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SNAP 2007

General Awareness

1. **The leading brand of artificial sweetener in India, 'Sugar Free' is owned by**

A. Cipla

B. Cadila

C. Glaxo

D. Monsanto

Answer: B

2. **Monsoon is caused by**

A. Movements of cloud

B. Impact of Summer temperature on the sea

C. Rise in temperature

D. Seasonal reversal of winds

Answer: D

3. **An Indian company manufacturing automobiles for Mitsubishi is**

A   Tata Motors

B   Bajaj Tempo

C Mahindra

D   Hindustan Motors

Answer: D

4. **The name "Koneru Humpy" is associated with which of the following sport?**

A. Badminton

B. Cricket

C. Chess

D. Weight Lifting

Answer: C

5. **The new coin 'Rupiya' was issued for the first time by**

A. Sher Shah Suri

B. Akbar

C. Ala ud din Khilji

D. Mohammed Shah Tughlaq

 Answer: A

6. **One of the following allows an individual to start and continue to share regularly any of his/her own personal experience, knowledge, opinion or thought with the internet community?**

A. Portal

B. Email

C. Blog

D. Chat

 Answer: C

7. **Phishing is**

A. A Govt. plan

B. A stem cell

C. A fraudulent way of getting the PIN and bank passwords using emails

D. None of these

 Answer: C

8. **In the sports world, the sobriquet 'Indo-Pak Express' is applied to**

A. Shree Santh and Shoaib Akhtar

B. Rohan Bopanna and Aisam -Ul- Haq Quareshi

C. Sania Mirza and Shahar peer

D. Rohan Bopanna and Shahar Peer

Answer: B

9. **A film that has not been directed by Mira Nair is**

A. Earth

B. Monsoon Wedding

C. Kamasutra

D. Salaam Bombay

Answer: A

10. **In banking terminology, CRR means**

A Credit Reserve Ratio

B Cash Reserve Ratio

C Credit Rating Ratio

D Cash Rating Ratio

Answer: B

11. **Some of the large deals entered into by IT majors in India (all are billion dollar deals) are listed here as options. Which one is not?**

A. TCS-Nielson

B. Tech Mahindra-BT C

 Infosys-BN AM O

D IBM-Bharti

Answer: C

12. **Suicide car bomb caused havoc in England in July 2007 at the which airport?**

A. Glasgow

B. Heathrow

C. Burmingham

D. Nottingham

Answer: A

13. **Pakistan has signed Free Trade Agreement (FTA) and a five year investment package with**

A. USA

B. European Union

C. China

D. Russia

   Answer: C

14. Major oil finds in India have been reported in

A. Krishna Godavari Basin

B. Cauvery Basin

C. Rajasthan Desert

D. Lower Assam Valey

   Answer: A

15. **The propagation of radio signals is greatly influenced by**

A   troposphere

B   ionosphere

C   exosphere

D   thermosphere

   Answer: B

16. According to Dun and Bradsstreet which one of the following is the largest employer among Indian ITes and BPO companies?

A. Genpact

B. Accenture Services

C. Wipro BPO

D. IBM Daksh

   Answer: A

17. **"In God we trust, the rest have to bring data on the table." This statement was made by the famous industrialist**

A. J.R.D. Tata

B. Aditya Birla

C Dhirubhai Ambani

D Narayan Murthy

Answer: D

18. **The runner-up in the recent Vice-Presidential election was**

A. Mr. Bhairon Singh Shekhawat

B. Dr. Najma Heptullah

C Mr. Praful Patel

D Mr. Hameed Ansari

Answer: B

19. **Which of the following is not provided in the constitution?**

A. Election Commission

B. Planning Commission

C. Public Service Commission

D. Finance Commission

Answer: B

20. **When did Governor General's rule end in India?**

A. 15th August 1947

B. 9th August 1948

C 26th january 1950

D 2nd Octobar 1950

Answer: C

21. The newspaper which was recently voted as the largest selling newspaper in the world is

A.   The Los Angeles Times

B.   The Times of India

C.   The London Times

D.   The New York Times

   Answer: B

22. Which of the following countries is the top source of FDI inflows into India at present?

A.   Singapore

B.   USA

C.   UK

D.   Mauritius

   Answer: D

23. The human cell contains

A.   44 chromosomes

B.   48 chromosomes

C.   46 chromosomes

D.   23 chromosomes

   Answer: C

24. In year 2006, the three largest economies in the world were

A.   USA, Japan & Germany

B. USA, China & Japan **C**

   USA, UK & Germany

D   USA, UK & France

   Answer: A

25. **Identify an entry that is reversed in terms of the forex rates for US Dollar on a day recently**

A   1 US $ = Rs. 39.35

B   1 US $ = € 1.42

C   1 US $ = £ 0.48

D   1 US $ = ¥ 114

   Answer: B

26. **Starbucks, the coffee chain retailer's name is inspired from which book?**

A.   The Scarlet Letter

B.   Mobydick

C.   Uncle Tom's Cabin

D.   None of the above

   Answer: B

27. **A major US toy manufacturer which suffered a breakdown in supply chain from China on account of legally unacceptable toxic substances in its products is**

A.   Leo Toys

B.   Mattel Toys

C.   Universal Toys

D.   Funskool Toys

   Answer: B

28. **Bollywood name has been granted as a trademark to which US based Media and Entertainment company by Indian Trademark Registry?**

A.   Viacom

B. Universal Studios   **C**

   Disney Enterprises

D   Miramax

   Answer: C

29. Lakshmi Mittal, the famous NRI industrialist, is partnering with Govt. of India for which of the following big projects?

A. Oil Refinery

B. Atomic Power Plant

C. Biotechnology

D. Mining

   Answer: A

30. Tyeb Mehta, Nand Lal Bose and Majit Bewa are

A. Classical Singers

B. English Poets   **C**

   Photographers

D Painters

   Answer: D

31. Zapak Digital Entertainment (a gaming venture) belongs to which business group?

A. UTV

B. Balaji Telefilm

C. Zee TV

D Anil Dhirubhai Ambani Enterprises

   Answer: D

32. In August 2007, Chennai High Court passed a landmark judgment that may have far reaching consequences on pharmaceuticals industry, dismissing a writ petition filed by

A. Ranbaxy

B. Sandoz

C. Novartis

D. Glaxo

   Answer: C

33. The busiest port in the world today is

A. Port of Rotterdam

B. Port of Shangai **C**

Port of Singapore

D Port of Dubai

  Answer: C

34. In recent months the monks of Myanmar marched the streets of Yangon in hundreds

A. To spread the message of peace

B. To celebrate Buddha purnima

C. To protest against the government that was ruling

D. To take the normal route for alms

  Answer: C

35. To recover the national loss suffered by small investors in the IPO allotment scam from the National Securities Depository Services Ltd, Central Depository Services Ltd, and eight depository participants, a second interim order was passed by

A. SEBI

B. RBI

C. FMI

D. Supreme Court

  Answer: A

36. Indian Broadcasting Service was renamed in 1936 as

A. Kshwani

B. Nabhowani

C. Doorwani

D. All India Radio

  Answer: D

37. Which of the following is not a principal organ of the UNO?

A General Assembly

B Trusteeship Council

C Security Council

D World Health Organization

 Answer: D

38. Who was the composer of the classical composition 'Moonlight Sonata'?

A. Ludwig Van Beethoven

B. Joseph Haydn **C**

Johann Batch   **D**

Handel

 Answer: A

39. During the year 2006-07 Indian Railways earned a profit of approximately

A Rs. 20,000 crores

B Rs. 14,000 crores

C Rs. 18,000 crores

D Rs. 16,500 crores

 Answer: A

40. Egg is a rich source of nutrients except

A. Vitamin C

B. Protein

C. Vitamin D

D. None of the above

 Answer: A

Instructions [41 - 46]

Read the following passage and answer within its context.

The world dismisses curiosity by calling it idle, or mere idle curiosity -even though curious persons are seldom idle. Parents do their best to extinguish curiosity in their children because it makes life difficult to be faced every day with a string of answerable questions about what makes fire hot or why grass grows. Children whose curiosity survives parental discipline are invited to join our university. Within the university, they go on asking their questions and trying to find the answers. In the eyes of a scholar, that is mainly what a university is for. Some of the questions that scholars ask seem to the world to be scarcely worth asking let alone answering. They ask questions too minute and specialized for you and me to understand without years of explanation. If the world inquires of one of them why he wants to know the answer to a particular question he may say, especially if he is a scientist, that the answer will in some obscure way make possible a new machine or weapon or gadget. He talks that way because he knows that the world understands and respects utility. But to you who are now part of the university, he will say that he wants to know the answer simply because he does not know it. The way a mountain climber wants to climb a mountain simply because it is there. Similarly a historian when asked by outsiders why he studies history may come out with argument that he has learnt to repeat on such occasions. Something about knowledge of the past making it possible to understand the present and mould the future. But if you really want to know why a historian studies the past, the answer is much simpler: something happened, and he would like to know what. All this does not mean that the answers which scholars find to their questions have no consequences. They may have enormous consequences but these seldom form the reason for asking the question or pursuing the answers. It is true that scholars can be put to work answering questions for the sake of the consequences as thousands are working now, for example, in search of a cure for cancer. But this is not the primary function of the scholar, for the consequences are usually subordinate to the satisfaction of curiosity.

41. **Common people consider some of the questions asked by scholars as unimportant**

A   since they are not worth asking of answering

B   because the question is related to new machines and gadgets

C   because the common man doesn't understand questions without years of explanations.

D   scholars ask very minute, specialized questions beyond the comprehension of the common man.

  Answer: D

Explanation:
The author says, "Some of the questions that scholars ask seem to the world to be scarcely worth asking, let alone answering. They ask questions too minute and specialized for you and me to understand without years of explanation."

So the correct answer is option D.

42. **In the statement 'that is mainly what a university is for' 'that' refers to**

A   parents refusal to answer questions.

B   children's curiosity that survives parents structures.

C   questions not worth answering.

D   the aim and scope of the university to provide an opportunity to curious minds to find out the answers to their questions.

   Answer: D

Explanation:
The author says, "Children whose curiosity survives parental discipline are invited to join our university. Within the university, they go on asking their questions and trying to find the answers. In the eyes of a scholar, that is mainly what a university is for."

So the correct answer is option D.

 43. **According to the passage the general public respects**

A.   new inventions.

B.   any useful invention.

C.   any invention that makes life easier for them.

D   a scientist who invents gadgets and machines for them.

   Answer: B

Explanation:
The author says, "If he is a scientist, that the answer will in some obscure way make possible a new machine or weapon or gadget. He talks that way because he knows that the world understands and respects utility."

So the correct answer is option B.

 44. **The writer compares the scientist to**

A.   a historian and mountain climber.

B.   a historian

C.   a mountain climber.

D.   a scholar

   Answer: A

Explanation:
The author clearly compares the scientist to a historian and a mountain climber.

45. **The primary function of a scholar is different from the search for a cure for cancer because**

A   the answers to the scholar's question have no consequence unlike the results of the research involving a cure for cancer.

B   the answer sought by the scholar is selfish unlike the consequences of cancer research which are for the common weal.

C.   the primary function of a scholar is satisfaction of his mental curiosity, while research involving a cure for cancer demands a constant, systematic and planned pursuit by several scholars.

D.   several scholars work for a cancer cure while a single scholar works with a selfish motive.

   Answer: C

Explanation:

The author says, "All this does not mean that the answers which scholars find to their questions have no consequences. They may have enormous consequences but these seldom form the reason for asking the question or pursuing the answers. It is true that scholars can be put to work answering questions for the sake of the consequences as thousands are working now, for example, in search of a cure for cancer. But this is not the primary function of the scholar, for the consequences are usually subordinate to the satisfaction of curiosity."

So the correct answer is Option C.

46. Idle curiosity means

A.   curiosity is lazy.

B.   idle people are curious.

C.   curiosity is apt

D.   casual curiosity.

   Answer: D

Explanation:

Idle curiosity means casual curiosity.

47. **Find the correct match of definition/Meaning with usage for the word :**
     WOULD

1) willingness	5) He would go for a walk even when it was raining.
2) obstinacy persistence	6) He would do as you say
3) determination	7) He beat the ox, but it wouldn't move
4) importable or real condition	8) If you came across a snake what would you do?

A 1-8, 2-5, 3-6, 4-6

B 1-6, 2-7, 3-5, 4-8

C 1-5, 2-7, 3-8, 4-6

D 1-7, 2-5, 3-6, 4-8

Answer: D

Explanation:

Part 8 is an improbable or real condition.

Part 7 is obstinacy persistence.

Part 6 is willingness.

Part 5 is determination.

48. **Choose the most appropriate passive construction of the sentence:
    'He is doing his job well.'**

A. His job is done well by him.

B. His job is being done well.

C. He has been doing his job well.

D. His job is being well done.

Answer: A

Explanation:

The correct passive form is

His job is done well by him.

49. **There are three underlined words below, followed by their usages. Determine the sentences, in which the use of words is correct or appropriate :**
    Pray. Prey. Prying
    A. If you pray with faith, they say, it will be answered.
    B. He has fallen a prey to cheats
    C. Prying into the affairs of others is bad.

A. A and B

B. A and C **C**

A,B and C

D B and C

Answer: C

Explanation:

Pray means to address a deity, saint, prophet or object of worship.

Prey means the animal hunted or caught for food.

Prying means offensively curious.

Instructions [50 - 54]

The following is an excerpt from a recent article by David Ewing Duncan. Read the passage and answer the questions within its context.

Eye surgeon Virendar Sangwan has perfected a procedure so cutting-edge that most who have tried it have failed. In an operating theatre in the central Indian city of Hyderabad, he surgically implants corneas grown in a petri dish from stem cells by his colleague Geeta Vemuganti in patients with damaged eyes. Together they perform about 80 corneal regeneration procedures a year, making the L.V. Prasad Eye Institute, where they work, one of the most prolific facilities in the world using stem cells to regenerate tissues of any kind. The Sangwan-Vemuganti team uses stem cells found in the tissues of living adults, not ones derived from embryos. Teams all over the world are working with adult stem cells, trying to coax them to regrow cells in hearts, brains, livers and other organs, but progress is slow. Besides corneas, scientists have had some success regrowing skin cells and bone tissues, but those procedures remain experimental. "A number of programs around the world have tried to perfect this treatment, but they have had bad outcomes," says University of Cincinnati eye surgeon and stem cell specialist Edward Holland. "It is impressive what they are doing at Prasad." In addition to the Hyderabad project, only Holland's program and a half-dozen others in the world conduct operations using corneas grown from stem cells.The treatment uses stem cells harvested from the limbus, located where the cornea touches the white of the eye. For those with damaged corneas, these cells -called "limbic" and "conjunctiva" -are harvested from a patients good eye, if he has one, or from a close relative. They are placed in a petri dish and chemically tweaked to grow into the lower layer of a cornea, called epithelium. It is then transplanted into the eye of the patient where in most cases it takes hold and grows. In 56% of the cases at the Prasad Institute, patient could still see clearly after 40 months later.

Indians are well known for reverse engineering, meaning they can deduce how drugs are made in order to produce generic versions. But in this case, Sangwan and Vemuganti, a pathologist, developed the technique on their own from reading papers and running experiments in the lab. Sangwan says he had a number of patients with burned eyes who could not helped with standard corneal transplants from cadavers, so he persuaded Vemuganti to try growing corneas in her lab. "You know how to grow cells, and I know how to do the transplant surgery." Vemuganti recalls him saying. "Why don't we work together?" She smiles and shakes her head. "I had no clue if this was going to work." Vemuganti's major innovation was developing a platform on which to grow corneas. First she designed a circular glass tube about the size of a stack of coins. Then she overlaid the glass with tissue from a human placenta which is "a good surface to grow corneas on." She says. After that she placed stem cells in four places around a circle, added a growth medium, and watched the corneas begin to grow. Commercial interests among stem cell companies for the procedure has been scant because of the perceived small volume of patients, says venture capitalist Antoun Nabhan of ay Capital, who sits on the board of Cellerant, a leading stem cell company in San Carlos. Calif. But corneal stem cell treatment may have wider applications, say ophthalmologist Ivan Schwab of University of California at Davis. "These stem cells are similar to others in the body that make mucous membrane," he say. "These techniques of growing stem cells might one day be used to treat mucous-membrane tissue in the sinuses, bladder, and other organs."

50. **According to the article Sangwan-Vemuganti team's cutting-edge procedure of implanting cornea grown from stem cells is considered a major advancement by the experts because**

A.   They derive stems cells from embryos.

B.   Their labs are customised to grow stem cells.

C   They regrow cells in hearts, brains, livers with stems cells from tissues of living adults.

D   They derive stem cells from tissues of living adults and grow cells in labs.

   Answer: D

Explanation:
The author says, "Together they perform about 80 corneal regeneration procedures a year, making the L.V. Prasad Eye Institute, where they work, one of the most prolific facilities in the world using stem cells to regenerate tissues of any kind. The Sangwan-Vemuganti team uses stem cells found in the tissues of living adults, not ones derived from embryos."

So option D is correct.

51. **Sangwan-Vemuganti procedure is carried out on**

A   Patients requiring any corneal transplant

B.   Patients with damaged corneas

C.   Patients with damaged eyes of any kind

D.   None of the above

   Answer: C

Explanation:
From the line, he surgically implants corneas grown in a petri dish from stem cells by his colleague Geeta Vemuganti in patients with damaged eyes, we can infer option C is the correct answer.

52. **The world recognises this Indian innovation because Indian scientists are normally known**

A.   To be good at analysing and finding out a method of how an existing drug is made.

B.   As they are good researchers of drugs.

C.   As they are good at carrying out experiments to create generic drugs.

D.   As they are able to carry out drug trials on large samples.

   Answer: A

Explanation:

From first line of 2nd paragraph, Indians are well known for reverse engineering, meaning they can deduce how drugs are made in order to produce generic versions, we can conclude option A is the answer.

53. The pathologist, Vemuganti, started growing cornea in a petri dish

A. By following procedures published in research papers

B. By inventing a totally new procedure

C. By experimenting with procedures published in journals

D. By following the instruction of the transplant surgeon.

   Answer: C

Explanation:

Sangwan and Vemuganti, a pathologist, developed the technique on their own from reading papers and running experiments in the lab.

54. In the context of the passage choose the correct set of meanings for the words: PLATFORM and GENERIC

A   Lab table; related to genes

B.   Method; related to genes

C.   Lab experiments; without a brand name

D.   Methodology; without a brand name

   Answer: D

Explanation:

Platform in the passage refers to a procedure or methodology.

Generic in the passage refers without a brand.

55. Choose the option which is closest in meaning to the word SUBTLE

A.   Innocent

B.   Elusive

C.   Dangerous

D.   Insidious

   Answer: D

Explanation:

Synonym of subtle is insiduous.

56. The following sentence has a missing punctuation mark, choose the right answer. My mother who is from the village is very superstitious

A. Brackets

B. Comma

C. Semicolon

D. Apostrophe

Answer: B

Explanation:
There will be a comma after mother.

57. For the pair of sentences below choose the right option.
   1. Those are them.
   2. Those are they.

A. The first sentence has an error.

B. The second sentence is erroneous.

C. Both sentences are incorrect.

D. Both sentences are correct.

Answer: A

Explanation:
The first sentence is incorrect.

Instructions [58 - 62]

Read the following passage and answer within its context.

TRIPs agreement provides a comprehensive set of global trade rules for the protection of copyright patents, trademarks, industrial designs, trade secrets, semiconductor lay out designs, and geographical indications, that apply to all the number-countries irrespective of their levels of development, natural and human endowments and history. Every member-country has been asked by the WTO to amend its national patent law to confirm to that universal globalized format for legislation relating to pharmaceutical, agrochemical, food, alloys, etc. Under Article 65, the developed countries have been asked to change their laws within another five years, and the less developed countries within an additional five years. The least developed countries have been asked to make those changes by 2005 AD. This attempt at global standardisation and uniformity by way of TRIP's agreement is in conflict with the main thrust of the Rio Earth Summit of 1992 that set out the conditions for sustainable development. These two reveal two contrasting types of international approaches and norms. While the 1992 Earth Summit and the 1993 convention on biodiversity (CBD) focused on 'diversity' as being fundamental to sustain life and

development, TRIPs and WTO are pushing for 'conformity' to international standardized norms on patents, services, labour, investment and what not irrespective of their history, ecology, level of economic development, etc. But despite their diametrically opposed viewpoints, 170 countries signed CBD upholding the need for diversity, and 50 countries signed the TRIPs agreement in 1994 claiming the urgency of uniformity, with a very large element of common names (130) in both. The convention on bio-diversity (CBD) in its Article 16.5 specifically asserts that intellectual property right must not be in conflict with conservation and sustainable use of bio-diversity, a provision that has been totally ignored by those who composed the TRIPs agreement. While in case of agriculture the higher yield of patented products induces the farmers to switch form a more varied production pattern, the resulting narrowing of genetic base makes the economy and society more vulnerable to plant disease and epidemics. It is true that the move towards cultivation of a smaller number of higher yielding varieties and the uniform spread of the same variety over a large space predates the present debate on patent, particularly since the introduction of the green revolution technology in the mid-sixties, but there can be no doubt that the latter has brought about a qualitative change in the scenario and has created possibility of a vast quantitative change too in that direction. So far no attempt has been made to reconcile the two conflicting approaches of CBD and TRIPs. If diversity is so important for sustaining life, how can WTO demand conformity to standardised global formats?

58. **The author points out that intellectual property rights and their administration mechanism**

A   is throttling the interest of global bio-diversity **B**

   is working to help sustain global bio-diversity **C**

   is being sustained by global bio-diversity

D   is what the global bio-diversity needs

   Answer: A

Explanation:
From this line, the convention on bio-diversity (CBD) in its Article 16.5 specifically asserts that intellectual property rights must not be in conflict with conservation and sustainable use of bio-diversity, a provision that has been totally ignored by those who composed the TRIPs agreement, we can infer that option A is the answer.

59. **Which of the following has been said by the author in the passage?**

A.   A high number of countries have signed both C D and TRIPs, two conflicting treaties.

B.   A narrow genetic base, if stuck to for ling, is fraught with danger

   Although a nondiscriminatory approach has been followed in the applicability of TRIPs,
C.   there has been a confessional attitude in prescribing a time frame for Transition, as per needs of the respective countries.

D.   The author is supportive of international conventions and treaties such as TRIPs, CBD etc.

   Answer: D

Explanation:
From the first line of the passage we can conclude that option D is the right answer.

60. Out of the countries that signed CBD, the percentage of those that signed the TRIPs also, is

A   76.5

B   74.5

C   78.5

D   80.2

  Answer: A

Explanation:
A total of 170 countries signed CBD and 130 signed both TRIP and CBD. So percentage = (130/170)*100 = 76.5%

61. According to the author, a higher-yield seed variety is not always welcome as it also ultimately leads to

A.   diseases among the consumers.

B.   diseases among the plants.

C.   monopoly of developed countries.

D.   monopoly of developing countries.

  Answer: B

Explanation:
The author says, "While in case of agriculture the higher yield of patented products induces the farmers to switch from a more varied production pattern, the resulting narrowing of genetic base makes the economy and society more vulnerable to plant disease and epidemics." So the correct answer is option B.

62. As per the TRIPs agreement not much differentiation is made between a developed country such as the USA and an undeveloped country such as Sudan. This is

A   definitely true

B   probably true

C   probably false

D definitely false

  Answer: D

Explanation:
From the line, Under Article 65, the developed countries have been asked to change their laws within another five years, and the less developed countries within an additional five years. The least developed

countries have been asked to make those changes by 2005 AD, we can infer that there is a differentiation between developed and under developed countries so the answer is option D.

63. **A single word equivalent for the statement 'Speak falsely with deliberate intent' is**

A. repudiate

B. prevaricate

C. disparage

D. equivocate

Answer: D

Explanation:

"Equivocate" means using ambiguous language so as to conceal the truth or avoid committing oneself.

Thus, the answer is option D.

64. **Identify the option with the correct spelling.**

A. paraphenalia

B. programe

C. pediatrics

D. beserk

Answer: C

Explanation:

Option A should have been "Paraphernalia".

Option B should have been 'Programme".

Option C is correct.

Option D should have been "Berserk".

Hence, the answer is option C.

65. **Which two sentences in the following convey the same idea? Choose from the combinations listed below:**
   1. **Wasn't there any checking at the airport?**
   2. **I want to know if there was any checking at the airport.**
   3. **I wonder if there should have been any checking at the airport?**
   4. **There should have been checking at the airport.**

A   2,3

B   1,2

C 3,4

D 2,4

Answer: B

Explanation:

Sentences 1 and 2 have the same meaning where the speaker wishes to know whether checking took place at the airport.

In sentence 3, the speaker is wondering whether checking should have been done or not.

In sentence 4, the speaker wants checking to happen at the airport.

Hence, the answer is option B.

66. **Choose the grammatically correct sentence.**

A You should at once report it to the concerned authority.

B You should report it at once, to the authority concerned.

C You should report it at once, to the concerned authority.

D You should at once report it to the authority concerned.

Answer: D

67. **Find the correct match of grammatical function with usage for the word:**
AFTER

Grammatical function	Usage
1) adjective	5) You may go after having your lunch
2) adverb	6) It appears to be the after effect of the disease
3) conjunction	7) Many graduates are hankering after jobs
4) preposition	8) He came soon after

A 1-8, 2-5, 3-6, 4-7

B 1-6, 2-5, 3-8, 4-7

C 1-5, 2-8, 3-7, 4-6

D 1-6, 2-8, 3-5, 4-7

Answer: D

Explanation:

In sentence 5, "after" is used to connect two clauses. Thus, it is used as a conjunction. Hence, 3 -5is a

match.

Hence, the answer is option D.

In sentence 6, "after" is to describe a noun "effect. Thus, it is used as an adjective. Hence, 1 -6is a match.

In sentence 8, "after" is used to describe the verb "came". Thus, it is used as an adverb. Hence, 2 -8is a match.

Thus, 4 -7 is the final match.

68. NEOPHYTE is the opposite of

A. student

B. clown

C. veteran

D. professional

   Answer: C

Explanation:
"Neophyte" refers to a person who is new to a particular subject.

"Veteran" refers to a person who has had long experience in a particular field. Thus, it is the opposite of the given word.

Hence, the answer is option C.

69. Find the maximum number of times that any one of the given words fits the set of sentences.
   disabled flimsy crippled lame
   1) Don't make .... excuses.
   2) Liberalization may have .... smaller manufacturers.
   3)Being a defaulter at the stock exchange makes him a .... duck.
   4) A .... person may limp.

A. in all the four sentences

B. in three sentences **C**

   in two sentences

D   in only one

   Answer: C

Explanation:
The word "lame" can be used in sentences 1 and 3.

The word "crippled" can be used in sentences 2 and 4.

Hence, a word can be used a maximum of two times.

Hence, the answer is option C.

70. Which of the following does not make a sensible word/ phrase when added to the given word?

FIRE

A. fly

B. engine

C. stick

D. escape

Answer: C

Explanation:

A "Firefly" is an insect which emits light.

A "Fire engine" is the vehicle used by firemen to help extinguish fires.

A "Fire escape" is a special route made to escape from buildings in case of fires.

Hence, the answer is option C.

71. Arrange the sentence 1,2,3,4 to form a logical sequence between sentences I and II. Choose the alternative where the four combinations make a meaningful sentence.

I. We all value having the freedom
1) which many of us fail to honour
2) to make the choices we want in our careers
3) but with great freedom comes great responsibility
4) so most companies fall prey to the policies which become rigid
II. and that's probably one reason we find most companies not following what they preach

A 1, 3, 4, 2

B 2, 3, 1, 4

C 1, 4, 2, 3

D 3, 2, 1, 4

Answer: B

Explanation:

2 will be the first statement as it mentions what freedom is being talked about in (I).

3 will follow 2 as it states that the freedom mentioned in 2 comes with great responsibility.

1 will continue the topic by saying that many of us fail to honour the responsibility mentioned in 3.

4 will conclude the argument sequence as it starts the idea continued in (II).

Hence, the answer is option B.

Instructions [72 - 74]

Read the edited excerpt of an article by NELSON VINOD MOSES and answer the questions in this context.

A successful non-resident Indian employed in the United States returns to a backward Indian village and transforms the lives of the villagers. Sounds familiar? At 31, Ashwin Naik is pacing through the path Shah Rukh Khan traced in his off-bear Bollywood movie, Swades. Naik had just quit his cushy job in a genomics firm in the US to join MIT Sloan School of Business. With a month in hand, he headed home a travelled through the remote areas of Bagalkot district in Karnataka. The woeful social conditions he saw moved him. Naik chucked the MBA course and in six months set up Vaatsalya Healthcare, a rural healthcare delivery system. In February 2005, Vaatsalya's first hospital opened in Hubli. Two more centres were opened in Gadag and Karwar to offer specialist services of surgeons and facilities such as physiotherapy for children suffering from cerebral palsy. "We introduced paediatric surgery for infants below six months," says Naik. "Else, patients would have to be taken to distant cities of Hubli or Bangalore." Naik plans 100 more units in five states in the next three years. Mere charity by an affluent, middle-class professional? Far from it. Vaatsalya is one among rapidly spreading 'for profit' social enterprises that serve the poor and bring in profit. Mumbai-based Ziqitza, an imbalance services company, is another. It never refuses a patient for money, and charges Rs. 50 to 200. Done fleetingly in India and elsewhere till now, entrepreneurial minds with a social conscience are methodically creating such models at a greater pace. "There has been a boom in the past two years," says Varun Sahni, country director of Acumen Fund, a US-based social fund that invests in companies that target low income communities. "Currently, there are about 1,000 in India." The timing seems perfect. There is a wide market acceptance and funding has
been coming in easily. These enterprises work across a swathe of areas including healthcare, education, rural energy, agriculture, arts and crafts, banking and more. 'For profit' entrepreneurs are obsessed with social and environmental impact in addition to the financial returns. Since they are answerable to the investors, they try expanding the business rapidly. SKS Microfinance, for instance, started in 1998 and has now over 900,000 customers, 440 branches and an outstanding loan disbursement of over Rs. 452 crores as of August 2007

72. **Identify the appropriate business model of the kind of enterprise described by the author.**

A.   Servicing societies at no profit

B.   Profiting from poor people

C.   Setting up enterprises for masses of low-income groups on experimental basis.

D.   Setting up enterprises for social causes for profit and expand rapidly

 Answer: D

Explanation:
The author describes the enterprise mentioned in the passage as "Vaatsalya is one among rapidly spreading 'for profit' social enterprises that serve the poor and bring in profit."

Hence, the answer is option D.

73. **Which of the following companies does not illustrate the idea explained by the author?**

A   SKS Micro finance

B Acumen Fund

C. Ziqitza

D. Vaatsalya Healthcare

Answer: B

Explanation:

The businesses mentioned in options A, C and D are all "for profit" enterprises that work on social causes.

Hence, the answer is option B.

74. **According to the author, which of the following options describes 'for profit' entrepreneurs most appropriately?**

A. NRI's paying back to their motherland.

B. Those affluent, middle-class professionals treating it as charity.

C Those who work towards getting financial returns on social business by expanding quickly.

D Those who have sympathetic investors for their business ideas for poor.

Answer: C

Explanation:

In the last paragraph, the author says, "'For profit' entrepreneurs are obsessed with social and environmental impact in addition to the financial returns. Since they are answerable to the investors, they try expanding the business rapidly."

Hence, the answer is option C.

75. **A contextual usage is provided for the word below. Pick the word that is most inappropriate.**
   MALINGER: The young man made it a point to malinger
   inspite of the assigned work load.

A. Wander

B. Laze

C. Evade

D. Argue

Answer: D

Explanation:

"Malinger" means to pretend to be ill in order to escape duty or work.

"Wander" means to roam aimlessly.

"Laze" means to pass time in a lazy manner.

"Evade" means to avoid doing something.

"Argue" means to express your disagreement angrily.

Options A, B and C have a similar meaning to Malinger.

Hence, option D is the answer.

76. **The following is a scrambled sentence with the segments marked 1,2,3 and 4. Choose the alternative with the order of segments that best reconstruct the sentence.**

    1. For all the padre's rhetoric about the English as God's Chosen People, the padre had a whole tribe of Anglo-Indian first cousins.
    2. Padre Rotton was an even more striking case.
    3. by various Indian wives, all of whom were at that moment engaged in fighting on the rebel side in Avadh, where they took an active part in besieging the British Residency in Lucknow.
    4. These included James Rotton who could not speak English and the twenty two Muslim sons of his convert cousin, Felix Rotton.

A   1, 2, 3, 4

B   2, 1, 4, 3

C   1, 4, 2, 3

D   2, 4, 1, 3

Answer: B

Explanation:

2 will be the opening statement as it introduces the Padre.

1 will follow 2 as it explains why Padre's case is called curious in 2.

4 will follow 1 as it mentions talks about the cousins mentioned in 1.

3 will be the closing statement.

Hence, the answer is option B.

77. **Choose the sentence in which the given word is used correctly (grammatically and semantically) ALMOST**

A.   As I crossed the road a scooterist almost hit me.

B.   Crossing the road a scooterist hit me almost.

C.   A scooterist across the road almost hit me.

D.   A scooterist almost hit me crossing the road.

   Answer: A

Explanation:
Option A is both semantically and grammatically correct.

Options B and D mean that the scooterist was crossing the road. Also, B is semantically incorrect.

A scooterist who is across the road cannot hit you. Thus, option C is semantically incorrect.

Hence, the answer is option A.

78. **In the following sentence choose the erroneous segment.**

<div align="center">

A   **B**   **C**

</div>

We took a taxi so we would be on time for the meeting

A   Error in segment A

B Error in segment B

C Error in segment C

D No error

Answer: B

Explanation:

Segment B should have been "so that we would be on time".

Hence, the answer is option B.

79. **Find the ODD one out from the group of words which are 87. related in some way or the other**

A. din

B. cacophony

C. racket

D. cadence

Answer: D

Explanation:

Options A, B and C all mean a loud, unpleasant noise.

Option D means a pleasant sound.

Hence, the answer is option D.

80. **Fill in the blanks with the correct alternative**
Caw is to crows as ....is to cows.

A. bleat

B. snort

C low

D bellow

Answer: D

Explanation:

"Caw" refers to the harsh cry of a crow or similar birds.

Similarly, "Bellow" refers to the harsh cry of cows or similar animals.

Hence, the answer is option D.

Quantitative Aptitude

81. **In 4 years, the SI on a certain sum of money is $\frac{7}{25}$ of the principal. What is the annual rate of interest?**

A   4%

B   4.5%

C.   7%

D.   9%

   Answer: C

Explanation:

SI = $\frac{PTR}{100}$

Given SI = 7/25P when t=4

$\frac{7}{25}P = \frac{4PR}{100}$

=> R=7

82. **Thirty days are in September, April, June and November. Some months are of thirty one days. A month is chosen at random.**

   Then its probability of having exactly three days less than maximum of 31 is

A $\frac{15}{16}$

B   1

C $\frac{3}{48}$

D   None of these

   Answer: D

Explanation:

Number of days in February = 28

Number of months having three days less than 31 i.e, 28 days = 1

$$\therefore \text{Required probability} = \frac{1}{12}$$

Hence, the correct answer is Option D

83. **Two persons are climbing up on two moving escalators which have 120 steps. The ratio of 1st person's speed to that of 1st escalator is 2:3 (steps). The ratio of 2nd person's speed to that of 2nd escalator is 3:5 (steps). Find the total number of steps they both have taken together.**

A. 85

B. 93

C. 80

D. 75

Answer: B

Explanation:

First person: For every 2 steps he takes, the escalator moves by 3 steps at the same time.

Hence, 5 steps are covered at a time.

This is repeated 24 times(120/5).

Hence, first person takes = 24 *2 = 48 steps

Second person: For every 3 steps he takes, the escalator moves by 5 steps at the same time.

Hence, 8 steps are covered at a time.

This is repeated for 15 times(120/8)

Hence, second person takes = 3 * 15 = 45 steps

Total number of steps = 48 + 45 = 93

84. **The table below shows the temperatures in degrees Fahrenheit in a city over one week. If m represents the median temperature, f represents the temperature that occurs most often, and a represents the average (arithmetic mean) of the seven temperatures, which of the following is the correct order of m, f, and a?**

Noontime Temperature!						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
66	78	75	69	78	77	70

A. $a < m > f$

B. $a < m < f$ C

$m < a < f$ D

$m < f < a$

Answer: B

Explanation:

When arranged in ascending order, we get the noontime temperatures as:

66, 69, 70, 75, 77, 78 and 78.

m= 75.

f= 78 (occurs twice)

$a= \dfrac{(66+69+70+75+77+78+78)}{7} = \dfrac{513}{7} = 73.29$

So, a<m<f. Option B

85. **Inside a triangular park, there is a flower bed forming a similar triangle. Around the flower bed runs a uniform path of such a width that the sides of the park are exactly double the corresponding sides of the flower bed. The ratio of areas of the path to the flower bed is:**

A   1 : 1

B   1 : 2

C   1 : 3

D   3 : 1

  Answer: D

Explanation:

Lets assume the park is an equilateral triangle with side '2x' units, => the side of the flower bed = 'x' units

Area of park = $\dfrac{\sqrt{3}}{4} \cdot (2x)^2 = \dfrac{\sqrt{3}}{4} \cdot 4x^2$

Area of flower bed = $\dfrac{\sqrt{3}}{4} \cdot x^2$

Area of path = area of park - area of flower bed = $\dfrac{\sqrt{3}}{4} \cdot 3x^2$

Ratio of area of path to area of flower bed = $\dfrac{\left(\dfrac{\sqrt{3}}{4} \cdot 3x^2\right)}{\dfrac{\sqrt{3}}{4} x^2}$ = 3:1

86. **Consider the following piecewise definition of the function f.**

$$f(x) = \begin{cases} 3 - x, & if \quad x \le 0 \\ x^2 + 2, & if \quad x \ge 0 \end{cases}$$

  Evaluate f(-3).

A.   6

B.   0

C   11

D   -7

  Answer: A

Explanation:

f(x) = 3x , if x ≤ 0

∴ f(3) = 3(3) = 6

87. **A special lottery is to be held to select a student who will live in the only deluxe room in a hostel. There are 100 Year-III, 150 Year-II, and 200 Year-I students who applied. Each Year-III's name is placed in the lottery 3 times; each Year-II's name, 2 times; and each Year-I's name, 1 time. What is the probability that a Year-III's name will be chosen?**

A $\frac{1}{8}$

B $\frac{2}{9}$

C $\frac{2}{7}$

D $\frac{3}{8}$

   Answer: D

Explanation:

By the given information,

Total number of Year III student's name= 3*100= 300

Total number of Year II student's name= 2*150= 300

Total number of Year I student's name= 1*200= 200.

Number of favourable outcomes= year III student's name= 300

Total Sample space= total number of names= 300+300+200= 800.

Therefore, required probability= $\frac{300}{800}$ = $\frac{3}{8}$ Option D

88. **The average of nine numbers is M and the average of three of these is P. If the average of remaining numbers is N, then**

A.   M = N + P

B. 2M = N + P   **C**

     3M = 2N + P

D   3M = 2P + N

   Answer: C

Explanation:

This can be solved easily by using allegations

$$p = \frac{(p1q1+p2q2)}{q1+q2}$$

Here p = M , p1=P , p2=N

q1=3 , q2=6

$$\therefore M = \frac{(3P + 6N)}{3 + 6}$$

On solving 3M = P+2N

89. The intersection of two cubes cannot be

A.   cube

B.   triangle

C.   rectangle

D.   none of these

  Answer: A

Explanation:

Cubes are a 3-D figure, and so, the intersection of two 3-D figure must be a 2-D figure.

So, Cube cannot be the intersection of two cubes.

90. In a factory, each day the expected number of accidents is related to the number of overtime hour by a linear equation. Suppose that on one day there were 1000 overtime hours logged and 8 accidents reported and on another day there were 400 overtime hours logged and 5 accidents. What is the expected number of accidents when no overtime hours are logged?

A.   2

B.   3

C.   4

D.   5

  Answer: B

Explanation:

Let the number of overtime hours logged be x.

Let the number of accidents reported be A.

So, since the relationship between A and x is linear, we can write A= ax+c

Given, when x=1000, A=8.

So, 8= 1000a+ c (1)

Again, when x= 400, A=5.

So, 5= 400a+ c (2)

Subtracting Eqn 2 from 1, we get,

600a= 3

=> a= 1/200.

Now putting this value of a in Eqn 1, we find

$8= \frac{1000}{200} + c$

=>c= 8-5=3.

So, when x=0,

A= c= 3-option B

91. **A rainy day occurs once in every 10 days. Half of the rainy days produce rainbows. What percent of all the days do not produce rainbow?**

A 95%

B 10%

C 50%

D 5%

   Answer: A

Explanation:

Let total number of days=20x

Number of rainy days = 2x

Number of rainbow days = x

Number of non rainbow days= 19x

$\therefore$ Percentage of non rainbow days = $\frac{19x}{20x} \cdot 100 = 95$

92. **Bags I, II and III together have ten balls. If each bag contains at least one ball, how many balls does each bag have? Decide whether the data given in the statements are sufficient to answer the question.**
    Statement (1): Bag I contains five balls more than bag III.
    Statement (2): Bag II contains half as many balls as bag I

A Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient to answer the question asked.

B Statement (2) Alone is sufficient, but statement (1) alone is not sufficient to answer the question asked.

C BOTH statements (1) and (2) TOGETHER are sufficient to answer the question asked, but NEITHER statement ALONE is sufficient to answer the question asked

D EACH statement ALONE is sufficient to answer the question asked.

   Answer: C

Explanation:

Considering statement 1 alone,

Let the number of balls in bag III be x.

The number of balls in bag I becomes x+5.

And the rest, which is 10-(x+x+5)= 5-2x balls are with C.

We cannot find the value of x, so Statement 1 alone is not sufficient.

Considering statement 2 alone,

Let the number of balls in bag I be 2a

Balls in bag II will be a and the rest, i.e 10-3a will be in bag 3.

Again, we cannot find the value of a in this case, and hence, Statement 2 alone is not sufficient.

Considering both the statements and using the number of balls with each one of them as found using statement 1, we get

$$5 + a = 2(5 - 2a)$$

=>5+a= 10-4a

=> 5a=5, or a=1.

So, balls in Bag I= 5+a=6

balls in Bag II= 5-2a=3

balls in Bag III= a= 5.

Therefore, both statement I and II are required.

93. **Area of a square natural lake is 50 sq. kms. A diver wishing to cross the lake diagonally, will have to swim a distance of**

A.   10 miles

B.   12 miles

C.   15 miles

D.   None of these

   Answer: D

Explanation:

Let the side of the square lake be of length x kms.
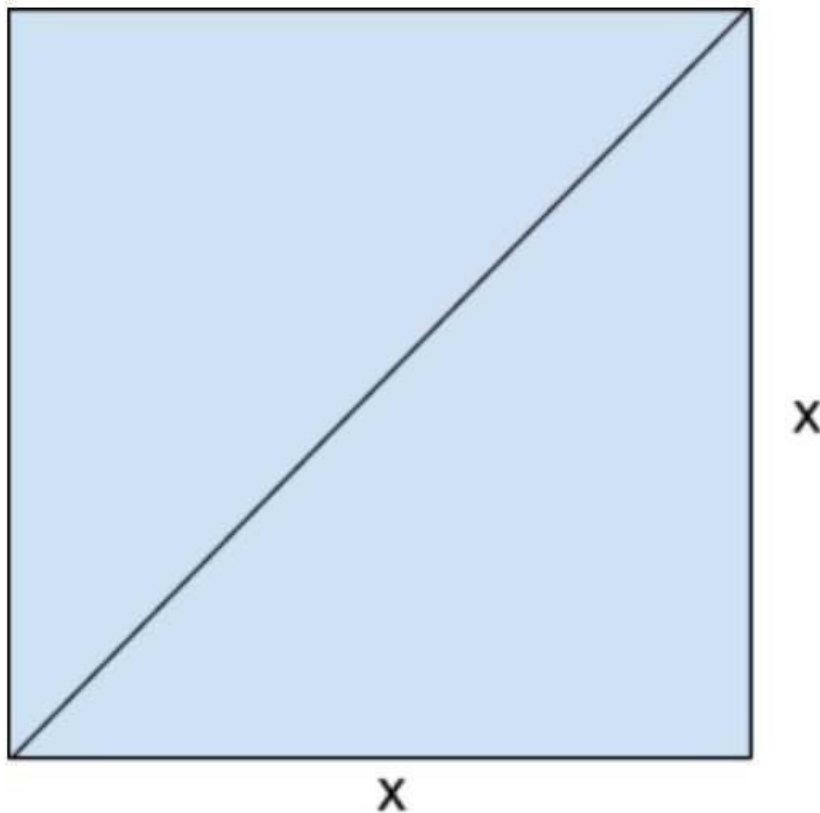
Using pythagorus theorem, we can find the length of the diagonal as $\sqrt{x^2 + x^2} = \sqrt{2x^2} = x\sqrt{2}$

'.' Area of the square= 50 sq. kms,

$x^2 = 50$ or x= $5\sqrt{2}$

Therefore length of the diagonal = $5\sqrt{2} \cdot \sqrt{2} = 5 \cdot 2 = 10$ km

94. **If n = 1 + x, where x is the product of 4 consecutive positive integers, then which of the following is/are true?**
    1. **n is odd;**
    2. **n is prime**
    3. **n is a perfect square**

A. 1 and 3 only

B. 1 and 2 only

C. 1 only

D. None of these

Answer: C

Explanation:

If x is a product of 4 consecutive positive integers, it has to be a multiple of 1*2*3*4= 24.

So, n becomes of the form 24k+1.

We know that x=24k will always be an even number, and so, n will always be an odd number as Even

number+1= Odd.

Even if for k=1 and 2, we get n= 25 and 49, which are perfect squares, it is not true for every case. For example, when k=3, n= 1+72=73, which is not a perfect square.

So, only statement 1 holds.

95. How many arrangements can be formed out of the letters of the word EXAMINATION so that vowels always occupy odd places?

A 72000

B 86400

C 10,800

D 64000

Answer: C

Explanation:

Number of vowels in word EXAMINATION =6

Number of consonants in word EXAMINATION =5

Number of ways in which 6 vowels can be arranged in 6 odd places=(6!)/2!*2!   (1)

Number of ways in which 5 consonants can be arranged in 5 even places = 5!/2!   (2)

Now total arrangements = (1)*(2)

=10,800

96. In a school drill, a number of children are asked to stand in a circle. They are evenly spaced and the 6th child is diametrically opposite the 16th child. How many children are made to stand in the circle?

A. 16

B. 20

C. 22

D. None of these

Answer: B

Explanation:

The 6th and the 16th child divide the circle into two halves as it is given that the 6th child is diametrically opposite the 16th child.

When we consider one of the two halves, it will contain students numbered from 7 to 15, i.e a total of 9 children.

Similarly, the other side must also have 9 children.

Now, including the two pairs of 9 children at each half along with child numbered 6 and 16, we have a total of 9+9+2= 20 children.

97. **A man purchased 40 fruits; Apples and oranges for Rs.17. Had he purchased as manyn oranges as apples and as many apples as oranges, he would have paid Rs.15/-. Find the cost of one pair of an apple and an orange.**

A. 70 paise

B. 60 paise

C. 80 paise

D. 1 rupee

Answer: C

Explanation:

Let us assume the number of apples purchased by the man to be x.

Then, the number of oranges will be (40-x).

Let the price of each apple be Rs. y and that of an orange be Rs. z

It is given that, xy+ (40-x)z= 17.

=> xy+40z-xz=17 (1)

Now, if the number of apples and oranges are interchanged, the apples will be (40-x) and the oranges will be x.

Given, the new total cost will be Rs. 15

So, (40-x)y + xz=15

=>40y-xy+xz= 15 (2)

Adding eqns 1 and 2, we get,

xy+40z-xz+40y-xy+xz=15+17

=> 40(y+z)=32

=>y+z= $\frac{32}{40}$ = $\frac{4}{5}$

Or, the cost of one apple and one orange, x+y= Rs. $\frac{4}{5}$ = $80\ paise$

98. **The number 3113113113113113113113 is**

A divisible by 3 but not by 11

B divisible by 11 but not by 3

C divisible by both 3 and 11

D neither divisible by 3 nor by 11

Answer: D

Explanation:

By looking into the option, we can see that we only need to check the divisibility of the given number by 3 and 11.

<u>Divisibility test by 3 :</u> The given number, 31131131131131131311 has seven 3s and fourteen 1s.

So, the sum of the digits in the number= (7*3)+(14*1)= 21+14=35.

Since, 35 is not divisible by 3, **the given number is not divisible by 3.**

<u>Divisibility test by 11:</u> The sum of digits at odd places= (1+3+1+1+3+1+1+3+1+1+3)= 19

The sum of digits at even places= Sum of all the digits- Sum of digits at odd places= 35-19= 16.

Since, the difference between the the sum of digits at odd places and the sum of digits at even places, i.e. 19-16 is not a multiple of 11.

So, the given number is also not divisible by 11.

Hence, option D

99. **A man earns 6% SI on his deposits in Bank A while he earns 8% simple interest on his deposits in Bank B. If the total interest he earns is Rs.1800 in three years on an investment of Rs.9000, what is the amount invested at 6 %?**

A   3000

B   6000

C   4000

D   4500

Answer: B

Explanation:

Let us assume that the investment made at bank A at 6% S.I. is Rs. x

Since, total investment= Rs. 9000, Investment made at bank B at 8% S.I.= Rs. (9000-x)

From bank A, interest earned= $\frac{P.r.t}{100}$, where P= Principal amount, r= rate of Interest and t= time period of investment in years.

So, Interest from bank A= $\frac{x.6.3}{100} = \frac{18x}{100}$

From Bank B, Interest earned for 3 years= $\frac{(9000-x).8.3}{100} = \frac{216000-24x}{100}$

Equating the sum of interests earned from both the banks to the value given i.e. 1800, we find,

$1800= \frac{216000-24x}{100} + \frac{18x}{100} = \frac{216000-6x}{100}$

=> $1800 \cdot 100 = 216000 - 6x$

=> $6x = 216000 - 180000$

=>x= $x = \frac{36000}{6}$

∴. x= Rs. 6000-Option B

1. **Two identical trains A and B running in opposite directions at same speed take 2 minutes to cross each other completely. The number of bogies of A are increased from 12 to 16. How much more time would they now require to cross each other?**

A．40s

B．50s

C．60s

D．20s

Answer: D

Explanation:

Let us assume that the length of each bogy is 1 unit, and the speed of both A and B be s units.

Initially, both A and B had 12 bogies, and ran in opposite direction.

So, using the concept of relative speed, the effective speed of the two trains taken together, when travelling in opposite direction adds up.

Effective distance covered = 12+12 units=24.

Effective speed= 2s units.

Now, using time= $\frac{Dis\tan ce}{Speed}$, we get 2 mins= $\frac{24}{2s}$

=>120= $\frac{12}{s}$

∴s= $\frac{1}{10}$

In the new scenario, length of B becomes 16 units.

So, Effective distance covered = 12+16 units=28 units.

Effective speed= 2s units.

New time= $\frac{28}{2s}$ = $\frac{14}{s}$ =140.

So, increase in time in the new case= 140-120 seconds= 20 Seconds- Option D.

01. **A ladder is lying against a wall which is 5 metres high. If the ladder slips 2 metres away from the wall, the top of the ladder touches the foot of the wall. The length of the ladder is**
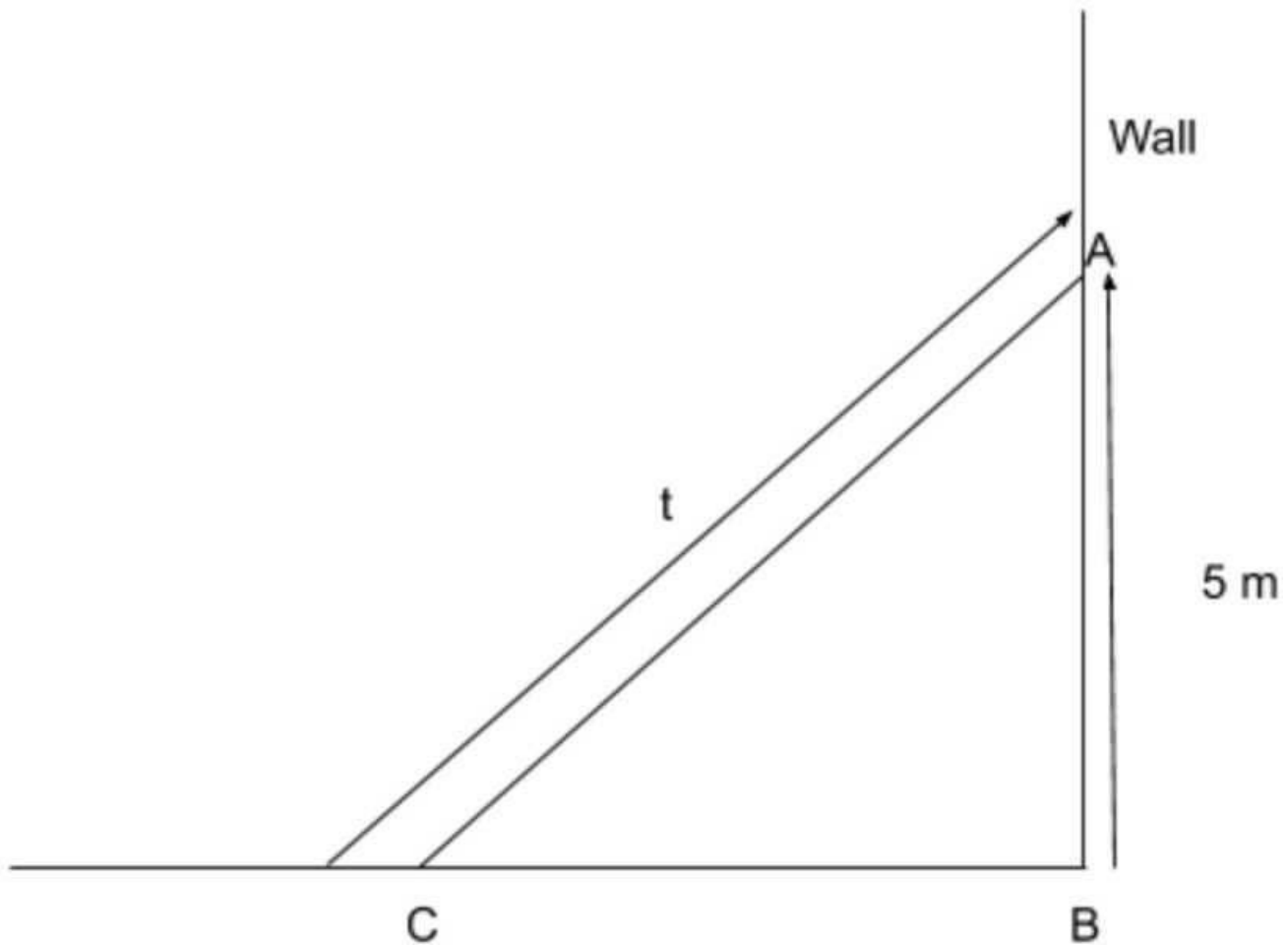
A   5m

B   5.25 m

C   7.25 m

D   4 m

Answer: C

Explanation:

Let us draw the diagram of the ladder against the wall as given in the question.
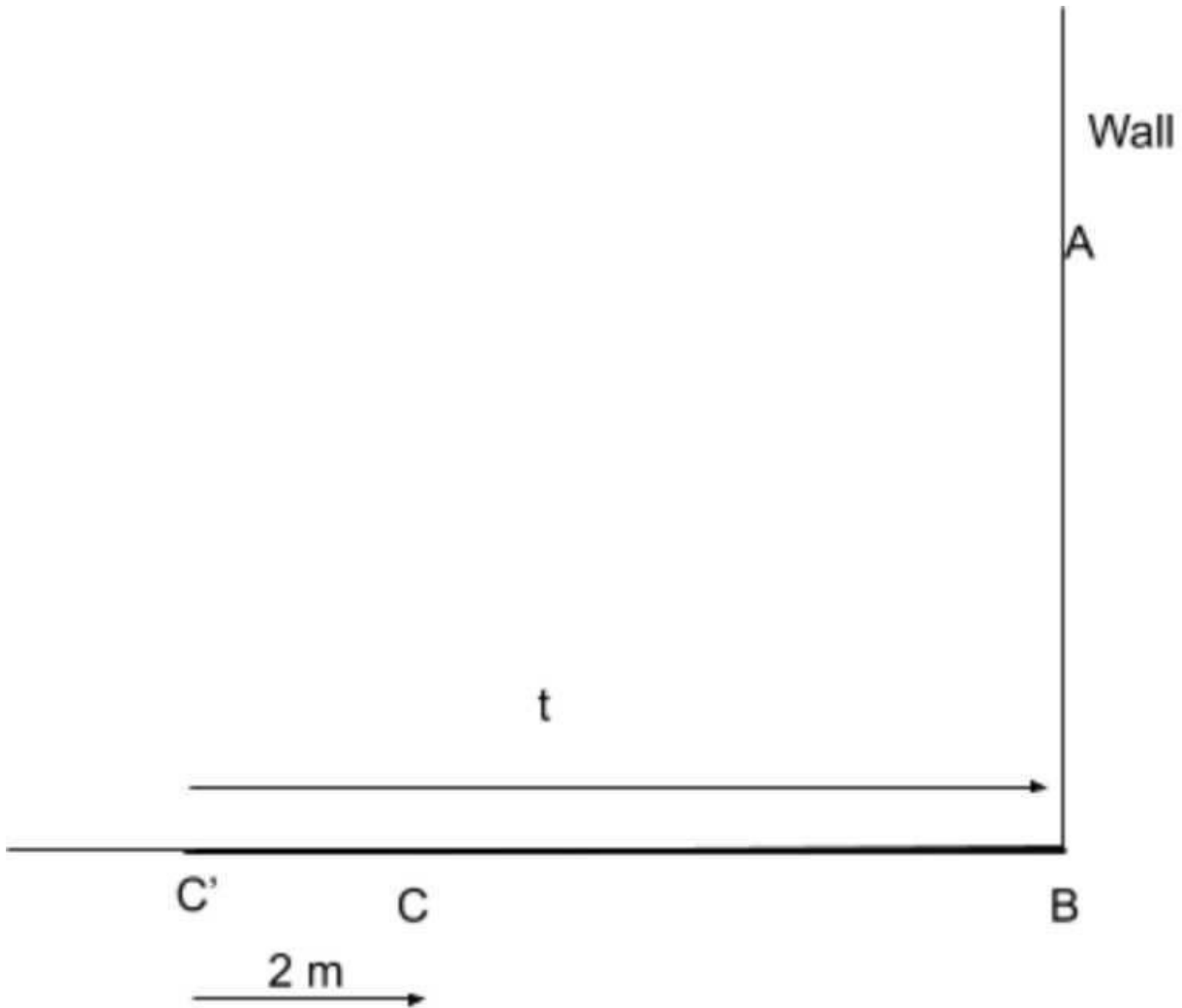
Let the length of the ladder be t metres.

We can find BC, i.e the distance of the ladder from the foot of the wall using Pythagorus theorem

$$BC^2 = t^2 - 5^2.,$$

$$\Rightarrow BC^2 = t^2 - 25$$

$$\Rightarrow BC = \sqrt{t^2 - 25}$$

Now, when the ladder is slips 2 m away from the wall, the ladder lies on the ground completely. This can be depicted as:

Wall

A

t

C'   C   B

2 m

Now, BC+ BC'= t

=> $\sqrt{t^2 - 25} + 2 = t$

=> $\sqrt{t^2 - 25} = t - 2$

Squaring both sides,

$t^2 - 25 = (t - 2)^2$

=> $t^2 - 25 = (t^2 - 4t + 4)$

=>$4t = 29. And\ so,\ t = 7.25$

Instructions [102 - 104]

The following line graph shows the ratio of the wheat production to rice production of a state in India over a period 7 years from 1999 -2006. Answer the questions based on this data.
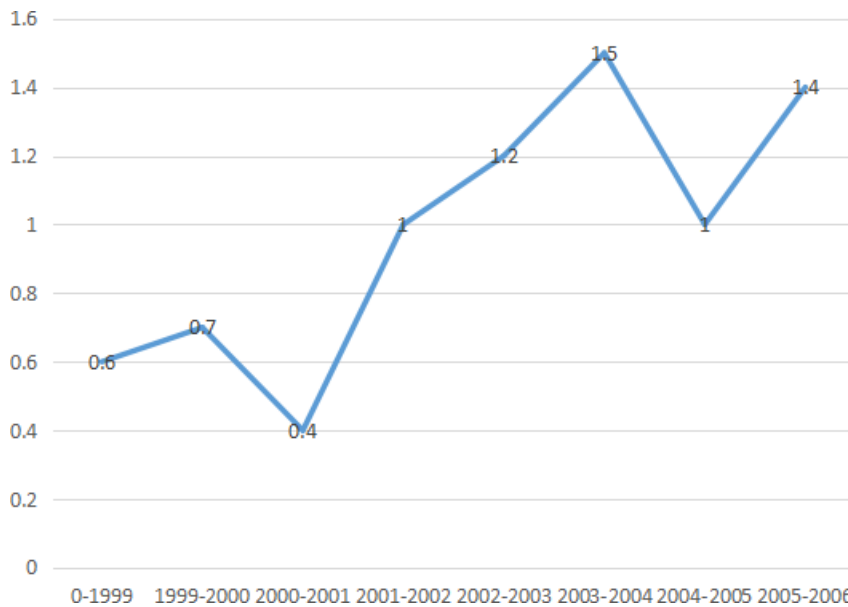
02. If the rice production in 2003 was 4 lac tons what was its wheat production during 2003?

A   1.2 lac tons

B   3.6 lac tons

C   4.8 lac tons

D 5.0 lac tons

  Answer: C

Explanation:

In the year 2003, Wheat: Rice=1.2 and it is given that Rice production= 4 lac tons.

Let the wheat production during 2003 be x.

So, $\dfrac{x}{4} = \dfrac{1.2}{1}$

=> x= 4.8 lac tons

03. In how many years wheat production was more than the rice production?

A.   2

B.   3

C.   4

D.   5

  Answer: B

Explanation:

The number of years in which ratio is greater than 1 will be the years where wheat production was greater than the rice production.

So number of years = 3

04. **If the total annual grain requirement (wheat and rice together) of the state is 5 lac tons andm if the rice production during 2001 was 3 lac tons, how much grain had to be imported from the other state of India to fulfill the requirement?**

A   2. 00 lac tons

B   1. 55 lac tons

C   1. 05 lac tons

D   0.65 lac tons

   Answer: D

5. **The profits of Biscuits India Ltd soared by 32% in the year 2006 - 07 as compared to year 2005 - 06. By what % did Biscuits India's Sales increase in 2006 - 07 compared to the previous year? (ssume: Profit = Sales - Expenses) Decide whether the information given in the two statements is sufficient to solve the problem.**
   Statement (1): Expenses in 2006 - 07 were Rs 1,400 crores, as compared to Rs 1,220 crores in 2005 - 06
   Statement (2): Sales in 2006 - 07 were Rs 4,300 crores

A.   Any one of the two statements (1) or (2) taken alone, is sufficient to answer the question.

B.   Each of the statement (1) or (2) taken alone, is sufficient to answer the question.

C   Both statements, taken together, are sufficient to answer the question, but neither of them alone is sufficient

D   Both the statements together are insufficient to answer the question.

   Answer: C

Explanation:
Considering statement 1 alone, we can make a table as follow:

	2005-06	2006-07
Sales	S	S'
Expenditure	1220	1400
Profit	P	1.32P

We get S-1220=P and S'-1400=1.32P

Since there are 3 variables, S, S' and P, we cannot get the values of the variable using the two equations

alone.

So, Statement 1 alone is not sufficient.

Using statement 2, 1.32P= 4300

=> P= 4300/1.32. But again, two variables, S and S' are unknown.

So, So, Statement 1 alone is not sufficient.

When we use both the given statements, we will have

S-1220=4300/1.32 and

S'-1400=4300.

Using these two equations, we can find S and S' respectively and hence answer the question asked.

Therefore, both statements are necessary to answer the question.

Instructions [106 - 108]

Use the table about the speed of a train over a 3-hour period. The time count does not begin from starting of train.

Time (Minutes)	0	30	45	60	90	120	150	180
Speed at given time (in km/hour)	40	45	47.5	50	55	60	65	70

06. **During the three-hour period shown in the table, the speed of the train increased by**

A   25%

B   100%

C   75%

D   125%

 Answer: C

Explanation:
At t=0, speed was 40 kmph

At t=180, speed becomes 70 kmph

Therefore, increase in speed= $\frac{70-40}{40}.100 = \frac{30}{40}.100 = 75\%$

07. **At time t, measured in minutes after the beginning of the time period, which of the following gives the speed of the train in accordance with the table?**

A $\frac{t}{6}$

B $6t$

C $40 + t$

D $\quad 40 + \dfrac{t}{6}$

 Answer: D

Explanation:

Each of the options given assumes the speed of the train to vary linearly wrt time.

So, let us assume the speed of the train at time t be given by 40+ at, because at t=0, the speed was already 40 kmph.

When we put x=30, we get,

45= 40+ 30a

=> 5= 30a Or, a= $\dfrac{1}{6}$

So, Speed= 40+ $\dfrac{t}{6}$

We will check again to verify the results.

When t=60, Speed= 40+ $\dfrac{60}{6}$ = 50 kmph, which matches with the value given in the table.

So, Option D is correct

8. **How fast was the train travelling 2 1/2 hours after the beginning of the time period?**

A. 50 km/hr

B. 55 km/hr

C. 60 km/hr

D. 65 km/hr

 Answer: D

Explanation:

$2\dfrac{1}{2}$ hours after the beginning of the time period means $120 + (2 \cdot 60) + \left(\dfrac{1}{2}\cdot 60\right) = 120 + 30 = 150$ minutes.

From the table, we can infer that after 150 minutes, Speed of the train was 65 km/hour

9. **In March 2007, Computers Ltd. made a bundled offer of its Laptops together with Deskjet printers to boost Sales, though both the Laptop and the printer were also available individually. What is the price of the Printer, if purchased separately? Decide whether the information given in the two statements is sufficient to solve the problem.**
    Statement (1): The bundled offer price was Rs 42,600
    Statement (2): The Laptop, without the bundle offer was priced at Rs 39,400

A. Any one of the two statements (1) or (2) is sufficient to answer the question

B. Each of the statement (1) or (2) taken alone, is sufficient to answer the question

C Both statements, taken together, are sufficient to answer the question, but neither of them alone is sufficient.

D Both the statements together are insufficient to answer the question.

Answer: D

Explanation:

Understanding the premise of the question, we can infer that the price of the laptop when taken individually is, let's say x and that of the printer is y.

But, when taken together under the bundle offer, the price is lesser than (x+y), because of the discount given, let's say a%.

Statement 1 gives us the discounted price of the printer and laptop taken together, i.e. $(x + y)\left(1 - \frac{a}{100}\right)$

We have three variables and cannot solve this equation.

Statement 2 gives us the value of x. But still, two variables, a and y are unknown.

Even if we use both the statements together, we will have 2 variables and only 1 equation.

Therefore, both statements are insufficient to find the value of y.

Instructions [110 - 113]

The following chart presents the data collected for an on-line job portal InfiniteJobs.com. For each Question, there are two Statements, each of which could be either True or False. Choose one of the following options as an answer:

Year	Category	Number of Registrations	Number of Candidates who posted their CV's	Number of Candidates short-listed by Employers	Number of offered jobs
2004	Technical	61,205	59,981	684	181
	Managerial	19,236	15,389	138	48
2005	Technical	63,298	60,133	637	115
	Managerial	45,292	40,763	399	84

10. **Statement X: The percentage increase in number of Registrations from 2004 to 2005 is higher for Managerial candidates than for Technical candidates**

    Statement Y: The overall Registrations have grown by more than 25%

A. Only [X] is True

B. Only [Y] is True

C. Both [X] and [Y] are True

D. Neither [X] nor [Y] is True

Answer: C

Explanation:

Considering statement X,

Percentage increase for Managerial candidates= $\frac{(45292-19236)}{19236} \cdot 100 = \frac{26056}{19236} \cdot 100 = 135.45\%$

Percentage increase in Technical candidates= $\frac{(63298-61205)}{61205} \cdot 100 = 3.3\%$

Therefore statement X is true.

Considering statement Y,

Total registrations in 2004= 61205+19236= 80441.

Total registrations in 2005= 63298+45292= 108690.

So, growth in the overall number of registrations= $\frac{(108690-80441)}{80441} \cdot 100 = 35.11\%$, which is greater than 25%.

So, both statement X and Y are true.

11. **Statement X: The percentage of drop-outs (from Registration stage to posting CV's) had decreased from 2004 to 2005 for Managerial category**
   Statement Y: The percentage of drop-outs was higher for Technical than for Managerial category in 2005

   A. Only [X] is True

   B. Only [Y] is True

   C. Both [X] and [Y] are True

   D. Neither [X] nor [Y] is True

   Answer: A

Explanation:

Statement X:

Percentage of drop-outs for Managerial category in 2004 = $\frac{19236 - 15389}{19236} \times 100 \approx 20\%$

Percentage of drop-outs for Managerial category in 2005 = $\frac{45292 - 40763}{45292} \times 100 \approx 10\%$

Therefore, percentage of drop-outs from 2004 to 2005 has decreased. Statement X is true.

Statement Y:

Percentage of drop-outs for Managerial category in 2005 = $\frac{45292 - 40763}{45292} \times 100 \approx 10\%$

Percentage of drop-outs for Technical category in 2005 = $\frac{63298 - 60133}{63298} \times 100 \approx 5\%$

Percentage of drop-out is lower for Technical category.

Statement Y is false

Answer is option A.

12. **Statement X: The success rate of candidates getting short-listed based on CV's is higher for Managerial category than for Technical category in 2005.**
Statement Y: The success rate of candidates getting short-listed based on CV's is better for Managerial category in 2005 than in 2004.

A. Only [X] is True

B. Only [Y] is True

C. Both [X] and [Y] are True

D. Neither [X] nor [Y] is True

Answer: B

Explanation:

Evaluating statement X,

In the year 2005, In Managerial category, the number of candidates the number of candidates shortlisted based on CV= $\frac{399}{40763}$ = 0.00978

In the year 2005, In Technical category, the number of candidates the number of candidates shortlisted based on CV= $\frac{637}{60133}$ = 0.0106

So, statement X is false.

Evaluating statement Y,

In the year 2005, In Managerial category, the number of candidates the number of candidates shortlisted based on CV= $\frac{399}{40763}$ = 0.00978

In the year 2004, In Managerial category, the number of candidates the number of candidates shortlisted based on CV= $\frac{138}{15389}$ = 0.00896

So, statement Y is True. Hence, Option B.

13. **Statement X: In 2004, the number of candidates offered jobs as a proportion of the number of CV's posted was higher for Technical than for Managerial candidates**
Satement Y: In 2004, among those short-listed by Employers, the Technical category had a higher success rate in securing jobs than the Managerial category.

A. Only [X] is True

B. Only [Y] is True

C. Both [X] and [Y] are True

D. Neither [X] nor [Y] is True

Answer: D

Explanation:

Let's evaluate statement X first.

For technical jobs in 2004, the number of candidates offered jobs as a proportion of the number of CV's

posted= $\dfrac{181}{59981}$ = 0.00301

For Managerial jobs in 2004, the number of candidates offered jobs as a proportion of the number of CV's

posted= $\dfrac{48}{15389}$ = 0.00312

So, statement X is false.

Evaluating Y,

In technical category in 2004, the number of candidates offered jobs as a proportion of the candidates

shortlisted= $\dfrac{181}{684}$ = 0.2646

In Managerial category in 2004, the number of candidates offered jobs as a proportion of the candidates

shortlisted= $\dfrac{48}{138}$ = 0.3478

So, statement Y is also false.

Hence, option D.

Instructions [114 - 116]

The following table gives cost data of select stock prices on 3rd Dec 2003 in two markets, BSE of India and NQE of Kya Kya island. Closing stock refers to the price at the close of trading hours and opening stock to the price at the beginning of the day. The currency of Kya Kya is # and the exchange rate is # = Rs 11.

	3rd Dec 2003			
	Closing		Opening	
	BSE(Rs)	NQE(in #)	BSE(Rs)	NQE(in #)
SIFY	247	22	232	21
INFY	115	10.5	105	9.5
WIPRO	65	6.5	60	5.5
TCS	444	40	450	40.5

14. **Which share and which market showed the highest % increase on 3rd Dec 2003?**

A.   SIFY on BSE

B.   INFY on NQE

C.   Wipro on NQE

D.   TCS on NQE

   Answer: C

Explanation:

We will go by the options to check each one of them

Option A says SIFY on BSE.

% increase= $\dfrac{\text{Closing Price-Opening Price}}{\text{Opening Price}}\cdot 100\% = \dfrac{247-232}{232}\cdot 100\% = \dfrac{15}{232}\cdot 100\% = 6.465\%$

Option B says INFY on NQE.

% increase= $\dfrac{\text{Closing Price-Opening Price}}{\text{Opening Price}}\cdot 100\% = \dfrac{10.5-9.5}{9.5}\cdot 100\% = \dfrac{1}{9.5}\cdot 100\% = 10.52\%$

Option C says Wipro on NQE.

% increase= $\frac{\text{Closing Price-Opening Price}}{\text{Opening Price}} \cdot 100\% = \frac{6.5 - 5.5}{5.5} \cdot 100\% = \frac{1}{5.5} \cdot 100\% = 18.18\%$

Option D says TCS on NQE

% increase= $\frac{\text{Closing Price-Opening Price}}{\text{Opening Price}} \cdot 100\% = \frac{40 - 40.5}{40.5} \cdot 100\% = \frac{-0.5}{40.5} \cdot 100\% = -1.23\%$

So, Option C shows the highest increase.

15. **Arbitrage means buying in one market and selling simultaneously in another market. If Mr. Ghosh Babu were to buy a share at the opening price on one exchange and be able to sell it at the opening price on the other exchange, on which share does he make maximum % profit?**

A. SIFY

B. INFY

C. Wipro

D. TCS

   Answer: D

Explanation:
First we convert the currency of Kya Kya into Rs. by multiplying the values to 11 and we can get the following table:

	BSE Opening	NQE Opening
SIFY	232	231
INFY	105	104.5
WIPRO	60	60.5
TCS	450	445.5

In SIFY, profit made by him= $\frac{232 - 231}{231} \cdot 100\% = 0.43\%$

In INFY, profit made= $\frac{105 - 104.5}{104.5} \cdot 100\% = 0.47\%$

In WIPRO, profit made= $\frac{60.5 - 60}{60} \cdot 100\% = 0.83\%$

In TCS, Profit made= $\frac{450 - 445.5}{445.5} \cdot 100\% = 1.01\%$

Therefore, max profit is made in TCS share

16. **In an M&A deal SIFY is purchased by its parent company SATYAM which purchases 15% of SIFY's equity shares. Total SIFY's equity shares is 1 million. How much does Satyam pay in Rs. for the stake if 50% of its purchases were on BSE's opening price and balance on BSE's closing price?**

A. 36 million

B. 3.5 million

C. 363 million

D 217 million

Answer: A

Explanation:

Given, total shares of SIFY= 1000000

Shares purchased by SATYAM= 15% of 1000000= 150000.

Now, 50% of the shares were purchased at BSE's opening price i.e. Rs. 232 and 50% of the shares were purchased at BSE's closing price, Rs. 247.

So, total amount paid by SATYAM= 75000*(232)+ 75000(247)= Rs. 75000(479)= Rs. 35925000 which is close to Rs. 36 millions.

Instructions [117 - 120]

The following pie-charts give the percentage distribution of employees in different Departments in XYZ Company Ltd. during the years 2005 and 2006. Answer the questions using this data.

A-Administration;B - Operations;C - Sales & Marketing;
D - Finance & Accounts;E - Corporate HQ

2005
(No.of employees - 18,000)

2006
(No.of employees - 20,000)
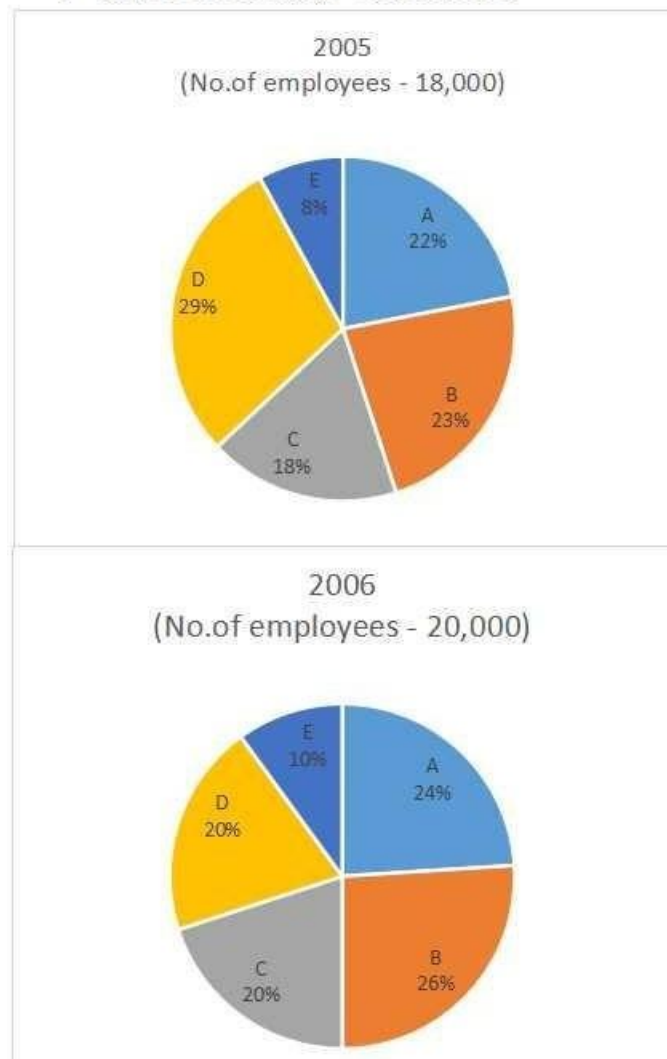
17. **If the average monthly salary of employees in Administration was Rs 12,000 in 2005, what was the approximate total Salary expense of Administration in 2005?**

A Rs. 57 lakhs

B   Rs. 4.7 crores

C.   Rs. 66 crores

D.   Rs. 66 lakhs

   Answer: B

Explanation:

Average Salary in Administration = $\frac{Total\ Salary}{Total\ number\ of\ People}$

Total number of people on Administration = $22\%\ of\ 18,000\ =\ 3,960$

Hence $12,000\ =\ \frac{Total\ Salary}{3,960}$

Total Salary = $12,000 \times 3960 = 47520000$ = $4.7\ crores$

18. **What is the percentage increase in No. of employees in Sales & Marketing?**

A   2%

B   2.34%

C   23.45%

D   None of these

   Answer: C

Explanation:

No of the employees in Sales & Marketing in 2005 = $18\%\ of\ 18,000\ =\ 3240$

No of the employees in Sales & Marketing in 2006 = $20\%\ of\ 20,000\ =\ 4000$

Percent Increase = $\frac{4000-3240}{3240} \times 100\% = 23.45\%$

19. **In which Dept is the variation in strength the maximum in 2006?**

A.   A

B.   B

C.   D

D.   E

   Answer: C

Explanation:

Department	2005		2006	
	% of Employees	Number of Employees	% of Employees	Number of Employees
Administration	22%	3960	24%	4800
Operation	23%	4140	26%	5200
Sales and Marketing	18%	3240	20%	4000
Finance and Accounts	29%	5220	20%	4000
Corporate HQ	8%	1440	10%	2000
Overall	100%	18000	100%	20000

From above chart we can get the following table.

Variation of A = |4800-3960| = 840

Variation of B = |5200-4140 | = 1060

Variation of C = |4000-3240 | = 760

Variation of D = | 4000 -5220 | = 1220

Variation of E = |2000-1440| =560

D has max variation

20. **If 300 employees left Operations at the end of 2005, how many joined in 2006?**

A   480

B   960

C   1360

D   None of these

   Answer: C

Explanation:

Department	2005		2006	
	% of Employees	Number of Employees	% of Employees	Number of Employees
Administration	22%	3960	24%	4800
Operation	23%	4140	26%	5200
Sales and Marketing	18%	3240	20%	4000
Finance and Accounts	29%	5220	20%	4000
Corporate HQ	8%	1440	10%	2000
Overall	100%	18000	100%	20000

From the above charts, the following table can be made.

Let N be the number of people who joined in 2006 in Operations department, then

$4140 - 300 + N = 5200$

$N = 1360$

21. **You have three chests in front of you. The first chest is labeled "GOLD", the second is labeled "SILVER" and the third is labeled "GOLD OR SILVER". You have been told that all the labels are on the wrong chests and that one chest contain gold coins, one contains silver coins and one contains bronze coins. How many chests do you need to open to deduce which label goes on which chest?**

A. 0

B. 1

C. 2

D. Cannot deduce

   Answer: C

Explanation:

It is given that the labels are wrong.

For the Chest labelled "Gold or Silver": It should not have either Gold or Silver. Hence it has Bronze coins

For the Silver labelled chest. It can't have silver and broze is in other chest. Hence it has Gold Coins

Thus Gold labelled chest will have Silver coins.

We need not open any chest to determine the labels

22. **How many minutes before 12 noon is it when it is 27 minutes past 10 am?**

A. 30

B. 93

C. 49

D. 94

   Answer: B

Explanation:

Let x minutes be the required time.

then 12 noon -10:27 am = x

x = 1 hour 33 minutes = 93 minutes

Instructions [123 - 125]

Read the following passage and answer the questions.
An employee has been assigned the task of allotting offices to six of the staff members. The offices are numbered 1 -6. The offices are arranged in a row and they are separated from each other by six foot high dividers. Hence voices, sounds and cigarette smoke flow easily from one office to another. Miss Ruby needs to use the telephone quite often throughout the day. Mr. Minhas and Mr. Brar need adjacent offices

as they need to consult each other often while working. Miss Harsha is a senior employee and has to be allotted the office number 5, having the biggest window. Mr. Dongre requires silence in the offices next to his. Mr. Tanjore, Mr. Minhas and Mr. Dongre are all smokers. Miss Harsha finds tobacco smoke allergic and consequently the offices next to hers are to be occupied by non-smokers. Unless specifically stated all the employees maintain an atmosphere of silence during office hours.

23. **The ideal candidate to occupy the office furthest from Mr. Brar would be**

A   Miss Harsha

B   Mr. Minhas

C   Mr. Tanjore

D   Mr. Dongre

Answer: D

Explanation:

Further, it is given that Mr. Minhas (smoker) and Mr. Brar (non-smoker) need an adjacent office as they consult with each other. The only way possible is when Mr. Minhas gets room 3 and Mr. Brar gets room 4. This will lead to the allocation of Room 6 to Ms. Ruby as she the only non-smoker left.

Updated allocation looks like

Occupant			Mr Minhas	Mr Brar	Miss Harsha	Miss Ruby
Room Number	1	2	3	4	5	6

Room 1 and 2 will be given to Mr. Dongre and Mr. Tanjore. Preferable location for Mr. Dongre will be Room 1 as he requires silence.

Occupant	Mr Dongre	Mr Tanjore	Mr Minhas	Mr Brar	Miss Harsha	Miss Ruby
Room Number	1	2	3	4	5	6

We see the ideal candidate to be furthest from Mr.Brar is Mr. Dongre

24. **The three employees who are smokers should be seated in the offices.**

A.   1,2 and 4

B.   2,3 and 6

C.   1,2 and 6

D.   1,2 and 3

Answer: D

Explanation:

25. **In the event of what occurrence, within a period of one month since the assignment of the offices, would a request for a change in office be put forth by one or more employees?**

A   Mr. Dongre quitting smoking

B   The installation of a noisy teletype machine by Miss Harsha in her office.

C.   Miss Ruby needs silence in the office (s) next to her own.

D.   Mr. Tanjore taking over the duties formerly taken care of by Miss Ruby.

Answer: D

Explanation:

In this question, it is given that Miss Harsha has been allotted Room 5 and she requires her neighbor to be non-smokers. This can be represented as follows

Occupant					Miss Harsha	
Condition to be fulfilled				Has to be Non-Smoker	---	Has to be Non-Smoker
Room Number	1	2	3	4	5	6

This implies Room 1, 2 and 3 have to be occupied by smokers as there are 3 smokers.

Further, it is given that Mr. Minhas (smoker) and Mr. Brar (non-smoker) need an adjacent office as they consult with each other. The only way possible is when Mr. Minhas gets room 3 and Mr. Brar gets room 4. This will lead to the allocation of Room 6 to Ms. Ruby as she the only non-smoker left.

Updated allocation looks like

Occupant			Mr Minhas	Mr Brar	Miss Harsha	Miss Ruby
Room Number	1	2	3	4	5	6

Room 1 and 2 will be given to Mr. Dongre and Mr. Tanjore. Preferable location for Mr. Dongre will be Room 1 as he requires silence.

Occupant	Mr Dongre	Mr Tanjore	Mr Minhas	Mr Brar	Miss Harsha	Miss Ruby
Room Number	1	2	3	4	5	6

A) If Mr. Dongre quits smoking it will not impact anyone

B)If Harsha has a noisy telephone installed in her office, Mr. Dongre who prefers silence would still be farthest from the noise hence he will not request for change

C)Since it is assumed that all the employees maintain an atmosphere of silence, the current allocation will not impact her

D)If Mr. Tanjore takes up the role of Miss Ruby which requires talking on the phone. It will impact Mr. Dongre as he prefers silence in his office and he'll apply for change of rooms

Option D is correct

26. **Shankar and Jwala are both members of a Youth club, though they are not speaking to each other and refuse to work with each other. Chaya, the club president, is appointing members to the fundraising committee, but she has resolved that she will not appoint anyone without his or her explicit consent. Shankar tells Chaya, "I will not consent to appointment on that committee unless I know whether Jwala is to be a member of it." And Jwala says, "I will not consent to be a member of that committee unless I know whether Shankar will be appointed to it." If all three of these people stick by these resolutions, then:**

A   Neither of them can be appointed to the committee.

B   They must either both be appointed or both be left out.

C   The committee may finally have one of them, both of them, or neither of them as members.

D   Either one of them can be appointed, but not both.

Answer: D

Explanation:

Since Shankar and Jwala will not work together and they have stated the same for their consent

Possible selection can be one of following

i) Not take Jwala or Shankar

ii) Take only Jwala and leave Shankar

iii) Take only Shankar and leave Jwala

Option D captures the sense hence it is correct

27. **A bank customer had Rs. 100 in his account. He then made 6 withdrawals, totaling Rs. 100. He kept a record of these withdrawals, and the balance remaining in the account, as follows:**

Withdrawals	Balance left
Rs. 50	Rs. 50
Rs. 25	Rs. 25
Rs. 10	Rs. 15
Rs. 8	Rs. 7
Rs. 5	Rs. 2
Rs. 2	Rs. 0
Rs. 100	Rs. 99

So, why are the totals not exactly right?

A There is a mistake in the total of withdrawals.

B There is a mistake in the total of the balance.

C The two totals need not be equal.

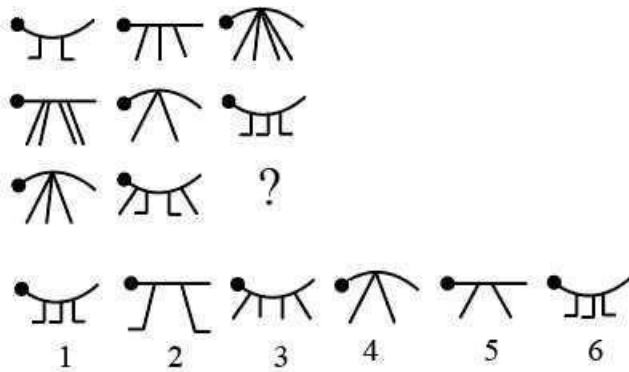**D** The bank has cheated the customer.

Answer: C

Explanation:

Withdrawals and the Balance are 2 separate things.

Imagine if the customer withdraws Rs.1 100 times. In this case sum of withdrawals will be still 100 but sum of balance = $(99 + 98 + \ldots + 1) = $ ⬜100

Two totals need not be equal

28. **Which image from the bottom row should replace the question mark?**
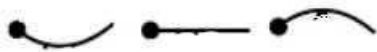

A. 3

B. 6

C. 2

D. 5

Answer: D

Explanation:

In the given pattern, each row and column's figure have 2,3 and 4 legs. Therefore the missing figure should have 2 legs. This eliminates options 1,3 and 6.
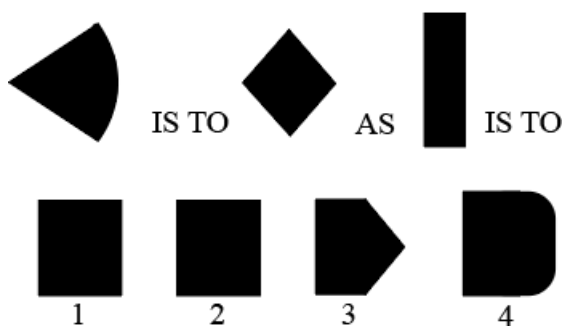
Only one of the figures in each row/column has crooked "L" shaped legs. Hence Option 2 is also eliminated.

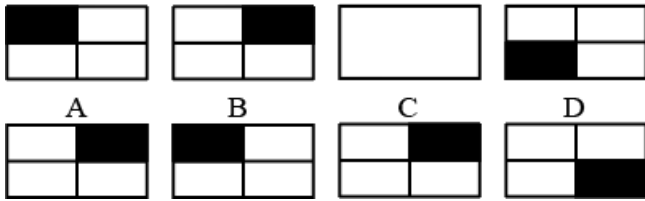Each row and column should have one each of the following head

Thus option 5 satisfies all the criteria

29.

A. 1

B. 2

C. 3

D. 4

Answer: C

30. **Which pattern from the bottom line (A, B, C, D or E) is missing from the top line?**

A. A

B. B

C. D

D. E

Answer: C

Explanation:

The Black Shade in the Big box is moving in the clockwise direction. Option D depicts the correct pattern

Instructions [131 - 133]

During their school Silver Jubilee Reunion, four alumni were discussing their starting annual salaries back in 1981. The salaries in question were Rupees 40, 50, 60 and 70 thousand per year. Of course the present MD of a private company earned the most. Arvind earned more than Biswajeet, and the doctor earned more than Dhruv the engineer. Chinmay could not remember what he started on. Biswajeet the lawyer did not start on Rs.50,000, nor did Dhruv.

31. **What is Chinmay's current profession?**

A. MD

B. Lawyer

C. Doctor

D. Engineer

Answer: C

Explanation:

Chinmay's Profession is Doctor

32. **What was the Lawyer's starting salary?**

A   40,000

B   50,000

C   60,000

D   70,000

  Answer: C

Explanation:

The lawyer's starting salary was Rs 60,000

33. Who received the highest starting salary?

A.   Arvind

B. Biswajeet

C.   Chinmay

D.   Dhruv

  Answer: A

Explanation:

It is given that

i) Current MD remembers that he earned the most(70,000)

ii) Biswajit and Dhruv did not start on 50,000

iii)Chinmay does not remember what he started on. (It implies Chinmay was not earning 70,000). The following things are known

Person		~Biswajit, ~Dhruv		~Chinmay
Occupation				MD
Salary	40,000	50,000	60,000	70,000

We know that Biswajit's profession is Lawyer and Dhruv is an Engineer. From above table we observe that Chinmay is not MD. Thus Arvind is the MD and Chinmay is Doctor

Since neither Biswajit nor Dhruv started their salary at 50,000, Chinmay starting salary was 50,000

Person		Chinmay		Arvind
Occupation		Doctor		MD
Salary	40,000	50,000	60,000	70,000

Given Arvind's Salary> Biswajit's Salary and Doctor's Salary > Dhruv's Salary. We obtain the following

Person	Dhruv	Chinmay	Biswajit	Arvind
Occupation	Engineer	Doctor	Lawyer	MD
Salary	40,000	50,000	60,000	70,000

Arvind received the highest salary

34. **A man has a job which requires him to work 8 straight days and rest on the ninth day. If he started work on a Monday, the 12th time he rests will be on what day of the week?**

A. Sunday

B. Wednesday

C. Tuesday

D. Friday

Answer: B

Explanation:

For the man to take 12th time rest he has to work for $(12 \times 8) = 96$ days and have rest for 11 days

Total days lapsed will be 96+11 = 107 and hence the 12th rest day is 108th day.

Day 1 is monday. After this Day 8 will be Monday. In general $(7k + 1)^{th}$ day is Monday

Therefore 106th day is Monday. 108th day or 12th rest day will be Wednesday

35. **From the images below (1-7) find 3 odd ones out.**
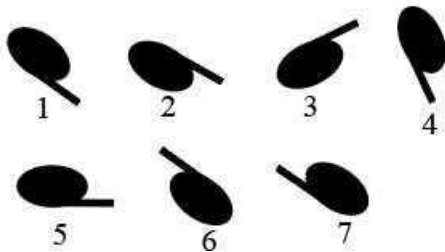
A 1, 2, 3

B 2, 3, 7

C 3, 7, 4

D 4, 1, 6

Answer: B

Explanation:

If we rotate the images we find (1,4,5 and 6) to be same figure and (2,3 and 7) to be the same figure.

Odd one out is (2,3 and 7)

36. **Babloo and Bunty were excitedly describing the result of the First nnual Running Race at Damapur High School. Snehal, Tanmay and Waman had been the three contestants.**
   "Tanmay won the race; Waman was in second place," reported Babloo. Bunty disagreed. "It was Snehal who won. Tanmay came second."
   In fact, neither Babloo nor Bunty had given a correct version of the result as each had made one true and one false statement.

A Snehal, Waman, Tanmay

B Snehal, Tanmay, Waman

C   Waman, Snehal, Tanmay

D   Tanmay, Waman, Snehal

    Answer: A

Explanation:

It is given that there are 3 racers. Hence the rank given will be 1,2 and 3

Let us assume the first statement of Babloo is true, then the second will be false(Hence Waman is not in 2nd place). Based on this the ranking will be as follows

| Rank	Person
1	Tanmay
2	Snehal
3	Waman

But this will imply that both of Bunty's statement is false which is not allowed.

Therefore the first statement of Babloee is False and the second Statement is true. Ranking based on this will be

Rank	Person
1	Snehal
2	Waman
3	Tanmay

In this, we see that one statement of Bunty is true and the other one is false. Hence this is the correct ranking

37. **What is the number of routes from P to Q?**
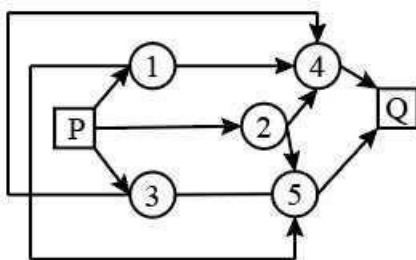
A.   5

B.   6

C.   9

D.   12

    Answer: C

Explanation:
Following are the possible routes
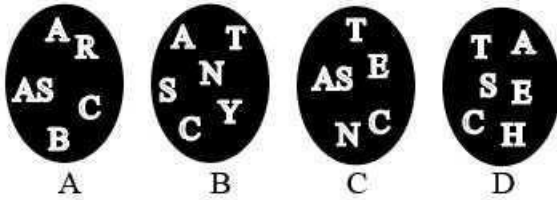
I) P-1-4-Q

II) P-1-5-Q

III) P-2-4-Q

IV) P-2-5-Q

V) P-3-4-Q

Total 5 routes are possible

38. **Find the circle, which does not include a word using all letters.**

A. A

B. B

C. C

D. D

Answer: A

Explanation:
On arranging words from Option B we get "SCANTY"

On arranging words from Option C we get "ASCENT"

On arranging words from Option D we get "SACHET"

No meaningful word is obtained by rearranging word in Option A

39. **It is possible to arrange eight of nine numbers 2,3,4,5,7,10,11,12,13 in the vacant squares of the 3 by 4 array shown below so that the arithmetic average of the numbers in each row and column is the same integer.**

1			15
	9		
		14	

Which one of the nine numbers must be left out when completing the array?

A. 4

B. 10

C. 15

D. 7

Answer: D

Explanation:
Let the average of the number of each row and column be integer denoted by x

Then the sum of numbers in Row 1 = $4x$.

Similarly for row 2 and row 3 the sum will be $4x$ each. Hence the sum of all the numbers in the table is 12.

Let N be the number only number that is left out of the table.

Then, $(1+2+3+4+5+7+9+10+11+12+13+14+15 - N) = 12x$

$106 - N = 12x$

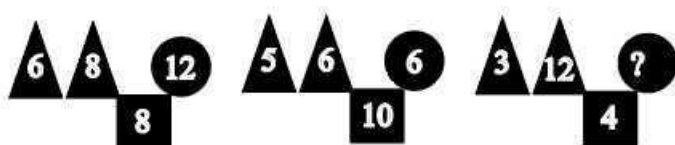Since x is integer then $Remainder\left(\dfrac{106-N}{12}\right) = 0$

$Remainder\left(\dfrac{10-N}{12}\right) = 0$

Hence N has to be 10 which is left out. And average of each row and column will be $\dfrac{106-10}{12} = \dfrac{96}{12} = 8$

Upon solving the table will look as follows

1	13	3	15	8
12	9	7	4	8
11	2	14	5	8
Average 8	8	8	8	

40. **What number will replace the question mark?**

A. 40

B. 18

C. 19

D. 24

Answer: B

Explanation:

In the patter we observe $\dfrac{product\ of\ number\ in\ traigle}{product\ of\ number\ in\ sqaure\ and\ circle} = \dfrac{6 \times 8}{12 \times 8} = \dfrac{5 \times 6}{6 \times 10} = \dfrac{1}{2}$

Let the missing number be N

$\dfrac{3 \times 12}{4 \times N} = \dfrac{1}{2}$

$N = 18$

41. **Where should the letter 'W' be placed?**

$$\begin{array}{cccccccc} B & C & D & E & J & K & L & M \\ \hline & A & F & G & H & I & N & \end{array}$$

A. Above

B. Below

C. Both

D. None

Answer: B

Explanation:

It is observed that B onward the alphabets are changing position in sets of 4. Which can be observed as

BCDE		JKLM		RSTU		Z
A	FGHI		NOPQ		VWXY	

letter "W" is placed below

42. **At a family reunion were the following people: one grandfather, one grandmother, two fathers, two mothers, four children, three grandchildren, one brother, two sisters, two sons, two daughters, one father-in-law, one mother-in-law, and one daughter-in-law. But not as many people attended as it sounds. How many person were there?**
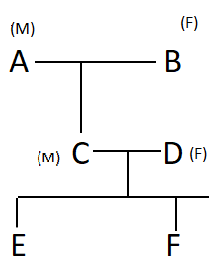
A. 5

B. 10

C. 15

D. 7

Answer: D

Explanation:

Since there are Grandparents(Represented by A&B) and Grand Children there will be 3 level Family Tree.

Since there is one Daughter-in-law, its possible when they have a son(C). Then Daughter in Law (D). Also they have 3 grandchildren(E,F and G). It can be represented in the family tree in the following manner

Furthermore, there are 2 sisters and 1 brother. It is possible when one of the grandchildren is Male.
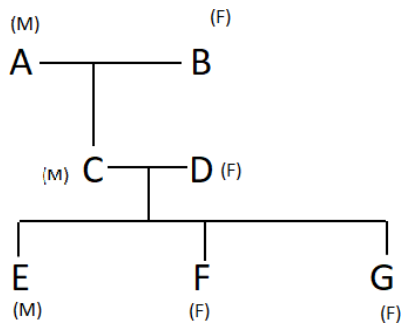
The above family tree satisfies all the required conditions. Total 7 person were there

XAT Previous Papers PDF

43. **On the counter are six squares marked 1, 2, 3, 4, 5, 6. Players are invited to place as much money as they wish on any one square. Three dice are then thrown.**

   1 If your number appears on one die only, you get your money back plus the same amount.
   1 If two dice show your number, you get your money back plus twice the amount you placed on the square.
   1 If your number appears on all three dice, you get your money back plus three times the amount.
   1 If the number is not on any of the dice, the operator gets your money.

   For example, suppose that you bet one Rupee on square No. 6. If one die shows a 6, you get your Rupee back plus another Rupee. If two dice show 6, you get back your Rupee plus two Rupees. If three dice show 6, you get your Rupee back plus three Rupees.

   From a player's point of view, the chance of his number showing on one die is $\frac{1}{6}$, but since there are three dice, the chances must be $\frac{3}{6}$ or $\frac{1}{2}$, therefore the game is a fair one. Of course this is the way the operator of the game wants everyone to reason, for it is quite fallacious.

   What is the probable story?

A.   Operator gets a profit of 6% on each Rupee bet.

B. Operator suffers a loss of 7.8% on each Rupee bet. **C**

   Operator gets a profit of 7.8% on each Rupee bet.

D   The player suffers a loss of 6% on each Rupee bet.

   Answer: C

Explanation:
$\frac{5 \times 5 \times 5}{6 \times 6 \times 6} = \frac{125}{216}$ Let the player bet Re 1 on any particular number.

If exactly 1 die shows the number, the player will get Rs 2. (Operator has to lose Re 1 from his side).
Probability of it is $\frac{1 \times 5 \times 5 \times 3}{6 \times 6 \times 6} = \frac{75}{216}$

If exactly 2 die shows the number, the player will get Rs 3. (Operator has to lose Rs 2 from his side).
Probability of it is $\frac{1 \times 1 \times 5 \times 3}{6 \times 6 \times 6} = \frac{15}{216}$

If all die shows the number, the player will get Rs 4. (Operator has to lose Rs 3 from his side). Probability of

it is $\dfrac{1 \times 1 \times 1}{6 \times 6 \times 6} = \dfrac{1}{216}$

If no die shows the number, the player will get Rs 0. (Operator will gain Re 1). Probability of it is
$\dfrac{5 \times 5 \times 5}{6 \times 6 \times 6} = \dfrac{125}{216}$

Overall expected earning of Operator will be $= (-1) \times \dfrac{75}{216} + (-2) \times \dfrac{15}{216} + (-3) \times \dfrac{1}{216} + (1) \dfrac{125}{216}$

Overall Earning Per rupee is $\dfrac{17}{216} = 0.078$

His earning per rupee is 7.87%

44. Jaideep was given some money by his mother on his birthday. Jaideep spent all of it in five stores. In each store he spent one rupee more than half of what he had when he came in. How much did he get from his mother?

A. Rs. 25

B. Rs. 30

C. Rs. 46

D. Rs. 52

Answer: B

Explanation:
Let y_i represent the money Jaideep has when he enters the shop i.

Money spent by him $= \dfrac{y_i}{2} + 1$ and money remaining with him is $\dfrac{y_i}{2} - 1$

For 5th shop it is given that $\dfrac{y_5}{2} - 1 = 0$ hence $y_5 = 2$. Therefore amount remaining with him after he exists Shop 4 is Rs 2

Which can be tabulated as

Shop Number	Amount have when entering the shop	Money Spent	Amount Remaining
5	2	2	0
4			2
3			
2			
1			

Hence $\dfrac{y_4}{2} - 1 = 2$ or $y_4 = 6$

Similarly y_1, y_2 and y_3 can be calculated and the table gets filled as follows

Shop Number	Amount have when entering the shop	Money Spent	Amount Remaining
5	2	2	0
4	6	4	2
3	14	8	6
2	30	16	14
1	62	32	30

Hence he got Rs 62 from his mother

45. Consider the following two statements to be true if they seem to be at variance from commonly known facts. Then decide which of the given conclusions logically follows from two given statements. Select the correct alternative.

Statements: All Lawyers are extrovert. Some wise men are extrovert. Conclusions:
(ja) All lawyers are wisemen.
(jb) All wisemen are lawyers.
(jc) Some extrovert are wisemen.
(jd) All extrovert are lawyers.

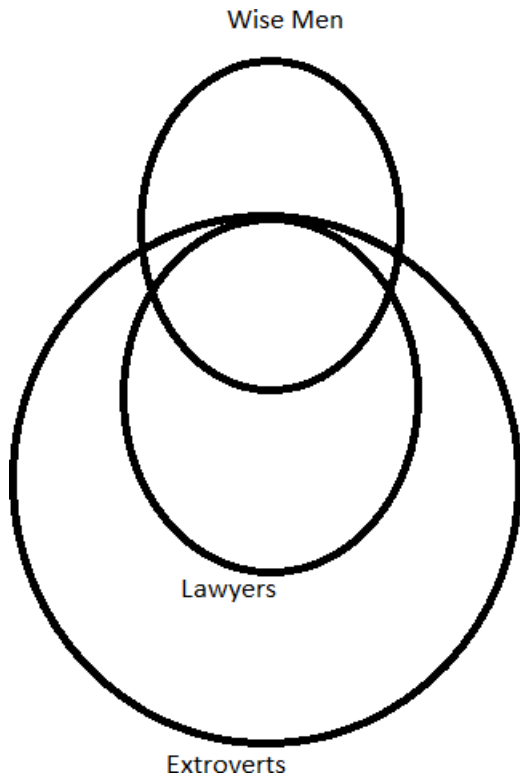A. Only (ja) follows

B. Only (jb) and (jc) follows **C**

Only (ja) and (jc) follows **D**

Only (jc) follows

Answer: D

Explanation:
The above statements can be represented in the following manner

a) All lawyers are wisemen -False

b) All wisemen are lawyers -False

c) Some extrovert are wisemen -True

d) All extrovert are lawyers -False

Option C is only correct

Instructions [146 - 148]

Use the data given below to answer the questions.
The following are the results of a survey conducted on a small cross-section of students from Symbiosis Group of institutes, to determine the readership of three magazines. This survey was conducted in Dec. 2006.

- Number of students who read only Business India was 40
- 60 students read only Outlook
- 110 students read only India Today
- 30 students read all three magazines
- 20 read Business India and India Today, but not Outlook
- 50 read Business India and Outlook, but not India Today
- 40 read Outlook and India Today, but not Business India

46. **What was the total no. of students surveyed?**

A   210

B   350

C   390

D   None of these

  Answer: B

Explanation:

Let s,d and t represent the number of students who like only 1, only 2 and all 3 magazines.

Total Number of Student = s+d+t

s = 40 + 60 + 110 = 210

d = 20 + 50 + 40 = 110

t = 30

Hence total students = 210 + 110 + 30 = 350

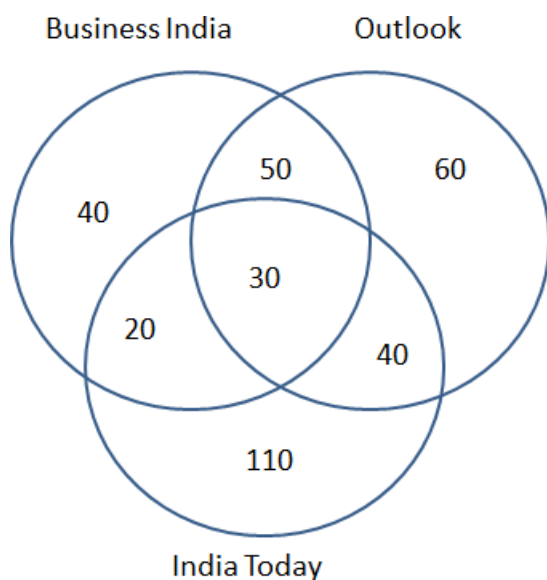47. **How many students did not read Business India?**

A   40

B   170

C   240

D   None of these

  Answer: D

Explanation:

Business India   Outlook

          50   60

    40

          30

      20

              40

          110

          India Today

          2006 survey

From the Venn Diagram, we can calculate that the no. of students who do not read Business India = 110 + 40 + 60 = 210
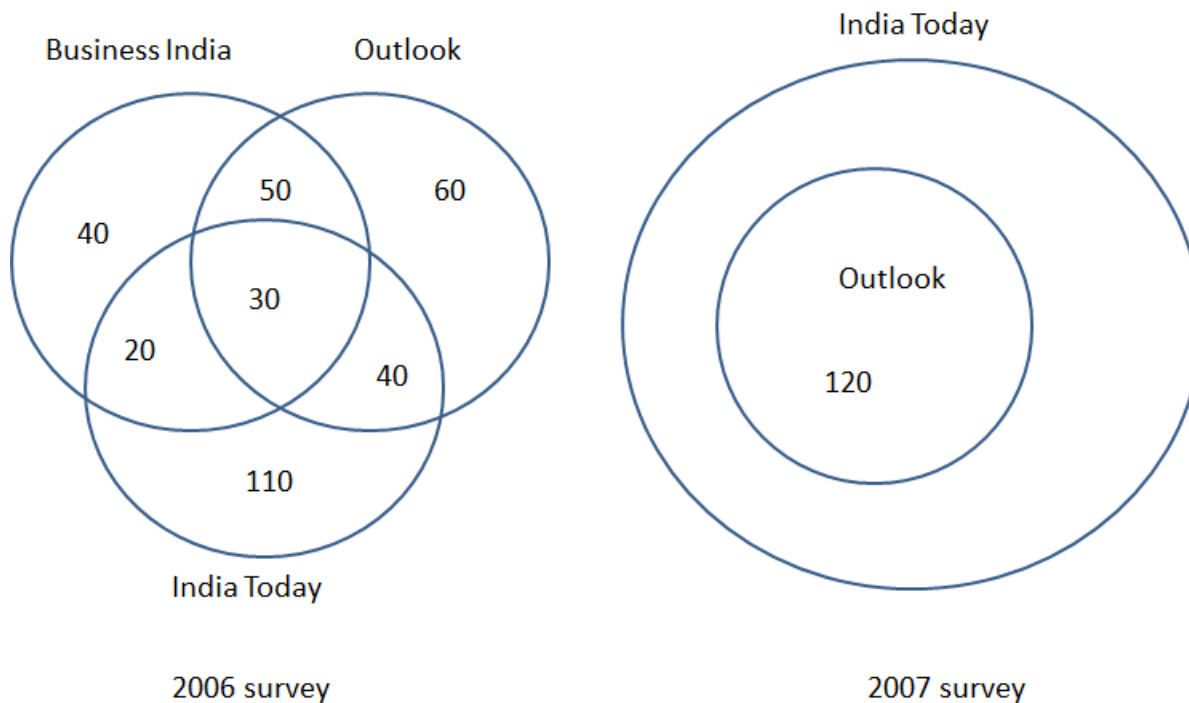
48. **When another survey was conducted in May 2007 with the same set of students, their tastes had changed and the findings were different. All of them read India Today. 120 read Outlook, and no one read Business India. Hence, in May 2007, how many students read only India Today?**

A   60

B   110

C   230

D   None of these

   Answer: C

Explanation:

VENN DIAGRAMS

From the statements given in question, the above venn diagrams represents the results of the surveys conducted in 2006 and 2007.

From the venn diagam that represents the 2006 survey, we sum up all the groups of people to get total no. of students which is 350.

The same set of students were surveyed in 2007 and from the statements, we drew the venn diagram for 2007 survey. All 350 students read India Today and among them 120 read Outlook. So, the no. of students who read only India Today = 350-120 = 230

49. **An ingredient in coffee, known as RTC, has been found to inactivate common cold viruses in experiments. In previous experiments, researchers found that inactivated common cold viruses can convert healthy cells into cancer cells. It can be concluded that the use of coffee can cause cancer. Which one of the following, if true, most seriously weakens the argument?**

A   Several teams of scientists performed the various experiments, and all of the teams had similar results.

B The carcinogenic effect of RTC could be neutralized by the other ingredients found in coffee.

C When RTC kills common cold viruses it weakens the immune system, and it might thus diminish the body's ability to fight other viruses, including viruses linked to cancers.

D If chemists modify the structure of RTC, RTC can be safely incorporated into medications to prevent the common cold.

Answer: C

50. **A census taker approaches a house and asks the woman who answers the door, "How many children do you have, and what are their ages?"**

   Woman: "I have three children, the product of their ages is 36, the sum of their ages is equal to the address of the house next door."

   The census taker walks next door, comes back and says, "I need more information." The woman replies, "I have to go, my oldest child is sleeping upstairs."

   Census taker: "Thank you, I now have everything I need."

   What are the ages of each of the three children?

A 9,2,2

B 6,6,1

C 12,3,1

D 6,3,2

Answer: A

Explanation:
It is given, product of their ages is 36.
Possible combinations are:
1*1*36 -sum = 38
1*2*18-sum = 21
1*3*12 -sum = 16
1*4*9 -sum = 14
1*6*6 -sum = 13
2*2*9 -sum = 13
2*3*6 -sum = 11
3*3*4 -sum = 10
The census takers comes back and ask for more information implies that the sum is 13. There are two possibilities for only sum 13, as there are two possibilities census taker comes back and asks for other clue.
(1, 6, 6) or (2, 2, 9)
The woman says her oldest child is sleeping upstairs. Therefore, the ages will be (2, 2, 9).
The answer is option A.