

**ATOMIC ENERGY CENTRAL SCHOOL NO.2, MUMBAI**  
**MULTIPLE CHOICE QUESTION EXAMINATION - 6 (MCQ-6)**  
**CLASS VIII (31.01.2024)**

**Time : 3 hours**

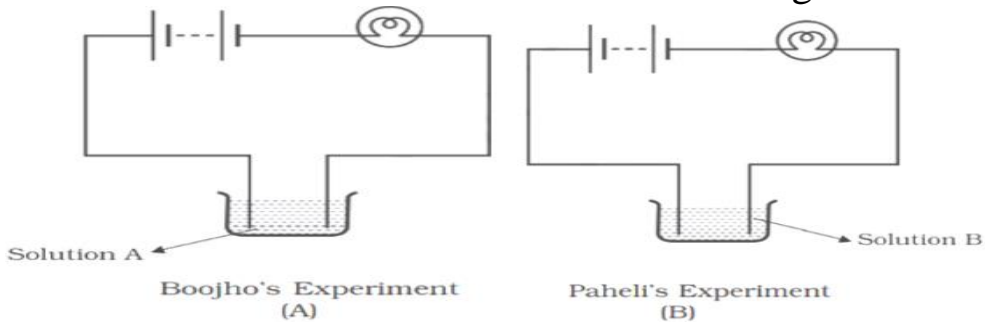
**Maximum Marks : 120**

<b>Attempt all questions. Each question carries 1 mark.</b>	
1	Find C.I .on Rs 16,000 for 2years at15% per annum compounded annually. a) Rs 5,160      b) None of these      c) Rs 5,600      d) Rs 6,000
2	40% of [100 - 20% of 300] is equal to a) 64      b) 16      c) 20      d) 140
3	Find the ratio of 5km to 10m. a) 1:500      b) 20:1      c) 500:1      d) 1:20
4	If 12.5% of 192 = 50% of x, then x = a) 48      b) 45      c) 25      d) 92
5	The population of a village increases @ 5% p.a. If present population is 8000, after how many years the population will be 9261? a) $3\frac{1}{2}$ years      b) 2 years      c) 4 years      d) 3 years
6	Mohanbuys a bike at 20% discount of its value and sells it for 20% more than its value. What will be his profit percentage? a) 40%      b) 20%      c) 50%      d) $66\frac{2}{3}\%$
7	A shirt with marked price Rs 800 was sold at Rs 680. The rate of discount allowed on the shirt is a) 25%      b) 20%      c) 10%      d) 15%
8	A football team won 10 matches out of the total number of matches they played. If their win percentage was 40, then how many matches did they play in all? a) 30      b) 20      c) 25      d) None of these
9	Multiply (a + 7) and (b - 5). a) ab - 5a + 7b - 35      b) ab - 35      c) ab - 5a - 35      d) ab - 5a + 7b
10	By using identity find (a + 1) (a +2) = ? a) $a^2 + 5a + 2$ b) $a^2 + 3a + 5$ c) $a^2 + 3a + 2$ d) $3a + 2$
11	Multiply $(a^2 + 2b^2)$ and $(5a - 3b)$ . a) $5a^3 - 3a^2b + 10ab^2$ b) $5a^3 - 3a^2b + 10ab^2 - 6b^3$ c) $5a^3 - 3a^2b - 6b^3$ d) $10ab^2$
12	$x(x - 3) + 2 = ?$ a) $x^2 - 3x + 2$ b) $x^2 - 2x + 2$ c) $x^2 - 5x + 3$ d) $x^2 + 3x + 5$
13	Multiply (x - y) and (3x + 5y). a) 2xy      b) $3x^2 + 2xy - 5y^2$ c) $5x^2 + 2xy - 5y^2$ d) $3x^2 + 2xy - 7y^2$

14	The product of $4mn$ and $0$ is a) $0$ b) $4mn$ c) $mn$ d) $1$
15	Evaluate using suitable identities. $497 \times 505$ a) $259085$ b) $250998$ c) $250190$ d) $250985$
16	The volume of a cuboid of dimensions $a, b, c$ is a) $abc$ b) $a^2 b^2 c^2$ c) $a^3 b^3 c^3$ d) none of these
17	The surface area of a cube is $486 \text{ sq m}$ , then its volume is a) $879 \text{ m}^3$ b) $625 \text{ m}^3$ c) $781 \text{ m}^3$ d) $729 \text{ m}^3$
18	The length of a cube is double than the other cube. The ratio between volumes of both, cubes is - a) $4 : 1$ b) $1 : 1$ c) $2 : 1$ d) $8 : 1$
19	Two cubes have volumes in the ratio $1 : 64$ . The ratio of the areas of a face of the first cube to that of the other is a) $1 : 4$ b) $1 : 16$ c) $1 : 8$ d) $1 : 32$
20	The total surface area of a right circular cylinder whose height is $15 \text{ cm}$ and the radius of the base is $7 \text{ cm}$ , is a) $1860 \text{ cm}^2$ b) $2310 \text{ cm}^2$ c) $968 \text{ cm}^2$ d) $488 \text{ cm}^2$
21	A right circular cylinder and a right circular cone have equal bases and equal heights. If their curved surface areas are in the ratio $8 : 5$ , what is the ratio of their base to their heights? a) $6 : 7$ b) $3 : 4$ c) $5 : 4$ d) $9 : 8$
22	What is the surface area of the drawing box, if its length is $16 \text{ cm}$ , width $6 \text{ cm}$ , and height $3 \text{ cm}$ ? a) $162 \text{ cm}^2$ b) $25 \text{ cm}^2$ c) $200 \text{ cm}^2$ d) $324 \text{ cm}^2$
23	A water tank whose dimensions are $1.5 \text{ m}$ , $0.75 \text{ m}$ and $0.48 \text{ m}$ is full. Its contents are emptied into another empty tank whose base area is $1 \text{ m}^2$ . How much the water level shall rise? a) $0.34 \text{ m}$ b) $64 \text{ m}$ c) $5.4 \text{ m}$ d) $0.54 \text{ m}$
24	What is the surface area of a book $13 \text{ cm}$ long, $10 \text{ cm}$ wide, and $3 \text{ cm}$ high? a) $320 \text{ cm}^2$ b) $529 \text{ cm}^2$ c) $160 \text{ cm}^2$ d) $398 \text{ cm}^2$
25	The value of $\frac{6^{12} \times (35)^{28} \times (15)^{16}}{(14)^{12} \times (21)^{11} \times 5^{28}}$ is _____. a) $3^{17} \times 5^{16} \times 7^5$ b) $2^7 \times 3^{17} \times 7^5$ c) $2^6 \times 5^{16} \times 7^{12}$ d) $2^6 \times 31^{16} \times 5^{12}$
26	Which one among the following is the greatest? $5^{-4}, 2^{-4}, 3^{-4}, 4^{-4}, 6^{-4}$ a) $2^{-4}$ b) $5^{-4}$ c) $6^{-4}$ d) $4^{-4}$
27	Find the value of $\left[ \left( \frac{-2}{3} \right)^{-2} \right]^1$ . a) $\frac{7}{4}$ b) $\frac{9}{4}$ c) $\frac{3}{4}$ d) $\frac{5}{4}$

28	The value of $\frac{(81)^{\frac{1}{3}} \times (576)^{\frac{1}{3}}}{(64)^{\frac{2}{3}} \times (27)^{\frac{2}{3}}}$ is a) $\frac{3}{8}$ b) $\frac{1}{4}$ c) $\frac{3}{4}$ d) $\frac{5}{8}$
29	The multiplicative inverse of $10^{-100}$ is a) $10^{-100}$ b) 10      c) 100      d) $10^{100}$
30	Expand 1025.63 using exponents. a) $1 \times 10^3 + 0 \times 10^1 + 5 \times 10^0 + 6 \times 10^{-1} + 3 \times 10^{-3}$ b) $1 \times 10^3 + 0 \times 10^2 + 2 \times 10^1 + 5 \times 10^0 + 6 \times 10^{-1} + 3 \times 10^{-2}$ c) $1 \times 10^3 + 0 \times 10^2 + 2 \times 10^1 + 5 \times 10^0 + 6 \times 10^{-1} + 3 \times 10^{-3}$ d) $1 \times 10^4 + 0 \times 10^3 + 2 \times 10^2 + 5 \times 10^1 + 6 \times 10^0 + 3 \times 10^{-1}$
31	The standard form of 0.0000078 is a) $78 \times 10^6$ b) $7.8 \times 10^{-6}$ c) $78 \times 10^5$ d) $78 \times 10^{-5}$
32	Simplify: $\left[ \left\{ \left( \frac{-1}{5} \right)^{-2} \right\}^2 \right]^{-1}$ a) $\frac{5}{625}$ b) $\frac{1}{652}$ c) $\frac{1}{625}$ d) $\frac{-1}{625}$
33	Factorise: $x^2 + \frac{4}{x^2} - 4$ a) $\left(x - \frac{2}{x}\right) \left(x - \frac{2}{x}\right)$ b) $\left(x + \frac{2}{x} + 2\right) \left(x + \frac{2}{x} - 2\right)$ c) $\left(x - \frac{2}{x}\right) \left(x + \frac{2}{x}\right)$ d) $\left(x + \frac{2}{x}\right) \left(x + \frac{2}{x}\right)$
34	Factorise: $x^2 - 2x - 3x + 6$ a) $(x - 3)$ b) None of these      c) $(x - 3)(x - 2)$ d) $(x - 2)$
35	The factorisation of $x^2 + x + xy + y + zx + z$ is. a) $(x + y + z)(z + x)$ b) $(x + y + z)(x + y)$ c) $(x + y + z)(y + z)$ d) $(x + y + z)(x + 1)$
36	Factorise: $36y^2 - 36y + 9$ a) $9(2y - 1)^2$ b) 9      c) None of these      d) $(2y - 1)^2$
37	Factors of $2a(x - y) + 3b(5x - 5y) + 4c(2y - 2x)$ a) $(x - y)(2a + 15b - 8c)$ b) $(x - y)(2a - 15b - 9c)$ c) $(x + y)(2a + 15b - 8c)$ d) $(x + y)(2a + 15b + 3c)$
38	Factorise: $4y^2 - 12y + 9$ a) $(5y - 3)^2$ b) $(7y - 5)^2$ c) $(2y - 3)^2$ d) $(2y - 5)^2$
39	Divide as directed: $4yz(z^2 + 6z - 16) \div 2y(z + 8)$ a) 2z      b) $2z(z - 2)$ c) $(z - 2)$ d) None of these
40	Factorise: $169a^2 - 144b^2$ a) $(13a + 12b)$ b) $(13a - 12b)$ c) None of these      d) $(13a + 12b)(13a - 12b)$
41	Which of the following group contain only conductor?



	c) P - (iii), Q - (i), R - (ii)	d) P - (i), Q - (ii), R - (iii)
52	When LED is connected to a circuit the shorter wire is connected to a) Any one of the terminals b) Negative terminals c) Positive terminals d) Neutral terminals	
53	Chemical effects of an electric current includes i. Deposits of metal on electrodes ii. deflection of compass needle iii. change of colour of solution iv. formation of air bubbles on electrodes a) (i), (iii) and (iv) b) (i) and (ii) c) (i), (ii), (iii) and (iv) d) (ii) and (iv)	
54	Which one does not involve chemical effect of electric current? a) Electrolysis of acidified water b) Electrotyping c) Movement of needle of magnet compass when placed near an electric wire carrying current d) Electroplating	
55	Boojho and Paheli performed experiments taking similar bulbs and cells but two different solutions A and B as shown in figure.  They found that the bulb in the setup A glows more brightly as compared to that of the setup B. You would conclude that a) higher current is flowing through the circuit in setup A. b) higher current is flowing through the circuit in setup B. c) equal current is flowing through both the circuits. d) the current flowing through the circuits in the two setups cannot be compared in this manner.	
56	While checking your tester, do not join its free ends for more than a few seconds otherwise a) Cells of the battery heat faster b) Cells of the battery drain very quickly c) Bulb of the tester get fused d) Conductors get heated	
57	The two leads of LED are of a) Equal length	



codes.

<b>Column I</b>	<b>Column II</b>
P.Richter scale	(i)Electric Charge
Q.Electroscope	(ii)Amber
R.Resin	(iii)Earthquake
S.Electric current	(iv)Flow of charges

- a) P - (iv), Q -(ii), R -(i), S -(iii)    b) P -(ii), Q -(iv), R - (i), S -(iii)  
 c) P - (i), Q - (iii), R -(iv), S -(ii)    d) P -(iii), Q -(i), R -(ii), S -(iv)

69 As per convention, what is the charge on a glass rod when it is rubbed with a silk cloth?

- a)positive    b)negative    c)both (a) and (b)    d) no charge

70 Richter scale is related to

- a) lightning    b) thermometer    c) earthquake    d) thunderstorm

71 The outermost layer of earth is called

- a) Mantle    b) Crust    c) Outer core    d) Inner core

72 Lightening occurs due to

- a) Rain    b) Electric discharge    c) Lord Varun anger    d) Wind

73 Like charges repel and unlike charge

- a) Repel each other    b) Attract each other  
 c) Any thing may happen    d) Repel or attract

74 Match column I and column II and select the correct option from the given codes.

	<b>Column I Reading onRichter scale</b>	<b>Column II Effect ofearthquake</b>
P	6 to 6.9	(i)Not felt but recorded
Q	4 to 5.9	(ii) can be destructive in small area
R	0 to 3	(iii) Total damage due to great earthquake
S	8 to above	(iv) Often felt but less damage

- a) P-(i), Q -(ii), R -(iii), S -(iv)    b) P -(iii), Q -(ii), R -(i), S -(iv)  
 c) P -(ii), Q -(iv), R -(iii), S -(i)    d) P -(ii), Q -(iv), R -(i), S -(iii)

75 During thunderstorm which action may be done?

- a) All of these    b) Using a mobile phone  
 c)Switching ON and OFF of electrical switches  
 d) Using telephone having a wire

76 In ancient times, people thought that earthquake and lightning is due to

- a)wrath of god visiting them    b)brushing of plates of earth

	c)charging of clouds	d)pollution of air
77	Lightning is seen little earlier than thunder sound because a)Light travels faster than sound                      b)Light moves slower than sound c)Light requires medium for propagation d)Sound requires medium for propagation	
78	An earthquake is originated from the _____ a) epicenter              b) focus                      c) crust                      d) mantle	
79	Which of the following is responsible for earthquake? a) Volcanic eruption b) Underground nuclear explosion c) Shift in the position of plates that form the crust of our planet d) All of these	
80	Seismograph is an instrument used to record a)Vibration of earthquake b)Temperature c)Lightening d)Strength of wind	
81	Name the person who started schools for Muslim girls in Patna and Calcutta and encouraged education for Muslim girls. a) Rashsundari Debi    b) Begum Rokeya Sakhawat Hossain c) Rama Bai Ranade    d) Mumtaz Ali	
82	Who was the important reformer who reinterpreted verses from the Koran to argue for women's education? a) Mumtaz Ali      b) Sarojini Naidu      c) Annie Besant d) Rashsundari Debi	
83	Why did Dr. B R Ambedkar lead three temple entry movements between 1927 and 1935? A. Dr. B R Ambedkar felt humiliated when he led the first movement. B. Dr. Ambedkar himself was from a Dalit. C. Dr. B R Ambedkar wanted to make everyone see the power of caste prejudices within society. D. Dr. Ambedkar wanted to study about these movements. a) Only D                      b) Only B                      c) Only A                      d) Only C	
84	Inspired by the Brahma Samaj, in Madras in 1864 another movement worked to abolish caste distinction and promote widow remarriage and women's education. Name this. a)Ramakrishna Mission    b)Prarthana Samaj c)Brahmo Samaj II    d)Veda Samaj	
85	The practice of Sati was banned in the year _____. a) 1829                      b) 1800                      c) 1827                      d) 1821	
86	Who from Bhopal, from the early 20 <sup>th</sup> century, played a notable role in promoting education among women and founded a primary school for girls?	



	a) Begums of Bhopal c) Tribals of Bhopal	b) Government of Bhopal d) British Resident
87	In which language women of the aristocratic Muslim households of North India learned to read and write the Koran? a) Hindi                      b) Arabic                      c) Persian                      d) English	
88	Periyar founded _____. a) Temple Entry Movement                      b) Self Respect Movement c) Paramhans Mandali                      d) Dalit Movement	
89	Pick out the important event that happened on 14 - 15 August 1947 at Red Fort, New Delhi. A. The National Flag was hoisted at Red Fort by Jawahar Lal Nehru. B. Mahatma Gandhi ji was declared the Father of Nation. C. Mahatma Gandhiji introduced ahimsa and non - violence to fight against the British. D. The Indian Constitution was framed by Dr. B R Ambedkar. a) Only B      b) Only A      c) Only D      d) Only C	
90	Name the important personality who renounced his knighthood expressing pain and anger of the country over the Jalianwallah massacre. a) Motilal Nehru                      b) Mahatma Gandhi c) Sarojini Naidu                      d) Rabindranath Tagore	
91	Pick out the date on which Clement Atlee made an important announcement that the British would completely transfer power to the Indians by June 1948. a) On 20 February 1947                      b) On 20 February 1950 c) On 20 April 1949                      d) On 20 March 1948	
92	Who were the important people behind the organization of the Home Rule Movement in 1916? a) Mohammed Ali Jinnah and Maulana Abul Kalam Azad b) Bipin Chandra Pal and Aurobindo Ghosh c) Annie Besant and Bal Gangadhar Tilak d) Lala Lajpat Rai and Surendranath Banerjee	
93	Pick out from the following dates on which Mohammed Ali Jinnah decided to launch Direct Action Day. a) On 16th August 1946                      b) On 16th August 1947 c) On 16th August 1948                      d) On 16th August 1944	
94	Choose the correct year in which the Cripps Mission was sent to India to secure India's cooperation in the Second World war. a) 1952                      b) 1942                      c) 1953                      d) 1948	
95	From the list of dates given below, which day did Gandhiji call upon all Indians to observe as the Satyagraha Day or national Humiliation Day in	

	<p>protest against the Rowlatt Act.</p> <p>a) 6 April 1927   b) 6 April 1919   c) 6 April 1925   d) 6 April 1930</p>
96	<p>Name the important General who blocked the only exit and ordered to fire at the people assembled in Jalianwala Bagh.</p> <p>a) General Andrews   b) General Charles   c) General Dyer   d) General Michael</p>
97	<p>Name the largest producer of steel in the world.</p> <p>a) USA                      b) India                      c) Germany                      d) China</p>
98	<p>From where does the iron ore come to Pittsburgh?</p> <p>a) Washington              b) Florida                      c) Minnesota                      d) Silicon Valley</p>
99	<p>Which one among the following is an important industrial region of South India?</p> <p>a) Ahmedabad - Vadodara region                      b) Bangalore - Tamil Nadu region c) Damodar Valley belt                                      d) Delhi - Gurgaon - Meerut region</p>
100	<p>What process does the iron ore undergo in a blast furnace?</p> <p>a) Smelting                      b) Refining                      c) Extraction                      d) None of these</p>
101	<p>Emerging industries can also be named as:</p> <p>a) Sunrise industries    b) Evolving industries c) Sunshine industries    d) Bright industries</p>
102	<p>Name the important Western industrial region in India.</p> <p>a) Delhi - Gurgaon - Meerut region                      b) Ahmedabad - Vadodara region c) Damodar Valley belt    d) Chottanagpur belt</p>
103	<p>Many countries have a hub of the Textile industry. From the list given below, choose the country that does not have a textile industry?</p> <p>a) Japan                      b) Germany                      c) India                      d) Taiwan</p>
104	<p>Which industry is considered as the key or basic industry?</p> <p>a) Information Technology    b) Iron and Steel Industry c) Textile Industry    d) Cement Industry</p>
105	<p>Name the ultimate resource on the earth.</p> <p>a) Capital                      b) Human Beings                      c) Land                      d) Minerals</p>
106	<p>The areas which usually enjoy an equable climate, adequate rainfall, where the land is flat and the soil is fertile are referred to as:</p> <p>a) Thickly populated regions    b) Meagerly populated regions c) Sparsely populated regions    d) Moderately populated regions</p>
107	<p>Population density refers to:</p> <p>A. the number of people living per square unit of area. B. the number of skilled people in a country. C. the way in which people are spread across the earth's surface. D. the number of unskilled people in a country.</p> <p>a) Only B                      b) Only A                      c) Only C                      d) Only D</p>

108	If the birth rate is high and the death rate is low in a country then the population pyramid will: a) narrow at the base b) not narrow at the base c) not narrow rapidly towards the top d) narrow rapidly towards the top
109	This is an example of a place where religious or cultural activities tend to attract more people. a) Jerusalem      b) Mumbai      c) Sahara      d) Osaka
110	What does the term population distribution refer to? A. How the population in a specified area changes over time. B. The number of people who die in relation to the number of people born in a specified area. C. The way in which people are spread across a given area. a) None of these      b) Only A      c) Only C      d) Only B
111	Cite an example from the following which shows that people usually avoid extreme climates. a) Nile in Egypt      b) Polar regions of Russia      c) Jerusalem      d) Vatican City
112	Human resources differ from one another in respect of a) educational level      b) All of these      c) age      d) sex
113	When was the Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act passed? a) 1970      b) 1989      c) 1993      d) 1980
114	When was the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act passed? a) 2006      b) 1993      c) 2001      d) 1989
115	_____ a social boycott of an individual and his family. a) Ostracise      b) Policy      c) Mainstream      d) Disposed
116	The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act. a) 1985      b) 1999      c) 1989      d) 1987
117	In which year, the government passed the Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act. a) 1994      b) 1995      c) 1993      d) 1992
118	Which of the following is a marginalised group in our Indian society? a) Children      b) None of these      c) Women      d) Men
119	A group that can express themselves and their views strongly are called: a) Assertive      b) Volatile      c) Morally reprehensible      d) Policy
120	Who among the following is an Adivasi activist? a) Rathnam      b) Chokhamela      c) C K Janu      d) Kabir

## Answer Key

Q NO	OPTION	Q NO	OPTION	Q NO	OPTION
1	C	41	A	81	B
2	B	42	C	82	A
3	C	43	B	83	D
4	A	44	B	84	D
5	D	45	D	85	A
6	C	46	C	86	A
7	D	47	B	87	B
8	C	48	D	88	B
9	A	49	A	89	B
10	C	50	A	90	D
11	B	51	B	91	A
12	A	52	B	92	C
13	B	53	A	93	A
14	A	54	C	94	B
15	D	55	A	95	B
16	A	56	B	96	C
17	D	57	B	97	D
18	D	58	A	98	C
19	B	59	A	99	B
20	C	60	A	100	A
21	B	61	D	101	A
22	D	62	A	102	B
23	D	63	D	103	D
24	D	64	A	104	B
25	A	65	B	105	B
26	A	66	D	106	A
27	B	67	A	107	B
28	B	68	D	108	D
29	D	69	A	109	C
30	B	70	C	110	C
31	B	71	B	111	C
32	C	72	B	112	B
33	A	73	B	113	C
34	C	74	D	114	A
35	D	75	B	115	A
36	A	76	A	116	C
37	A	77	A	117	C
38	C	78	B	118	C
39	B	79	D	119	A
40	D	80	A	120	C