

# DESIGN OF THE QUESTION PAPER

## First Mid -Term Exam

Class : IX

Subject: Science Time : 60 Min. Max. Marks: 20

YEAR : 2023-24

The weightage or the distribution of marks over different dimensions of the questionpaper shall be as follows :

### 1.Weightage to Learning Outcomes :

Sr.No	Learning Outcomes	Marks	Percentage of Marks
1.	Knowledge	06	30%
2.	Understanding	08	40%
3.	Application	04	20%
4.	Skill	02	10%
	<b>Total</b>	<b>20</b>	<b>100%</b>

### 2.Weightage to Content/Subject Units :

Sr. No.	Ch. No.	Units	Marks	Deletions
1	1	Matter in our Surroundings	5	No Deletions
2	5	The fundamental unit of life	6	No Deletions
3	8	Motion	6	No Deletions
4	15	Improvement in food Resources	3	No Deletions
		<b>Total</b>	<b>20</b>	

### 3.Weightage to Forms of Questions :

Sr.No.	Form of Questions	Marks for each question	Number of questions	Total Marks
1.	Long Answer Type (LA)	4	01	04
2.	Short Answer Type (SA-II)	3	02	06
3.	Short Answer Type (SA-I)	2	03	06
4.	Very Short Answer Type (VSA)	1	04	04
	<b>Total</b>		<b>10</b>	<b>20</b>

4.The expected time for different types of question would be as follows :

S.No.	Form of Questions	Approx. time for each Question in mins (t)	Number of questions (n)	Approx. time for each form of Questions in mins (n x t)
1	Long Answer Type (LA)	12	01	12
2	Short Answer Type (SA-II)	06	02	12
3	Short Answer Type (SA-I)	08	03	24
4	Very Short Answer Type (VSA)	03	04	12
	<b>Total</b>			<b>60</b>

As the total time is calculated on the basis of the number of questions required to be answered and the length of their anticipated answers, it would, therefore, be advisable for the candidates to budget their time properly by cutting out the superfluous words and be within the expected time limits.

### 5. Scheme of Options

There will be no overall choice, However, there is an internal choice in some questions. While framing MCQ's, no alternatives / options are to be marked by using alphabets. All alternatives / options are to be indicated by using bullet markings.

### 6. Weightage to Difficulty level of questions :

S.No.	Estimated difficulty level of question	Percentage
1	Easy	20%
2	Average	60%
3	Difficult	20%

A question may vary in difficulty level from individual to individual, As such, the assessment in respect of each question will be made by the paper setter on the basis of general anticipation from the group as a whole taking the examination. This provision is only to make the paper balanced in its weightage, rather than to determine the pattern of marking at any stage.

### 7. Number of main Questions :

It has been decided to introduce serial wise question number and to do away with sub-question among the questions.

# DESIGN OF THE QUESTION PAPER

## FIRST TERMINAL EXAMINATION

Class : IX

Subject: Science Time : 2½ hours. Max. Marks: 70

YEAR : 2023-24

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The weightage or the distribution of marks over different dimensions of the questionpaper shall be as follows :

### 1.Weightage to Learning Outcomes :

Sr.No	Learning Outcomes	Marks	Percentage of Marks
1.	Knowledge	21	30 %
2.	Understanding	28	40 %
3.	Application	14	20 %
4.	Skill	07	10 %
	<b>Total</b>	70	100

### 2.Weightage to Content/Subject Units :

Sr. No.	Ch. No.	Units	Marks	Core content - Thrust Area	Deletions
1	2	Is matter around Us Pure?	15		No Deletions
2	6	Tissues	14		No Deletions
3	9	Force and Laws of motion	14		No Deletions
4	10	Gravitation	12		No Deletions
		<b>CORE CONTENT</b>			No Deletions
5	1	Matter in our Surroundings	4	1.5, 1.5.1, 1.5.2	
6	5	The fundamental unit of life	4	5.2.5, 5.2.5(i),(ii),(iii), (iv), (v), (vi)	
7	8	Motion	4	8.2, 8.2.1, 8.3	
8	15	Improvement in food Resources	3	15.1.2(i), (ii), (iii), 15.2.1, 15.2.2	
		<b>Total</b>	<b>70</b>		

### 3.Weightage to Forms of Questions :

Sr.No.	Form of Questions	Marks for each question	Number of questions	Total Marks
1.	Long Answer Type (LA)	4	3	12
2.	Short Answer Type (SA-II)	3	4	12
3.	Short Answer Type (SA-I)	2	14	28
4.	Very Short Answer Type (VSA)	1	18	18
	<b>Total</b>		<b>39</b>	<b>70</b>

### 4.The expected time for different types of question would be as follows :

S.No.	Form of Questions	Approx. time for each Question in mins (t)	Number of questions (n)	Approx. time for each form of Questions in mins (n x t)
1	Long Answer Type (LA)	10	03	30
2	Short Answer Type (SA-II)	7	04	28
3	Short Answer Type (SA-I)	4	14	56
4	Very Short Answer Type (VSA)	2	18	36
	<b>Total</b>			<b>150</b>

As the total time is calculated on the basis of the number of questions required to be answered and the length of their anticipated answers, it would, therefore, be advisable for the candidates to budget their time properly by cutting out the superfluous words and be within the expected time limits.

### 5.Scheme of Options

There will be no overall choice, However, there is an internal choice in some questions. While framing MCQ's, no alternatives / options are to be marked by using alphabets. All alternatives / options are to be indicated by using bullet markings.

## **6.Weightage to Difficulty level of questions :**

<b>S.No.</b>	<b>Estimated difficulty level of question</b>	<b>Percentage</b>
1	Easy	20%
2	Average	60%
3	Difficult	20%

A question may vary in difficulty level from individual to individual, As such, the assessment in respect of each question will be made by the paper setter on the basis of general anticipation from the group as a whole taking the examination. This provision is only to make the paper balanced in its weightage, rather than to determine the pattern of marking at any stage.

## **7.Number of Questions :**

It has been decided to introduce serial wise question number and to do away with sub-question among the questions.

**DESIGN OF THE QUESTION PAPER**  
**SECOND MID -TERM EXAM**

**Class : IX**

**Subject: Science      Time : 60 Min.      Max. Marks: 20**  
**YEAR : 2023-24**

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The weightage or the distribution of marks over different dimensions of the questionpaper shall be as follows :

**1.Weightage to Learning Outcomes :**

Sr.No	Learning Outcomes	Marks	Percentage of Marks
1.	Knowledge	06	30%
2.	Understanding	08	40%
3.	Application	04	20%
4.	Skill	02	10%
	<b>Total</b>	<b>20</b>	<b>100%</b>

**2.Weightage to Content/Subject Units :**

Sr. No.	Ch. No.	Units	Marks	Deletions
1	3	Atoms and Molecules	<b>7</b>	No Deletions
2	11	Work and Energy	<b>7</b>	No Deletions
3	13	Why do we fall ill ?	<b>6</b>	No Deletions
		<b>Total</b>	<b>20</b>	

**3.Weightage to Forms of Questions :**

Sr.No.	Form of Questions	Marks for each question	Number of questions	Total Marks
1.	Long Answer Type (LA)	4	01	04
2.	Short Answer Type (SA-II)	3	02	06
3.	Short Answer Type (SA-I)	2	03	06
4.	Very Short Answer Type (VSA)	1	04	04
	<b>Total</b>		<b>10</b>	<b>20</b>

#### 4. The expected time for different types of question would be as follows :

S.No.	Form of Questions	Approx. time for each Question in mins (t)	Number of questions (n)	Approx. time for each form of Questions in mins (n x t)
1	Long Answer Type (LA)	12	01	12
2	Short Answer Type (SA-II)	06	02	12
3	Short Answer Type (SA-I)	08	03	24
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	<b>Total</b>			<b>60</b>

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#### 7. Number of main Questions :

It has been decided to introduce serial wise question number and to do away with sub-question among the questions.

# DESIGN OF THE QUESTION PAPER

## SECOND TERMINAL EXAMINATION

Class : IX

Subject: Science Time : 2½ hours. Max. Marks: 70

YEAR : 2023-24

The weightage or the distribution of marks over different dimensions of the questionpaper shall be as follows :

### 1.Weightage to Learning Outcomes :

Sr.No	Learning Outcomes	Marks	Percentage of Marks
1.	Knowledge	21	30 %
2.	Understanding	28	40 %
3.	Application	14	20 %
4.	Skill	07	10 %
	<b>Total</b>	70	100

### 2.Weightage to Content/Subject Units :

Sr. No.	Ch. No.	Units	Marks	Core content - Thrust Area	Deletions
1	4	Structure of Atom	13		No Deletions
2	7	Diversity in living organisms	16		No Deletions
3	12	Sound	14		No Deletions
4	14	Natural Resources	12		No Deletions
		<b>CORE CONTENT</b>			
4	3	Atoms and Molecules	5	3.4, 3.4.1	
5	11	Work and Energy	5	11.2,11.2.1, 11.2.2, 11.2.3	
6	13	Why do we fall ill ?	5	13.3.4, 13.3.5	
		<b>Total</b>	70		



### 3.Weightage to Forms of Questions :

Sr.No.	Form of Questions	Marks for each question	Number of questions	Total Marks
1.	Long Answer Type (LA)	4	3	12
2.	Short Answer Type (SA-II)	3	4	12
3.	Short Answer Type (SA-I)	2	14	28
4.	Very Short Answer Type (VSA)	1	18	18
	<b>Total</b>		<b>39</b>	<b>40</b>

4.The expected time for different types of question would be as follows :

S.No.	Form of Questions	Approx. time for each Question in mins (t)	Number of questions (n)	Approx. time for each form of Questions in mins (n x t)
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2	Short Answer Type (SA-II)	7	04	28
3	Short Answer Type (SA-I)	4	14	56
4	Very Short Answer Type (VSA)	2	18	36
	<b>Total</b>			<b>150</b>

As the total time is calculated on the basis of the number of questions required to be answered and the length of their anticipated answers, it would, therefore, be advisable for the candidates to budget their time properly by cutting out the superfluous words and be within the expected time limits.

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## **7.Number of Questions :**

It has been decided to introduce serial wise question number and to do away with sub-question among the questions.

**PATTERN OF STD IX FIRST TERM EXAM QUESTION PAPER YEAR: 2023-24**

		<b>Subject : SCIENCE</b>		<b>TIME: 150 Min.</b>		<b>Max. Marks : 70</b>			
<b>Sr.No. /Q. No.</b>	<b>Objective</b>	<b>Content area /Major area of content topic</b>	<b>Form of the questions</b>	<b>Language of questions</b>	<b>Difficulty of the answers</b>	<b>Difficulty level of the questions</b>	<b>Marks allotted</b>		
1	K	Chp 2	VSA	Specific	Definite	Easy	1		
2	K	Chp 2	VSA	Specific	Definite	Easy	1		
3	K	Chp 6	VSA	Specific	Definite	Easy	1		
4	K	Chp 6	VSA	Specific	Definite	Easy	1		
5	U	Chp 6	VSA	Specific	Definite	Average	1		
6	K	Chp 9	VSA	Specific	Definite	Easy	1		
7	U	Chp 9	VSA	Specific	Definite	Average	1		
8	K	Chp 9	VSA	Specific	Definite	Easy	1		
9	K	Chp 5	VSA	Specific	Definite	Easy	1		
10	A	Chp 10	VSA	Specific	Definite	DIFFICULT	1		
11	U	Chp 5	VSA	Specific	Definite	Average	1		
12	A	Chp 8	VSA	Specific	Definite	Average	1		
13	U	Chp 8	VSA	Specific	Definite	Average	1		
14	U	Chp 15	VSA	Specific	Definite	Average	1		
15	U	Chp 15	VSA	Specific	Definite	Average	1		
16	K	Chp 15	VSA	Specific	Definite	Easy	1		
17	K	Chp 8	VSA	Specific	Definite	Easy	1		
18	S	Chp 8	VSA	Specific	Definite	Easy	1		18
19	K (a)	Chp 1	SA I	Specific	Definite	Easy	1	2	
	(b)			Specific	Definite	Easy	1		
20	A	Chp 2	SA I	Specific	Definite	Average	2	2	
21	S (a)	Chp 2	SA I	Specific	Definite	Average	1	2	
	(b)			Specific	Definite	Average	1/2+1/2		
22	U (a)	Chp 6	SA I	Specific	Definite	Average	1	2	
	(b)			Specific	Definite	Average	1		
23	K (a)	Chp 10	SA I	Specific	Definite	Average	1	2	
	(b)			Specific	Definite	Average	1		
24	U	Chp 10	SA I	Specific	Definite	Average	2	2	
25	S (a)	Chp 5	SA I	Specific	Definite	Average	1	2	
	(b)			Specific	Definite	Average	1/2+1/2		
26	U (a)	Chp 1	SA I	Specific	Definite	Average	1	2	
	(b)			Specific	Definite	Average	1		
27	A	Chp 6	SA I	Specific	Definite	Average	2	2	
28	S (a)	Chp 6	SA I	Specific	Definite	Average	1	2	
	(b)			Specific	Definite	Average	1/2+1/2		
29	U	Chp 9	SA I	Specific	Definite	Average	2	2	



37 a)	A	Chp 10	LA	Specific	Definite	Difficult	1	4	
b)				Specific	Definite	Difficult	1		
c)				Specific	Definite	Difficult	2		
38 a)	K	Chp 2	LA	Specific	Definite	Average	1	4	
b)				Specific	Definite	Average	1		
c)				Specific	Definite	Average	1		
d)				Specific	Definite	Average	1		
39(A) a)	A	Ch 9	LA	Specific	Definite	Difficult	1	4	
b)				Specific	Definite	Difficult	1		
c)				Specific	Definite	Difficult	2		
<b>OR</b>			<b>OR</b>				<b>OR</b>		
39(B) a)	A	Ch 9	LA	Specific	Definite	Difficult	1	4	
b)				Specific	Definite	Difficult	1		
c)				Specific	Definite	Difficult	2		
									12
									70
	VSA - NO OPTION				Level	marks	%		
	SA I - 3 INTERNAL OPTION(3 QUEST)				EASY	14	20%		
	SA II - 2 INTERNAL OPTIONS (2 QUEST)				AVERAGE	42	60%		
	LA - 1 INTERNAL OPTION(1 QUEST)				DIFFICULT	14	20%		



**PATTERN OF STD IX SECOND TERM EXAM QUESTION PAPER YEAR: 2023-24**

		<b>Subject : SCIENCE</b>	<b>TIME: 150 Min.</b>						<b>Max. Marks : 70</b>
<b>Sr.No. /Q. No.</b>	<b>Objective</b>	<b>Content area /Major area of content</b>	<b>Form of the questions</b>	<b>Language of questions</b>	<b>Difficultnes of the answers</b>	<b>Difficulty level of the questions</b>	<b>Marks allotted</b>		
1	K	Chp 4	VSA	Specific	Definite	Easy	1		
2	K	Chp 7	VSA	Specific	Definite	Easy	1		
3	K	Chp 7	VSA	Specific	Definite	Easy	1		
4	s	Chp 4	VSA	Specific	Definite	Easy	1		
5	U	Chp 12	VSA	Specific	Definite	Average	1		
6	K	Chp 12	VSA	Specific	Definite	Easy	1		
7	U	Chp 7	VSA	Specific	Definite	Average	1		
8	K	Chp 12	VSA	Specific	Definite	Easy	1		
9	K	Chp 14	VSA	Specific	Definite	Easy	1		
10	U	Chp 14	VSA	Specific	Definite	Average	1		
11	U	Chp 14	VSA	Specific	Definite	Average	1		
12	A	Chp 14	VSA	Specific	Definite	DIFFICULT	1		
13	A	Chp 3	VSA	Specific	Definite	Average	1		
14	U	Chp 11	VSA	Specific	Definite	Average	1		
15	U	Chp 11	VSA	Specific	Definite	Average	1		
16	K	Chp 14	VSA	Specific	Definite	Easy	1		
17	K	Chp 11	VSA	Specific	Definite	Easy	1		
18	K	Chp 13	VSA	Specific	Definite	Easy	1		18
19	K (a)	Chp 3	SA I	Specific	Definite	Easy	1	2	
	(b)			Specific	Definite	Easy	1		
20	U	Chp 3	SA I	Specific	Definite	Average	2	2	
21	S (a)	Chp 12	SA I	Specific	Definite	Average	1	2	
	(b)			Specific	Definite	Average	1/2+1/2		
22	U (a)	Chp 7	SA I	Specific	Definite	Average	1	2	
	(b)			Specific	Definite	Average	1		
23	A (a)	Chp 4	SA I	Specific	Definite	Average	1	2	
	(b)			Specific	Definite	Average	1		
24	U	Chp 4	SA I	Specific	Definite	Average	2	2	
25	U (a)	Chp 12	SA I	Specific	Definite	Average	1	2	
	(b)			Specific	Definite	Average	1		
26	K (a)	Chp 14	SA I	Specific	Definite	Average	1	2	
	(b)			Specific	Definite	Average	1		
27	U	Chp 13	SA I	Specific	Definite	Average	2	2	
28	S (a)	Chp 7	SA I	Specific	Definite	Average	1	2	
	(b)			Specific	Definite	Average	1/2+1/2		
29	K	Chp 13	SA I	Specific	Definite	Average	2	2	

30(A)a)	K	Chp 7	SA I	Specific	Definite	Easy	1	2	
b)	K			Specific	Definite	Easy	1		
<b>OR</b>			<b>OR</b>				<b>OR</b>		
30(B) a)	K	Chp 7	SA I	Specific	Definite	Easy	1	2	
b)	K		SA I	Specific	Definite	Easy	1		
31(A) a)	A	Chp 11	SA I	Specific	Definite	DIFFICULT	1	2	
b)	A			Specific	Definite	DIFFICULT	1		
<b>OR</b>			<b>OR</b>				<b>OR</b>		
31(B) a)	A	Chp 11	SA I	Specific	Definite	DIFFICULT	1	2	
b)	A		SA I	Specific	Definite	DIFFICULT	1		
32(A) a)	S	Chp 14	SA I	Specific	Definite	Average	1	2	
b)	S		SA I	Specific	Definite	Average	1		
<b>OR</b>			<b>OR</b>				<b>OR</b>		
32(B) a)	S	Chp 14	SA I	Specific	Definite	Average	1	2	28
b)	S		SA I	Specific	Definite	Average	1		
33 a)	U	Chp 4	SA II	Specific	Definite	Average	2	3	
b)	U			Specific	Definite	Average	1		
34 a)	U	Chp 14	SA II	Specific	Definite	Average	1	3	
b)							1		
c)							1		
35(A) a)	U	Chp 7	SA II	Specific	Definite	Average	2	3	
b)			SA II	Specific	Definite	Average	1		
<b>OR</b>			<b>OR</b>				<b>OR</b>		
35(B) a)	U	Chp 7	SA II	Specific	Definite	Average	2	3	
b)			SA II	Specific	Definite	Average	1		
36(A) a)	A	Chp 12	SA II	Specific	Definite	Difficult	1	3	
b)			SA II	Specific	Definite	Difficult	1		
c)			SA II	Specific	Definite	Difficult	1		
<b>OR</b>			<b>OR</b>				<b>OR</b>		
36(B) a)	A	Chp 12	SA II	Specific	Definite	Difficult	1	3	12
b)			SA II	Specific	Definite	Difficult	1		
c)			SA II	Specific	Definite	Difficult	1		



37 a)	A	Chp 7	LA	Specific	Definite	Difficult	1	4	
b)				Specific	Definite	Difficult	1		
c)				Specific	Definite	Difficult	2		
38 a)	K	Chp 4	LA	Specific	Definite	Average	1	4	
b)				Specific	Definite	Average	1		
c)				Specific	Definite	Average	1		
d)				Specific	Definite	Average	1		
39(A) a)	A	Chp 12	LA	Specific	Definite	Difficult	1	4	
b)				Specific	Definite	Difficult	1		
c)				Specific	Definite	Difficult	2		
<b>OR</b>			<b>OR</b>				<b>OR</b>		
39(B) a)	A	Chp 12	LA	Specific	Definite	Difficult	1	4	
b)				Specific	Definite	Difficult	1		
c)				Specific	Definite	Difficult	2		
									12
									70
	VSA - NO OPTION				Level	marks	%		
	SA I - 3 INTERNAL OPTION(3 QUEST)				EASY	14	20%		
	SA II - 2 INTERNAL OPTIONS (2 QUEST)				AVERAGE	42	60%		
	LA - 1 INTERNAL OPTION(1 QUEST)				DIFFICULT	14	20%		



**Revised pattern of assessment /grading in science for std IX with effect from the academic year 2023-24**

<b>Theory</b>					<b>Internal assessment</b>					
<b>First Mid Test</b>	<b>First Term</b>	<b>Second Mid Test</b>	<b>Second Term</b>	<b>Total Theory marks</b>	<b>Practical first Term</b>	<b>Assignment</b>	<b>Practical Second Term</b>	<b>project</b>	<b>Total internal assessment marks</b>	<b>Overall Total marks</b>
<b>20 mks</b>	<b>70 mks</b>	<b>20 mks</b>	<b>70 mks</b>	<b>180</b>	<b>20 mks</b>	<b>10 mks</b>	<b>20 mks</b>	<b>10 mks</b>	<b>60</b>	<b>240</b>

**Distribution of Practical marks in science**

Max. Marks: 20 marks

Duration : 1 hr.

Long experiment : 10 marks

Short experiment : 5 marks

Journal : 5 marks