



Placement Classes

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AMCAT APTITUDE QUESTIONS

SET - 4

Question 1 :- Choose the correct answer.

A sells a bicycle to B at a profit of 20%. B sells it to C at a profit of 25%. If C pays Rs. 225 for it, the cost price of the bicycle for A is:

Option 1 : Rs. 110

Option 2 : Rs.120

Option 3 : Rs. 125

Option 4 : Rs. 150

Answer :- D

Question 2 :- Choose the correct answer.

If 5% more is gained by selling an article for Rs. 350 than by selling it for Rs. 340, the cost of the article is:

Option 1 : Rs. 50

Option 2 : Rs. 160

Option 3 : Rs. 200

Option 4 : Rs. 225

Answer :- C

Question 3 :- Choose the correct answer.

Consider the following statements : If a sum of money is lent at simple interest, then the

- 1. Money gets doubled in 5 years if the rate of interest is $50/3$ %.**
- 2. Money gets doubled in 5 years if the rate of interest is 20%.**
- 3. Money becomes**

Option 1 : 1 and 3 are correct

Option 2 : 2 alone is correct

Option 3 : 3 alone is correct

Option 4 : 2 and 3 are correct

Answer :- B

Question 4 :- Choose the correct answer.

The difference between simple interest and compound interest on Rs.1200 for one year at 10% per annum reckoned half-yearly is:

Option 1 : Rs. 2.50

Option 2 : Rs. 3

Option 3 : Rs. 3.75

Option 4 : Rs. 4

Option 5 : None of these

Answer :- B

Question 5 :- Choose the correct answer.

A sum of money lent at compound interest for 2 years at 20% per annum would fetch Rs. 482 more, if the interest was payable half-yearly than if it was payable annually. The sum is:

Option 1 : Rs. 10,000

Option 2 : Rs. 20,000

Option 3 : Rs. 40,000

Option 4 : Rs. 50,000

Answer :- B

Question 6 :- Choose the correct answer.

The simple interest on Rs. 10 for 4 months at the rate of 3 paise per rupee per month is:

Option 1 : Rs. 1.20

Option 2 : Rs. 1.60

Option 3 : Rs. 2.40

Option 4 : Rs. 3.60

Answer :- A

Question 7 :- Choose the correct answer.

If the compound interest on a sum for 2 years at $25\frac{1}{2}\%$ per annum is Rs. 510, the simple interest on the same sum at the same rate for the same period of time is:

Option 1 : Rs. 400

Option 2 : Rs. 450

Option 3 : Rs. 460

Option 4 : Rs. 480

Answer :- D

Question 8 :- Choose the correct answer.

I started on my bicycle at 7 a.m. to reach a certain place. After going a certain distance, my bicycle went out of order. Consequently, I rested for 35 minutes and came back to my house walking all the way. I reached my house at 1 p.m. If my cycling s

Option 1 : 4.92 km

Option 2 : 13.44 km

Option 3 : 14.375 km

Option 4 : 15.476 km

Answer :- D

Question 9 :- Choose the correct answer.

A bag contains 10-paisa, 20-paisa and 25-paisa coins in the ratio 7:4:3. If the total value is Rs. 90, the number of 25-paisa coins in the bag is:

Option 1 : 120

Option 2 : 160

Option 3 : 280

Option 4 : 300

Answer :- A

Question 10 :- Choose the correct answer.

Find a whole number such that when one of its digit is erased, the resulting number is equal to one-ninth of the original number. The resulting number is also a multiple of 9.

Option 1 : 90

Option 2 : 83438

Option 3 : 10125

Option 4 : 70847

Answer :- C

Question 11 :- Choose the correct answer.

A ship is moving at a speed of 30 kmph. To know the depth of the ocean beneath it, it sends a radiowave which travels at a speed 200 m/s. The ship receives back the signal after it has moved 500 m. What is the depth of the ocean?

Option 1 : 4 km

Option 2 : 8 km

Option 3 : 6 km

Option 4 : 12 km

Answer :- C

Question 12 :- Choose the correct answer.

In a town the population grows at a simple rate of 10% in a decade and compounds from decade to decade. Find the population at the beginning of the 1970s if the population at the beginning of the 1990s is 3,63,000 people.

Option 1 : 30,000

Option 2 : 3,00,000

Option 3 : 30,00,000

Option 4 : 3,15,000

Answer :- B

Question 13 :- Choose the correct answer.

In approximately how many years will a certain sum of money triple itself at 22% simple interest?

Option 1 : 10 years

Option 2 : 11 years

Option 3 : 9 years

Option 4 : 12 years

Answer :- C

Question 14 :- Choose the correct answer.

A man rows a boat at a speed of 5 km/hr in still water. Find the speed of a river if it takes him 1 hr to row a boat to a place 2.4 km away and return back.

Option 1 : 1 km/hr

Option 2 : 6 km/hr

Option 3 : 3 km/hr

Option 4 : 4 km/hr

Answer :- A

Question 15 :- Choose the correct answer.

A boat covers 40 km upstream and 90 km downstream in 5 hr. It can also cover 60 km upstream and 60 km downstream in 5 hr. The speed of the water current is

Option 1 : 4 km/hr

Option 2 : 5 km/hr

Option 3 : 20 km/hr

Option 4 : 25 km/hr

Answer :- B

Question 16 :- Choose the correct answer.

Two champion swimmers start a two-length swimming race at the same time, but from opposite ends of the pool. They swim at constant but different speeds. They first pass at a point 18.5 m from the deep end. Having completed one length, each swimmer take

- Option 1 : 90 m
- Option 2 : 45 m
- Option 3 : 26.5m
- Option 4 : Data insufficient

Answer :- B

Question 17 :- Choose the correct answer.

A and B start together from the same point on a circular track and walk in the same direction till they both again arrive together at the starting point. A completes one circle in 224 s and B in 364 s. How many times will A have passed B?

- Option 1 : 4
- Option 2 : 5
- Option 3 : 6
- Option 4 : 7

Answer :- B

Question 18 :- Choose the correct answer.

36 men can complete a piece of work in 18 days. In how many days will 27 men complete the same work ?

- Option 1 : 12
- Option 2 : 18
- Option 3 : 22
- Option 4 : 24
- Option 5 : None of these

Answer :- D

Question 19 :- Choose the correct answer.

39 persons can repair a road in 12 days, working 5 hours a day. In how many days will 30 persons, working 6 hours a day, complete the work ?

- Option 1 : 10
- Option 2 : 13
- Option 3 : 14

Option 4 : 15

Answer :- B

Question 20 :- Choose the correct answer.

If 7 spiders make 7 webs in 7 days, then 1 spider will make 1 web in how many days ?

Option 1 : 1

Option 2 : $7/2$

Option 3 : 7

Option 4 : 49

Answer :- C

Question 21 :- Choose the correct answer.

Some persons can do a piece of work in 12 days. Two times the number of such persons will do half of that work in:

Option 1 : 6 days

Option 2 : 4 days

Option 3 : 3 days

Option 4 : 12 days

Answer :- C

Question 22 :- Choose the correct answer.

Ronald and Elan are working on an assignment. Ronald takes 6 hours to type 32 pages on a computer, while Elan takes 5 hours to type 40 pages. How much time will they take, working together on two different computers to type an assignment of 110 pages ?

Option 1 : 7 hours 30 minutes

Option 2 : 8 hours

Option 3 : 8 hours 15 minutes

Option 4 : 8 hours 25 minutes

Answer :- C

Question 23 :- Choose the correct answer.

A and B can do a work in 12 days, B and C in 15 days, C and A in 20 days. If A, B and C work together, they will complete the work in:

Option 1 : 5 days

Option 2 : $47/6$ days

Option 3 : 10 days

Option 4 : $47/3$ days

Answer :- C

Question 24 :- Choose the correct answer.

A and B can do a job together in 7 days. A is $7/4$ times as efficient as B. The same job can be done by A alone in:

Option 1 : $28/3$ days

Option 2 : 11 days

Option 3 : $49/4$ days

Option 4 : $49/3$ days

Answer :- B

Question 25 :- Choose the correct answer.

A and B can complete a work in 15 days and 10 days respectively. They started doing the work together but after 2 days B had to leave and A alone completed the remaining work. The whole work was completed in:

Option 1 : 8 days

Option 2 : 10 days

Option 3 : 12 days

Option 4 : 15 days

Answer :- C

Question 26 :- Choose the correct answer.

A, B and C together can complete a piece of work in 10 days. All the three started working at it together and after 4 days A left. Then B and C together completed the work in 10 more days. A alone could complete the work in:

Option 1 : 15 days

Option 2 : 16 days

Option 3 : 25 days

Option 4 : 50 days

Answer :- C

Question 27 :- Choose the correct answer.

One pipe can fill a tank three times as fast as another pipe. If together the two pipes can fill the tank in 36 minutes, then the slower pipe alone will be able to fill the tank in:

Option 1 : 81 min

Option 2 : 108 min

Option 3 : 144 min

Option 4 : 192 min

Answer :- C

Question 28 :- Choose the correct answer.

A large tanker can be filled by two pipes A and B in 60 minutes and 40 minutes respectively. How many minutes will it take to fill the tanker from empty state if B is used for half the time and A and B fill it together for the other half ?

Option 1 : 15 min

Option 2 : 20 min

Option 3 : 27.5 min

Option 4 : 30 min

Answer :- D

Question 29 :- Choose the correct answer.

Three taps A, B and C can fill a tank in 12, 15 and 20 hours respectively. If A is open all the time and B and C are open for one hour each alternately, the tank will be full in:

Option 1 : 6 hrs.

Option 2 : $20/3$ hrs

Option 3 : 7 hrs

Option 4 : $15/2$ hrs

Answer :- C

Question 30 :- Choose the correct answer.

Two pipes can fill a tank in 20 and 24 minutes respectively and a waste pipe can empty 3 gallons per minute. All the three pipes working together can fill the tank in 15 minutes. The capacity of the tank is:

- Option 1 : 60 gallons
- Option 2 : 100 gallons
- Option 3 : 120 gallons
- Option 4 : 180 gallons

Answer :- C

Question 31 :- Choose the correct answer.

If 33 untrained labourers can do a work in 15 days of 12 hr. each, how many trained labourers can do 50% more work in 11 days of 9 hr each ? (It may be assumed that it takes 2 trained labourers to do the work of 5 untrained labourers)

- Option 1 : 42
- Option 2 : 36
- Option 3 : 90
- Option 4 : 100

Answer :- B

Question 32 :- Choose the correct answer.

Which of the following fractions is less than $\frac{7}{8}$ and greater than $\frac{1}{3}$?

- Option 1 : $\frac{1}{4}$
- Option 2 : $\frac{23}{24}$
- Option 3 : $\frac{11}{12}$
- Option 4 : $\frac{11}{24}$

Answer :- D

Question 33 :- Choose the correct answer.

$$892.7 - 573.07 - 95.007 = ?$$

- Option 1 : 224.623
- Option 2 : 224.777
- Option 3 : 233.523
- Option 4 : 414.637

Answer :- A

Question 34 :- Choose the correct answer.

Which is the closest approximation to the product $0.3333 \times 0.25 \times 0.499 \times 0.125 \times 24$?

Option 1 : $1/8$

Option 2 : $3/4$

Option 3 : $3/8$

Option 4 : $2/5$

Answer :- A

Question 35 :- Choose the correct answer.

Find the value of X : $0.009/X = 0.01$

Option 1 : 0.0009

Option 2 : 0.09

Option 3 : 0.9

Option 4 : 9

Answer :- C

Question 36 :- Choose the correct answer.

The least among the following is:

Option 1 : 0.2

Option 2 : $1/0.2$

Option 3 : 0.22222222

Option 4 : $(0.2)^2$

Answer :- D

Question 37 :- Choose the correct answer.

In the following expression, there are two missing digits: * and #. Find the value of *.

$$1*5\#4 / 148 = 78$$

Option 1 : 1

Option 2 : 4

Option 3 : 6

Option 4 : 8

Option 5 : None of these

Answer :- A

Question 38 :- Choose the correct answer.

What is the value of $(-5)(4)(2)(-1/2)(3/4)$?

Option 1 : -30

Option 2 : -15

Option 3 : 15

Option 4 : 30

Answer :- C

Question 39 :- Choose the correct answer.

If $x * y = x^2 + y^2 - xy$, then the value of $9 * 11$ is:

Option 1 : 93

Option 2 : 103

Option 3 : 113

Option 4 : 121

Answer :- B

Question 40 :- Choose the correct answer.

If $a = 0.1039$, then the value of $(4a^2 - 4a + 1)^{1/2} + 3a$ is:

Option 1 : 0.1039

Option 2 : 0.2078

Option 3 : 1.1039

Option 4 : 2.1039

Answer :- C

Question 41 :- Choose the correct answer.

$(1.0816)^{1/2} = ?$

Option 1 : 0.14

Option 2 : 1.4

Option 3 : 1.004

Option 4 : 1.04

Answer :- D

Question 42 :- Choose the correct answer.

If the digit in the units place of a square natural number is 6, then the digit in the tens place will be:

Option 1 : 1

Option 2 : 3

Option 3 : Even

Option 4 : Odd

Answer :- D

Question 43 :- Choose the correct answer.

$(a+b)^3 - (a-b)^3$ can be factorized as:

Option 1 : $2b(3a^2 + b^2)$

Option 2 : $2a(3a^2 + b^2)$

Option 3 : $2b(3b^2 + a^2)$

Option 4 : $2a(a^2 + 3b^2)$

Answer :- A

Question 44 :- Choose the correct answer.

If $9x^2 + 3px + 6q$ when divide by $3x + 1$ leaves a remainder $-3/4$ and $qx^2 + 4px + 7$ is exactly divisible by $x + 1$, then the values of p and q respectively will be:

Option 1 : 0, $7/4$

Option 2 : $-7/4$, 0

Option 3 : Same

Option 4 : $7/4$, 0

Answer :- D

Question 45 :- Choose the correct answer.

The equations $2x + 3y - 7 = 0$ and $10x + 15y - 35 = 0$ are:

Option 1 : Consistent and have unique solution

Option 2 : Consistent and have infinitely many solutions

Option 3 : inconsistent

Option 4 : none of these

Answer :- B

Question 46 :- Choose the correct answer.

The solution of the simultaneous equations $(1/2)x + (1/3)y = 2$ and $x+y=1$ is:

Option 1 : $x = 0, y = 1$

Option 2 : $x = 1, y = 0$

Option 3 : $x = 2/3, y = 3/2$

Option 4 : $x = 10, y = -9$

Answer :- D

Question 47 :- Choose the correct answer.

If the equation $x^2 - 2(k+1)x + (9/2)k = 0$ has two identical roots then the values of k are:

Option 1 : $k=1, 2$

Option 2 : $k=2$ or $1/2$

Option 3 : $k=3, 1/2$

Option 4 : none of these

Answer :- B

Question 48 :- Choose the correct answer.

The number which should be subtracted from $5a^2 - 3ab + 7b^2$ to make it equal to $a^2 + ab + b^2$, is:

Option 1 : $4a^2 - 4ab + 6b^2$

Option 2 : $4a^2 - 4ab + 5b^2$

Option 3 : $4a^2 + 4ab + 6b^2$

Option 4 : $4a^2 - 3ab + 6b^2$

Option 5 : None of these

Answer :- A

Question 49 :- Choose the correct answer.

If $x = (1/2)(2p+2q-r)$, $y = (1/3)(-p-2q+3r)$ and $z = (1/5)(3p-4r+5q)$, then the value of $2x-3y-5z$ is:

Option 1 : 0

Option 2 : -q

Option 3 : 2

Option 4 : None of these

Answer :- C

Question 50 :- Choose the correct answer.

The roots of the quadratic equation $6x^2 - 5x + 1 = 0$ are:

Option 1 : 2,3

Option 2 : $\frac{1}{2}, \frac{1}{3}$

Option 3 : 3,4

Option 4 : $\frac{1}{3}, \frac{1}{4}$

Option 5 : None of these

Answer :- B