OBJECTIVE TYPE (1 Mark)

Q.1.	A rational number between $\frac{3}{5}$ and $\frac{4}{5}$ is							
	A	$\frac{7}{5}$	B	$\frac{7}{10}$	C	$\frac{3}{10}$	D	$\frac{4}{10}$
Q.2.	Which one of the following is a rational number?							
	A	$\sqrt{3}$	B	$\sqrt{2}$	C	0	D	$\sqrt{5}$
Q.3.	On rationalising the denominator of $\frac{1}{\sqrt{7}}$, we get							
	A	7	B	$\frac{\sqrt{7}}{7}$	C	$\frac{-\sqrt{7}}{7}$	D	$\sqrt{7}$
Q.4.	The exponential form of $\sqrt[3]{7}$ is							
	A	7^3	B	3^7	C	$3^{\frac{1}{7}}$	D	$7^{\frac{1}{3}}$
Q.5.	$0.666\ldots$ in $\frac{p}{q}$ form is							
	A	$\frac{6}{99}$	B	$\frac{2}{3}$	C	$\frac{3}{5}$	D	$\frac{1}{66}$
Q.6.	The value of $(5 + \sqrt{5})(5 - \sqrt{5})$ is							
	A	0	B	25	C	20	D	-20
Q.7.	The value of $9^{\frac{3}{2}}$ is							
	A	18	B	27	C	-18	D	$\frac{1}{27}$

Q.8.	If $\left(\frac{3}{4}\right)^6$ x $\left(\frac{16}{9}\right)^5 = \left(\frac{4}{3}\right)^{x+2}$, then the value of x is						
	A	2	B	4	C	-2	D	6

Q.9.	$\frac{3\sqrt{12}}{6\sqrt{27}}$ equals						
	A	$\frac{1}{2}$	B	$\sqrt{2}$	C	$\sqrt{3}$	D	$\frac{1}{3}$

Q.10.	The number obtained on rationalizing the denominator of $\frac{1}{\sqrt{7}-2}$ is						
	A	$\frac{\sqrt{7}+2}{3}$	B	$\frac{\sqrt{7}-2}{3}$	C	$\frac{\sqrt{7}+2}{5}$	D	$\frac{\sqrt{7}+2}{45}$

Q.11.	The value of $\frac{\sqrt{32}+\sqrt{48}}{\sqrt{8}+\sqrt{12}}$ is equal to						
	A	$\sqrt{2}$	B	2	C	4	D	8

Q.12.	The product $\sqrt[3]{2}$ x $\sqrt[4]{2}$ x $\sqrt[12]{32}$						
	A	$\sqrt{2}$	B	$\sqrt[12]{2}$	C	$\sqrt[12]{32}$	D	2

Q.13.	Value of $\sqrt[4]{(81)^{-2}}$ is						
	A	$\frac{1}{9}$	B	$\frac{1}{3}$	C	9	D	$\frac{1}{81}$

Q.14.	Value of $(256)^{0.16}$ x $(256)^{0.09}$ is						
	A	4	B	16	C	64	D	256.25

Q.15.	If a $= 2 + \sqrt{3}$, then the value of a $- \frac{1}{a}$ is						
	A	2 - $\sqrt{3}$	B	$\sqrt{3}$	C	4	D	$2\sqrt{3}$

Q.16.	Which of the following is the greatest?						
	A	4^2	B	$16^{\frac{3}{2}}$	C	$\left(\frac{1}{64}\right)^{\frac{-1}{3}}$	D	$256^{\frac{-1}{4}}$

Q.17.	The value of $\sqrt{(81)^{2.5}}$							
	A	$\dfrac{1}{81}$	B	81	C	243	D	343

Q.18.	Simplify: $\dfrac{\sqrt{5}+\sqrt{3}}{\sqrt{80}+\sqrt{48}-\sqrt{45}-\sqrt{27}}$							
	A	$\sqrt{5}$	B	$\sqrt{3}$	C	1	D	$\sqrt{5}+\sqrt{3}$

Q.19.	If p = 5 - $2\sqrt{6}$, then $p^2 + \dfrac{1}{p^2}$							
	A	50	B	98	C	24	D	49

Q.20.	Find the value of x if $25^{2x-3} = 5^{2x+3}$							
	A	$\dfrac{9}{2}$		$\dfrac{3}{2}$		9	D	6

Q.21.	Find the sum of $\sqrt{125} + 2\sqrt{27}$ and -$5\sqrt{5}$ - $\sqrt{3}$							
	A	$6\sqrt{3}$	B	$5\sqrt{3}$	C	$5\sqrt{5}$	D	$6\sqrt{5}$

Q.22.	Express $0.6 + 0.\overline{7} + 0.4\overline{7}$ in the form $\dfrac{p}{q}$, where p and q are integers and q ≠ 0							
	A	$\dfrac{67}{99}$	B	$\dfrac{49}{90}$	C	$\dfrac{167}{90}$	D	$\dfrac{71}{90}$

Q.23.	If a = $1 + \sqrt{2}$, then the value of $\dfrac{1}{a}$ is							
	A	$\sqrt{2}+1$	B	$\sqrt{2}$ - 1	C	1 - $\sqrt{2}$	D	$\sqrt{2}$

Q.24.	The decimal which represents the fraction $\dfrac{7}{8}$ is							
	A	0.775	B	0.845	C	0.0875	D	0.875

Q.25.	Simplify $\left(\dfrac{81}{16}\right)^{\frac{-3}{4}} \times \left[\left(\dfrac{25}{9}\right)^{\frac{-3}{2}} \div \left(\dfrac{5}{2}\right)^{-3}\right]$							
	A	$\dfrac{4}{3}$	B	$\dfrac{3}{4}$	C	1	D	0

Q.26.	If a = $1 + \sqrt{7}$, then the value of $\dfrac{-6}{a}$ is							
	A	$7+\sqrt{7}$	B	1 - $\sqrt{7}$	C	-6 + $\sqrt{7}$	D	-6 (1 - $\sqrt{7}$)

Q.27.	If $2^{5x} \div 2^x = \sqrt[5]{32}$, then the value of x is							
	A	$\dfrac{1}{2}$	B	1	C	4	D	$\dfrac{1}{4}$

Q.28.	The value of x, if $5^{x-3} \times 3^{2x-8} = 225$ is							
	A	2	B	3	C	5	D	7

Q.29.	The value of $\left(\dfrac{32}{243}\right)^{-\frac{4}{5}}$							
	A	$\dfrac{81}{16}$	B	$\dfrac{16}{81}$	C	$\dfrac{2}{3}$	D	81

Q.30.	The simplified form of $64^{\frac{-1}{3}} \left[64^{\frac{1}{3}} - 64^{\frac{2}{3}}\right]$ is							
	A	-12	B	3	C	-3	D	4

Answers

	1	B	2	C	3.	B	4	D
	5	B	6	C	7	B	8	A
Answers	9	D	10	A	11	B	12	D
	13	A	14	A	15	D	16	B
	17	C	18	C	19	B	20	A
	21	B	22	C	23	B	24	D
	25	C	26	B	27	D	28	C
	29	A	30	C				

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