Placement Classes

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AMCAT APTITUDE QUESTIONS

SET - 2

Question 1 :- Choose the correct answer. Four bells begin to toll together and then each one at intervals of 6 s, 7 s, 8 s and 9 s respectively. The number of times they will toll together in the next 2 hr is:

Option 1 : 14 times

Option 2 : 15 times

Option 3 : 13 times

Option 4 : 11 times

Answer :- A

Question 2 :- Choose the correct answer. The product of two numbers is 16200. If their LCM is 216, find their HCF.

Option 1 : 75

Option 2 : 70

Option 3 : 80

Option 4 : Data inconsistent

Answer :- A

Question 3 :- Choose the correct answer. There are four prime numbers written in ascending order of magnitude. The product of first three is 385 and that of last three is 1001. Find the first number.

Option 1 : 5

Option 2 : 7

Option 3 : 11

Option 4 : 17

Answer :- A

Question 4 :- Choose the correct answer. M and N are two distinct natural numbers. HCF and LCM of M and N are K and L respectively. A is also a natural number, which of the following relations is not possible?

Option 1 : K*L=A

Option 2 : K*A=L

Option 3 : L*A=K

Option 4 : None of these

Answer :- C

Question 5 :- Choose the correct answer. On dividing a number by 999,the quotient is 366 and the remainder is 103.The number is:

Option 1 : 364724

Option 2 : 365387

Option 3 : 365737

Option 4 : 366757

Answer :- C

Question 6 :- Choose the correct answer. The difference between two numbers is 1365.When the larger number is divided by the smaller one ,the quotient is 6 and the remainder is 15.The smaller number is:

Option 1 : 240

Option 2 : 270

Option 3 : 295

Option 4 : 360

Answer :- B

Question 7 :- Choose the correct answer. The ratio of two numbers is 3:4 and their HCF is 4.Their LCM is:

Option 1 : 12

Option 2 : 16

Option 3 : 24

Option 4 : 48

Answer :- D

Question 8 :- Choose the correct answer. A rectangular courtyard 3.78 meters long and 5.25 meters wide is to be paved exactly with square tiles ,all of the same size. What is the largest size of the tile which could be used for the purpose?

Option 1 : 14 cm

Option 2 : 21 cm

Option 3 : 42 cm

Option 4 : None of these

Answer :- B

Question 9 :- Choose the correct answer. The least perfect square which is divisible by 3, 4, 5, 6, 8 is:

Option 1 : 900

Option 2 : 1200

Option 3 : 2500

Option 4 : 3600

Answer :- D

Question 10 :- Choose the correct answer. What will be obtained if 8 is subtracted from the HCF of 168, 189, and 231?

Option 1 : 15

Option 2 : 10

Option 3 : 21

Option 4 : None of these

Answer :- D

Question 11 :- Choose the correct answer. The largest four digit number which is a multiple of 8, 10,12 and 15 is:

Option 1 : 120

Option 2 : 9600

Option 3 : 9840

Option 4 : 9960

Answer :- D

Question 12 :- Choose the correct answer. If logx (0.1) = -1/3, then the value of x is:

Option 1 : 10

Option 2 : 100

Option 3 : 1000

Option 4 : 1/1000

Answer :- C

Question 13 :- Choose the correct answer. If ax = by, then:

Option 1 : log(a/b) = x/y

Option 2 : log(a) / log(b) = x/y

Option 3 : log(a) / log(b) = y/x

Option 4 : None of these

Answer :- C

Question 14 :- Choose the correct answer. If log8 x + log8 (1/6) = 1/3 then the value of x is:

Option 1 : 12

Option 2 : 16

Option 3 : 18

Option 4 : 24

Answer :- A

Question 15 :- Choose the correct answer. If log x + log y = log (x + y), then:

Option 1 : x = y

Option 2 : xy=1

Option 3 : y = (x-1)/x

Option 4 : y = x/(x-1)

Answer :- D

Question 16 :- Choose the correct answer. If log10 7 = a, then log10(1/70) is equal to:

Option 1 : -(1 + a)

Option 2 : (1 + a)-1

Option 3 : a/10

Option 4 : 1/10a

Answer :- A

Question 17 :- Choose the correct answer. If log{(a+b)/3} = 0.5(log a + log b), then the correct relation between a and b is:

Option 1 : a2+b2 = 7ab

Option 2 : a2-b2 = 7ab

Option 3 : (a+b)2 = 2

Option 4 : (a+b)/3 = (1/2)(a+b)

Option 5 : None of these

Answer :- A

Question 18 :- Choose the correct answer. If log x = log 3 + 2 log 2- (3/4) log 16. The value of x is:

Option 1 : 1/2

Option 2 : 1

Option 3 : 3/2

Option 4 : 2

Option 5 : None of these

Answer :- C

Question 19 :- Choose the correct answer. If log x =(1/2) log y = (1/5) log z, the value of x4y3z-2 is:

Option 1 : 0

Option 2 : 1

Option 3 : 2

Option 4 : 3

Option 5 : None of these

Answer :- B

Question 20 :- Choose the correct answer. If log10000 x = -1/4, then x is given by:

Option 1 : 1/100

Option 2 : 1/10

Option 3 : 1/20

Option 4 : none of these

Answer :- B

Question 21 :- Choose the correct answer. The value of 3-1/2 log3(9) is:

Option 1 : 3

Option 2 : 1/3

Option 3 : 2/3

Option 4 : none of these

Answer :- B

Question 22 :- Choose the correct answer. loge xy - loge |x| equals to:

Option 1 : loge x

Option 2 : loge |x|

Option 3 : - loge x

Option 4 : none of these

Answer :- D

Question 23 :- Choose the correct answer. The value of (loga n) / (logab n) is given by:

Option 1 : 1 + loga b

Option 2 : 1 + logb a

Option 3 : loga b

Option 4 : logb a

Answer :- A

Question 24 :- Choose the correct answer. If (a4 - 2a2b2 + b4)x-1 = (a-b)2x (a+b)-2, then x equals to:

Option 1 : (a - b) / (a + b)

Option 2 : log (a2 - b2)

Option 3 : log (a + b) / log (a - b)

Option 4 : log (a - b) / log (a + b)

Answer :- D

Question 25 :- Choose the correct answer. If a, b, and c are in geometric progression then loga n, logb n and logc n are in:

Option 1 : AP

Option 2 : GP

Option 3 : HP

Option 4 : None of these

Answer :- C

Question 26 :- Choose the correct answer. What is the value of antilog10100?

Option 1 : 2

Option 2 : 10100

Option 3 : 100

Option 4 : 10

Answer :- B

Question 27 :- Choose the correct answer. If antilog x 5 = 30, what can you infer

about x?

Option 1 : x is a number between 1 and 2

Option 2 : x is 305

Option 3 : x is a number between 2 and 3

Option 4 : None of these

Answer :- A

Question 28 :- Choose the correct answer. Every time x is increased by a given constant number, y doubles and z becomes three times. How will log(y) and log(z) behave as x is increased by the same constant number?

Option 1 : Both will grow linearly with different slopes

Option 2 : Both will grow linearly with same slopes

Option 3 : y will grow linearly, while z will not

Option 4 : z will grow linearly, while y will not

Answer :- A

Question 29 :- Choose the correct answer. x triples every second. How will log2x change every second?

Option 1 : It will double every second

Option 2 : It will triple every second

Option 3 : It increases by a constant amount every second.

Option 4 : None of these

Answer :- C

Question 30 :- Choose the correct answer. f(x) grows exponentially with x, how will f(log(x)) grow?

Option 1 : Exponentially

Option 2 : Linearly

Option 3 : Quadratically

Option 4 : None of these

Answer :- B

Question 31 :- Choose the correct answer. What is the value of log512 8?

Option 1 : 3

Option 2 : 1/3

Option 3 : -3

Option 4 : -1/3

Answer :- B

Question 32 :- Choose the correct answer. What is the value of log7 (1/49)?

Option 1 : 2

Option 2 : 1/2

Option 3 : -1/2

Option 4 : -2

Answer :- D

Question 33 :- Choose the correct answer. Given that log64 x = 2/6, what is the value of x?

Option 1 : 2

Option 2 : 4

Option 3 : 6

Option 4 : 8

Answer :- B

Question 34 :- Choose the correct answer. If 7x = 85, what is the value of x?

Option 1 : log785

Option 2 : log857

Option 3 : log107

Option 4 : log1085

Answer :- A

Question 35 :- Choose the correct answer. If log102 = 0.3010, what is the number of digits in 264

Option 1 : 19

Option 2 : 20

Option 3 : 18

Option 4 : None of these

Answer :- B

Question 36 :- Choose the correct answer. What is log110?

Option 1 : 1

Option 2 : 10

Option 3 : 0

Option 4 : Tends to infinity

Answer :- D

Question 37 :- Choose the correct answer. What is log100 ?

Option 1 : 0

Option 2 : 10

Option 3 : 1

Option 4 : Not defined

Answer :- D

Question 38 :- Choose the correct answer. What is the value of log3 (-9)?

Option 1 : 3

Option 2 : 1/3

Option 3 : -3

Option 4 : Not defined

Answer :- D

Question 39 :- Choose the correct answer. Rajeev multiplies a number by 10, the log (to base 10) of this number will change in what way?

Option 1 : Increase by 10

Option 2 : Increase by 1

Option 3 : Multiplied by 10

Option 4 : None of these

Answer :- B

Question 40 :- Choose the correct answer. The logarithm of a very small positive number will tend to which of the following?

Option 1 : 0

Option 2 : negative infinity

Option 3 : positive infinity

Option 4 : 1

Answer :- B

Question 41 :- Choose the correct answer. If n numbers are in geometric progression, the logarithm of the number will be in which of the following?

Option 1 : Geometric Progression

Option 2 : Arithmetic Progression

Option 3 : Harmonic Progression

Option 4 : None of these

Answer :- B

Question 42 :- Choose the correct answer. Which of the following is equivalent to log(a + b) ?

Option 1 : log a + log b

Option 2 : log a * log b

Option 3 : log a - log b

Option 4 : None of these

Answer :- D

Question 43 :- Choose the correct answer. What is the value of log3 (1/9) + log 9 81 ?

Option 1 : 2

Option 2 : -2

Option 3 : 0

Option 4 : 4

Answer :- C

Question 44 :- Choose the correct answer. What is the value of log3 1.5 + log3 6 ?

Option 1 : 2

Option 2 : 2.7

Option 3 : 1.8

Option 4 : None of these

Answer :- A

Question 45 :- Choose the correct answer. Which of the following is log8 x equivalent to?

Option 1 : log2 (x/3)

Option 2 : log2 (3x)

Option 3 : (log2x)/ 3

Option 4 : None of these

Answer :- C

Question 46 :- Choose the correct answer. If n numbers are in arithmetic progression, the logarithm of the number will be in which of the following?

Option 1 : Exponentially

Option 2 : Linearly

Option 3 : Quadratically

Option 4 : None of these

Answer :- D

Question 47 :- Choose the correct answer. What is the value of log20 1 ?

Option 1 : 0

Option 2 : 1

Option 3 : 20

Option 4 : None of these

Answer :- A

Question 48 :- Choose the correct answer. The unit's digit in the product (771 x 659 x 365) is

Option 1 : 1

Option 2 : 2

Option 3 : 4

Option 4 : 6

Answer :- C

Question 49 :- Choose the correct answer. 1.52 * 0.02251/2 = ?

Option 1 : 0.0375

Option 2 : 0.3375

Option 3 : 3.275

Option 4 : 32.75

Answer :- B

Question 50 :- Choose the correct answer. If x1/2 / 4411/2 = 0.02, the value of x is:

Option 1 : 0.1764

Option 2 : 1.764

Option 3 : 1.64

Option 4 : 2.64

Answer :- A