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MACRO VISION ACADEMY BURHANPUR	**Sample Paper-I Answer Key (2026-27)**	**For Office Use Only**
	Class: XI Mathematics	
	Time: 03:00 Hrs.	
	M.M: 80	

Personal Information

Student's Name:-_____ Father's Name:-_____
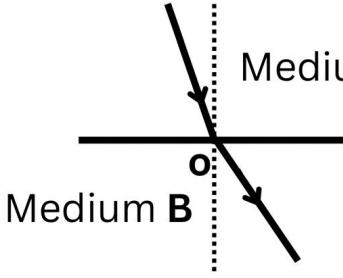
City:-_____ Mobile No:-_____ Exam Date:-   /   /2026

Studying in Class:- _____ Appearing for class:-_____ Board:- _____

Present School Name:-_____ Category :-_____

Physics (20)	Chemistry (15)	Mathematics (25)	English (10)	MAT (10)	Total (80)	Remark

	Physics (20)	**M.M**
	Choose the correct answer. (Q. 1 to 4)	
1.	(c) A convex lens of focal length 2 m	1
2.	(b) correct reading for current I but incorrect reading for potential difference V	1
3.	(c) Momentum	1
4.	(a) different refractive index for different wavelength of each colour	1
	Fill in the blank. (Q. 5 to 11)	
5.	Retina	1
6.	Lens	1
7.	$^{a}\mu_{b} = 1.25$	1
8.	25 cm to infinity (∞)	1
9.	No deflection (Neutrons are neutral particles)	1
10.	The direction of the force on the wire due to the magnet is upwards. (Out of the plane of paper)	1
11.	R_{eq} = 8Ω	1
	Do as directed (Q. 12 to 14)	
12.	End B is the North pole, End A is the South pole.	1
13.		1

14.		1
15.	(c) Assertion (A) is true but reason (R) is false.	1
16.	(b) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A)	1
17.	(a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).	1
18.	$H^1 = 2H$	1
19.	$\dfrac{1}{\sqrt{2}} = \dfrac{r_1}{r_2}$	1
20.	$H = 750\,J$	1
	Chemistry (15)	
21.	(c) The reaction of a metal with an acid.	1
22.	(a) $NaOH$	1
23.	(c) The outer surface of the beaker has become hot.	1
24.	(c) 2, 8	1
25.	(d) CaO	1
26.	(d) Both P and R are neutral salt solutions.	1
	Fill in the blank. (Q. 27 to 32)	
27.	$NaHCO_3 + \underline{CH_3COOH} \rightarrow CH_3COONa + H_2O + \underline{CO_2}$	1
28.	$X - Na_2CO_3 - Sodium\ Carbonate$	1
29.	$Ni - Catalyst - Nickel\ catalyst$	1
30.	Oxidation Reaction	1
31.	2, 3 dimethyl Pentane H $\underset{\overset{\displaystyle|}{H}}{\overset{\displaystyle H}{-C}}$ $\underset{\overset{\displaystyle|}{H}}{\overset{\displaystyle H}{-C}}$ $\underset{\overset{\displaystyle|}{H}}{\overset{\displaystyle CH_3}{-C}}$ $\underset{\overset{\displaystyle|}{H}}{\overset{\displaystyle CH_3}{-C}}$ $\underset{\overset{\displaystyle|}{H}}{-C}$ $-H$	1
32.	Aqua regia – Royal water	1
33.	(a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).	1
34.	(d) Assertion (A) is false but reason (R) is true.	1
35.	(a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).	1

	Mathematics (25)	
	Choose the correct answer. (Q. 36 to 40)	
36.	(c) $\dfrac{3+\sqrt{5}}{2},\dfrac{3-\sqrt{5}}{2}$	**1**
37.	(d) $10x-14y=-4$	**1**
38.	(b) $\dfrac{x^2-1}{2x}$	**1**
39.	(a) 30°	**1**
40.	(a) 13	**1**
	Fill in the blank. (Q. 41 to 47)	
41.	$\sqrt{ab}$	**1**
42.	cx^2+bx+a **OR** $\dfrac{1}{C}\left(cx^2+bx+a\right)$	**1**
43.	20 cm	**1**
44.	100°	**1**
45.	500 revolutions	**1**
46.	17	**1**
47.	$P \le 4$	**1**
48.	$12.96\,cm^2$	**1**
49.	(a) 1.8×1.4×1.7	**1**
50.	(d) (0, −9)	**1**
51.	(b) 6 units	**1**
	Subjective Type Questions (Q. 52 to 56)	
52.	$x=\dfrac{30}{11}\,metres$ **OR** 2.72	**1**
53.	so the no's are 40 and 48	**1**
54.	$\theta = 60°$	**1**
55.	10.8 %	**1**
56.	OP = 4 cm	**1**
57.	$n \ge 11$	**1**
58.	$x = 6$	**1**
59.	$n = 7$	**1**
60.	$d = 2$	**1**
	English (10)	
61.	(a) Both A and R are true, and R is the correct explanation of A	**1**
62.	(c) False, because planned obsolescence is still widely practiced despite emerging regulations	**1**

63.	(c) Disposable plastics : Environmental degradation	1
64.	(c) They seek to empower consumers and reduce unnecessary product disposal	1
	Fill in the blanks. (Q. 65 to 67)	
65.	*were*	1
66.	*had practised*	1
67.	*do we see*	1
68.		3
	MAT (10)	
	Solve the question based on general intelligence. (Q. 69 to 78)	
69.	(c) Grandson	1
70.	(a) Grandfather	1
71.	(a) CVT	1
72.	(b) 45	1
73.	(a) 5 m North	1
74.	(c) East	1
75.	(c) 36	1
76.	(c) 13	1
77.	(d) 4	1
78.	(b) Steps	1

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