

Academic standard wise weightage

S.no	Academic standard	OT	VSA	SA	ESSAY	TOTAL	PERCENTAGE
1	CONCEPTUAL UNDERSTANDING	6(1/2)	5(1)	2(2)	2(4)	15(20)	40
2	Asking Questions and making hypothesis	2(1/2)	-	2(2)	-	4(5)	10
3	Experimentation and field investigation	2(1/2)	1(1)	1(2)	1(4)	5(8)	16
4	Information skills and projects	2(1/2)	-	1(2)	1(4)	4(7)	14
5	Communication through drawing, model making	-	1(1)	-	1(4)	2(5)	10
6	Appreciation & Aesthetic sense , values	-	1(1)	1(4)	-	3(5)	10
		12(1/2)	8(1)	8(2)	5(4)	33(50)	100
	Total Marks	6	8	16	20	50	

Academic Standard -1

Conceptual Understanding

Section	Question Type	No of Questions	Marks
1	½ mark	6	3
2	1 mark	5	5
3	2 marks	2	4
4	4 marks	2 (+2 choice)	8
Total	-	15 (+2 choice)	20

1. Explain

- Ex : 1. Explain the process of finding specific heat of solid?
2. What is the minimum focal length of the eye lens of a healthy human ?

2. Give reasons :

Ex : ZnS , MgCO_3 , Fe_3O_4 , $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$

in the above ores which one can concentrate through a froth floatation process ? why?

3. Give comparison and differences :

Ex: Write the differences between Evaporation & Boiling ?

4. Give examples :

Ex: Give any two examples of each to ionic compounds and covalent compounds

Academic Standard -2

Asking Questions and making hypothesis

Section	Question Type	No of Questions	Marks
1	½ mark	2	1
2	1 mark	-	-
3	2 marks	2	4
4	4 marks	-	-
Total	-	4	5

Asking Questions to understand the concept and predict the situations :

- Ex : 1. Sandhya observed red colour of sun during sunrise and sunset and she got some doubts in her mind. What would be those doubts?
2. Take water fully in a glass bottle and cap it .put the bottle in a deep fridge . predict what happens ?
3. Predict the colour of sky if sodium vapour is filled in the atmosphere?

Academic Standard -3

Experimentation and field investigation

Section	Question Type	No of Questions	Marks
1	½ mark	2	1
2	1 mark	1	1
3	2 marks	1	2
4	4 marks	1 (+1 choice)	4
Total	-	5 (+1 choice)	8

Able to do Experiments, Able to participate in field investigations and making reports on them.

- Ex: 1. How do you connect a voltmeter in a circuit while finding voltage of a resistor ?
2. How do you test for hydrogen gas ?
3. How do you verify experimentally that V/I is constant?

Academic Standard -4

Information skills and projects

Section	Question Type	No of Questions	Marks
1	½ mark	2	1
2	1 mark	-	-
3	2 marks	1	2
4	4 marks	1(+1choice)	4
Total	-	4 (+1 choice)	7

Able to collect information and Analysis systematically .Able to conduct their own projects .

Ex: Observe the information provided in the table about quantum numbers. Then answer the questions given below

n	l	ml
1	0	0
2	0	0
	1	-1,0,1
3	0	0
	1	-1,0,1
	2	-2,-1,0,1,2

- write the l value and symbol of the spherical shaped sub-shell ?
- How many values that ml takes for l=2 ? What are they ?
- write the symbols the orbitals for l=1?
- what is the shape of subshell for l=2?

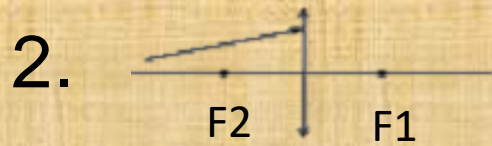
Academic Standard -5

Communication through drawing, model making

Section	Question Type	No of Questions	Marks
1	½ mark	-	-
2	1 mark	1	1
3	2 marks	-	-
4	4 marks	1 (+1 choice)	4
Total	-	2(+1 choice)	5

Explain concepts by drawing figures , making model ,able to plotting graphs

Ex: 1. Draw the diagram that shows the increasing order of $(n+l)$ of various orbitals ?



Complete the ray diagram to show the path of the ray after refraction through the lens shown in the figure

Academic Standard -6

Appreciation & Aesthetic sense ,values

Section	Question Type	No of Questions	Marks
1	½ mark	-	-
2	1 mark	1	1
3	2 marks	2	4
4	4 marks	-	-
Total	-	3	5

Able to Appreciate man power and nature ,and have aesthetic sense towards nature

Able to fallow constitutional values .Able to show concern towards bio–diversity.

Ex: 1. How do you appreciate dobereiner for his efforts in the classification of elements?

2. Give one daily life application of baking soda?