**MATHEMATICS**

**EXPONENTS AND POWER**

1. The value of is 5<sup>1/4</sup> × (125)<sup>0.25</sup>@√5@5@5√5@25@0100
2. <img src="2\_Q.gif" >@102@105@107@109@1000
3. (2.4 × 10<sup>3</sup>) ÷ (8 × 10<sup>-2</sup> =@ 3×10<sup>-5</sup>@3×10<sup>4</sup>@ 3× 10<sup>5</sup>@30@0100
4. (1/213)<sup>-2/3</sup> ÷ 1/27 <sup>-4/3</sup> =@3/4@2/3@/9@1/8@0010
5. (256)<sup>0.16</sup> × (256)<sup>0.09</sup>=@4@16@64@256@1000
6. (0.04)<sup>-1.5</sup>@25@125@250@625@0100
7. The value of (8<sup>-25</sup> - <sup>-26</sup>)is@7 × 8<sup>-25</sup>@7 × 8<sup>-26</sup>@8× 8 <sup>-26</sup>@7 × 8 <sup>-27</sup>@0100
8. <img src="8\_Q.gif" >@3/7@7/3@<img src="8\_A3.gif" >@<img src="8\_A4.gif" >@1000
9. <img src="9\_Q.gif" >@1/2@1@2@7/2@0010
10. <img src="10\_Q.gif" >@3@2@@0@0100
11. If 5<sup>a</sup>= 3125, , then the value of 5 (sup>(a-3)</sup>is@ 25@125@625@1625@0001
12. <img src="12\_Q.gif" >@4@5@6@8@0100
13. <img src="13\_Q.gif" >@3.5@4.5@6@7@1000
14. <img src="14\_Q.gif" >@8.5@13@16@17.5@0100
15. <img src="15\_Q.gif" >@6<sup>2</sup>@6<sup>4</sup>@6@6<sup>3</sup>@0010
16. <img src="16\_Q.gif" >@2<sup>n+1</sup>@9/8-2n@-2<sup>n+1</sup>+1/8@1@0001
17. <img src="17\_Q.gif" >@3@3<sup>2</sup>@3<sup>n</sup>@3<sup>n+2</sup>@0100
18. If x = y <sup>a</sup>, y = z<sup>b</sup> and z = x<sup>c</sup>then the value abc is@1@2@0@Data insufficient@1000
19. <img src="19\_Q.gif" >@x<sup>abc</sup>@x<sup>a+b+c)3</sup>@x<sup>a3</sup>+<sup>b3</sup>+c3<sup></sup>@1@0001
20. If (1/5)<sup>3y</sup>=0.008, then the value of (0.25)<sup>-y</sup> us @<sup>0.25</sup>@1@4@0.625@0010
21. If 2<sup>x</sup>=4<sup>y</sup>=8<sup>z</sup> and 1/2x + 1/4y +1/6z = 24/7, then the value of z is@7/16,@7/32@7/48@7/64@0100
22. <img src="22\_Q.gif" >@0@1/2@1@a<sup>m + n</sup>@0010
23. <img src="23\_Q.gif" >@0@1@x<sup>a-b-c</sup>@x<sup>a+b+c</sup>@0100
24. <img src="24\_Q.gif" >@0@1@1/ab@ab@0100
25. 25.If 3<sup>x-y = 27</sup>and then is equal to@ 0@2@4@6@0010
26. 26Value of 7<sup>5</sup> ÷ 7<sup>3</sup> is@ 343@49@7@–49@0100
27. <img src="27\_Q.gif" > @7  11<sup>5</sup>@7<sup>3</sup> 11@7  11<sup>8</sup>@7<sup>3</sup>  11<sup>8</sup>@1000
28. The value of 2<sup>3</sup> × a<sup>3</sup> × 5a4 is@ 40a@40a<sup>7</sup>@a<sup>7</sup> @40a<sup>12</sup>@0100
29. The value of x so that (3/5)<sup>3</sup> × (3/5)<sup>-6</sup> = (5/3)<sup>1-2x</sup> is@ 0@1@–1@2@0010
30. By what number should we multiply 4<sup>– 3</sup> so that the product may be equal to 64?@4<sup>5</sup>@2<sup>12</sup>@2<sup>6</sup>@2<sup>6</sup>@0100
31. If 3x = 500, then the value of 3<sup>x–2</sup> is@100/9@1000/9@500/9@500/3@0010
32. The value of is@27/8@8/27@16/27@27/16@1000
33. The additive inverse of - 6 is@6@0@– 5@–7@1000
34. 2<sup>3</sup> + 2<sup>3</sup> + 2<sup>3</sup> + 2<sup>3</sup> is equal to@ 2<sup>5</sup>@2<sup>12</sup>@2<sup>81</sup>@216@1000
35. If 8 x – 1=2 <sup>x + 3</sup>, then x is @2@4@1@3@0001
36. If (7/5)<sup>3</sup> × (7/5)<sup>x+2</sup> = (7/5)<sup>8</sup>, then x =@3\*@2@1@0@1000
37. If x = y<sup>3</sup>, which expression is equal to y<sup>6</sup>? @x<sup>2</sup>@x<sup>3</sup>@x<sup>9</sup>@x<sup>18</sup>@1000
38. Exponential notation of 729 is@3<sup>8</sup>@3<sup>7</sup>@3<sup>6</sup>@3<sup>5</sup>@0010
39. The value of is@4@16@2@32@1000
40. If = 81, then n =?@2@4@6@8@0100
41. (– 27 ) × (–16) + (– 27) (–14) =?@ – 810@810@1110@–1110@0100
42. Which one is correct? @0· 658 <0.732 <0. 514 < 0. 813@0· 514 <0· 658 <0.732 <0. 813 @0·813 <0 ·732 < 0·658 < 0 . 514 @0· 514 < 0· 732 <0. 658 <0. 813@0100
43. <img src="43\_Q.gif" >@a<sup>–1</sup> × b<sup>–1</sup>@1/1b@a<sup>1</sup> b<sup>–1</sup>@ab@0001
44. If p/q = (3/2)<sup>3</sup> sup>-3</sup>, then the value of (p/q)<sup>-10</sup> is@ 1@0@–1@Cannot be determined@1000
45. If 2<sup>a</sup> = 32 and 3<sup>b</sup> = 27 then find the value of (a + b)<sup>2</sup>@36@49@64 @81@0010
46. If 9 × 3<sup>n</sup> = 3<sup>6</sup>. Find the value of n.@6@4@3@None of these@0100
47. If 4(4x)<sup>7</sup> =, then what is the value of x?@5@25@64@256@0001
48. (25)(n – 1) = 5(n + 1), find the value of n.@2@4@10@3@0001
49. <img src="49\_Q.gif" >@0@1@–1@2@0100
50. <img src="50\_Q.gif" >@1/16@16@-1/16@–16@1000
51. <img src="51\_Q.gif" >@159@100@89@90@1000
52. The cost of 28 toys of the same kind is M3462.20, then the cost of each toy is@M123 @M123.65 @M124.65 @M122.65@0100
53. The exponential form of 10000 is@10<sup>3</sup>@10<sup>4</sup>@10<sup>5</sup>@none of these@0100
54. The exponential form of 100000 is@10<sup>3</sup>@10<sup>4</sup>@10<sup>5</sup>@none of these@0010
55. The exponential form of 81 is@3<sup>4</sup>@3<sup>3</sup>@3<sup>2</sup>@none of these@1000
56. The exponential form of 125 is@5<sup>4</sup>@5<sup>3</sup>@5<sup>2</sup>@none of these@0100
57. The exponential form of 32 is@2<sup>3</sup>@2<sup>4</sup>@2<sup>5</sup>@none of these@0010
58. The exponential form of 243 is@3<sup>5</sup>@3<sup>4</sup>@3<sup>3</sup>@3<sup>2</sup>@1000
59. The exponential form of 64 is@ 2<sup>5</sup>@2<sup>6</sup>@2<sup>7</sup>@2<sup>8</sup>@0100
60. The exponential form of 625 is@5<sup>2</sup>@5<sup>3</sup>@5<sup>4</sup>@5<sup>5</sup>@0010
61. The exponential form of 1000 is@10<sup>1</sup>@10<sup>2</sup>@10<sup>3</sup>@10<sup>4</sup>@0010
62. The value of (- 2)<sup>3</sup> is@8@-8@16@-16@0100
63. The value of (- 2)<sup>4</sup> is@8@-8@16@-16@0010
64. What is the base in 8<sup>2</sup>?@8@2@6@10@1000
65. What is the exponent in 82?@8@2@16@6@0100
66. (-1)even number =@-1@1@0@none of these@0100
67. (-1)odd number =@-1@1@0@none of these@1000
68. 0 × 10<sup>4</sup> =@0@104@1@none of these@1000
69. If 2<sup>3</sup> × 2<sup>4</sup> = 2?, then ? =@ 3@4@1@7@0001
70. If (- 3)<sup>4</sup> × (-3)<sup>6</sup> = (-3)?, then ? =@4@10@6@12@0100
71. 2<sup>7</sup> ÷ 2<sup>3</sup> =@ 2<sup>4</sup>@2<sup>10</sup>@2@1<sup>2</sup>@1000
72. 10<sup>6</sup> ÷ 10<sup>5</sup> =@10<sup>1</sup>@10<sup>5</sup>@10<sup>6</sup>@10<sup>11</sup>@1000
73. b × b × b × b × b =@ b<sup>5</sup>@b<sup>4</sup>@b<sup>6</sup>@b<sup>3</sup>@1000
74. (-5)<sup>4</sup> =@ 125@625@375@125@0100
75. a<sup>m</sup> × a<sup>n =</sup>@ a<sup>m+n</sup>@a<sup>m-n</sup>@a<sup>mn</sup>@a<sup>m/n</sup>@1000
76. am ÷ an =@ am+n@am-n@amn@am/n@0100
77. (2<sup>2</sup>)<sup>3</sup> =@2<sup>2</sup>@2<sup>3</sup>@2<sup>1</sup>@2<sup>6</sup>@0001
78. (5<sup>2</sup>)<sup>10</sup> =@ 5<sup>2</sup>@5<sup>20`</sup>@5<sup>10</sup>@5<sup>5</sup>@0100
79. (a<sup>m</sup>)<sup>n</sup> =@a<sup>m+n</sup>@a<sup>m-n</sup>@a<sup>mn</sup>@a<sup>m/n</sup>@1000
80. If a is any non-zero integer, then a<sup>°</sup> =@ a@0@1@none of these@0010
81. .3° =@0@1@3@none of these@0100
82. 3° × 4° × 5° =@1@3@4@5@1000
83. (2° + 3°) × 4° =@1@2@3@4@0100
84. 3° + 4° + 5° =@1@2@3@none of these@0010
85. Which of the following is true?@2° = (100)° @10<sup>2</sup> × 10<sup>8</sup> = 10<sup>16</sup>@2<sup>2</sup> × 3<sup>3</sup> = 6<sup>5</sup>@2<sup>3</sup>>3<sup>2</sup>@1000
86. (2<sup>2</sup> × 2)<sup>2</sup> =@ 2<sup>3</sup>@2<sup>4</sup>@2<sup>5</sup>@2<sup>6</sup>@0001
87. <img src="87\_Q.gif" >@1@3@5@8@1000
88. (a<sup>4</sup>a<sup>2</sup>×a<sup>3=</sup>)@a<sup>4</sup>@a<sup>5</sup>@a<sup>6</sup>@a<sup>8</sup>@0100
89. 82 ÷ 24 =@ 1@2@3@4@0001
90. (-2a)<sup>3</sup> =@ 2a<sup>3</sup>@4a<sup>3</sup>@8a<sup>3</sup>@-8a<sup>3</sup>@0001
91. am ÷ b<sup>m =</sup>@ a<sup>m</sup>b<sup>m</sup>@(a/b)<sup>m</sup>@ab@1@0100
92. (ab)<sup>m =</sup>@ a<sup>m</sup>b<sup>m</sup>@a<sup>m</sup>b@ab<sup>m</sup>@ab@1000
93. 333 in standard form is@3.33 × 10<sup>2</sup>@3.33 × 10<sup>3</sup>@3.33 × 10<sup>1</sup>@3.33 × 10<sup>4</sup>@1000
94. 6000 in standard form is@6 × 10<sup>3</sup>@6 × 10<sup>6</sup>@6 × 10<sup>4</sup>@6 × 10<sup>5</sup>@1000
95. 3430000 in standard form is@3.43 × 10<sup>6</sup>@3.43 × 10<sup>4</sup>@3.43 × 10<sup>2</sup>@3.43 × 10<sup>10</sup>@1000
96. 1353000000 in standard form is@1.353 × 109@1.353 × 106@1.353 × 103@1.353 × 1012
97. @1000
98. 100000000000 in standard form is@1 × 10<sup>8</sup>@1 × 10<sup>9</sup>@1 × 10<sup>10</sup>@1 × 10<sup>11</sup>@0001
99. 5<sup>3</sup>+5<sup>3</sup>+5<sup>3</sup>+5<sup>3</sup>+5<sup>3</sup>is equal to@ 5<sup>4</sup>@ 55555<sup>3</sup>@5<sup>5</sup>@None of these@1000
100. <img src="99\_Q.gif" >@81/4@5/9@9/5@4/81@0010
     1. What is the value of (1° × 2°)×5<sup>2</sup>?@25@0 @−25@1@1000