SRCC GBO 2016

Verbal Ability

Instructions [1 - 5]

Study the passages below and answer the questions that follow each Passage.

Passage I:

The composer Wolfgang Amadeus Mozart's remarkable musical talent was apparent even before most children can sing a simple nursery rhyme. Wolfgang's older sister Maria Anna (who the family called Nannerl) was learning the clavier, an early keyboard instrument, when her three-year-old brother took an interest in playing. As Nannerl later recalled, Wolfgang "often spent much time at the clavier picking out thirds , which he was always striking, and his pleasure showed that it sounded good." Their father Leopold, an assistant concertmaster at the Salzburg Court, recognized his children's unique gifts and soon devoted himself to their musical education.

Born in Salzburg, Austria, on January 27, 1756, Wolfgang had composed his first original work by age five. Leopold planned to take Nannerl and Wolfgang on tour to play before the European courts. Their first venture was to nearby Munich where the children played for Maximillian III Joseph, elector of Bavaria. Leopold soon set his sights on the capital of the Hapsburg Empire, Vienna. On their way to Vienna, the family stopped in Linz, where Wolfgang gave his first public concert. By this time, Wolfgang was not only a skilled harpsichord player, but he had also mastered the violin. The audience at Linz was amazed by the six-year-old, and word of his genius soon traveled to Vienna. In a much attended concert, the Mozart children appeared at the Schonbrunn Palace on October 13, 1762. They completely attracted the emperor and empress.

Following this success, Leopold received a lot of invitations for the children to play, for a fee. Leopold seized the opportunity and booked as many concerts as possible at courts throughout Europe. A concert could last three hours, and the children played at least two per a day. Today, Leopold might be considered the worst kind of stage parent, but at the time, it was not uncommon for prodigies to make extensive concert tours. Even so, it was an exhausting schedule for a child who was just past the age of needing an afternoon nap.

1. **According to the passage. Wolfgang became interested in music because**

A his father thought it would be profitable

B he had a natural talent.

C he saw his sister learning to play an instrument.

D he came from a musical family.

Answer: E

2. **What was the consequence of Wolfgang's first public appearance?**

A He charmed the emperor and empress of Hapsburg.

B Word of Wolfgang's genius spread to the capital.

C Leopold set his sights on Vienna.

D Invitations for the miracle children to play poured in.

Answer: E

3. **Each of the following statements about Wolfgang Mozart is directly supported by the passage except _____.**

A Mozart's father, Leopold, was instrumental in shaping his career.

B Maria Anna was also talented in musician in her own right.

C Wolfgang's childhood was devoted to his musical career.

D Wolfgang preferred the violin to other instruments.

Answer: E

4. **According to the Passage, during Wolfgang's early years child prodigies were**

A few and far between.

B accustomed to extensive concert tours.

C expected to spend at least six hours in a day practising their music

D expected to play for courts through out Europe

Answer: E

5. **Based on the information found in the paasage,Mozart can be described as**

A a child prodigy

B a work alcoholic

C the greatest composer of 18th century

D a victim of his father ambition

Answer: E

Instructions [6 - 10]

Study the passages below and answer the questions that follow each Passage.

Passage II:

Saving energy means saving money. Homeowners and renters Know this basic fact, but they often don't know what kinds of adjustments they can make in their homes and apartments that will result in savings. For those willing to spend some time and money, to reap long-term energy savings, an energy audit is the way to go. An energy auditor will come.into your home and assess its energy efficiency. The auditor will pinpoint areas of your home that use the most energy and offer solutions to lower your energy use and costs.Trained energy auditors know what to look for and can locate a variety of flaws that maybe resulting in energy inefficiency, including inadequate insulation, construction flaws, and uneven heat distribution. There are(quicker and less costly measures that can be taken as well. One way to save money is to replace incandescent lights with fluorescents. This can result in a savings of more than 50% on your monthly lighting costs. When it's time to replace old appliances, it's wise to spend a bit more for an energy-efficient model, and be sure that you are taking advantage of energy-saving settings already on your current refrigerator, dishwasher, washing machine, or dryer. Windows provide another opportunity to cut your energy costs. Caulk old windows that might be leaky to prevent drafts, and choose double - paned windows if you're building an addition or replacing old windows. Most.areas-of your home or apartment offer opportunities to save energy and money. The results are significant and are well worth the effort.

6. **Which two main organizational schemes can be identified in this passage?**

A Hierarchical order and order by topic.

B Order by topic and cause and effect.

C Hierarchical order and chronological order.

D Chronological order and compare and contrast.

Answer: E

7. **Which of the following ideas is NOT included in the passage?**

A You reduce your $130 monthly lighting cost to $65 by using fluorescent bulbs instead of incandescent.

B Double panned windows can cut energy cost.

C Your local energy company will send an energy auditor at your request.

D Some Appliances will have enrgy saving settings

Answer: E

8. **Which of the following best expresses the main idea of this passage?**

A They are many things a home owner or renter can do to save energy and money

B Hiring an energy auditor will save energy and money

C Homeowners andrenters don't know what they can do to save energy and money

D Replacing windows and light bulbs are well worth the effort and cost

Answer: E

9. **According to the following passage , Which of the following would an energy auditor Not do?**

A Check for construction flaws

B Look for problems with heat distribution.

C Offers solutions to lower your energy costs.

D Locate a variety of flaws that may result in energy inefficiency and fix them.

Answer: E

10. **According to the passage, double panned windows**

A are energy efficient.

B should only be used as replacement windows.

C Should only be used in new addition to homes.

D will lower your heating cost by 50 %

Answer: E

Instructions [11 - 15]

Choose the word which is opposite in meaning of the underlined word.

11. **<u>Nourishing</u> food is a necessity both for a pregnant mother and a baby.**

A Unhygienic

B Poor

C Undercooked

D Heavy

Answer: E

12. **A feeling of brotherhood should be <u>propagated</u> amongst the masses.**

A disseminated

B Suppresses

C dissipated

D crushed

Answer: E

13. **We must realise the <u>futility</u> of wars.**

A urgency

B usefullness

C value

D Importance

Answer: E

14. **His punctuality and regularity <u>propitiates</u> everyone with whom he deals**

A depresses

B excites

C enrages

D appeases

Answer: E

15. **The problem of dowry in our country has assumed <u>gargantuan</u> proportions**

A negligable

B bearable

C minute

D minimal

Answer: E

Instructions [16 - 20]

Choose the word which is nearest in meaning to the underlined word.

16. **We arrived safely at the <u>quay</u> and went ashore.**

A Peninsula

B Wharf

C target

D island

Answer: E

17. **Editors are known to be <u>pernickety</u> about grammar.**

A Spiteful

B careful

C fussy

D ignorant

Answer: E

18. **I rather like the quaint little house at the end of the street.**

A old

B quiet

C haunted

D unusual

Answer: E

19. **Some of the discoveries of modem science are simply marvellous.**

A praise worthy

B commendable

C amazing

D admirable

Answer: E

20. **The football coach had a sympathetic presence, albeit a commanding one.**

A although

B futher more

C because

D not only

Answer: E

Instructions [21 - 25]

Choose the option which best expresses the meaning of the underlined idiom/phrase in the sentence.

21. **His father advised him to be fair and square in his dealings lest he should fall into trouble.**

A Considerate

B Upright

C Careful

D Polite

Answer: E

22. **He burnt his fingers by interfering in his neighbour's affairs.**

A got rebuked

B got himself insulted

C burnt himself

D got himself in to trouble

Answer: E

23. **He is temporarily in charge of the company and is trying to feather his nest.**

A raise the imageof‘the company

B bring ordeand discipline in the company

C act for his own future benfits

D diversify the product of the company

Answer: E

24. **He was in a brown study and did not seem to catch my point.**

A in his study room

B absorbed in reading

C absent-minded

D in a state of shock

Answer: E

25. **The class could not keep a straight face on hearing the strange pronounciation of the new teacher.**

A remain serious

B remain unaffected

C remain silent

D remain indifferent

Answer: E

Instructions [26 - 30]

Fill in the blank.

26. **They were disspointed to see the armed guards.It ..... them from doing anything disruptive**

A inspired

B prevented

C encouraged

D irritated

Answer: E

27. **The ..... politician thought that all bureaucrats should be polite to him.**

A Insolent

B Merciless

C Civilised

D docile

Answer: E

28. **paula was ..... a child, accepting with out a question, every thing she was told.**

A recitent

B taciturn

C recalcitrant

D credulous

Answer: E

29. **The route between the two cities has always been known to wind its ..... way through steep mountain passes and coarse terrain.**

A easy

B smooth

C elusive

D tortuous

Answer: E

30. **As there were not enough seats to ..... so many people at the venue of the address, they had to put up a big tent outside.**

A entertain

B ascerin

C welcome

D accomodate

Answer: E

Instructions [31 - 35]

Choose the order of the sentences marked A, B, C and D to form a Logical paragraph.

31. **A. Its aim was.10. remove from dance, any external associations, so that the dancers could concentrate on pure movement and pure pattern.**
B. Abstract dance was the name of a specific style of ballet, devised in the 1920s and developed at the bahaus.
C. Ballroom dancing, for example, is concerned with the pleasure the movement and pattern-making give to the dancers, and not with some external'programme'.
D. Jn the widersense, a great deal of danceis 'abstract'.

A DBAC

B BADC

C BDCA

D BDAC

Answer: E

32. **A. In those countries where the ideals of liberty and equality have received the greatest devotion, and particularly in America, the political constitution has been framed with the precise object of making impossible too great a concentration of power.**
B. A philosophy that emphasizes the likeness of all men will be averse from recognizing those exceptional qualities in any individual which place him so clearly above his fellows that he may justly claim to lead and influence them.
C. A different though related strand of thought is equalitarian.
D. Further, when circumstances make it necessary for a particular individual to display qualities of leadership in a very high degree, his position is under constant and bitter attack on the score of dictatorship, and it is necessary for him to conceal his qualities, consciously, behind a facade of 'ordinariness'.

A CBAD

B CABD

C CDAB

D DCAB

Answer: E

33. **A. It has removed manyof the material obstacles té_the pursuit of the good life from the majority f mankind in those countries at a highlevel of technical development.**
B.Butt has exposed us to new dangers, notthe obvious dangers of new weapons of destruction but the much more serious ones,of a purely materialist view of life.
C.The growth of science and technology has conferred obvious and immense benefits upon the community.
D. It has also, as we too often forget, madepossible newand daring adventures of the mind

A CADB

B ABDC

C ACBD

D CDBA

Answer: E

34. **A. There are manifest dangers in thé:persuasive aspect of leadership.**
B. It is alarming, for example,to.reflect how great a part the power to speak well has acquired in an age of broadcasting.
C. It is quite possible formerto feel that they are freely giving their allegiance to a leader, when gefually they are simply slaves of his techniques of propaganda.
D.At its Lowest the technique of the persuasion may involve all those devices of suggestion and propaganda where are so freely available to the unsculpurous in a scientific age.

A ABDC

B ACBD

C CDBA

D ADBC

Answer: E

35. **A. The leader should possess high Intelligence**
B. The reasons for th) frequent neglect of intelligence as a prerequisite of leadership are complex.
C. It is certaipl¥ true to say that this is more commonlyunderrated than anyother aspect of leadership
D.There is First, a general Misunderstanding of such a phrase as of very high intelligence.

A ABCD

B ACBD

C DABC

D DBAC

Answer: E

Instructions [36 - 40]

For each of the following questions, a part or the whole of the original sentence has been underlined. You have to find the best way of writing the underlined part of the sentence.

36. **The matter was referred back to expert committee since the solution to the problem was different from the one proposed earlier.**

A Reffered back to expert committee since the solution to the problem was different from the one proposed earlier.

B Reffered to expert committee since the solution to the problem was different from the one proposed earlier.

C Reffered back to expert committee since the solution to the problem was different than the one proposed earlier.

D Reffered to expert committee since the solution to the problem was different than the one proposed earlier.

Answer: E

37. **Completing the physical examination, the tonsils were found to be diseased.**

A Completing the physical examination, the tonsils.

B Having completedthe physical examination, the tonsi

C When the physical examination was completed,thetonsils

D The physical examination completed, the tonsils

Answer: E

38. **Reared in a village where computers and the internet were objects of curiosity , purty today hardly gives a thought to the immense possibilities that the internet revolution has thrown open to him.**

A Reared in a village where computers and the internet were objects of curiosity

B Curious to knowthat computers and(the internet were objects of curiosity in the village he was reared up

C Being reared in the village where the computers andthe internet are objects of curiosity

D Reared in a village where computers andthe intemet were an object of curiousness.

Answer: E

39. **In the attempt to destroy them, with completeness, the Indian team has launched a coordinated attack on the opposing team.**

A In the attempt to destroy) them with completeness

B In attempting to destroythem completely

C In an attempt to des{roythem completely

D In the attempt ofdestroying them completely

Answer: E

40. **Balancing a home delivery pizza with one hand and gripping a six-pack carton of Coke with another , the young boy Vijay, paused in front of guard room of the building.**

A Balancing a homedeliverypizza with one hand and gripping a six-pack carton of Coke with another

B Balancing a home deliverypizza with one hand and having gripped a six-pack carton of Coke with another

C Having a balance of a home delivery pizza with one hand and gripping a six-pack of carton of Coke with the another

D Balancing a home delivery pizza with one hand and gripping a pack of six Cokes with the other

Answer: E

Quantitative Ability

41. **Seven hundred twenty sweets were distributed equally amongst children, in such a way that number of sweets received by each child is 20% of the total numberof children. How many sweets did each child receive?**

A 12

B 14

C 11

D 15

Answer: A

Explanation:
Total number of sweets distributed = 720

Let total children = 100x

Number of sweets received by each child = 20% of 100x = 20x

Total number of sweets = 100x * 20x = 720

$x^2 = 0.36$

x = 0.6

Total number of sweets did each child receive = 20x = 12

42. **15% of the people eligible to vote are between 18 and 25 years of age. In an election, 75% of those eligible to vote, who are between 18 and 25, actually voted. In that election, the number of persons between 18 and 25, who actually voted was what percent of those eligible to vote?**

A 12.50%

B 10.75%

C 11.25%

D 10.25%

Answer: C

Explanation:
Let eligible voters = 100x

Eligible voters between 18 and 25 years of age = 15% of 100x = 15x

Eligible voters between 18 and 25 years of age who actually voted = 75% of 15x = 11.25x

Required percent = $\frac{11.25x}{100x} * 100 = 11.25\%$

43. **What is the sum of the total surface areas of all the cubes formed when a cuboid of size 5.2m $\times$ 13m $\times$ 39m is cut completely into the least possible number of cubes, all of which arg identical?**

A 6164 sq m

B 30452 sq m

C 6084 sq m

D 6760 sq m

Answer: C

Explanation:

LCM of sides of cuboid = 2.6

So, side of each cube = 2.6 m

Least number of cubes formed = $\frac{5.2*13*39}{2.6*2.6*2.6} = 150$

Total surface area of each = $6 * 2.6^2 = 40.56m^2$

Sum of total surface area of all the cubes = 150 * 40.56 = 6084 m^2

44. **A tank of capacity 1000 cubic centimeter is being filled with water by 3 pipes A, B and C. The areas of cross-section of the pipes A, B and C are"in the ratio 3: 2: 4. Water is flowing through each of these pipes at a different rate in cm/min.twas found that the time taken to fill the tank which was initially empty by the pipes A, B and individually is 20 minutes, 50 minutes and 25 minutes respectively. Find the ratio of the-rates of flow of water through the pipes A and C.**

A 20:9

B 5:3

C 3:5

D 9:20

Answer: E

45. **Three men, four women and six children can complete a work in seven days. A woman docs double the work a man does and a-child does half the work a man does. How many women alone can complete the work in 7 days?**

A 7

B 8

C 12

D None of these

Answer: A

Explanation:

According to the question:

Total work = (3M + 4W + 6C) * 7

Now,

A woman does double the work a man does, So, the ratio of efficiency of a man to that of a woman = 1: 2

M: W = 1: 2

2M = W ..... (1)

A child does half the work a man does. So, the ratio of efficiency of a man to that of child = 2: 1

M: C = 2: 1

M = 2C ..... (2)

From (1) and (2):

4C = W ..... (3)

Let the required number of women = 'x'

Now,

(3M + 4W + 6C) * 7 = (xW) * 7

From (1) and (3):

1.5W + 4W + 1.5W = xW

7W = xW

x = 7

46. **A can do a piece of work in 36 days, B in 54 days and C in 72 days. All the three began the work together but A and B left 8 days and 12 days before the completion of the work respectively. How many days in all did C put in till the entire work was finished?**

A 24 days

B 29 days

C 20 days

D 32 days

Answer: A

Explanation:
Let total time taken to complete the work = 'x' days

C work for 'x' days.

A left 8 days before the completion of the work. So, A works for 'x - 8' days

B left 12 days before the completion of the work. So, B works for 'x - 12' days

Now,

$\frac{x-8}{36} + \frac{x-12}{54} + \frac{x}{72} = 1$

$\frac{6(x-8)+4(x-12)+3x}{216} = 1$

6x - 48 + 4x - 48 + 3x = 216

x = 24

Hence, C works for total 24 days.

47. **In a group of 5 boys the 2^{nd} boy is twice as efficient as the 1^{st} boy. The 3^{rd} boy is twice as efficient as the 2^{nd}boy and so on. All of them working together will take 5 days to complete a job. How much extra time will the 2^{nd} and 4^{th} boys take working together as compared to the 5^{th} boy working alone to complete the same job approximately**

A 3 days

B 6 days

C 8 days

D 10 days

Answer: B

Explanation:
Ratio of efficiency of 1^{st} boy to 2^{nd} boy = 1: 2

Ratio of efficiency of 2^{nd} boy to 3^{rd} boy = 1: 2

And so on...

So ratio of efficiency of 1^{st}, 2^{nd}, 3^{rd}, 4^{th} and 5^{th}tboy = 1: 2: 4: 8: 16

Let unit of work done by 1^{st}, 2^{nd}, 3^{rd}, 4^{th} and 5^{th}boy is 1, 2, 4, 8 and 16 respectively.

Since, job is completed by all the five boys together in 5 days. Hence,total work = 5 * (1 + 2 + 4 + 8 + 16) = 155

Time taken by 2^{nd} and 4^{th} boys together to do the work = $\frac{155}{2+8} = 15.5$ days

Time taken by 5^{th} boy alone to do the work = $\frac{155}{16}$ days

$155 \quad 93$

Required diffrence = 15.5 - $\frac{155}{16} = \frac{93}{16} = 5.8125$ days = 6 days (Approx)

48. **How many hours will atul ,Shiva, sapan take to finish their assignment together if atul alone can do it in six hours more , shiv alone do it in one hour more ,and sapan alone in twice the time?**

A 5 hours

B $\frac{1}{3}$ hours

C $\frac{4}{5}$ hours

D $\frac{2}{3}$ hours

Answer: D

Explanation:

Let time taken by Atul, Shiva and Sapan together to finish the work = 'x' hours

Time taken by Atul alone to finish the work = (x + 6) years

Time taken by Shiva alone to finish the work = (x + 1) years

Time taken by Sapan alone to finish the work = 2x years

Now,

$\frac{1}{x+6} + \frac{1}{x+1} + \frac{1}{2x} = \frac{1}{x}$

$x = \frac{2}{3}$ hours

49. **C can empty it in 60 hours .Pipes A and B were Kept open simultaneously for 12 hours . when person reached the tank when it should have been full , he obeserved the pipe c also remained open by mistake for these 12 hours .He immediately closed it . In what time will the tank get full after C is closed**

A 3 hours

B 2 hours

C 2.4 hours

D 3.6 hours

Answer: C

Explanation:

Pipes A and B together can fill the tank in 12 hours and C alone can empty the tank in 60 hours.

So, part of tank emptied by pipe C in 12 hours = $\frac{12}{60} = \frac{1}{5}$

Now, this $\frac{1}{5}^{th}$ part of the tank will be filled by pipes A and B together in $\frac{1}{5} * 12 = 2.4$ hours

50. **A large water tank gets filled from two pipes T_1 and T_2. T_1 alone can fill it in 50 minutes, while T_2 alone can fill it in one hour. If on any day T_2 starts working only after T_1 has been used for filling half the tank, then the time taken to fill the tank will be**

A $50 + \frac{61}{2}$ minutes

B 110 minutes

C $\frac{1}{2}\left[\frac{1}{50} + \frac{1}{60}\right]$ minutes

D $\frac{150}{11} + 25$ minutes

Answer: D

Explanation:

Time taken by $T_1 and T_2$ together to fill the tank = $\frac{1}{\frac{1}{50}+\frac{1}{60}} \frac{300}{11}$ minutes

$300 \qquad 150$

Time taken by $T_1 and T_2$ together to fill half the tank = $\frac{300}{2*11} = \frac{150}{11}$ minutes

Time takne by T_1 alone to fill half the tank = $\frac{50}{2} = 25$ minutes

Total time taken to fill the tank completely = 25 + $\frac{150}{11}$ minutes

51. **A tap takes 8 seconds to fill a jar and 6 minutes to fill a.drum. Rahul has to fill the drum with the jar. First he fills the jar and then brings it to the drum and pours the water into the drum. The time taken to bring the jar from the tap to the drum is 10 seconds. Unfortunately, the jar develops a leak, which can empty the full jar in 40 seconds. What will be the minimum total time required by Rahul to fill the drum?**

A $18\frac{1}{4}$ minutes

B 18 minutes

C 20 minutes

D $16\frac{2}{3}$ minutes

Answer: C

Explanation:
Let the capacity of Jar and Drum is 8 and 360 respectively.

Quantity of water filled in Jar in 1 second = 1

It takes 40 seconds by the hole to empty the Jar completely.

So. effective time taken to fill the jar = $\frac{1}{\frac{1}{8}-\frac{1}{40}}$ = 10 seconds.

It takes 10 seconds to bring the Jar to the drum. So, quantity of water in Jar emptied in 10 seconds = $8 * \frac{10}{40} = 2$

Quantity of water poured into Drum by Jar = 6

Total time taken to pour this 6 unit of water = Time taken to fill the Jar + Time taken to bring the Jar to the Drum = 10 + 10 = 20 seconds

Number of time Jar is used to fill the drum = $\frac{Capacity of drum}{Quanttiy of water filled by jar in one go} = \frac{360}{6} = 60 times$

Total time taken to fill the drum = 60 * 20 = 1200 seconds = 20 minutes

52. **A company manufactures two products X and Y. One unit of X requires three units of material A and two units of material B while one unit of Y requires two units of material A and five units of material B. If 25 units of each product were to be produced, calculate the requirement of material B. If 25 units of each product were to be produced calculate the requirement of material B.**

A 175

B 125

C 150

D 156

Answer: A

Explanation:
One unit of X requires two units of material B, then 25 unit of X will require = 2 * 25 = 50 units of material B

One unit of Y requires five units of material B, then 25 unit of Y will require = 5 * 25 = 125 units of material B

Total requirement of material B = 50 + 125 = 175

53. **Three containers X, Y and Z have capacities of 10, 20 and 30 litres respectively. X, which is empty is filled with water from Y. Y is then filled with the wine from Z. X is now emptied into Z. The entire operation is repeated. What would be the strength of wine in the container Z?**

A 33%

B 25%

C 51%

D None of these

Answer: D

Explanation:
Table given shows the operations given:

Operations	Containers X (Water: Wine)	Container Y (Water: Wine)	Containers Z (Water: Wine)
Initially	0	Water = 20	30 (Wine)
X is completely filled by Y	Water = 10	Water = 10	30
Y is completely filled by Z	Water = 10	Water = 10 Wine = 10	20
X is poured into Z	0	Water = 10 Wine = 10	10: 20
X is completely filled by Y	Water = 5 Wine = 5	Water = 5 Wine = 5	10: 20
Y is completely filled by Z	Water = 5 Wine = 5	Water= 5 + $\frac{10}{3} = \frac{25}{3}$ Wine = 5 + $\frac{20}{3} = \frac{35}{3}$	Water= 10 - $\frac{10}{3} = \frac{20}{3}$ Wine = 20 - $\frac{20}{3} = \frac{40}{3}$
X is poured into Z	0	Water = $\frac{25}{3}$ Wine = $\frac{235}{3}$	Water = $\frac{20}{3} + 5 = \frac{35}{3}$ Wine = $\frac{40}{3} + 5 = \frac{55}{3}$

Total quantity in container Z = $\frac{35}{3} + \frac{55}{3} = 30$

Required percent = $\frac{\frac{55}{3}}{30} * 100$ = 61% (Approx)

54. **A milk man diluted milk to an extent of 25% of the original volume of pure milk with water and priced it same as the cost price of milk. Part of the water evaporated and the volume was reduced to $\frac{23}{25}th$ of the diluted volume. The profit percent to the milk man is**

A 23%

B 25%

C 15%

D 20%

Answer: C

Explanation:
Let original quantity of pure milk = 100x

Let cost price of '100x' litres of pure milk = 100

Amount of water added = 25% of 100x = 25x

Total quantity of mixture = 100x + 25x = 125x

Total quantity of mixture after evaporation = $125x * \frac{23}{25} = 115x$

Selling price of '115x' litres of mixture = Cost price of '115x' litres of pure milk = 115x

Profit amount = 115x - 100x = 15x

Profit % = $\frac{15x}{100x} * 100$ = 15%

55. **The Percentage volume of alcohol in three solutions M, N, O form a geometric progression in that order. If we mix first , second , third solution in the volume of ratio of 2 : 3 : 4, we obatin a solution containing 32% alchohol . If we mix them in the ratio 3 : 2 : 1 by volume, we obatain a solution containing 22% of alcohol. What is the percentage of Alcohol in M?**

A 6%

B 12%

C 18%

D 10%

Answer: B

Explanation:

Let percent of alcohal in mixture M, N and O mixture is 'a', 'ar' and 'a r^2' respectively.

Now,

$\frac{2a+3ar+4ar^2}{2+3+4} = 32$

$a(2 + 3r + 4r^2) = 288$ ..... (1)

$\frac{3a+2ar+ar^2}{3+2+1} = 22$

$a(3 + 2r + r^2) = 132$ ..... (2)

From (1) and (2):

$\frac{a(2+3r+4r^2)}{a(3+2r+r^2)} = \frac{288}{132}\ \frac{24}{11}$

$4r^2 - 3r - 10 = 0$

r = 2

From equation (1):

$a(2 + 6 + 16) = 288$

a = 12

Ppercentage of Alcohol in M = a = 12%

56. **The content in the beakers A and B are 90 litres of milk and 90 litres of water respectively .Now 30 litres of milk is taken from A and put in to the beaker B after throughly mixing 12 litres of mixure is taken from B and put in to the beaker A.what is the percentage of water in beaker A?**

A 14.5%

B 12.5%

C 15.5%

D 17.5

Answer: B

Explanation:

The ratio of milk to water in beaker B after mixing 30 litres of milk from beaker A to beaker = 30: 90 = 1: 3

The remaining quantity of milk in beaker = 90 - 30 = 60 litres

Quantity of milk in beaker A when 12 litres of mixture from beaker B is mixed in beaker = $60 + 12\frac{1}{4}$ = 60 + 3 = 63 litres

Quantity of water in beaker A when 12 litres of mixture from beaker B is mixed in beaker = $12\frac{3}{4}$ = 9 litres

Total quantity of mixture in beaker A = 63 + 9 = 72 litres

Required percent = $\frac{9}{72} * 100$ = 12.5%

57. **Three Friends Kamal , Vishal, Shaan divide ₹1105 amongst them in such a way that ₹10 ,₹20, ₹15 are removed from the sums that kamal,vikhs and shan received respectively ,then the share of the sums that they got will be in the ratio of 11:18:24.How much did shan receive ?**

A ₹355

B ₹495

C ₹624

D ₹510

Answer: B

Explanation:
Let amount with Kamal, Vishal and Shaan after removing the amount is '11x', '18x' and '24x' respectively.

Now,

Total amount = (11x + 10) + (18x + 20) + (24x + 15) = 1105

53x = 1060

x = 20

Amount received by Shaan = (24x + 15) = Rs.495

58. **At the beginning of a term, the ratio of the number of boys in a school under 15 years to those over 15 years age was 5: 4. At the end of term,the ratio was 7:8 as of 20 boys had reached the age of 15 years during the term. Find the total number of'Boys in the school, given that no boy left or was admitted during the term.**

A 225

B 105

C 250

D 215

Answer: A

Explanation:
Let initial number of boys under 15 years and over 15 years are '5x' and '4x' respectively.

Now,

$$\frac{5x-20}{4x+20} = \frac{7}{8}$$

40x - 160 = 28x + 140

12x = 300

x = 25

Total boys in the exam = 5x + 4x = 9x = 225

59. **Lalit purchased two triangularplots, cach of whichhad exactly two sides of length 100 m. Find the maximum possible difference of the nOoy two plots, if it is knownthat neither of the twoplots is less than 4800 sq. m in area.**

A 20 m

B 40 m

C 60 m

D None of these

Answer: B

Explanation:
Since two sides of triangles are 100 m each.

Now, the third side of triangle must be greater than '0' and less than '200'.

The Minimum length of the third side when the area is greater than or equal to 4800 = 120 m

The maximum length of the third side when the area is greater than or equal to 4800 = 160 m

Now, Difference between perimeter of two triangle = Difference between length of third side = 160 - 120 = 40 m

60. **There are two right pyramids with a soni The two pyramids are similar in shape. The height of the first pyramid is 30m and taiof the smaller is 22.5 m. 36 men take 32 days to build the first pyramid. How many dayswould 54 rs of the sameefficiency take to build the second phyramid?**

A 20

B 11

C 25

D 9

Answer: D

Explanation:

Since, total work done $\propto$ Volume of pyramids $\propto$ $side^3$

Total work done to built pyramids = Total men working * Days take

Let days taken by 54 men to build the second pyramid = N

Now,

$\frac{36*32}{54*N} = \frac{30^3}{22.5^3} = \frac{4^3}{3^3}$

$N = \frac{36*32*27}{64*54}$

N = 9 days

61. **Two persons A and B are at two P and Q,respectively. A walks at 'V' km/h and B is 2 km/h faster then A, starting simultaneoausly from where they stand.If they walk towards each other,they meet in 72 minutes.If they walk in the same direction the faster over takes the slower in 6 hours .what are they respective speeds in km/h?**

A 3 and 5

B 4 amd 6

C $2\frac{1}{2}$ and $4\frac{1}{2}$

D $3\frac{1}{2}$ and $5\frac{1}{2}$

Answer: B

Explanation:

Speed of A = V

Speed of B = V + 2

Let the distance between points P and Q = D

Now,

$\frac{D}{V+(V+2)} = \frac{72}{60} = 1.2$

D = 1.2(2V + 2)

D = 2.4V + 2.4 ..... (1)

$\frac{D}{(V+2)-V} = 6$

D = 12 ..... (2)

From (1) and (2):

12 = 2.4V + 2.4

V = 4

Speed of A = V = 4 km/h

Speed of B = V + 2 = 6 km/h

62. **Two trains starting all the same time from two stations 240 km apart and going in opposite directions cross each other at a distance of 160 km from one of the stations. What is the ratio of their speeds?**

A 2 : 1

B 2 : 3

C 1 : 3

D 1 : 4

Answer: A

Explanation:
Distance between two stations = 240 km

Their meeting point is 160 km from one of the stations.

So, one train travels 160 km and other train travels 240 - 160 = 80 km.

Since, distance travelled by one train is double of the distance travelled by another train at the same time.

Hence, the ratio of speed will be = 2: 1 or 1: 2

63. **It takes eight hours for a 600 km journey, if 120 km is done by train and the rest by car. He takes 20 minutes more, if 200 km is done by the train and the rest by car .The ratio Speed of the train to that of the car is**

A 2:3

B 3:2

C 3:4

D 4:3

Answer: C

Explanation:
Let speed of train and car is 'x' and 'y' respectively.

According to the quetsion:

$\frac{120}{x} + \frac{480}{y} = 8$ ..... (1)

$\frac{200}{x} + \frac{400}{y} = 8 + \frac{20}{60} = \frac{25}{3}$ ..... (2)

From (1) and (2):

x = 60 and y = 80

Required ratio = x: y = 60: 80 = 3: 4

64. **A person has to cover a distance of 6 km in 45 minutes .If he covers half of the distance in two-third of the total time to cover the remaining distance in the remaining time, his speed must be**

A 6 km/h

B 8 km/h

C 12 km/h

D 15 km/h

Answer: C

Explanation:

Remaining distance = $\frac{6}{2}$ = 3 km

Remaining time = $45 * \frac{1}{3}$ = 15 minutes

Required speed = $\frac{3}{15} * 60$ = 12 km/h

65. **An automobile financier claims to be lending money at simple interest, but he includes the interest every 4 months for calculating the principal, if he is charging an interest of 12%, then the effective rate of interest is approximately**

A 13.25%

B 12.5%

C 12.75%

D 13.5%

Answer: B

Explanation:

Let principle amount = 1000

SI for first 4 months = $\frac{1000*12*1}{100*4}$ = 30

SI for second 4 months = $\frac{1030*12*1}{100*4}$ = 30.9

SI for third 4 months = $\frac{1060.9*12*1}{100*4}$ = 31.827

SI for last 4 months = $\frac{1092.727*12*1}{100*4}$ = 32.78181

Total amount at the end of 1 year = 1092.727 + 32.78181 = 1125.50881

Effective interest = $\frac{1125.50881-1000}{10}$ = 12.55% = 12.5% (Approx)

66. **A borrowed ₹4800 from B at 9% per annum simple interest for 3 years. He then added some more money to the borrowed sum and lent it to C for the same period at 12% per annum simple interest. If A gains ₹720 in the whole transaction, how much money did he add from his side?**

A ₹500

B ₹740

C ₹640

D ₹800

Answer: D

Explanation:

Total amount of interest given by A to B = $\frac{4800*9*3}{100}$ = Rs.1296

Let extra amount added by A = X

Total amount of interest received by A to C = $\frac{(4800+X)*12*3}{100}$ = (1728 + 0.36X)

Now,

(1728 + 0.36X) - 1296 = 720

0.36X = 288

X = 800

Hence, extra amount added = Rs.800

67. **If the rate of interest be 5% per annum for first year, 89 % per annum for second year and 12% percent per annum for third year, then the compound interest of ₹ 8000 for 3 years will be**

A ₹2055.16

B ₹1480.24

C ₹2160.64

D ₹1350.36

Answer: C

Explanation:
Total amount of interest at the end of 3 years = 8000 * 1.05 * 1.08 * 1.12 - 8000

= 10160.64 - 8000

= Rs.2160.64

68. **A man borrows ₹5000 from a bank at 8% per annum compound interest. At the end of every year, he pays ₹1000 as a part payment of loan and-interest. How much does he still owe to the bank after three such installments?**

A ₹3052.16

B ₹3442.20

C ₹3616.84

D ₹3824.40

Answer: A

Explanation:
Total amount left at the end of 1 year = $5000 + \frac{5000*8*1}{100} - 1000$ = Rs.4400

Total amount left at the end of 2 year = $4400 + \frac{4400*8*1}{100} - 1000$ = Rs.3752

Total amount left at the end of 3 year = $3752 + \frac{3752*8*1}{100} - 1000$ = Rs.3052.16

69. **A solid cylinder of lead 8 m and 2 m radius is melted and recast into a cone of radius 1.5 m. What is the height of the cone?**

A 16.67 m

B 21.35 m

C 42.67 m

D 31.35 m

Answer: C

Explanation:
Let the height of cone = 'h' cm

Volume of cylinder = Volume of cone

$\pi * 2^2 * 8 = \frac{1}{3} * \pi * 1.5^2 * h$

3 * 4 * 8 = 1.5 * 1.5 * h

h = 42.67 m

70. **A repost consists of 20 sheets ethof 55 lines and each suchline consists of 65 characters. This report is reduced onto sheetseach of 65 lines such that each line consists: of 70 characters. The percentage reduction in numberofsheetsis closer to**

A 20%

B 5%

C 30%

D 35%

Answer: A

Explanation:
Total character in 20 sheets of 55 lines each = 20 * 55 * 65

Let the number of sheets after reductio = N

According to the question:

20 * 55 * 65 = N * 65 * 70

N = $\frac{110}{7} = 15.7 pages = 16 pages$

Reduction in number of sheets = 20 - 16 = 4 pages

Required percent = $\frac{4}{20} * 100 = 20\%$

71. **Out of the total production of iron from hematite, an ore of Iron, 20% of the ore gets wasted, and out of the remaming iron, only 25% is pure iron. If the pure iron obtained if a year from a mine of hematite Was 80,000 kg then the quantity of hematite mined from that mine in the year is?**

A 500000 kg

B 400000 kg

C 450000 kg

D 400500 kg

Answer: B

Explanation:
Let the quantity of hematite mined from the mine in a year = 100x

Wasted ore = 20% of 100x = 20x

Pure iron = 25% of (100x - 20x) = 20x = 80000

x = 4000

Hence, quantity of hematite mined from the mine in a year = 100x = 400000 kg

72. **An express train without its rake can go 24 km an hour, and the speed is diminished by a quantity that varies as the square root of the number wagons attached .If it is known that it is four wagons its speed is 20 km/hthe greatest number of wagons with which the engine can just move is**

A 143

B 140

C 135

D 210

Answer: A

Explanation:
Speed of train without wagons = 24 km/h

Reduction in speed with 'n' wagons $\propto \sqrt{n}$

Reduction in speed with 'n' wagons $= k\sqrt{n}$

Speed of train with 4 wagons = 20 = 24 $-k\sqrt{4}$

2k = 4

k = 2

Now,

Consider the case when the speed of train is zero.

$24 - 2\sqrt{n} = 0$

$24 = 2\sqrt{n}$

$12 = \sqrt{n}$

$n = 12^2$

n = 144

Hence, total number of wagons will be 143 when the train cna just move.

73. **They are six boxes are numbered 1, 2, 3, 4, 5, 6. Each box is to be filled with either red or green balls in such a way that at least one box containing green balls are consecutively numbered .The total number of days in which these can be done is**

A 60

B 33

C 21

D 5

Answer: C

Explanation:
Case 1: Total ways when one box contains one green ball = {1}. {2}, {3}, {4}, {5}, {6} = 6 ways

Case 2: Total ways when two boxes contain one green ball = {1, 2}, {2, 3}, {3, 4}, {4, 5}, {5, 6} = 5 ways

Case 3: Total ways when three boxes contain one green ball = {1, 2, 3}, {2, 3, 4}, {3, 4, 5}, {4, 5, 6} = 4 ways

Case 4: Total ways when four boxes contain one green ball = {1, 2, 3, 4}, {2, 3, 4, 5}, {3, 4, 5, 6} = 3 ways

Case 5: Total ways when five boxes contain one green ball = {1, 2, 3, 4, 5}, {2, 3, 4, 5, 6} = 2 ways

Case 5: Total ways when all the six boxes contain one green ball = {1, 2, 3, 4, 5, 6} = 1 way

Tota; ways = 6 + 5 + 4 + 3 + 2 + 1 = 21

74. **'N' persons stand on the circumference of a circle at distinct points. Each possible pair of persons, not standing next to cach other, sings a two-minute song one pair after the other. If the total time taken for singingis 28 minutes, what is 'N'?**

A 5

B 7

C 9

D None of these

Answer: B

Explanation:
Since, N persons are standing on the circumference of a circle at distinct points and each possible pair of persons, not standing next to each other, sings a two-minute song one pair after the other.

Total time taken is 28 minutes when each pair sings for 2 minutes, then total time taken will be 14 minutes when each pair sings for 1 minute.

A person standing can't form pair with himself and with his two neighbours. Hence, total possible pairs = N * (N - 3).

This also includes the pair in both clockwise and anticlockwise direction.

Hence, the actual number of pair = $\frac{[N(N-3)]}{2} = 14$

N(N - 3)=28

N = 7

75. **Thirty six identical chairs must be arranged in rows with the same ntimber of chairs in each row. Each row must contain at least three chairs and there must beat least three rows. A row 1S parallel to the front of the room. How many different angementsare possible?**

A 2

B 4

C 5

D 6

Answer: C

Explanation:

Case 1: When there is 3 chairs in each row, then total rows = $\frac{36}{3} = 12$ (Valid)

Case 2: When there is 4 chairs in each row, then total rows = $\frac{36}{4} = 9$ (Valid)

Case 3: When there is 6 chairs in each row, then total rows = $\frac{36}{6} = 6$ (Valid)

Case 4: When there is 9 chairs in each row, then total rows = $\frac{36}{9} = 4$ (Valid)

Case 5: When there is 12 chairs in each row, then total rows = $\frac{36}{12} = 3$ (Valid)

Hence, total possible arrangements = 5

76. **In an examination, A obtains 10 percent less than the minimum number of marks required for passing. B obtains 11 $\frac{1}{9}$ percent less than A. C obtains 41 $\frac{3}{17}$ percent less than the number of marks obtained by A and B together. Does C pass the exam or fail?**

A Pass

B Fail

C Can not be determined

D None of these

Answer: A

Explanation:

Let passing marks in the exam = 90

Marks obtained by A = 90% of 90 = 81

Marks obtained by B = $(100 - 11\frac{1}{9})$% of 81 = 72

Marks obtained by A and B together = 81 + 72 = 153

Marks obtained by C = $(100 - 41\frac{3}{17})$% of 153= 90

Hence, C will pass the exam

77. **From a well shuffled pack of 52 cards, 3 cafds'are drawn successively, the first being replaced before the second is drawn and the second being replaced before the third is drawn. The probability that the first is black, the sec m isdiamond andthethirdis ace. is**

A $\frac{1}{104}$

B $\frac{1}{52}$

C $\frac{1}{26}$

D $\frac{1}{13}$

Answer: A

Explanation:

Since, three cards are drawn successively after replacing the previous one.

Probability of drawing first card which is Black = $\frac{26C1}{52C1} = \frac{26}{52} = \frac{1}{2}$

Probability of drawing second card which is Diamond = $\frac{13C1}{52C1} = \frac{13}{52} = \frac{1}{4}$

Probability of drawing third card which is Ace= $\frac{4C1}{52C1} = \frac{4}{52} = \frac{1}{13}$

Required probability = $\frac{1}{2} * \frac{1}{4} * \frac{1}{13} = \frac{1}{104}$

78. **In a class, there are equal number of boys and girls. Two students are selected for a game.If the probabilty that the two students are girls is $\frac{7}{29}$,then what is the strength of the class?**

A 15

B 30

C 90

D 60

Answer: B

Explanation:
Let boys and girls in the class are 'x' each.

Total students = x + x = 2x

Probability of selecting two girls from the class = $$\frac{xC1}{2xC1} = \frac{7/29}$$

$$\frac{[x(x - 1)]}{[2x(x - 1)]} = \frac{7}{29}$$

29(x - 1) = 14(2x - 1)

29x - 29 = 28x - 14

x =15

Strength of class = 2x = 30

79. **Two squares of sizé $$1\times1$$ are selected one after another from an $$8\times8$$ chessboard. The 'probability that the two squares belong to different rows and different columns, is**

A $$\frac{1}{6}$$

B $$\frac{5}{36}$$

C $$\frac{29}{36}$$

D $$\frac{7}{9}$$

Answer: D

Explanation:
First we'll select 1 square out of total 64 squares that means we can't select second square from that row and that column. Now we're left with 7 rows and 7 columns from which we can select another square.

Hence, total square left = 7 * 7 = 49 [From which we can select another square].

Probability to select first square = $$\frac{64C1}{64C1} = 1$$

Probability to select first square = $$\frac{49C1}{63C1} = \frac{49}{63}$$

Required probability = $$1 * \frac{49}{63}$$

$$= \frac{7}{9}$$

80. **Virat was asked to multiply a two-digit number P by a three-digit number Q. But she mistakenly multiplied P by the number formed by writing the digits of Q in the reverse order, there by getting an answer which is 22770 more than the correct answer. What is the minimum possible sum of the digits of Q?**

A 8

B 7

C 6

D can not be determined

Answer: E

Reasoning and Logical Ability

Instructions [81 - 85]

Read the following information carefully to answer these following questions
There are six writers of literature A, B, C, D, E and F. Two belong to the $$17^{th}$$ century, three to the $$19^{th}$$ century and one to the $$20^{th}$$ century. Four were recognized as great poets, three as great novelists and three as great dramatists. One contributed to Bengali, two to Hindi, two to Marathi and one to the Tamil literature. The $$20^{th}$$ century writer wrote poetry only and contributed to Marathi literature and the other Marathi writer contributed to poetry, novel and drama. One Hindi writer, and the only Tamil writer belonged to the $$19^{th}$$ century. The former contributed to poetry and novel while the latter to novel and drama. The Bengali writer belonged to the $$17^{th}$$ century and contributed to poetry only. A belonged to the $$20^{th}$$ century, B wrote drama only, C contributed to Marathi literature, D was a Hindi poet and novelist and belonged to the $$19^{th}$$ century. E also belonged to the $$19^{th}$$ century, and F contributed poetry only.

81. **Writer A contributed to which branch of literature?**

A Poetry

B Novel

C Drama

D All of these

Answer: E

82. **Who was the Bengali writer among the following?**

A A

B C

C B

D F

Answer: E

83. **Writer C contributed to which branch of literature ?**

A Poetry

B Novel

C Drama

D All of these

Answer: E

84. **Writer B contributed to which language**

A Bengali

B Hindi

C Marathi

D Tamil

Answer: E

85. **who was the tamil writer among the following?**

A A

B D

C E

D C

Answer: E

Instructions [86 - 89]

Study the following information to answer these questions.
An organization consists of 1500 employees. The ratio of males to females is 17 : 13. All the employees work at five different floors named F1, F2, F3, F4 and F5. 28% of females are at floor F1. 18% of the males work at floor F2. One-fifth of the males work at floor-F5. The ratio of females to males at floor F2 is 2 : 3. And 25% of the total numbers of employees are at floor F3. Females working at floor F5 are 60% of the males working at the same floor. 18% of the females are at floor F4, The remaining females are at floor F3. 16% of the males work at floor F1 and the remaining males are working at floor F4

86. **what is the number of males working at floor f3?**

A 136

B 228

C 253

D 163

Answer: E

87. **Number of males working at floor F4, form what percent of the number of females working the same floor?**

A ı45.52

B 169.12

C 123.42

D 139.32

Answer: E

88. **What is the number of females working at floor F5?**

A 147

B 182

C 102

D 117

Answer: E

89. **Number of males working at floor F1; form approximately what percent of total number of employees employees in the organisation**

A 9

B 13

C 18

D 22

Answer: E

Instructions [90 - 94]

Study the information to answer these questions.
In a city there are six modes of transport available A, B, C, D, E and F for commuting. Out of a total number of commuters commuting daily in the city, 17171 commute only by A. 7359 commute only by B and 22077 commute only by C. 1471.8 commute only by D, 4906 commute only by E and 7359 commute only by F. 26983 commute by C as well as A , 9812 commute by E as well as A. 12265 commute by C as well as E daily. Assume that there is no overlap between the commuters of different modes (and their combination) of transport.

90. **The total number of commuters commuting by A form _____ percent of the total number of commuters commuting daily.**

A 44

B 22

C 14

D 36

Answer: E

91. **Whatis the difference in percentage of commuters commuting by E andthat of B and F taken together?**

A 22

B 25

C 12

D 10

Answer: E

92. **The total number of commuters commuting by D and B together form ___ percent of the total number of commuters commuting daily.**

A 12

B 18

C 6

D 16

Answer: E

93. **A majority commuters in the city use ..... mode of transport.**

A A

B B

C C

D D

Answer: E

94. **The number of commuters commutting by B,D and F taken together form .... percent of the total number of commuters commuting daily by A,C and E taken together ?**

A 20.6

B 18.22

C 13.20

D 16.23

Answer: E

Instructions [95 - 97]

Each of the following has an aasertion (A) and a reason (R).Mark answer as

95. **Assertion (A): President of India is the head of the State.**
Reason (R): Parliament of India consists of the President, Lok Sabha and Rajya Sabha.

A if both (A) and (R) are true and (R) is the correct explanation of (A)

B if both (A) and (R) are true and (R) is not the correct explanation of (A)

C if (A) is true but (R) is false

D if (A) is false but (R) is true

Answer: E

96. **Assertion (A): Indus valley people knew the art of navigation**
Reason (R): Indus Valley seals indicate prevalence of overseas trade.

A if both (A) and (R) are true and (R) is the correct explanation of (A)

B if both (A) and (R) are true and (R) is not the correct explanation of (A)

C if (A) is true but (R) is false

D if (A) is false but (R) is true

Answer: E

97. **Assertion (A): A person with blood group O is considered a universal recipient**
Reason (R): Type O blood does not contain any antigens.

A if both (A) and (R) are true and (R) is the correct explanation of (A)

B if both (A) and (R) are true and (R) is not the correct explanation of (A)

C if (A) is true but (R) is false

D if (A) is false but (R) is true

Answer: E

Instructions [98 - 100]

In each of these questions, two statements I and II are given. These may have a cause and effect relationship or may have, independent causes or be the effects of independent causes. Read the statements and mark answer as

98. **Statement I:**
A mobile phone,if i kept on during an air flight, can actually disrupt the plane's electronic systems and eventually lead to a crash, a study has revealed. Older planes are most at risk to mobiles, Laptops and iPads.

Statement II:
One case involved a Boeing 747 flying at a height of 4500 feet whose pilot disengaged, by itself. When the flight attendants went through the cabin, they found four passengers using their cell phones. Once these were switched off. the flight carried on without any problem.

A if statement I is the cause and statement II is its effect.

B if statement II is the cause and statement I is its effect.

C if both the statements I and II are effects of independent causes.

D if both the statements I and II are effects of some common cause.

Answer: E

99. **Statement I:**

Indian women don't believe in donating blood. According to the first ever data bank on gender distribution of blood donors, India has only 6 percent blood donations by women.The rest 94% were male donors.

Statement II:

Just twenty five countries in the world collect more than 40% of their blood supplies from female doctors,these include Australia, US, Thailand, Swaziland, Portugal, New Zealand, Mongolia, Zimbabwe, etc

A if statement I is the cause and statement II is its effect.

B if statement II is the cause and statement I is its effect.

C if both the statements I and II are effects of independent causes.

D if both the statements I and II are effects of some common cause.

Answer: E

00. **Statement I:**

Six months after Glaxo Smith Kline (GSK) consumer health care India brought in its global oral care brand sensodyne to the Indian market, sensodyne has garneyed a 10% share of the sensitive tooth paste market.
Statement II:

GSK has not only invested heavily in the advertising and promotion of the brand but has contacted 15000 dentist in two months and in keen on building on the sensodyne equity .

A if statement I is the cause and statement II is its effect.

B if statement II is the cause and statement I is its effect.

C if both the statements I and II are effects of independent causes.

D if both the statements I and II are effects of some common cause.

Answer: E

Instructions [101 - 103]

Each of these questions has a statement followed by two conclusions I and II. Consider the statement and the following conclusions. Decide which of the conclusions follows from the statement. Mark answer as

01. **Statement: Parents are prepared to pay any price for an elite education to their children.**
Conclusions:
I. All parents these days are very well off.
II. Parents have an obsessive passion for a perfect development of their children through good schooling.

A if conclusion I follows

B if conclusion II follows

C if neither conclusion I nor II follows

D if both conclusions I and II follow

Answer: E

02. **Statement: For over three decades 'A' has been totally involved in energy conservation, its efficient use and management.**
Conclusions:
I. There is a lot of development in the society.
II. Power rates have become cheaper.

A if conclusion I follows

B if conclusion II follows

C if neither conclusion I nor II follows

D if both conclusions I and II follow

Answer: E

03. **Statement:**

Wind is an inexhaustible source of energy and an aero-generator can convert it into electricity .Thought much has been done in this field, the survey shows that there is vast potential for developing wind as alternative source of Energy.
Conclusions:
I. Energy by wind is comparatively newly emerging field.
II. The energy crisis can be dealt by exploring more in the field of aero-generation.

A if conclusion I follows

B if conclusion II follows

C if neither conclusion I nor II follows

D if both conclusions I and II follow

Answer: E

04. **In a certain code, TOGETHER is written as RQEGRJCT. In the same code, PAROLE will be written as**

A NCPQJG

B NCQPJG

C RCPQJK

D RCTQNG

Answer: E

05. **If 'cinto baoli tsi nzro' means 'her village is Sarurpur', 'mhi cinto keepi tsi oind' means 'her first love is literature' and 'oind geit tsi cinto pki ' means 'literature and 'oind geit tsi cinto pki' means 'literature collection is her hobby ',which word would mean literature "?**

A cinto

B baoli

C oind

D geit

Answer: E

06. **Pointing to a photograph,a woman says ,"this man's sons sister is my mother-in-law ".How is the woman's husband related to man in the photograph ?**

A Grandson

B Son

C Son-in-law

D Nephew

Answer: E

07. **Four girls are sitting on a bench ibe photographed. Shikha is to the left of Reena, Manju is to the right of Reena, Rity is between Reena and Manju. Who would be second fromtheleft in the photograph?**

A Reena

B Shikha

C Manju

D Rita

Answer: E

08. **A child is looking for his father. He went 90 metresin the East beforeturning to his right. He Went 20 metres before turning to his right again to look for his father ‘at his uncle's place 30 metres fromthis point. His father was not there. From here he went\]00 metres to the North before meeting his father in a street. How far did the son mecthis father fiom the starting point?**

A 80 metres

B 100 metr

C 140 metres

D 260 metres

Answer: E

09. **One morningafter sunrise, Reeta and Kavita were talking toleach other face to face at Tilak Square. If Kavita's shadow was exactly to the right of‘Reeta which direction Kavita was facing?**

A North

B South

C East

D None ofthese

Answer: E

10. **Nitin was counting down from 32. Sumit was counting upwards the numbers starting from I and he wascalling out only the odd numbers. What common number will they call out at the same time if they were calling out at the same Speed?**

A 19

B 21

C 22

D They will not call out the same number

Answer: E

11. **Ina class of 60, where girls are twicethat of boys, Kamal ranked seventeenth from the top. If there are 9 girls ahead of Kamal, how-manyboys are after him in rank?**

A 3

B 7

C 12

D 23

Answer: E

12. **There are twenty people working in an office. The first group of five works between 8.00 a.m. and 2.00 p.m. The second, group of ten works between 10.00 a.m. and 4.00 p.m. And the third group of five works between 12 noon and 6.00 p.m. There are three computers in the office which all the employees frequently use. During which of the following hours the computers are likely to be used most?**

A 10.00 a.m. - 12 noon

B 12.00 pm - 2.00 pm

C 1.00 pm - 3.00 pm

D 2.00 pm - 4.00 pm

Answer: E

13. **At the end of a business conference ,the ten people present all shake hands with each other once .How many hand shakes will therebe altogether**

A 20

B 45

C 55

D 90

Answer: E

14. **In a caravan in addition to 50 hens,there are 45 goats and 8 camels with some keepers .if the total number of feet be 224 more than number of heads in the caravan , the number of keepers is .....**

A 5

B 8

C 10

D 15

Answer: E

Instructions [115 - 117]

Studythefollowing informationto answer these questions.
A cube is coloured red on two opposite faces, blue on two adjacent faces and yellow on the two remaining faces.It is then cut in to two halves along the plane parallel to red faces .one piece is then cut in to four equal cubes and the is 31 equal cubes and other one in to 32 equal cubes

15. **How many cubes do not have any coloured face?**

A 0

B 2

C 4

D 8

Answer: E

16. **How many cubes do not have any red face?**

A 8

B 16

C 20

D 24

Answer: E

17. **How many cubes have at least two coloured face?**

A 20

B 24

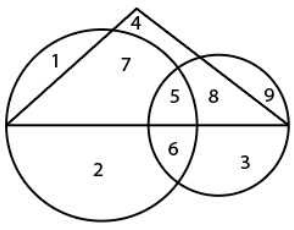
C 28

D 32

Answer: E

Instructions [118 - 120]

The following-questions are based on the following diagram In which the triangle represents female graduates small circle represents self-employed females and the big circle represents self-employed females with bank loan facility.Numbers are shown in the different sections of the diagram.on the basis of these numbers answer the following.



18. **How many female graduates are self-employed?**

A 12

B 13

C 15

D 20

Answer: E

19. **How many female graduates are not self-employed?**

A 4

B 10

C 12

D 15

Answer: E

20. **How many non graduate females are self-employed?**

A 9

B 11

C 12

D 21

Answer: E

Data Interpretation

Instructions [121 - 125]

Each Question consist of a problem followed by two statements marked as I and II .Decide whether data in the statements are sufficient to answer the questions . Mark answer as

21. **If no student took test T more than once, how many students took test T?**
I. The average(arithmetic mean) of the students' scores on test T was 72.
II. The sum of the students' scores on test T was 2,232.

A if statement I alone is sufficient, but statement II alone is not sufficient to answer the question

B if statement II alone is sufficient, but statement I alone is not sufficient to answer the question

C if both statements taken together are sufficient to answer the question, but neither statement alone is sufficient

D if statements I and II together are not sufficient and additional data is needed to answer the question

Answer: C

Explanation:
Average = Sum of the scores/ Number of students

=> Number of students = Sum of the scores/Average

Hence both statements are necessary

22. **Last year $$\frac{4}{5}$$ of the applicants for a job on a police force/passed ow the physical examination. If $$\frac{3}{4}$$ of the applicants who passed the physical examination also passed the written examination, how many of the applicants passed both examinations?**
I. The number of applicants who did not pass either examination was equal to the number who passed the written examination only.
II. There was a total of 100 applicants.

A if statement I alone is sufficient, but statement II alone is not sufficient to answer the question

B if statement II alone is sufficient, but statement I alone is not sufficient to answer the question

C if both statements taken together are sufficient to answer the question, but neither statement alone is sufficient

D if statements I and II together are not sufficient and additional data is needed to answer the question

Answer: C

Explanation:
Let the total number of students = 5x

Number of students who passed physical test = 4x

Number of students who failed physical test = x

Let Number of students who passed the written test = 3x+y

=>Number of students who failed written test = 2x-y

From statement 2, we can say 5x=100 => x=20

From statement 1, we can say 3x-y = 3x+y => y =0

Number of students who passed both examinations =7x= 140

23. **G, P, and S are animal species. What is the average life span, in year, of S?**
I. The averagelife span of S is twice that of P and $$\frac{4}{5}$$ that of G.
II. The average life span of G is 30 years longer than that of P and 10 years longer than that of s

A if statement I alone is sufficient, but statement II alone is not sufficient to answer the question

B if statement II alone is sufficient, but statement I alone is not sufficient to answer the question

C if both statements taken together are sufficient to answer the question, but neither statement alone is sufficient

D if statements I and II together are not sufficient and additional data is needed to answer the question

Answer: E

Explanation:
1.S=2P; S=(4/5)G; we cannot determine. Insufficient

2.G=P+30 ;G=s+10 >> we cannot determine. Insufficient

1+2

S=(4/5)G and G=S+10

S=(4/5)(S+10)=>(1/5)S=8

S=40

24. **There are exactly 6 teams in league Y. What was the total number of games played by the 6 teams last season?**
I. Each team in league X played each of the other teams at least once.
II. No team in league X played more than 7 games.

A if statement I alone is sufficient, but statement II alone is not sufficient to answer the question

B if statement II alone is sufficient, but statement I alone is not sufficient to answer the question

C if both statements taken together are sufficient to answer the question, but neither statement alone is sufficient

D if statements I and II together are not sufficient and additional data is needed to answer the question

Answer: D

Explanation:
From the statement I, each team has played at least 5 games with each team once. From the statement II, number of games played by each team is less than or equal to 7. So the teams can play between 5 to 7 games which is not definite.

$$\therefore\ $$We cannot say the exact total number of games played using the given data.

Hence, the correct answer is Option D

25. **A Swimming club that sold only individual and family memberships charged ₹300 for an individual membership. If the club's total revenue from memberships was ₹480,000, what was the charge for a family membership ?**
I. The revenue from individual memberships was $$\frac{1}{4}$$ of the total revenue from memberships.
II.The club sold 1.5 times as many family memberships as individual memberships.

A if statement I alone is sufficient, but statement II alone is not sufficient to answer the question

B if statement II alone is sufficient, but statement I alone is not sufficient to answer the question

C if both statements taken together are sufficient to answer the question, but neither statement alone is sufficient

D if statements I and II together are not sufficient and additional data is needed to answer the question

Answer: C

Explanation:
From statement 1, total revenue from individual memberships = 96000 Rs and total revenue from family memberships = 384000 Rs

Number of Individual memberships = 96000/300 = 320

Adding statement 2 , we get number of family memberships = 1.5 x 320 = 480

charge for a family membership = 384000/480 = 800 RS

Instructions [126 - 130]

In each of these questions, two quantities A and B are given compare the two quantities and mark answer as

26. **Soni's salary, which is greater than ₹10000 is 75 percent of Amit's salary. Duas salary is 80 percent of Soni's salary.**
A. Amit's salary
B. Dua's salary

A if quantity A is greater than quantity B

B if quantity B is greater than quantity A

C if quantities A and B are equal

D if comparision can not be made.

Answer: A

Explanation:
Let Amit's salary = 100x

Soni's salary = 75x

Duas salary = 0.8*75x = 60x

27. **The total surface area of a cube equals**
A. The length of one edge of the cube.
B. 4.5

A if quantity A is greater than quantity B

B if quantity B is greater than quantity A

C if quantities A and B are equal

D if comparision can not be made.

Answer: D

Explanation:
Since the total surface area of a cube is unknown, the comparison cannot be made between the given quantities.

Hence, the correct answer is Option D

28. **A merchant made a profit of ₹2.75 on the sale price of a sweater that cost the merchant ₹ 12.25**
    A. The Profit expressed as a percentage of the cost to the merchant.
    B. The Profit expressed as a percent of the sale price.

A if quantity A is greater than quantity B

B if quantity B is greater than quantity A

C if quantities A and B are equal

D if comparision can not be made.

Answer: A

Explanation:
CP = 12.25

SP = 12.25 + 2.75 = 15

The Profit expressed as a percentage of the cost = (SP-CP)/CP * 100 = 22.44%

The Profit expressed as a percent of the sale price = (SP-CP)/SP = 18.33%

29. **There are 28 students in a class all born in 2000.**
    A. The probability that all their birthdays are in February.
    B. The probability that all their birthdays fall on a Friday.

A if quantity A is greater than quantity B

B if quantity B is greater than quantity A

C if quantities A and B are equal

D if comparision can not be made.

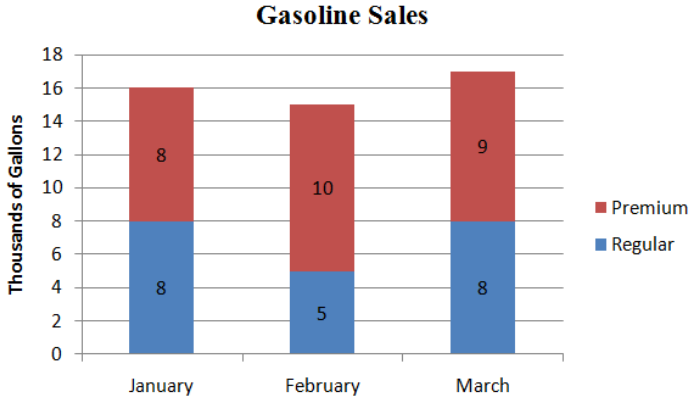
Answer: A

Explanation:
Probabilty that all their birthdays are in February = $$\left(\frac{28}{365}\right)^{28}$$

The probability that all their birthdays fall on a Friday = $$\left(\frac{52}{365}\right)^{28}$$

A is greater

30. **Base on the graph compare A and B.**



A. The percent change in premium sales from February to March .
B. The percent change in total sales from January to February.

A if quantity A is greater than quantity B

B if quantity B is greater than quantity A

C if quantities A and B are equal

D if comparision can not be made.

Answer: A

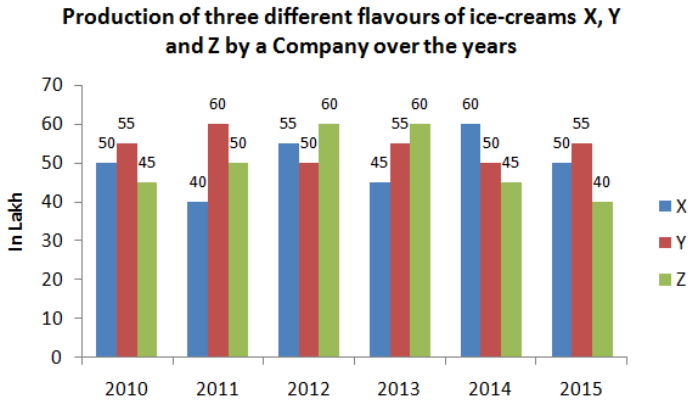
Explanation:
The per cent change in premium sales from February to March = (10-9)/10 = 1/10

The percent change in total sales from January to February = (16-15)/16 = 1/16

Hence The per cent change in premium sales from February to March is greater

Instructions [131 - 135]

Study the following graph to answer these questions
An ice-cream company prepares three different flavours X, Y and Z. The production of three flavours over a period of six years has been expressed in the bar graph provided below.



31. **For which of the following years, the percentage of rise/fall in production from the previous year is thé maximum for the flavour Y ?**

A 2012 Decrease

B 2013 Increas

C 2014 Decrease

D 2015 Increase

Answer: A

Explanation:
Percentage decrease in 2012 = 1/6

Percentage increase in 2013=1/10

Percentage decrease in 2014=1/11

Percentage increase in 2015 = 1/10

Percentage decrease in 2012 = 1/6 is the highest

32. **For which flavour was the average annual production maximum in the given period?**

A For X

B For Y

C For Z

D Both for X and Y

Answer: B

Explanation:
the average annual production maximum in the given period is nothing but the maximum production

For X it is 300

For Y it is 325

For Z it is 300

33. **Whatis the difference betweeh.the average production of flavour X in 2010, 2011 and 2012 and the average production of flavour Y in 2013, 2014 and 2015?**

A 500000

B 25000

C 240000

D 80000

Answer: A

Explanation:
Average production of flavour X in 2010, 2011 and 2012 = (50+40 +55)/3 = 145/3

average production of flavour Y in 2013, 2014 and 2015 = (55+50+55)/3 = 160/3

Difference = 15/3 = 5 lakhs

34. **Which year shows the highest production of ice-creams?**

A 2010

B 2012

C 2014

D 2015

Answer: B

Explanation:
2010 = 150 lakhs

2012 = 165 lakhs

2014 = 155 lakhs

2015 = 145 lakhs

35. **The. total production of ice-creams in 2014 is what per cent of the total production of ice-cream flavours Y and Zin 2010 and 2012 combined?**

A 14.50%

B 80.25%

C 65.12%

D 73.80%

Answer: D

Explanation:
Total production of ice-creams in 2014=155

total production of ice-cream flavours Y and Zin 2010 and 2012 combined = 100+110 = 210

155/210 = 73.80%

Instructions [136 - 140]

Study the following table to answer these questions.
The following table gives the number of candidates appeared (App.) and qualified (Qual.) in ABC entrance examination from different zones (I - VI in different years from 2010-2015).

Zone →	I		II		III		IV		V		VI	
Year ↓	App.	Qual.	App.	Qual.	App.	Qual.	App.	Qual.	App.	Qual.	App.	Qual.
2010	2989	575	2490	530	2540	430	2534	440	1008	130	2698	498
2011	2438	590	2899	520	2384	470	2653	450	1103	160	2798	610
2012	7534	608	2840	532	2053	502	2234	480	1143	190	2848	580
2013	6524	650	3600	560	2143	510	2468	500	1198	220	3008	490
2014	8746	632	3698	544	2340	544	2549	560	1208	240	2948	560
2015	8429	648	5432	612	2230	588	2630	580	1203	238	3048	534

36. **The qualifying percentage from Zone V is maxinium in which of the following years?**

A 2014

B 2015

C 2013

D 2010

Answer: A

Explanation:
The qualifying percentage from Zone V in 2010 = 130/1008 = 12%

The qualifying percentage from Zone V in 2013= 220/1198 = 18%

The qualifying percentage from Zone V in 2014 = 240/1208 =19.86%

The qualifying percentage from Zone V in 2015 = 238/1203 = 19.78%

37. **The total number of qualifying candidates in 2013 is what percentJess than that in 2015**

A 9.21 %

B 6.89 %

C 9.89 %

D 8.43 %

Answer: D

Explanation:
The total number of qualifying candidates in 2013 = 2930

The total number of qualifying candidates in 2015 = 3200

Perentage less = (3200 -2930)/3200 = 8.43%

38. **Ratios between boys and girls for qualified and for appeared from Zone IV in 2013 are 7:3 and 3:2 respectively. What is‘the approximate ratio between the boys qualified and girls appeared?**

A 2:13

B 13:19

C 1:28

D 1:50

Answer: E

Explanation:
Number of boys qualified = 7/10 * 500 = 350

Number of girls appeared = 2/5 * 2468 = 987

Ratio = 0.35 which is nearer to 2:13

39. **In which of the following zones is there a continuous increase in the number of students appeared as well as'qualified over the years?**

A Zone II

B Zone III

C Zone IV

D None of

Answer: D

Explanation:
In none of the above zones, there a continuous increase in the number of students appeared as well as'qualified over the years

40. **The numberof students appeared from Zone V in 2012 and 2015_together is approximately what percent less than that from Zone II in 2011 and 2014 together?**

A 64.4%

B 50.2%

C 55.6%

D 60%

Answer: A

Explanation:
The number of students appeared from Zone V in 2012 and 2015 together = 1143+1203 = 2346

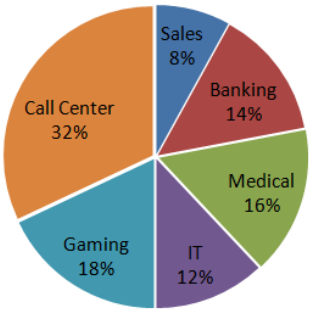
The number of students appeared from Zone II in 2011 and 2014 together = 2899+3698 = 6597

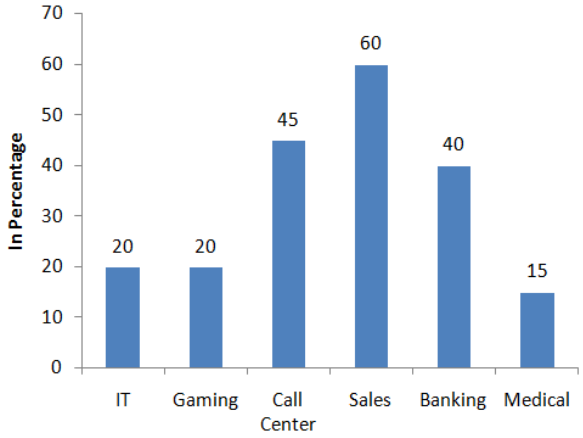
The number of students appeared from Zone V in 2012 and 2015 together is approximately = $$\frac{\left(6597-2346\right)}{6597}\cdot100\ =\ 64.4\%$$ less than that from Zone II in 2011 and 2014 together

Instructions [141 - 145]

Study the following graph to answer these Questions.
The following pie-chart gives the percentage of people in a city working in night shifts from various Industries. The bar graph shows the percentage of females from these industries working in night shifts.

Total number of people = 40250





41. **What is the approximate average number of females working in night shifts from all the industries together?**

A 2227

B 4481

C 3326

D 2523

Answer: A

Explanation:
It is given that 8% of 40250 are in Sales. Thus number of people in sales = 8% of 40250 = 3220

Also, females in sales are 60%. Number of females in sales = 60% of 3220 = 1932. Thus remaining are males which are 3220 - 1932 = 1288

Similar things can be calculated for other sectors as well and can be obtained as below table:

	Percentage of Employees	Numbr of Employees	Percentage of Female in the industry	Number of Female	Number of Males
Sales	8%	3220	60%	1932	1288
Banking	14%	5635	40%	2254	3381
Medical	16%	6440	15%	966	5474
IT	12%	4830	20%	966	3864
Gaming	18%	7245	20%	1449	5796
Call Center	32%	12880	45%	5796	7084
Overall	100%	40250		13363	26887

Approx average number of female = (1932+2254+966+966+1449)/6 = ~2227

42. **The number of females from the gaming industry is what percent of the total number of people working in the night shifts from all the industries together?**

A 5.6

B 3.6

C 3.2

D 4.4

Answer: B

Explanation:
It is given that 8% of 40250 are in Sales. Thus number of people in sales = 8% of 40250 = 3220

Also, females in sales are 60%. Number of females in sales = 60% of 3220 = 1932. Thus remaining are males which are 3220 - 1932 = 1288

Similar things can be calculated for other sectors as well and can be obtained as below table:

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Gaming	18%	7245	20%	1449	5796
Call Center	32%	12880	45%	5796	7084
Overall	100%	40250		13363	26887

Required Percentage = $$\frac{1449}{40250}\times\ 100\%\ =\ 3.6\%$$

43. **What is the percentage differenéé-between the number of males and females working in the night shift from these industries?**

A 33.2

B 23.8

C 33.6

D None of these

Answer: C

Explanation:
It is given that 8% of 40250 are in Sales. Thus number of people in sales = 8% of 40250 = 3220

Also, females in sales are 60%. Number of females in sales = 60% of 3220 = 1932. Thus remaining are males which are 3220 - 1932 = 1288

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Gaming	18%	7245	20%	1449	5796
Call Center	32%	12880	45%	5796	7084
Overall	100%	40250		13363	26887

Total number of females = 1932+2254+966+966+1449 = 13363

Total number of males = 40250-13363 = 26887

Difference = 26887-133363 = 13524

Difference as percentage of total employees = $$\frac{13524}{40250}\times\ 100\%\ =\ 33.6\%$$

44. **If the numberof females working in night shift for banking is 3206, while the percentage of females inrest ofthe industries remained unchanged, Then the new percentage of females workingin night shiff will be .....**

A 35.56%

B 33.72%

C 23.82%

D can not be determined

Answer: A

Explanation:
It is given that 8% of 40250 are in Sales. Thus number of people in sales = 8% of 40250 = 3220

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IT	12%	4830	20%	966	3864
Gaming	18%	7245	20%	1449	5796
Call Center	32%	12880	45%	5796	7084
Overall	100%	40250		13363	26887

If number of females in banking is = ($$\frac{1932+3206+966+966+1449}{40250}\times\ 100\%\ = 35.5%$$)

45. **Percentage of males workingin night shift is lowest in which of the following industries?**

A Sales

B IT and Medical

C Banking

D Gaming

Answer: A

Explanation:
In sales 60% of employees are female which is the highest percentage of females working in a department. So %males in Sales will be least

Instructions [146 - 150]

Study the following graphs to answer these questions
In the year 2015, 17 lakh tonnes of a fruit was produced in a certain State. Is production status in SIX Districts of that State is shown in Pie-chart I. the percentages of total expenditure incurred under different heads for producing this fruit in a District is shown by Pie-chart II.

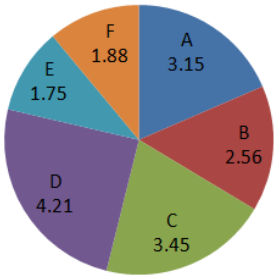


Chart - I(Figure in lakh tonne)

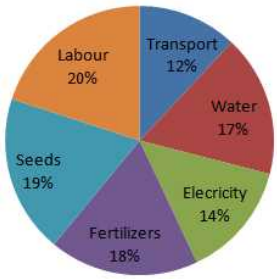


Chart - II

46. **The monthly expenses for water in District B is more/less than the monthly expenditure for electricity in District A by ..... (The total expenditure is ₹1700 per tonne in a year).**

A ₹82167 less

B ₹82167 more

C ₹986000 less

D ₹1003000 less

Answer: C

Explanation:
monthly expenses for water in District B = 0.17 x 1700 x 2.56 lakhs = 739.84 lakhs

monthly expenditure for electricity in District A = 0.14 x 1700 x 3.15 lakhs = 749.7 lakhs

monthly expenses for water in District B is less than monthly expenditure for electricity in District A by 986000 rs

47. **The total expenses incurred for the production of fruits in districts E, F and C are in the ratio 3:2:4.The total expenditure per tonne of production fruit in these districts is ₹ 5580.The amount spent towards transport in district F is more/less than that in E is .....**

A more by ₹11085600

B less by ₹11085600

C more by ₹74697600

D less by ₹74697600

Answer: D

Explanation:
Total production in districts C,E AND F = 3.45 + 1.75 + 1.88 = 7.08 lakh tonnes

Total expenditure = 7.08 x 5580 lakhs = 39506.4 lakhs

Total Expenses in E = 3/9 * 39506.4 = 13168.8 lakhs

Total Expenses in F = 2/9 x 39506.4 = 8779.2 lakhs

amount spent towards transport in district F = 8779.2 x 0.12 = 1053.504 lakhs

amount spent towards transport in district in E = 13168.8 x 0.12 = 1580.256 lakhs

48. **If the expenditure incurred indistrict D is 20% more than that in district B and ₹ 950000 were spent in district B then expenses for labour in district D are**

A ₹1140000

B ₹152000

C ₹228000

D ₹190000

Answer: C

Explanation:
expenditure incurred indistrict D = 950000 x 1.2 = Rs 1140000

expenses for labour in district D = 1140000 x 0.2 = Rs 228000

49. **The profit earned by the sale of the fruit in district F is 25%. The sale price being 10000 per tonne, how money was spent on fertilizers approx.?**

A ₹84600000

B ₹33840000

C ₹3384000

D ₹270720000

Answer: D

Explanation:
Total SP = 10000 x 1.88 lakhs = 18800 lakhs

Total CP = 18800 lakhs/ 1.25 = 15040 lakhs

Money spent on fertilizers = 0.18 x 15040 lakhs = 270720000

50. **The sale price of the vegetable IN District A is ₹ 7000 per tone and that in B is ₹8500 per tonne. A profit of 5% is earned in B and a loss of 5% is registered in A. The amount spent on water in A more/less than that on seeds in B is**

A more by ₹890000

B less by ₹890000

C more by ₹8.875 cr

D less by ₹8.875 cr

Answer: A

Explanation:

Total SP of A = 3.15 x 7000 = 22050lakhs

Total SP of B = 2.56 x8500 = 21760 lakhs

Total CP of A = 22050/0.95 = 23210 lakhs

Total CP of B = 21760/1.05 = 20723 lakhs

amount spent on water in A = 17% of 23210 lakhs = 3945 lakhs

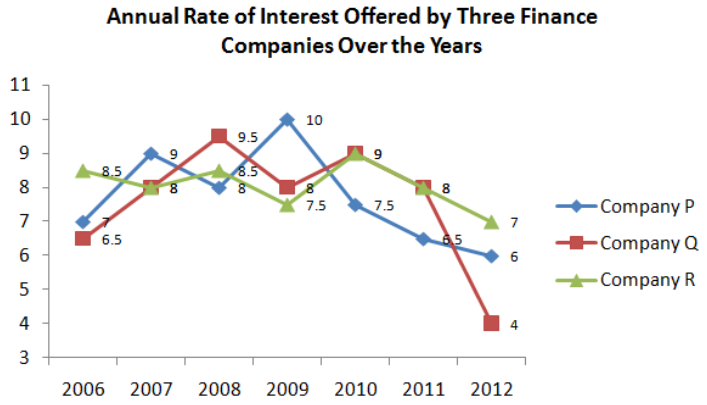
amount spent on seeds in B = 19% of 20723 lakhs = 3937 lakhs

Difference is approximately more by 890000

Instructions [151 - 155]

Study the following graph to answer these question?

Three different finance companies declare a fixed annual rate of interest on the amounts invested with them by investors. The rate of interest offered by these companies may differ from year to year depending on the variation in the economy of the country and the banks' rate of interest. The annual rate of interest offered by the three Companies P, Q, and R over the years are shown by the line graph provided below.



51. **If two different amounts in the ratio 8:9 are invested in Companies P and Q respectively in 2012, then the amounts received after one year as interests from Companies P and Q are respectively in the ratio?**

A 2:3

B 3:4

C 6:7

D 4:3

Answer: D

52. **In 2010, a part of ₹30 lakhs was invested in Company P and the rest was invested in Company Q and R for one year. The total interest received was 2.43 lakh. What was the amount invested in Company P?**

A 7 lakh

B 8 lakh

C 9 lakh

D 13.5 lakh

Answer: E

Explanation:
Let x be the amount invested in P.

Interest = 7.5x/100

=> 3000000 - x is invested in Q and R

Interest = (3000000 - x)9/100

Given, 7.5x/100 + (3000000 - x)9/100 = 243000

Upon solving, x = 13.5 lakhs

53. **An investor invested a sum of ₹ 15 lakh in Company P in 2008 .The total amount received after one year was reinvested in the same company for one more year .The total appreciation received by the investor on his investments was .....**

A ₹282000

B ₹296200

C ₹216000

D ₹225600

Answer: A

Explanation:
Amount received at the end of 2008 = 15(1+8/100) = 1620000

Amount received at the end of 2009 = 1620000(1+10/100)=1782000

The total appreciation received by the investor on his investment = 1782000 - 1500000 = 282000

54. **In which year was the difference between the annual rate of interest offered from Companies P and R the minimum?**

A 2008

B 2007

C 2010

D 2011

Answer: A

Explanation:
In 2008, the difference between the annual rate of interest offered from Companies P and R = 8.5 - 8 =0.5

In 2007, the difference between the annual rate of interest offered from Companies P and R = 9-8 =1

In 2010, the difference between the annual rate of interest offered from Companies P and R = 9-7.5 = 1.5

In 2011, the difference between the annual rate of interest offered from Companies P and R = 8-6.5 = 1.5

55. **The average annual rate of interest offered for the given period is the highest for**

A Company P

B Company Q

C Company R

D can not be determined

Answer: E

Instructions [156 - 160]

Study the following information to answer these questions.

In a city, there are M1, M2, M3, M4, M5 and M6 modes available for commuting. Out of a total numberof commuters commuting daily in a city, 17171 commuters commute only by M1 daily. 7359 commuters commute only by M2 and 22077 commuters commute only by M3. 14718 commuters commute only by M4 and 4906 commuters commute only byM5¢7359 commuters commute only by M6. 26983 commuters commute by M3 as well as M1 daily .9812 commuters commute by M5 as well as M1 daily. 12265 commuters commute by M3 as iellas M5 daily.

56. **The total number of commuters commuting by-M1 form what percent of the total number of commuters commuting daily?**

A 22

B 44

C 14

D 36

Answer: E

57. **What is the percentage difference.in.the total number of commuters commuting in M5 and that of M2 and M6 together?**

A 22

B 25

C 12

D 10

Answer: E

58. **The total number of commiters commuting by M4 and M2 together form what percent of the total number of commuters commuting daily?**

A 12

B 6

C 18

D 16

Answer: E

59. **Majority of thé cOmmuters in the city use .....**

A M1

B M2

C M3

D M4

Answer: E

60. **The number of commuters commuting by M2,M4 and M6 form what percent of the total number of the commuters commuting daily by M1 and M3 and M5?**

A 20.6

B 18.22

C 13.20

D 16.23

Answer: E