

**INDIAN SCHOOL AL WADI AL KABIR**  
**Class VIII**, Mathematics  
**MCQ –EXPONENTS & POWERS**  
**18-04-2021**

**OBJECTIVE TYPE (1 Mark)**

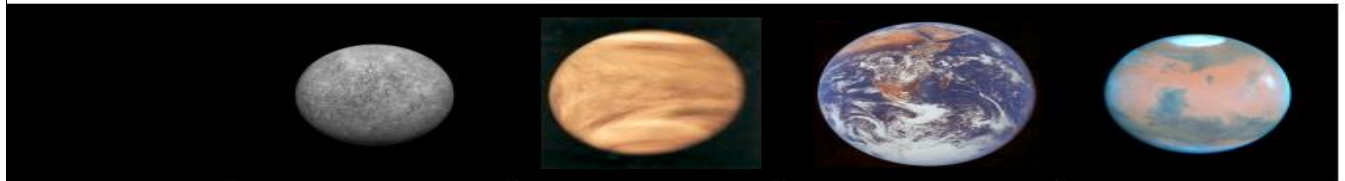
Q.1.	The multiplicative inverse of $2^{-4}$							
	A	$-2^4$	B	$(\frac{1}{2})^{-4}$	C	16	D	-16
Q.2.	If $3^m \times 3^{-3} = 3^5$ , the value of m is							
	A	2	B	8	C	-2	D	-4
Q.3.	The standard form of 149600000000 is							
	A	$1.496 \times 10^{11}$	B	$1.496 \times 10^{10}$	C	$1.496 \times 10^{13}$	D	$0.496 \times 10^{10}$
Q.4.	The value of $9^{-2}$							
	A	81	B	18	C	$\frac{1}{18}$	D	$\frac{1}{81}$
Q.5.	$\{2^7 \div 2^3\} + 2^0$ is equal to							
	A	16	B	17	C	10	D	7
Q.6.	$\{ (5^{-3} \times 5^{-1}) \}^0$							
	A	5	B	-5	C	1	D	0
Q.7.	The value of p such that $7^{2p+1} \div 7^4 = 7^7$							
	A	5	B	7	C	2	D	-5
Q8.	$5^3 \times 5^{-1}$ is equal to							
	A	5	B	$5^3$	C	$5^{-1}$	D	$5^2$
Q9	The usual form of $7.83 \times 10^{-3}$							
	A	783000	B	0.00783	C	0.000783	D	0.783
Q10	The standard form of 0.000005236 is							
	A	$5.236 \times 10^{-6}$	B	$5.236 \times 10^{-5}$	C	$0.5236 \times 10^{-6}$	D	$52.36 \times 10^{-6}$

Q11	The value of $\left(\frac{1}{2}\right)^{-3} + \left(\frac{1}{3}\right)^{-1} + \left(\frac{1}{5}\right)^{-2}$							
	A	50	B	45	C	36	D	22
Q12	$(-2)^{-2}$ is equal to							
	A	$\frac{1}{2}$	B	$\frac{1}{4}$	C	$-\frac{1}{2}$	D	$-\frac{1}{4}$
Q13	$3 \times 10^5 + 1 \times 10^3 + 2 \times 10^2 + 5 \times 10^1 + 8 \times 10^0 + 2 \times 10^{-2}$ is equal to							
	A	31258.02	B	31258.2	C	301258.2	D	301258.02
Q14	The value of $\left(\frac{3}{4}\right)^{-3}$							
	A	$\frac{27}{64}$	B	$\frac{64}{27}$	C	$-\frac{64}{27}$	D	$\frac{27}{12}$
Q15	$(2^0 + 5^0 + 3^0) \times 7^0$							
	A	4	B	0	C	1	D	3
Q16	$\frac{3^{-1} \times 5^{-2}}{5^{-3} \times 3^{-3}}$ can be simplified as							
	A	$\frac{1}{45}$	B	45	C	14	D	54
Q17	$3^{-1} \times 6^{-1} \times 2$							
	A	36	B	9	C	$\frac{1}{36}$	D	$\frac{1}{9}$
Q18	Which of the following is equal to $\left(-\frac{3}{7}\right)^{-3}$							
	A	$\left(\frac{3}{7}\right)^{-3}$	B	$-\left(\frac{3}{7}\right)^{-3}$	C	$\left(\frac{7}{3}\right)^3$	D	$\left(-\frac{7}{3}\right)^3$
Q19	The value of $(7^{-1} - 8^{-1})^{-1} - (3^{-1} - 4^{-1})^{-1}$							
	A	44	B	68	C	56	D	12
Q20.	$\left(\frac{3}{4}\right)^5 \div \left(\frac{5}{3}\right)^5$ is equal to							
	A	$\left(\frac{3}{4} \div \frac{5}{3}\right)^5$	B	$\left(\frac{3}{4} \div \frac{5}{3}\right)^1$	C	$\left(\frac{3}{4} \div \frac{5}{3}\right)^0$	D	$\left(\frac{3}{4} \div \frac{5}{3}\right)^{10}$

Q21.

CASE STUDY

The table shows distance of four planets from sun in km and astronomical unit and their diameters .study the table and answer the following questions



Planet	Mercury	Venus	Earth	Mars
Distance from Sun in <u>km</u>	58 million km	108 million km	150 million km	228 million km
Distance from Sun in <u>AU</u>	0.4 AU	0.7 AU	1.0 AU	1.5 AU
Diameter in km	4,878 km	12,104 km	12,755 km	6,790 km

1.	Which planet has greater diameter?							
	A	Mercury	B	Earth	C	Venus	D	Mars
2	The distance of Venus from Sun in standard form							
	A	$1.08 \times 10^9$ km	B	$1.08 \times 10^7$ km	C	$1.08 \times 10^8$ km	D	$108 \times 10^{10}$ km
3	The distance of mercury given in AU can be written in standard form as							
	A	$4 \times 10^1$	B	$4 \times 10^{-1}$	C	$40 \times 10^2$	D	$4 \times 10^{-2}$
4	Express difference in diameters of mercury and earth in standard form							
	A	$7.877 \times 10^3$	B	$7.787 \times 10^3$	C	$8.777 \times 10^4$	D	$7.878 \times 10^4$
5	If 1AU = 150 million km ,express 7AU =-----km in standard form							
	A	$1.5 \times 10^9$	B	$1.05 \times 10^8$	C	$1.5 \times 10^{10}$	D	$1.05 \times 10^9$

ANSWERS

1. C	2. B	3.A	4.D	5.B	6.C	7.C	8. D	9. B
10. A	11. C	12.B	13.D	14.B	15.D	16.B	17.D	18.B
19. A	20.A	21 1.B 2.D 3.B 4.A 5.D						