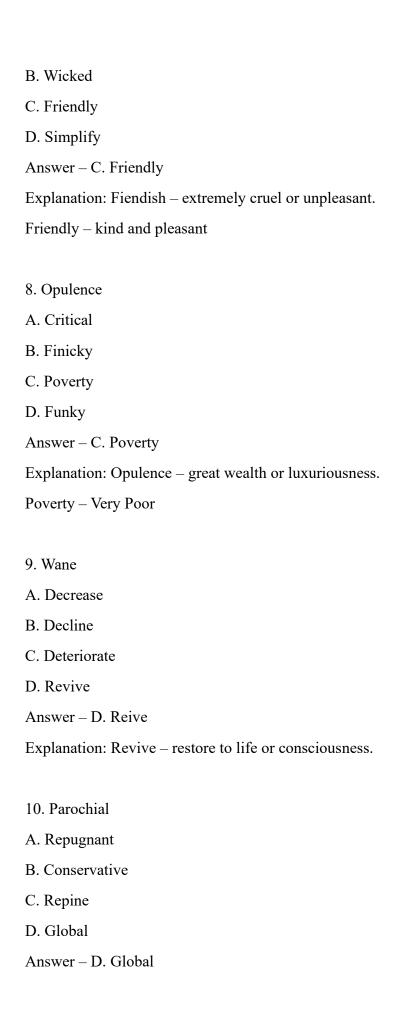# IBM Aptitude & Reasoning

Directions (Q 1 – 5): Choose the Synonyms of the following words

1. Imposture

A. Charlatan

B. Deception

C. Commensurate

D. Claim

Answer – A. Charlatan

Explanation:

Imposture – An instance of pretending to be someone else in order to deceive others.

2. Predilection

A. Ignorance

B. Antipathy

C. Preference

D. Procrastination

Answer – C. Preference

Explanation:

Predilection – a preference or special liking for something; a bias in favor of something.

3. Sacrosanct

A. Indifferent

B. Voluble

C. Ineffable

D. Inviolable

Answer – D. Inviolable

Explanation:

Sacrosanct – something which is regarded as too important or valuable to be interfered with.

4. Eccentric

A. Usual

B. Introvert

C. Extraordinary

D. Unconventional

Answer – D. Unconventional

Explanation:

Eccentric – unconventional or slightly strange often relating to a person's behavior

5. Predilection

A. Ignorance

B. Dissonance

C. Antipathy

D. Preference

Answer – D. Preference

Explanation:

Predilection – a preference or special liking for something; a bias in favor of something

Directions (Q 6 – 10): Choose the Antonyms of the following words

6. Veteran

A. Novice

B. Bounteous

C. Exuberant

D. Modernistic

Answer – A. Novice

Explanation: Veteran – a person who has had long experience in a particular field. where

Novice – a person new to and inexperienced in a job or situation.

7. Fiendish

A. Illiberal

B. Wicked

C. Friendly

D. Simplify

Answer – C. Friendly

Explanation: Fiendish – extremely cruel or unpleasant.

Friendly – kind and pleasant

8. Opulence

A. Critical

B. Finicky

C. Poverty

D. Funky

Answer – C. Poverty

Explanation: Opulence – great wealth or luxuriousness.

Poverty – Very Poor

9. Wane

A. Decrease

B. Decline

C. Deteriorate

D. Revive

Answer – D. Reive

Explanation: Revive – restore to life or consciousness.

10. Parochial

A. Repugnant

B. Conservative

C. Repine

D. Global

Answer – D. Global

Explanation: Parochial – having a limited or narrow outlook or scope.

Global – relating to the whole world; worldwide.

Questions (11 – 15): Choose the correct option and Fill in the Blanks

11. We are now trying to repurpose that suitcase, so that it can also enable the diagnosis of_____fever and tuberculosis, further revolutionizing disease_____in poor and rural communities.

A. typhoid, surveillance

B. detract, durable

C. utter, inactive

D. diminish, lethargic

Answer – A. typhoid, surveillance

Explanation:

typhoid – an infectious bacterial fever with an eruption of red spots on the chest and abdomen and severe intestinal irritation.

surveillance – close observation, especially of a suspected spy or criminal.

12. In the last one decade, along with many other_____ laws of colonial_____ , it has become extremely popular with our rulers.

A. disclaimer, friction

B. obedience, deviation

C. probity, an invention

D. draconian, vintage

Answer – D. draconian, vintage

Explanation:

draconian – excessively harsh and severe.

vintage – the year or place in which wine, especially wine of high quality, was produced.

13. When the legal process itself becomes the _____, the slapping of sedition charges is an attempt to browbeat the protesters into _____.

A. disavowal, defiance

B. punishment, submission

C. allegiance, combat

D. fidelity, contention

Answer – B. punishment, submission

Explanation:

punishment – the infliction or imposition of a penalty as retribution for an offense.

submission – the action of accepting or yielding to a superior force or to the will or authority of another person.

14. The _____ of the Army in just about any political debate and its projection as the ideal to which every citizen should aspire towards is also an attempt to regiment the citizenry on the same _____ lines.

A. resolution, unexpurgated

B. integrity, unabridged

C. conscientiousness, plenary

D. invocation, hierarchical

Answer – D. invocation, hierarchical

Explanation:

invocation – the action of invoking someone or something.

hierarchical – of the nature of a hierarchy; arranged in order of rank.

15. While the general methodology has become part of_____economics, it is mostly_____to academic research.

A. heterodox, incuriousness

B. equivocal, lassitude

C. ambiguous, indifference

D. orthodox, confined

Answer – D. orthodox, confined

Explanation:

orthodox – following or conforming to the traditional or generally accepted rules or beliefs of a religion, philosophy, or practice.

confined – restricted in area or volume; cramped.

Directions (Q 16 – 18): Choose the best option in the place of bold words for the purpose of Sentence Correction

16. He stared at the front, but got tired and dropped after as the race went on.

A. drop with

B. drop back

C. drop away

D. No correction required.

Answer – B. Drop back

Explanation: drop back is nothing but move towards the back of a group.

17. If I could chip on, there are a couple of issues I'd like to raise.

A. chip of

B. chip up

C. chip in

D. No correction required.

Answer – C. chip in

Explanation: Chip in – Contribute to a discussion.

18. The lecture was boring and my mind wandered off after ten minutes.

A. Waltz through

B. Wash down

C. wandered off

D. No correction required.

Answer – C. wandered off

Explanation: Wander off – Stop paying attention.

Directions (Q 19 – 20) Find the meaning of the bold words in the sentence

19. The moorland is devoid of interest except to grazing sheep.

A.sinker

B. plenary

C. replete

D. lacking

Answer – C. lacking

Explanation: devoid – entirely lacking or free from.

20. This zoogeographical realm includes Africa south of the Atlas Mountains.

A. province

B. alfresco

C. cognigent

D. farthest

Answer – A. province

Explanation: realm – a kingdom.

Directions (Q 21 -22) Choose the pair that best represents a similar relationship to the one expressed in the original pair of words

21. PASTORAL: RURAL

A. metropolitan: urban

B. harvest: autumn

C. agrarian: benevolent

D. sleepy: nocturnal

Answer – A. metropolitan: urban

Explanation: Pastoral describes rural areas; metropolitan describes urban areas.

22. TAILOR: SUIT

A. edit: manuscript

B. scheme: agent

C. revise: writer

D. mention: opinion

Answer – A. edit: manuscript

Explanation: To tailor a suit is to alter it; to edit a manuscript is to alter it.

23. Solve 1781.90÷54.20 + 456.13 – 2345.80 *0.98 = ? * 2

A. 988

B. -876

C. -928

D. -675

E.None of these

Answer – C. -928

Explanation:

Let's take round figure value, then the simplification is

1782÷54+456-2345*1

= 33+456-2345

= -1856/2 = -928

24. Solve 24.95% of 797.07 ÷ 19.05 = 54.88 – ?

A. 36

B. 47

C. 63

D. 45

E. None of these

Answer – D. 45

Explanation:

25% of 800 ÷ 20 = 25*800/100*20

= 10

55-45 = 10

Therefore, forgetting value as a 10 the number should be ' 45 '

25. The average expenditure of Sharma for January to June is Rs. 4200 and he spent Rs. 1200 in January and Rs.1500 in July. The average expenditure for the months of February to July is:

A. 4250

B. 4500

C. 3500

D. 2750

E. 3250

Answer – A. 4250

Explanation:

Given

The expenditure between January to June = 4200 * 6 = 25200

The expenditure between February to June = 25200 – 1200 = 24000

Therefore, The expenditure between February to July = 24000 + 1500 = 25500/6 = 4250

26. A jar containing 60litres of the mixture of milk and water. The respective ratio of milk and water in the ratio 7:5. From the jar 12litres of the mixture was taken out and 6 liters of pure milk was added. What is the respective ratio of milk and water after the final operation?

A. 12:17

B. 13:19

C. 9:7

D. 17:10

E. None of these

Answer – D. 17:10

Explanation:

7x+5x = 60

Milk = 35litres, water = 25litres

10litres of mixture taken out

Milk = 35-12(7/12) = 35-7 = 28

Water = 25-12(5/12) = 25-5 = 20

28+6 : 20 = 34:20 = 17:10

Therefore, the ratio of Milk and Water after the final operation is 17:10

27. Two varieties of juice are mixed in the ratio of 4:5. The price of 1st variety juice is Rs.14 per liter while the second variety is Rs.17 per liter. Find the average price of the mixture?

A. Rs.15.03

B. Rs.15.67

C. Rs.16.78

D. Rs.17.43

E. None of these

Answer – B. Rs.15.67

Explanation:

Let we assume x = avg price

x-14/17-x = 5/4

4x-56 = 85-5x

5x+4x = 85+56 = 141

9x = 141

x = 141/9 = 15.67

Hence, The average price of the mixture is Rs.15.67

28. Venkat lends Rs 30,000 of two of his friends. He gives Rs 15,000 to the first at 6% p.a. simple interest. He wants to make a profit of 10% on the whole. The simple interest rate at which he should lend the remaining sum of money to the second friend is

A. 16%

B. 12%

C. 14%

D. 8%

E. None of the Above

Answer – C. 14%

Explanation:

The Simple Intrest on Rs 15000

=(15000×6×1)/100 = Rs. 900

Profit to made on Rs 30000

= 30000×10/100=Rs 3000

S.I.on Rs.15000 = 3000-900 = Rs.2100

Rate=(S.I.* 100)/(P * T)=(2100×100)/15000

=14% per annum

Therefore, the simple interest rate at which he should lend the remaining sum of money to the second friend is 14%.

29. Mahesh lends 40% of his money at 15% per annum, 50% of the rest at 10% per annum and the rest at 18% per annum rate of interest. What would be the annual rate of interest, if the interest is calculated on the whole sum?

A. 14.4%

B. 16.5%

C. 18.5%

D. 19.5%

E. None of the Above

Answer – A. 14.4%

Explanation:

x – (40/100)*x = 60x/100

40/100 at 15% p.a = 40/100 * 15/100 = 60x/1000

50/100*60x/100 = 30x/100 at 10% p.a = 30x/100 * 10/100 = 30x/1000

Balance amount = x – 40x/100 – 30x/100 = 30x/100 at 18% p.a = 18/100 * 30x/100 = 54x/1000

R = [(144x/1000)/x] * 100 = 14.4%

Therefore, the annual rate of interst is 14.4%.

30. Find the 4-digit smallest number which when divided by 12, 15, 25, 30 leaves no remainder?

A. 1800

B. 1020

C. 1120

D. 1200

E. None of these

Answer – D. 1200

Explanation:

LCM of 12, 15, 25 and 30 is 300

the least number of 4-digit divided by 300 is 1200

31. A, B, and C can alone complete a work in 10, 12 and 15 days respectively. All started the work but B left the work 3 days before completion. How much work was then done by A and B together in the total work?

A. 2/3

B. 3/4

C. 1/3

D. 3/5

E. 2/5

Answer – A. 2/3

Explanation:

Let us assume that work completed in x days

According to given data A and C worked for all x days and B for (x-3) days. So

(1/10 + 1/15)*x + (1/12)*(x-3) = 1

Solve, x = 5 days

In 5 days, A did 5/10 = 1/2 of work

In (5-3) = 2 days, B did 2/12 = 1/6 of work

So total by A and B = (1/2 + 1/6) = 2/3

Therefore, the total work done by A and B together is 2/3.

32. A sum of money is to be distributed among A, B, C, D in the proportion of 5: 2: 4 : 3. If C gets Rs. 1000 more than D, what is B's share?

A. Rs. 500

B. Rs. 1500

C. Rs. 2000

D. None of these

Answer – C. Rs. 2000

Explanation:

Let we assume that the shares of A, B, C and D be Rs. 5x, Rs. 2x, Rs. 4x and Rs. 3x respectively.

Then, 4x – 3x = 1000

x = 1000.

B's share = Rs. 2x = Rs. (2 x 1000) = Rs. 2000.

Therefore, the share of the B is Rs. 2000.

33. Three pipes A, B and C can fill a cistern in 6 hours. After working at it together for 2 hours, C is closed and A and B can fill the remaining part in 6 hours. The number of hours taken by C alone to fill the cistern is

A. 12 hours

B. 10 hours

C. 18 hours

D. 8 hours

E. None of these

Answer – C. 18 hours

Explanation:

Given that

A+B+C in 1h = 1/6

A+B+C in 2h = 2/6 = 1/3

Remaining = 1-1/3 = 2/3

A+B in 6hrs = 2/3

A+B in 1hr = 2/18

C alone to fill the cistern = 1/6 – 2/18 = 3-2/18 = 1/18

Therefore, the time taken by C alone to fill the cistern was 18 hours.

34. Two pipes A and B can fill a tank in 6 hours and 5 hours respectively. If they are turned on alternatively for 1 hour each, find the time in which the tank is full.

A. 4hrs 30min

B. 5hrs

C. 6hrs 25min

D.5hrs 30min

E. None of these

Answer – D. 5hrs 30min

Explanation:

We assume that pipe A is opened first

Total= 30, A = 30/6 =1/5, B = 30/5 =1/6

In 2 hrs = 5+6 =11

In 4hrs = 22

Remaining = 30-22 =8

1hr Pipe A = 8-5= 3,Remaining B = 3*1/6 = 30min

Therefore, the time taken in order to fill the tank was 5hrs 30min

35. Two pipes P and Q can fill a tank in 20m and 30m respectively. If both the pipes are opened simultaneously, after how much time should Q be closed so that the tank is full in 16 minutes?

A. 12 min

B. 6 min

C. 10 min

D. 7 min

E. None of these

Answer – B. 6 min

Explanation:

X(1/20+1/30) +(16-x)1/20 = 1

5x/60+16-x/20 =1

5x+48-3x/60 =1

2x+48 = 60

2x=12

X=12/2 = 6

Hence it is proved.

36. Veera Reddy sold 10 sarees for a total profit of Rs. 460 and 12 sarees for a total profit of Rs. 144. At what profit per saree should he sell the remaining 20 sarees so that he gets an average profit of Rs. 18 per sarees?

A. Rs 7.10

B. Rs 7.60

C. Rs 7.99

D. Rs 8

Answer – B. Rs 7.60

Explanation:

According to the given data

Total profit required = Rs.(42 x 18) = Rs.756

Profit on 22 sarees = Rs. (460 + 144) = Rs. 604

Profit on 20 sarees = Rs. (756 – 604) = Rs. 152

Average profit on these sarees = Rs.(152/20) = Rs. 7.60.

Hence it is proved.

37. A retailer buys 40 pens at the market price of 36 pens from a wholesaler. If he sells these pens giving a discount of 1%, what is the profit percent?

A. 22%

B. 25%

C. 26%

D. 10%

Answer – D. 10%

Explanation:

Let us assume that the market price of each pen is Rs. 1.

Then, C.P. of 40 pens = Rs. 36.

S.P. of 40 pens = 99% of Rs. 40 = Rs. 39.60.

Therefore, the percentage of profit = [3.60/36 x 100]% = 10%.

Hence it is proved.

38. The numerator of a rational number is 4 less than the denominator. If the numerator is increased by 15 and denominator is decreased by 4, we get 6. Find a rational number?

A. 1/5

B. 2/7

C. 3/7

D. 5/9

E. None of these

Answer – C. 3/7

Explanation:

let the fraction is (p-4)/p

now, (p -4 + 15)/(p-4) = 6

we get p = 7

Therefore, fraction = 3/7

39. Two different numbers, when divided by the same divisor, leaves remainder 7 and 9 respectively. When their sum is divided by the same divisor remainder was 4. Find the divisor?

A. 13

B. 14

C. 11

D. 12

E. None of these

Answer – D. 12

Explanation:

Let first number N1 = D*a + 7

and second number N2 = D*b + 9

N1 + N2 = (a+b)*D + 16

Remainder is 4

Therefore, D will be 12

40. When a number is added to 20 percent of the second number, we get 150 percent of the second number. Find the ratio between the first and second number?

A. 13:9

B. 12:10

C. 13:10

D. 17:10

E. None of these

Answer – C. 13:10

Explanation:

a + (20/100)*b = (150/100)*b

a:b = 13:10

Therefore, the ratio between the first and second number is 13:10.