khilafat Movement?
13. State any three causes of the Non-Cooperation Movement.
14. What was the Salt Law? Why was it resented by Indians?
15. Mention any three effects of the Non-Cooperation Movement.
16. What is meant by Purna Swaraj?
17. Why did the Dalits not participate fully in Civil Disobedience Movement?

Worksheet 2

5 MARK QUESTIONS

1. Classify minerals on the basis of their composition. Explain each with examples.
2. Describe the distribution of iron ore in India.
3. Explain the importance of minerals in the economic development of India.
4. Explain the types of coal found in India. Write any three uses of coal.
5. Describe the distribution of petroleum in India.
6. Explain the difference between conventional and non-conventional sources of energy.
7. Why is conservation of minerals necessary? Explain any four methods.
8. Explain the distribution of bauxite in India.

3 MARK QUESTIONS

9. What are minerals? How are they formed?
10. Mention any three characteristics of minerals.
11. State any three uses of manganese.
12. Why is mica important? Mention two uses.
13. Name any three non-conventional sources of energy.
14. Give three reasons for the uneven distribution of minerals in India.
15. What are tidal energy and biogas?

1 MARK QUESTIONS

16. Which mineral is the basic raw material for the iron and steel industry?
17. Name the oldest oil refinery in India.
18. Which state is the largest producer of iron ore in India?
19. Which type of coal has the highest carbon content?
20. Name one nuclear power plant in India.

(Is matter around us pure) Science

1. Define a pure substance. Give two examples of pure substances.

2. Differentiate between a mixture and a compound with one example each.

3. Classify the following as elements, compounds, or mixtures:

a) Air

b) Sodium chloride (NaCl)

c) Iron

4. Explain the difference between homogeneous and heterogeneous mixtures with examples.

5. Identify the type of mixture in the following cases:

a) Salt in water

b) Sand in water

c) Milk

6. Why is water considered a compound and not a mixture? Explain with reasoning.

7. A sample contains 60 g of oxygen and 120 g of magnesium. Determine the chemical formula of the compound formed. (Atomic masses: Mg = 24 u, O = 16 u)

8. Define element. Give two examples of elements that exist in gaseous state at room temperature.

9. Explain the following separation techniques with one example each:

a) Filtration

b) Distillation

c) Evaporation

10. Air contains nitrogen, oxygen, carbon dioxide, and other gases. Explain why it is a mixture and not a compound.

Chapter: Work and Energy

Q1. Define work done. Under what conditions is work said to be positive, negative, or zero?

Q2. A force of 20 N acts on a body and moves it 5 m in the direction of the force. Calculate the work done by the force.

Q3. A person lifts a 10 kg box to a height of 2 m. Calculate the work done against gravity. (Take g = 9.8 m/s²)

Q4. A body of mass 2 kg is moving with a velocity of 5 m/s. Calculate its kinetic energy.

Q5. The kinetic energy of a body is 200 J. If its velocity is doubled, what will be its new kinetic energy?

Q6. Define potential energy. A body of mass 3 kg is lifted to a height of 4 m. Calculate its potential energy. (Take g = 9.8 m/s²)

Q7. A body of mass 5 kg is moving with a velocity of 10 m/s. It comes to rest after applying brakes. Calculate the work done by the brakes.

Q8. Explain the work-energy theorem.

Q9. What will be the velocity of a particle of mass 5 kg having kinetic energy of 250 J?

Q10. An elevator with load of 700 kg is moving down with a velocity of 0.5 m/s. The power produced by motor in horse power will be? (1 HP = 746 W)

Chapter: Animal Tissue

1. What are animal tissues? Name the four main types of animal tissues.

2. Describe epithelial tissue. Write any three functions of epithelial tissue.

3. Differentiate between squamous epithelium and cuboidal epithelium (any three points).

4. What is connective tissue? Name any two connective tissues and write one function of each.

5. Explain the structure and function of blood as a connective tissue.

6. What are muscular tissues? Name the three types of muscular tissues.

7. Differentiate between striated muscle and unstriated muscle (any three points).

8. Write three characteristics of cardiac muscle.

9. Describe nervous tissue. Write its structure and function.

10. Explain the function of neurons with the help of a neat labelled diagram.

3. **Complete any ten of twelve of the following tasks, as directed.**

   (*i*) Fill in the blank by using the correct form of the word in the bracket for the given portion of a market research:

   The special subscriptions of newspapers are well .... (illustrate), to make reading interesting for school students.

(*ii*) Identify the error and write the correction in the given sentence from a life skills' book.

The road to success is not the bed of roses.

Use the given format.

Error	Correction

(*iii*) Fill in the blank with the correct form of verb given in the brackets.

I'm so happy to see my plants again! They .... (grow) so much since I last saw them.

(*iv*) Read the given statement.

They said to the guide, "We'd love to come here again next year."

Report it correctly by completing the following.

They told the guide that ....

(*v*) Fill in the blank by choosing the correct option to complete the conclusion of a letter of placing order.

There would be no compromise .... the quality of items supplied.

(*a*) regards (*b*) regard
(*c*) regardless (*d*) regarding

(*vi*) Report the following by completing the sentence correctly.

"Don't try mending the trousers yourself," she warned him.

She warned him ....

(*vii*) Complete the given opinion by filling the blank with correct option.

The experience of watching the movie left me .... grateful for knowing the importance of being empathetic to others.

(*a*) having felt (*b*) feeling
(*c*) felt (*d*) feels

(*viii*) The given question has an error. Select the option that correctly identifies the error and the correction.

Which kind of person does something like that?

No.	Error	Correction
(a)	Which	What
(b)	kind	kinds
(c)	something	somethings
(d)	that	this

(*ix*) Report the following question.

She said to her sister, "Are you joining us for lunch today?"

(*x*) Fill in the blank with the correct option from those given in the brackets.

Everyone is saying that Farhana's chances are bright in the upcoming tournament and she .... (must/may) become the youngest football player ever.

(*xi*) Fill in the blank to complete the sentence in a teacher's diary by choosing the correct option.

.... student in the class submitted their assignment on time.

(*a*) All (*b*) One
(*c*) Every (*d*) A

(*xii*) Choose the correct option to fill the blank.

I looked inside the bucket and saw there was .... water in it, so they had to add more to use.

(*a*) little (*b*) any
(*c*) few (*d*) least

3. Complete ANY TEN of twelve of the following tasks, as directed.

(a) Fill in the blank by using the correct form of the word in the bracket, for the given portion of a letter.

Dear Sir

Subject: Limiting the number of vehicles

Through the columns of your esteemed newspaper, I .... (*highlight*) the problem of an ever-increasing number of vehicles on the roads of the cities in our country.

(b) Read the given sentence from a recipe review article. Identify the error and supply the correction in the sentence.

Most fast food items also fall under the category of junk food because they would be harmful to your health.

Use the given format for your response.

Error	Correction

(c) Mahima told Tanvi that the violence in the movie had scared her and that's why she looked gloomy. Report the question asked by Tanvi.

(d) Read the dialogue between a teacher and his student. Complete the paragraph by choosing the correct option.

Teacher: Sahil, what happened to you? You look upset.

Student: I lost my Exercise Book.

The teacher asked Sahil .... to him as he looked upset, to which Sahil answered that he had lost his Exercise Book.

(i) what had happened

(ii) if anything had happened

(iii) what has happened

(iv) if anything has happened

(e) Correct the following concluding paragraph of a report on a lunar mission.

The 2019 mission which was originally scheduled for launch on July 15 went aborted due to technical anomalies detected in the final hours.

(f) Identify the error and supply correction for the given sentence from an article by an economist in a national daily.

India's strong economic fundamentals among a weak global growth outlook is a key rallying point for investors.

Use the given format for your response.

Error	Correction

(g) Select the option that identifies the error and supplies the correction for the following line, from a story.

The older boys were working on the field, while the smaller ones were playing besides the house when the storm struck with full force.

Option no.	Error	Correction
(i)	on	in
(ii)	ones	one
(iii)	besides	near
(iv)	with	by

(h) Complete the given narrative, by filling in the blank with the correct option.

My younger brother .... the wall when his friends came to call him for the match.

   (i) has been whitewashing   (ii) was whitewashing

(iii) had been whitewashing   (iv) was being whitewashed

(i) Report the dialogue between Abeer and his father and complete the given narration.

Father: Have you revised all the sample papers in English?

Abeer: Yes, I am sure that I will get the highest marks in English.

Father asked Abeer ....all the sample papers in English. Abeer replied that he was sure that .... the highest marks in English.

(j) Fill in the blank by choosing the correct option to complete the live feed on a popular news channel.

> *In Punjab, a thousand hands .... to plug a breach that flooded 3 dozen villages working on repairing the Bandh.*

   (i) converge

  (ii) converged

 (iii) had converge

 (iv) were converging

(k) Complete the line from a popular English song, by filling in the blank with the correct option.

I followed the signs, and I

.... getting nowhere.

Oh! Why did I follow you?

Follow you? Follow you?

   (i) wind up   (ii) wound up

(iii) wounded up   (iv) winds up

(l) Identify the error and supply correction, for the following note on a company's website.

> *Khatri & Sons Pvt. Ltd. Sonepat, Haryana*
> *The South Point Group of Institutions offered discounts on all its courses for deserving and meritorious candidates.*

Use the given format for your response.

Error	Correction

Type I. Multiple Choice Questions :

1. A number is randomly chosen from the set {1, 2, 3,....., 10}. The probability that the number is odd, is :

   (a) $\dfrac{1}{3}$ (b) $\dfrac{1}{2}$ (c) $\dfrac{2}{3}$ (d) $\dfrac{1}{4}$

2. In a single throw of a die, the probability of getting a multiple of 3 is :

   (a) $\dfrac{1}{2}$ (b) $\dfrac{1}{3}$ (c) $\dfrac{1}{6}$ (d) $\dfrac{2}{3}$

3. In an experiment, a coin is tossed 500 times. If the head turns up 280 times, then the experiment probability of getting (i) a head (ii) a tail is :

   (a) $\dfrac{14}{25}, \dfrac{11}{25}$ (b) $\dfrac{11}{20}, \dfrac{12}{20}$ (c) $\dfrac{11}{25}, \dfrac{10}{25}$ (d) $\dfrac{9}{25}, \dfrac{11}{25}$

4. In a cricket match, a batsman hits a boundary 16 times out of 40 balls he plays. Probability that he did not hit a boundary is :

   (a) $\dfrac{2}{5}$ (b) $\dfrac{3}{5}$ (c) $\dfrac{1}{5}$ (d) None of these

5. Probability of happening of an event E is given as :

   (a) $0 < P(E) \le 1$ (b) $0 \le P(E) < 1$ (c) $0 \le P(E) \le 1$ (d) $0 < P(E) < 1$

6. Probability of an impossible event is :

(a) between 0 and 1   (b) less than 1   (c) equal to 1   (d) equal to 0

7. Which of the following cannot be the probability of an event ?

(a) $\dfrac{2}{3}$ (b) 15%   (c) $\dfrac{3}{2}$ (d) 0·0003

8. A die is rolled once. Probability of getting a number less than 5 is :

(a) $\dfrac{2}{3}$ (b) $\dfrac{4}{3}$ (c) $\dfrac{1}{3}$ (d) None of these

9. An alphabet is chosen from English alphabets. Probability that the alphabet chosen is a vowel is:

(a) $\dfrac{5}{26}$ (b) $\dfrac{21}{26}$ (c) $\dfrac{1}{26}$ (d) None of these

10. A die is rolled 100 times and the data is recorded as

Outcomes :	1	2	3	4	5	6
Frequency :	22	13	20	10	25	10

Probability of getting an odd number in a trial is :

(a) $\dfrac{22}{100}$ (b) $\dfrac{20}{100}$ (c) $\dfrac{25}{100}$ (d) $\dfrac{67}{100}$

11. In a sample study of 642 people, it was found that 514 people have a high school certificate. If a persons is selected at random, the probability that the person has a high school certificate is :

(a) 0·5   (b) 0·56   (c) 0·7   (d) 0·8   [NCERT EXEMPLAR]

12. In a survey of 364 children aged 19 - 36 months, it was found that 91 liked to eat potato chips. If a child is selected at random, the probability that he/she does not like to eat potato chips, is :

(a) 0·25   (b) 0·50   (c) 0·75   (d) 0·80   [NCERT EXEMPLAR]

13. Two coins are tossed 1000 times and outcomes are recorded as below :

Number of heads	2	1	0
Frequency	200	550	250

Based on this information, the probability for atmost one head is :

(a) $\dfrac{1}{5}$ (b) $\dfrac{1}{4}$ (c) $\dfrac{4}{5}$ (d) $\dfrac{3}{4}$ [NCERT EXEMPLAR]

14. 80 bulbs are selected at random from a lot and their lifetime (in hours) is recorded in the form of a frequency table given below :

Lifetime (in hours):	300	500	700	900	1100
Frequency :	10	12	23	25	10

One bulb is selected random from the lot. The probability that its life is 1150 hours, is

(a) $\dfrac{1}{80}$ (b) $\dfrac{7}{16}$ (c) 0   (d) 1   [NCERT EXEMPLAR]

15. In a football match, Ronaldo makes 4 goals from 10 penalty kicks. The probability of converting a penalty kick into a goal by Ronaldo is

(a) $\dfrac{1}{4}$ (b) $\dfrac{1}{6}$ (c) $\dfrac{1}{3}$ (d) $\dfrac{2}{5}$

Type I. Multiple Choice Questions :

1. The class mark of the class $90 - 120$ is
   (a) 90   (b) 105   (c) 115   (d) 120   [NCERT EXEMPLAR]

2. In the class intervals $10 - 20$, $20 - 30$, the number 20 is included in
   (a) $10 - 20$ (b) $20 - 30$
   (c) both the intervals   (d) none of these intervals   [NCERT EXEMPLAR]

3. In a frequency distribution, the mid-value of a class is 10 and the width of the class is 6. The lower limit of the class is
   (a) 6   (b) 7   (c) 8   (d) 12 [NCERT EXEMPLAR]

4. The width of each of the five continuous classes in a frequency distribution is 5 and the lower class limit of the lowest class is 10. The upper limit of the highest class is
   (a) 15   (b) 25   (c) 35   (d) 40 [NCERT EXEMPLAR]

5. Class mark of a particular class is 6·5 and class size is 3. Then the class interval is
   (a) $5 - 8$ (b) $6·5 - 9·5$
   (c) $3·5 - 6·5$ (d) $4·5 - 7·5$

6. If $\bar{x}$ represents the mean of n observations $x_1, x_2, x_3, ..., x_n$, then value of $\sum_{i=1}^{n} (x_i - \bar{x})$ is
   (a) -1 (b) 0   (c) -1 (d) $n - 1$

7. If each observation of data is increased by 5, then their mean :
   (a) remains the same   (b) becomes 5 time of the original mean
   (c) is decreased by 5   (d) is increased by 5   [NCERT EXEMPLAR]

8. The median of the data 27, 9, 2, 35, 13, 7, 40, 20, 28, 22, 25, 24 is :
   (a) 40   (b) 23   (c) 22   (d) 24

9. The median of the data 26, 56, 32, 33, 17, 60, 29, 34, 45 is 33. If 26 is replaced by 62, then the new median is
   (a) 34   (b) 33   (c) 32   (d) 29

10. The mode of the data 15, 14, 19, 20, 14, 15, 16, 14, 15, 18, 14, 19, 15, 17 and 15 is
    (a) 14   (b) 15   (c) 16   (d) 17 [NCERT EXEMPLAR]

11. The arithmetic mean of $a - 2$, a and $a + 2$ is
    (a) $a + 2$ (b) $a - 2$ (c) a (d) $3a$

12. The mean of $x - 5y$, $x - 3y$, $x - y$, $x + y$, $x + 3y$ and $x + 5y$ is 12. Then the value of x is
    (a) 18   (b) 12   (c) 15   (d) Data is not sufficient

13. If $\bar{x}$ is the mean of $x_1, x_2,....., x_n$, $\bar{y}$ is the mean of $y_1, y_2,....., y_n$ and $\bar{z}$ is the mean of $x_1, x_2,...x_n, y_1, y_2,....., y_n$, then $\bar{z}$ is equal to
    (a) $\bar{x} + \bar{y}$ (b) $\dfrac{\bar{x} + \bar{y}}{2}$ (c) $\dfrac{\bar{x} + \bar{y}}{n}$ (d) $\dfrac{\bar{x} + \bar{y}}{2n}$
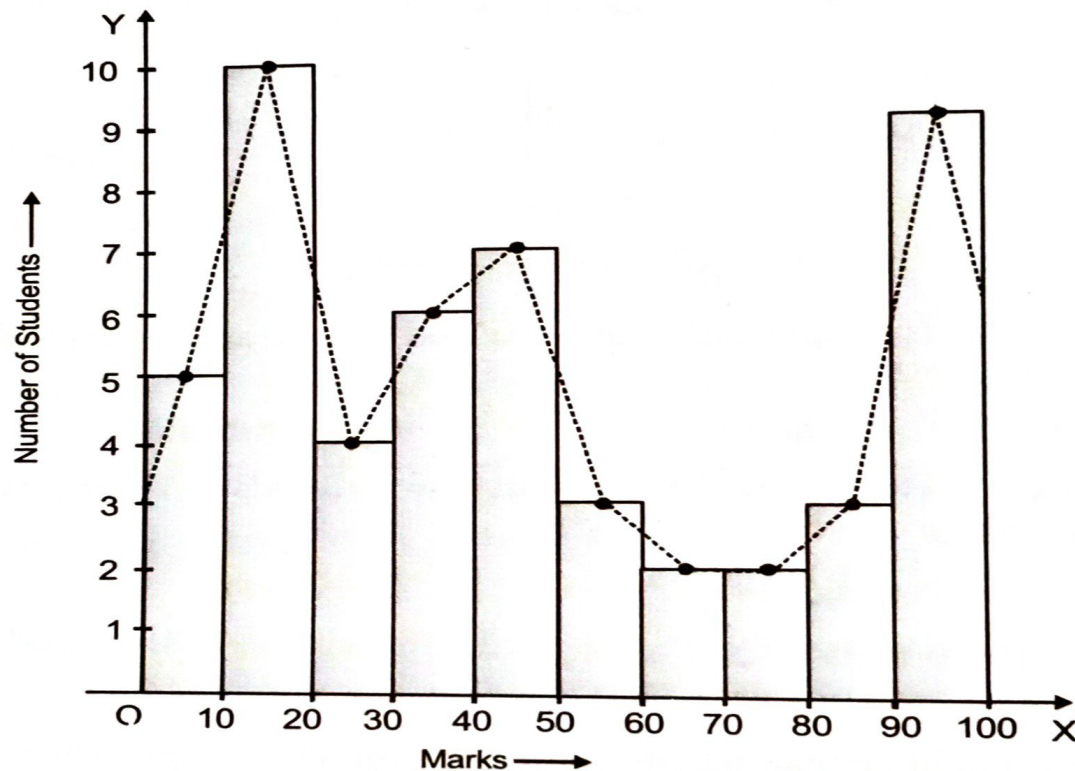
[NCERT EXEMPLAR]

14. The mean of a data is '*p*'. If each observation is multiplied by 3 and then 1 is added to each result, then the mean of the new observations so obtained is

(a) *p*   (b) 3*p*   (c) *p* + 1   (d) 3*p* + 1

15. For the set of numbers 2, 2, 4, 5 and 12, which of the following statements is true ?

(a) Mean = Median (b) Mean > Mode   (c) Mean < Mode   (d) Mode = Median

16. The mode of data given below is 16. The value of *x* is

13, 15, 16, 14, 16, 14, 13, 14, 13, *x*, 16, 17, 18, 17

(a) 15   (b) 16   (c) 17   (d) 18

17. A grouped frequency distribution table with classes of equal size using 63 – 72 (72 included) as one of the class is constructed for the following data :

30, 32, 45, 54, 74, 78, 108, 112, 66, 76, 88, 40, 14, 20, 15, 35, 44, 66, 75, 84, 95, 96, 102, 110, 88, 74, 112, 14, 34, 44. The number of classes in the distribution will be

(a) 9   (b) 10   (c) 11   (d) 12 [*NCERT EXEMPLAR*]

18. For drawing a frequency polygon of a continuous frequency distribution, we plot the point whose ordinates are the frequencies of the respective classes and abscissae are respectively :

(a) upper limits of the classes   (b) lower limits of the classes

(c) class marks of the classes   (d) upper limits of preceding classes

[*NCERT EXEMPLAR*]

19. Which one of the following is not the graphical representation of the statistical data ?

(a) Bar graph   (b) Histogram

(c) Frequency polygon   (d) Cumulative frequency distribution

20. In a histogram, the class intervals or the groups are taken along

(a) Y-axis   (b) X-axis

(c) both of X-axis and Y-axis   (d) in between X and Y axis

21. A frequency polygon is constructed by plotting frequency of the class interval and the

(a) upper limit of the class   (b) lower limit of the class

(c) mid value of the class   (d) any values of the class

Type II. Fill in the Blanks :

22. Tally marks are used to find _____ .

23. If the class marks of a frequency distribution are 15, 20, 25,...., then the class corresponding to the class mark 20 is _____ .   [*NCERT EXEMPLAR*]

24. The mid-value of a class interval is 42. If the class size is 10, then the upper and lower limits of the class are _____ .

25. The width of each of nine classes in a frequency distribution is 2.5 and the lower class boundary of the lowest class is 10.6. Then the upper class boundary of the highest class is _____ .

26. In a histogram, each class rectangle is constructed with base as _____ .

27. The mean of *n* observations is $\bar{x}$. If *a* is added to each observation, then the new mean is _____ .

28. The mean of *n* observations is $\bar{x}$. If each observation is multiplied by *a*, the mean of new observations is _____ .

29. The algebraic sum of the deviations of a set of *n* values from their mean is _____ .

9 Observe the following figure and answer the questions that follow :

(i) What information do you get from the above diagram ?

(a) The maximum and minimum number of students with marks.

(b) The histogram of marks obtained by students.

(c) Number of students securing different ranges of marks.

(d) Bar graph of different marks.

(ii) What is the range of marks obtained by maximum number of students ?

(a) 100   (b) 90 – 100   (c) 10   (d) 10 – 20

(iii) How many students got marks in the range of 60 to 80 ?

(a) 2   (b) 3   (c) 4   (d) 9

(iv) **What is the sum of all the frequencies ?**

(a) 48   (b) 49   (c) 50   (d) 51

(v) **What does the dotted line in above diagram represent ?**

(a) Frequency polygon   (b) bar graph

(c) Histogram   (d) Pie chart

Ms. Rubina gave Mohit, who has a good memory some work. She asked him to collect the data of number of students in different ranges of height. He very efficiently collected the data, but by mistake he lost the paper on which he collected the data in the playground. After coming back to class he tries to note down the data as far as he remembers. He made the following table in which he filled a, b, c and d at the place he could not recall.

Intervals (Height in cm)	Frequency	Cumulative Frequency
150 – 155	12	12
155 – 160	a	25
160 – 165	10	b
165 – 170	c	43
170 – 175	d	48
175 – 180	2	50

(i) **Using the above table, the values of a, b, c, d are**

(a) $a = 13$, $b = 35$, $c = 8$, $d = 5$

(b) $a = 13$, $b = 8$, $c = 35$, $d = 5$

(c) $a = 12$, $b = 8$, $c = 35$, $d = 5$

(d) $a = 12$, $b = 35$, $c = 5$, $d = 58$

(ii) **What are the total number of students in the class ?**

(a) 35   (b) 43   (c) 48   (d) 50

(iii) **What is the class size of the class interval 160 – 165 ?**

(a) 160   (b) 165   (c) 5   (d) 4

(iv) **What is the range, in which maximum number of students lie ?**

(a) 150 – 155   (b) 160 – 165

(c) 155 – 160   (d) 175 – 180

(v) **How many students have height less than 170 cm ?**

(a) 12   (b) 25   (c) 43   (d) 10

SAMPLE QUESTION PAPER-1
Information Technology (402)
Class IX (Session 2025-26)

Time Allowed: 2 Hours **Maximum Marks: 50**

General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of **21 questions** in two sections – Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (5 + 16 =) 21 questions, a candidate has to answer (5 + 10 =) 15 questions in the allotted (maximum) time of 2 hours.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A – OBJECTIVE TYPE QUESTIONS (24 MARKS):**
   i. This section has 05 questions.
   ii. Marks allotted are mentioned against each question/part.
   iii. There is no negative marking.
   iv. Do as per the instructions given.
7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (26 MARKS):**
   i. This section contains 16 questions.
   ii. A candidate has to do 10 questions.
   iii. Do as per the instructions given.
   iv. Marks allotted are mentioned against each question/part.

SECTION A: OBJECTIVE TYPE QUESTIONS

Q.1	Answer any 4 out of the given 6 questions on Employability Skills (1 × 4 = 4 marks)	
i.	The word 'Communication' comes from the Latin word commūnicāre, meaning.' a) to talk b) to listen c) to share d) to write	1
ii.	It refers to a state of psychological tension and discomfort originating from unforeseen, difficult, confusing and challenging situations. a) Stress Management b) Time Management c) Personality Confidence d) Self Management	1

iii.	_____ businesses buy and sell a product. They also transport the product from the factory to warehouses and then finally to shops near the customers. a) Manufacturing b) Trade c) Designing d) Thinking	1
iv.	Realistic belief and trust of an individual in one's own judgement, capabilities and worthiness is _____. a) Self-Motivation b) Over-Confidence c) Self-Confidence d) Team Player	1
v.	What is the target year to achieve the SDGs globally? a) 2025 b) 2030 c) 2040 d) 2050	1
vi.	What do you type in the "To" field? a) The topic of the e-mail b) The main message of the e-mail c) Email address of the person to whom you want to send a copy of the e-mail d) Email address of the person you are sending the mail to	1
Q.2	**Answer any 5 out of the given 6 questions (1 × 5 = 5 marks)**	
i.	In the Home Row Approach, also called Horizontal Approach, all the _____ fingers of both the hands rest on Home Keys during the keyboard operation. a) 6 b) 4 c) 8 d) 2	1
ii.	_____ services mean performing business operations through an outside service provider. a) BPM b) MNC c) ISP d) BPO	1
iii.	_____ colour indication stands for right inputs exceeding the acceptable time frame in Rapid Typing Tutor. a) Red b) Yellow c) Green d) Orange	1

iv.	ITeS is also called _____ that cover the entire operations which exploit Information Technology for improving the efficiency of an organisation. a) web-enabled services b) webpage c) computer services d) business	1
v.	'F' and 'J' are called as _____ keys. a) Home b) Filter c) Guide d) Sticky	1
vi.	The _____ is the one which displays the result of the lessons which have already been completed. a) Lesson Editor b) Navigation Tree c) Statistics Window d) Result Window	1
Q.3	**Answer any 5 out of the given 6 questions (1 × 5 = 5 marks)**	
i.	Which is NOT a type of alignment in Word Processor? a) Left b) Justify c) Adjust d) Center	1
ii.	Which of the following is a way of selecting a word in a Word processor using a mouse? a) Single Click b) Double Click c) Triple Click d) Scrolling	1
iii.	Amit wants to write x2 . But when he writes this, it shows x2. Which option should he use to get 2 at its proper place? a) Superscript b) Strikethrough c) Subscript d) Change Case	1
iv.	Garima has created a document in Word Processor. She wants to give headings in bold text but her mouse is not working. Can you suggest to her the shortcut key through which she can perform this task from the keyboard? a) Ctrl+I b) Ctrl+U c) Ctrl+B d) Ctrl+D	1

v.	Sunil has prepared a project for his school in a Word Processor. In his document, he wants all the occurrences of the word "when" to be changed to "where". Which option of the word processor will he use to complete the task? a) Change Case b) Orientation c) Find and Replace d) Find	1
vi.	Akhil is practicing to type on a notepad. By mistake, he has written the wrong spelling. Now, he wants to delete the wrongly typed word from the left side of the cursor. Which key will he use to accomplish the task? a) Delete b) Backspace c) Return d) Pause	1
Q.4	**Answer any 5 out of the given 6 questions (1 × 5 = 5 marks)**	
i.	What is the cell address of Fifth row and tenth column in a spreadsheet? a) J5 b) H10 c) E10 d) A6	1
ii.	After evaluating the given equation using operator precedence : 5+6*2^2 The answer will be: a) 49 b) 29 c) 17 d) 23	1
iii.	In spreadsheet the default format of the date is: a) DD-YYYY-MM b) YYYY-DD-MM c) MM-DD-YYYY d) DD-MM-YYYY	1
iv.	_____ Handle tool is used to fill the next cells till you drag it with the next predefined value. a) Fill b) Copy c) Create d) Paste	1

v.	To see the formula of a cell. Select from Menu _____ ->Show Formula. a) File b) Edit c) View d) Window		1
vi.	Formula =H2+C$14 is an example of _____ Referencing. a) Relative b) Absolute c) Mixed d) New		1
Q.5	**Answer any 5 out of the given 6 questions (1 × 5 = 5 marks)**		
i.	Which of the following is NOT an element of a presentation? a) Slide b) Text c) Database d) Images		1
ii.	What is a key characteristic of an effective presentation? a) Overloaded slides with text b) Clear and simple visuals c) Complex vocabulary d) Random slide order		1
iii.	What does a template in presentation software provide? a) Virus protection b) File compression c) Database connection d) A pre-designed slide layout and style		1
iv.	What is the purpose of a Slide Master? a) It plays audio b) It stores database queries c) It defines common layout and design for all slides d) It saves the presentation		1
v.	What happens when you press F5 in Impress? a) Opens Print Preview b) Starts the slideshow from the beginning c) Opens Help Menu d) Saves the presentation		1
vi.	Which file extension is used for saving a LibreOffice Impress presentation? a) .odp b) .pptx c) .ods d) .odt		1

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills (2 × 3 = 6 marks)
Answer each question in 20 – 30 words.

Q.6	Give any two disadvantages of verbal communication.	2
Q.7	Write any two characteristics of Entrepreneurship.	2
Q.8	List the steps to search for information using a web browser.	2
Q.9	How can self-management help a person in their daily life?	2
Q.10	Differentiate between Non-renewable Resources and Renewable Resources.	2

Answer any 4 out of the given 6 questions in 20 – 30 words each (2 × 4 = 8 marks)

Q.11	How can you differentiate between MNCs and ISPs in the IT-BPM industry?	2
Q.12	Explain in short any two important categories of keys on the Keyboard?	2
Q.13	Give two different ways of creating charts in a spreadsheet?	2
Q.14	What is the default name of the worksheet? How can it be renamed?	2
Q.15	List four views that can be used to view the slides in the presentation?	2
Q.16	List any two important basic features provided by any popular word processor?	2

Answer any 3 out of the given 5 questions in 50 – 80 words each (4 × 3 = 12 marks)

Q.17	ABC International School wants to send invitations to 500 parents to invite them for the annual day function. The office assistant wanted to use LibreOffice Writer to simplify the job of sending 500 invitations in a fraction of seconds. a) Which feature of LibreOffice Writer should the office assistant use to perform this task efficiently? b) Explain the role of the data source in the Mail Merge process. c) What are the basic steps to perform Mail Merge in LibreOffice Writer? d) Mention any two advantages of using Mail Merge in such situations.	4

Q.18		4

	A	B	C	D
1			MY SHOPPING LIST	
2				
3	ITEMS	QUANTITY	PRICE	AMOUNT
4	JEANS	2	1500	
5	T-SHIRTS	5	1000	
6	TROUSERS	1	2100	
7	BLAZERS	1	4000	
8	CAPRI	3	1700	
9				
10				

Give the formula of the following using the above given worksheet :
a) Calculate the amount for T-Shirt in cell D5
b) Calculate the maximum Quantity in cell B9
c) Calculate the minimum Price in cell C9
d) Count the number of items in cell A9

Q.19	Typing ergonomics provides the logistic support for efficient and effective typewriting. They help in attaining and maintaining accuracy and speed. List any four factors important to maintain correct typing ergonomy?	4
Q.20	List the various uses of IT in a banking system.Give any four points to support your answer.	4
Q.21	Amit has created a presentation on "Say No to Plastic" in LibreOffice Impress. Help him do the following by giving him the steps to : a) Add Custom Animation b) Add a new Slide c) Group the objects d) Add an image	4