SBI CLERK MAIN EXAM, 25-06-2016

GENERAL AWARENESS

1. According to the current provisions of RBI Act, 1934, the RBI can issue banknotes in the denomination not more than
   (1) 5,000/-
   (2) 1,000/-
   (3) 1,00,000/-
   (4) 10,000/-
   (5) 50,000/-

   Solution : 2

2. The Valmiki National Park and Wildlife Sanctuary is located in which of the following states in India ?
   (1) Gujarat
   (2) Madhya Pradesh
   (3) Karnataka
   (4) Assam
   (5) Bihar

   Solution : 5

3. The low-cost train with wi-fi, entertainment screens and vending machines for passengers, recently announced by Indian Railways is :
   (1) Humsafar Express
   (2) Antyodaya” Express
   (3) Tejas Express
   (4) Deen Dayalu Express
   (5) UDAY Express

   Solution : 3

4. In Shishu category of Pradhan Mantri Mudra Yojana, the maximum loan which can be availed is :
   (1) 5,00,000/-
   (2) 1,00,000/-
   (3) 10,00,000/-
   (4) 50,000/-
   (5) 10,000/-

   Solution : 5
S \text{olution : 4}

5. Which of the following State's capital has declared its own mascot?
   
   (1) Assam
   (2) Karnataka
   (3) Arunachal Pradesh
   (4) Andhra Pradesh
   (5) Himachal Pradesh

   \text{Solution : 1}

6. `'NACH' has been implemented by the National Payments Corporation of India for Banks, Financial Institutions, Corporate and Government. The full form of NACH is:
   
   (1) National Automation Cleansing House
   (2) National Automated Clearing House
   (3) National Automatic Cleaning House
   (4) National Automated Cleansing House
   (5) National Automatic Cash House

   \text{Solution : 2}

7. 'Wings of Fire' is an autobiography of which of the following?
   
   (1) Mahatma Gandhi
   (2) Dr. B.R. Ambedkar
   (3) Yuvraj Singh
   (4) Pranab Mukherjee
   (5) Dr. A.P.J. Abdul Kalam

   \text{Solution : 5}

8. The CRR and SLR are reserved in which form with the bank?
   
   (1) Cash and Liquidity
   (2) Liquidity and Cash
   (3) Both are reserved as cash
   (4) Both are reserved as liquidity
   (5) Both are reserved in other forms

   \text{Solution : 3}

9. The 11-digit alphanumeric code used to make all electronic money transactions across India is known as:
   
   (1) MICR Code
   (2) IFSC Code
   (3) CCC
   (4) LCLG
   (5) BBB

   \text{Solution : 2}
10. India recently (January, 2016) has exported first batch of ‘Made in India’ metro coaches to
   Australia manufactured in
   (1) Allahabad, Uttar Pradesh
   (2) Ludhiana, Punjab
   (3) Nagpur, Maharashtra
   (4) Baroda, Gujarat
   (5) Jaipur, Rajasthan
   Solution: 4

11. What is the current reverse repo rate in India?
   (1) 21%
   (2) 6.50%
   (3) 6%
   (4) 7%
   (5) 15%
   Solution: 2

12. The Ahmedabad City is located on the banks of
   (1) Narmada river
   (2) Sabarmati river
   (3) Yamuna river
   (4) Godavari river
   (5) Tapti river
   Solution: 2

13. The currency of the Republic of Israel is:
   (1) Peso
   (2) New Shekel
   (3) Jordanian Dinar
   (4) Egyptian Pound
   (5) Lira
   Solution: 2

14. Recently, an Indian sportsman Neeraj Chopra clinches silver medal in Warsaw, Poland.
   With which sport he is associated with?
   (1) Boxing
   (2) Javelin Throw
   (3) Athletics
   (4) Judo
   (5) Chess
   Solution: 3
15. The RIDF was set up by the Government in 1995-96 for financing ongoing rural infrastructure projects. The term ‘I’ in RIDF stands for
(1) Industry
(2) India
(3) Infrastructure
(4) Instruction
(5) International

Solution : 3

16. India’s first Defence Industrial Park is located in :
(1) Vishakhapatnam, Andhra Pradesh
(2) Mangalore, Karnataka
(3) Ottappalam, Kerala
(4) Surat, Gujarat
(5) Nagpur, Maharashtra

Solution : 3

17. The Gobi is a large desert region in Asia. The desert is located in :
(1) India
(2) Russia
(3) China
(4) Nepal
(5) Iran

Solution : 3

18. Recently (May 25, 2016), the Kerala was given a new Chief Minister named
(1) Oommen Chandy
(2) V.S. Achuthanandan
(3) Pinarayi Vijayan
(4) K. Chandrashekar Rao
(5) N. Chandrababu Naidu

Solution : 3

19. Anant Geete, represents which of the following constituency in Lok Sabha?
(1) Raigad, Maharashtra
(2) Maval, Maharashtra
(3) Ratlam, Madhya Pradesh
(4) Tikamgarh, Madhya Pradesh
(5) Dharwad, Karnataka

Solution : 1

20. HPCA stadium is a cricket stadium located in the city of :
(1) Vishakhapatnam, Andhra Pradesh
(2) New Delhi  
(3) Jaipur, Rajasthan  
(4) Surat, Gujarat  
(5) Dharamshala, Himachal Pradesh  
**Solution : 5**

21. The ECGC limited provides export credit insurance support to Indian exporters and is controlled by the Ministry of Commerce. The term ‘G’ in abbreviation ECGC stands for :  
(1) Global  
(2) Guide  
(3) Ground ,  
(4) Guarantee  
(5) Guest  
**Solution : 4**

22. Bank of India is headquartered in  
(1) New Delhi  
(2) Chennai  
(3) Bengaluru  
(4) Mumbai  
(5) Kolkala  
**Solution : 4**

23. The Atomic Power Plant with largest capacity (540MW) is located in  
(1) Kaiga Generating Station, Karnataka ,  
(2) Rajasthan Atomic Power Station, Rajasthan  
(3) Tarapur Atomic Power Station, Maharashtra  
(4) Madras Atomic Power Station, Tamil Nadu  
(5) Kakrapar Atomic Power Station, Gujarat  
**Solution : 3**

24. Recently (June, 2016), India is pulling all stops to raise funds for Chabahar port. The port is located in :  
(1) Iraq  
(2) Bangladesh  
(3) Sri Lanka  
(4) Iran  
(5) Pakistan  
**Solution : 4**

25. Shri Piyush Goyal, who recently (June, 2016) launched Surya Mitra Mobile App is a  
(1) Minister of State for Petroleum and Natural Gas  
(2) Minister of State for Civil Aviation
(3) Minister of State for Railways
(4) Minister of State for Culture and Tourism
(5) Minister of State for Power, Coal and New Renewable Energy

Solution: 5

26. July 28 is observed as the
(1) World Hepatitis Day
(2) International Yoga Day
(3) World UFO Day
(4) World Population Day
(5) World Environment Day

Solution: 1

27. Which country recently (June, 2016) returned to India over 200 stolen cultural artifacts, some dating back 2,000 years?
(1) United Kingdom
(2) United States
(3) Russia
(4) UAE
(5) South Africa

Solution: 2

28. Wular Lake, one of the largest fresh water lake in Asia, is in the Indian State of
(1) Sikkim
(2) Himachal Pradesh
(3) Uttarakhand
(4) Jammu & Kashmir
(5) Arunachal Pradesh

Solution: 4

29. Credit Information Bureau (India) Limited is India’s first founded in August 2000.
(1) Debit Information Company
(2) Credit Insurance Company
(3) Debit Insurance Company
(4) Credit Information Company
(5) Credit Stabilising Corporation

Solution: 4

30. In the context of banking, the term in MCLR stands for:
(1) Lending
(2) Loss
(3) Liquidity
(4) Lender
(5) Limited

**Solution : 1**

31. Nairobi is the capital city of :
   (1) Sudan
   (2) Kenya
   (3) South Africa
   (4) Egypt
   (5) Algeria

**Solution : 2**

32. The International Development Association (IDA) is an international financial institution which offers concessional loans and grants to the world’s poorest developing countries. It is headquartered in :
   (1) Washington D.C., U.S.
   (2) Vienna, Austria
   (3) New York, U.S.
   (4) New Delhi, India
   (5) Berlin, Germany

**Solution : 1**

33. The Federal Reserve System- also known as the Federal Reserve or simply as the Fed- is the central banking system of the
   (1) United Kingdom
   (2) Russia
   (3) Denmark
   (4) United States
   (5) France

**Solution : 4**

34. KSE is a stock exchange index of which of the following country ?
   (1) Pakistan
   (2) India
   (3) China
   (4) Russia
   (5) USA

**Solution : 1**

35. Lokpriya Gopinath Bordoloi International Airport, formerly known as Borjhar Airport, is situated at :
   (1) Amravati, Andhra Pradesh
   (2) Hyderabad, Telangana
(3) Itanagar, Arunachal Pradesh
(4) Guwahati, Assam
(5) Kolkata, West Bengal

**Solution : 4**

36. Which of the following is not a motivational model?
   (1) Economic model
   (2) Learning model
   (3) Psycho-analytic model
   (4) Organisational model

**Solution : 1**

37. Regulatory Authority for Regional Rural Bank is of:
   (1) Sponsor Bank
   (2) State Government
   (3) Central Government
   (4) RBI and NABARD
   (5) SEBI

**Solution : 4**

38. The private sector bank which recently allowed children above 10 years to open savings bank accounts after SBI is:
   (1) IDBI
   (2) HDFC
   (3) ICICI
   (4) Axis Bank
   (5) Kotak Mahindra Bank

**Solution : 3**

39. A cheque which is payable to any person who presents it for payment at the bank counter is called
   (1) Cross Cheque
   (2) Bearer Cheque
   (3) Open Cheque
   (4) Close Cheque
   (5) Lender Cheque

**Solution : 2**

40. Which one of the following is not method of setting prices?
   (1) Cost plus pricing method
   (2) Marginal cost pricing method
   (3) Break-even-pricing method
(4) First-in-first-out cost method
(5) Other than those given as options

Solution : 4

41. Bancassurance is a relationship between bank and

(1) Education
(2) Insurance Company
(3) Employee
(4) Customer
(5) NABARD

Solution : 2

42. Marketing Strategy means

(1) to introduce in sales promotion scheme
(2) population
(3) preservance
(4) demands
(5) networth

Solution : 1

43. Marketing should be resorted :

(1) Only among rich person
(2) Depends on income
(3) Only in crowded areas
(4) Depends on the product
(5) Only among the poor

Solution : 4

44. The incumbent Governor of RBI is

(1) Arundhati Bhattacharya
(2) Raghuram Rajan
(3) U.K. Sinha
(4) D. Subbarao
(5) Y.V. Reddy

Solution : 2

45. To survive in the growing competition banks need to implement

(1) Free schemes
(2) Service orientation
(3) Marketing orientation
(4) Core banking
(5) Low interest rates

Solution : 2
46. The process of gathering information about customers or market is known as:
   (1) Customer inspection
   (2) Checking market area
   (3) Need of a bank
   (4) Market research
   (5) Checking customers’ demand

   **Solution:** 4

47. When costs are accumulated for an organizational unit or department, it is called:
   (1) a cost centre
   (2) a cost benefit
   (3) a cost breaking
   (4) a cost of production
   (5) unit cost

   **Solution:** 5

48. Developing and spreading persuasive communications about an offer or product is known as:
   (1) Promotion
   (2) Information
   (3) Channel usage
   (4) Distribution
   (5) Other than those given as options

   **Solution:** 1

49. PMFBY is a scheme launched by Prime Minister Slid Narendra Modi in January, 2016. It is related to:
   (1) Health insurance
   (2) Bank insurance
   (3) Crop insurance
   (4) Accident insurance
   (5) Business insurance

   **Solution:** 3

50. Which state government’s business is not transacted by RBI?
   (1) Himachal Pradesh
   (2) Jammu & Kashmir
   (3) Manipur
   (4) Assam
   (5) Sikkim

   **Solution:** 2
GENERAL ENGLISH

Directions (1-5) : In these questions, read each sentence to find out whether there is any grammatical error or idiomatic error in it. The error, if any, will be in one part of the sentence. That part is the answer. If there is no error, the answer is No error’. (Ignore errors of punctuation, if any)

1. The tourist industry of the state feels that the facility of visa-on-arrival should be made available to keeping the industry vibrant.
   (1) The tourist industry of the state
   (2) feels that the facility of visa-on-arrival
   (3) should be made available
   (4) to keeping the industry vibrant.
   (5) No error
   Solution : 4

2. Even a newly-recruited teacher in a government high school gets more than what a former principal gets as pension.
   (1) Even a newly-recruited teacher
   (2) in a government high school gets
   (3) more than what
   (4) a former principal gets as pension.
   (5) No error
   Solution : 5

3. Six people fainted on board an international flight, promptly the emergency crew to check the plane for hazardous materials.
   (1) Six people fainted
   (2) on board an international flight,
   (3) promptly the emergency crew to check
   (4) the plane for hazardous materials.
   (5) No error
   Solution : 3

4. To be short-listed for the competition, the children have to fill up a contest form that their respective schools will provide.
   (1) To be short-listed for the competition
   (2) the children have to fill up
   (3) a contest form that their
Directions (6-10) : Read the following passage carefully and answer the questions given below it.

Business finance refers to the funds and monetary support required by an entrepreneur for carrying out the various activities relating to his/her business organisation. It is needed at every stage of a business life cycle. For instance, in starting a business, it is essential for acquiring fixed assets, such as land, building, plant and machinery etc. as well as for meeting the day-to-day expenses in the form of payment of wages and salaries, purchasing raw materials etc. In order to successfully operate and expand the business, funds are necessary for promoting and marketing the product; distributing it to the prospecting consumers; as well as for managing the firm’s human resource base. Further, in the changing business environment marked by increasing competition, additional funds are desirable for continuous modernisation and upgradation of the business unit. Though the amount of the capital needed by an enterprise depends upon the nature and size of the business, but its timely and adequate supply is indispensable for any form of individual set up (whether small, medium or large). Recognising this fact, the Government of India has evolved a well developed financial system in the country. The financial system refers to an institutional arrangement through which the savings in the economy are mobilised and effectively allocated among the ultimate borrowers. It operates through a network of financial markets and institutions, which are broadly categorized into money market and capital market.

Given this financial set up, the Central and the State Governments have been making all efforts for meeting the financial requirements of the entrepreneurs. These are in the form of several financial schemes and funding options offered by the ministries, public and private banks, small industries development organisation, national small industries corporation limited, state financial corporations etc. Thus, India has a sound financial structure which is capable of providing a strong base for setting up of business units in the country.

Growth of a business is essential for sustaining its viability, dynamism and value-enhancing capability. It reflects the ability of a company to earn higher profits and compete with the rivals in an effective manner. The three widely used measures of
Corporate growth are: Increase in sales. Increase in Profits and Increase in Assets. A company can achieve its growth objectives by expanding the existing market for its product and entering into new markets. Therefore, an entrepreneur must make a thoughtful analysis of all the possible options available to him for expanding his business by taking into account the inherent risks, the financial requirements and the surrounding regulatory framework.

6. Which word among the following is the most suitable synonym for the word 'monetary' in this context?
   (1) Monthly
   (2) Rewards
   (3) Responsibility
   (4) Mechanism
   (5) Money

   **Solution : 5**

7. .................is needed at every stage of a business life cycle.
   (1) People
   (2) Funds
   (3) Profits
   (4) Assets
   (5) Sales

   **Solution : 2**

8. What is the general tone of the author?
   (1) Descriptive
   (2) Narrative
   (3) Analytical
   (4) Argumentative
   (5) Critical

   **Solution : 2**

9. The financial system refers to a/an through which the savings in the economy are mobilised and effectively allocated.
   (1) institutional arrangement
   (2) bank arrangement
   (3) interest arrangement
   (4) allocation arrangement
   (5) distributive arrangement

   **Solution : 1**

10. A company can achieve its growth objectives by laying emphasis on
    (1) funds availability
    (2) advancements in technology
(3) customer services
(4) market growth
(5) management

Solution : 4

Directions (21-30) : Read the passage carefully and answer the questions given below it. Certain words/phrases have been given in bold to help you locate them while answering some of the questions.

Some time ago, there lived a King. The King should have been contented with his life, given all the riches and luxuries he had. However, this was not the case! The King always found himself wondering why he just never seemed contented with his life. Sure, he had the attention of everyone wherever he went, attended fancy dinners and parties, but somehow, he still felt something was lacking and he couldn’t put his finger on it.

One day, the King had woken up earlier than usual to stroll around his palace. He entered his huge living room and came to a stop when he heard someone happily singing away. Following this singing, he saw that one of the servants was singing and had a very contented look on his face. This fascinated the King and he summoned this man, to his chambers. The man entered the King’s chambers as ordered. The King asked why he was so happy. To this the man replied: “Your Majesty, I am nothing but a servant, but I make enough of a living to keep my wife and children happy. We don’t need too much, a roof over our heads and warm food to fill our tummy. My wife and children are inspiration; they are content with whatever little I bring home. I am happy because my family is happy.”

Hearing this, the King dismissed the servant and summoned his Personal Assistant to his chambers.

The King related his personal anguish about this feeling and then related the story of the servant to his Personal Assistant. Hoping that somehow, he will be able to come up with some reasoning that here was a King who could have anything he wished for at a snap of his fingers and yet was not contented, whereas his servant, having so little, was extremely contented. The Personal Assistant listened attentively and came to a conclusion. He said, “Your Majesty, I believe that the servant has not been made part of The 99 Club.”

“The 99 Club? And what exactly is that?” The King inquired.
To which the Assistant replied, “Your Majesty, to truly know what The 99 Club is, you will have to do the following: Place 99 gold coins in a bag and leave it at the servant’s doorstep. You will then understand what The 99 Club is.”

That very same evening, the King arranged for 99 gold coins to be placed in a bag at the servant’s doorstep. Although he was slightly hesitant and he thought he should have put 100 gold coins into the bag, yet since his assistant had advised him to put 99, that is what he did.

The servant was just stepping out of his house when he saw a bag at his doorstep. Wondering about its contents, he took it into his house and opened the bag. When he opened the bag, he let out a great big shout of joy, “Gold coins. So many of them.” He
could hardly believe it. He called his wife to show her the coins. He then took the bag to a
table and emptied it out and began to count the coins. Doing so, he realised that there
were 99 coins and he thought it was an odd number so he counted again and again and
again only to come to the same conclusion — 99 gold coins.
He began to wonder, what could have happened to that last one coin? For no one would
leave 99 coins. He began to search his entire house, looked around his backyard for
houses, not wanting to lose out that one coin. Finally, exhausted, he decided that he
would work harder than ever to make up for that one gold coin to make his entire
collection an even 100 gold coins.
He got up the next morning in an extremely horrible mood, shouting at the children
and his wife for his delay, not realising that he had spent most of the night conjuring
ways of working hard so that he had enough money to buy himself that gold coin. He
went to work as usual — but not in his usual best mood, singing happily — as he
grumpily did his daily errands. I Seeing the man’s attitude change so drastically, the King
was
puzzled. He promptly summoned his Assistant to his chambers. The King related his
thoughts about the servant and once again, his Assistant ‘listened. The King could not
believe that the servant who until yesterday had been singing away and was happy and
contented with his life had taken a sudden change of attitude, even though he should
have been happier after receiving the gold coins. To this the Assistant replied, “Ah! But
your Majesty, the servant has now officially joined The 99 Club.” He explained: “The 99
Club is just a name given to those-people who have everything but yet are never
contented, therefore they are always working hard and striving for that extra one to
round it out to 100! We have so much to be thankful for and we can live with very little
in our lives, but the minute we are given something bigger and better, we want even
more! We are not the happy contented person we used to be. We want more and more
and by wanting more and more we don’t realise the price we pay for it. We lose our sleep,
our happiness; we hurt the people around us just as a price to pay for our growing needs
and desires. That is what joining The 99 Club is all about.” Hearing this, the King
decided that from that day onwards, he was going to start appreciating all the little
things in life.

Striving for more is always good, but let’s not strive so hard and for so much that we lose
all those near and dear to our hearts. We shouldn’t compromise our happiness for
moments of luxuries!

11. Why did the King summon the servant?
(1) Because the servant was singing a sad song.
(2) Because he was fascinated by the happiness of the servant.
(3) Because the servant had shown disrespect to him.
(4) Because the servant was also assigned the job of a spy.
(5) Other than those given as options

Solution: 2
12. What was/were the reason for the servant’s happiness?
   A. He was not a part of The 99 Club.
   B. He was too poor to look after his family.
   C. His family was happy.
   (1) Only (A) and (B)
   (2) Only (B) and (C)
   (3) Only (A) and (C)
   (4) All (A), (B) and (C)
   (5) Only (C)
   **Solution : 3**

13. What was not the effect of placing the bag containing 99 gold coins at the servant’s doorstep?
   (1) The servant became overjoyed to find the bag containing gold coins.
   (2) He counted the gold coins again and again to confirm whether they were just ninety nine or a hundred.
   (3) He began to search the last one coin in and around his house.
   (4) Finally he could find the last one coin in his backyard.
   (5) Other than those given as options
   **Solution : 4**

14. What happened to the servant when he became part of The 99 Club?
   (1) He got up the next morning in a horrible mood.
   (2) He rebuked the members of his family.
   (3) He went to work in a depressed mood.
   (4) He did his work grumpily.
   (5) All of the above
   **Solution : 5**

15. In the context of the passage, what do you mean by The 99 Club?
   (1) The 99 Club is ‘a group of rich people’
   (2) It is the club of dissatisfied people.
   (3) It is a club of minister of the royal court.
   (4) It is the club of people.
   (5) Other than those given as options
   **Solution : 2**

16. Choose the word which is most similar in meaning to the word **FASCINATED** given in **bold** as used in the passage.
   (1) Bored
   (2) Attracted
   (3) Repulsed
(4) Exhausted
(5) Irritated

**Solution : 2**

17. Choose the word which is most similar in meaning to the word **HESITANT** given in **bold** as used in the passage.
(1) Resolute
(2) Sure
(3) Definite
(4) Uncertain
(5) Confident

**Solution : 4**

18. Choose the word which is most opposite in meaning to the word **STROLL** given in **bold** as used in the passage.
(1) Excursion
(2) Lazy walk
(3) Survey
(4) Breath
(5) Run

**Solution : 5**

19. Choose the word which is most opposite in meaning to the word **ANGUISH** given in **bold** as used in the passage.
(1) Joy
(2) Affliction
(3) Agony
(4) Distress
(5) Sorrow

**Solution : 1**

20. Choose the word which is most similar in meaning to the word **HORRIBLE** given in **bold** as used in the passage.
(1) Pleasant
(2) Light
(3) Terrible
(4) Happy
(5) Fine

**Solution : 3**

**Directions (21-25)**: Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in a proper sequence to form a meaningful paragraph and then answer the given questions.
A. The full extent and impact of the forest fires in Uttarakhand can be assessed only after they have abated with better weather conditions, but the furious blaze that has swept the hill state drives home the truth that governments are yet to find scientific ways to tackle the phenomenon.
B. Some of the studies reported by organisations affiliated to the Union Environment Ministry point to the effective intervention of community-led `van panchayats’ (forest councils in preventing fires.
C. Progress can be made also by providing environmental education to local residents and officials.
D. Significantly, the use of biomass alternatives, including cooking gas, has had a beneficial impact on fire risk, and this must be expanded.
E. The Uttarakhand Government should learn from the severity of the experience, and involve its large rural communities in preparing for the future.
F. It is possible that the changing patterns of climate may be exacerbating the problem; more research is required to conclude whether the El Nino that set in last year, marked by a lack of pre-monsoon showers, also played a part in intensifying the fires.

21. Which of the following will be the **FOURTH** sentence after rearrangement?
(1) E  
(2) B  
(3) F  
(4) A  
(5) C

**Solution : 2**

22. Which of the following will be the **THIRD** sentence after rearrangement?
(1) E  
(2) B  
(3) F  
(4) A  
(5) C

**Solution : 1**

23. Which of the following will be the **FIRST** sentence after rearrangement?
(1) D  
(2) E  
(3) A  
(4) B  
(5) F

**Solution : 3**

24. Which of the following will be the **SIXTH (LAST)** sentence after rearrangement?
(1) E  
(2) D
25. Which of the following will be the FIFTH sentence after rearrangement?

(1) E
(2) C
(3) D
(4) A
(5) B

Solution: 2

Directions (26-30): Each sentence given below has two blanks. Each blank indicates that something has been omitted. Choose the word that best fits in the meaning of the sentence as a whole.

26. When you want to digitalise a city............. with millions, you don’t bet............. the odds.

(1) proceedings, into
(2) teeming, against
(3) undergoing, adhere
(4) dangling, for
(5) falling, above

Solution: 2

27. The_ numbers................. by the legitimate online music service providers indicate that a growing number of users are ...............to buy music.

(1) morphed, ignoring
(2) labelled, thriving
(3) figured, fanatic
(4) painted, interested
(5) touted, willing

Solution: 5

28. If India is ..... on protecting its resources, international business appears equally..................to safeguard its profits.

(1) dreaded, fragile
(2) stubborn, weak
(3) bent, determined
(4) approaching, settled
(5) obsessed, prepared

Solution: 3
29. Brands.................. decision simplicity strategies make full use of available information to ...............where consumers are on the path of decision making and direct them to the best market offers.
(1) diluting, divulge
(2) tempting, maintain
(3) imputing, overdrive
(4) pursuing, assess
(5) employing, trust

**Solution : 4**

30. Lack of financing options.................. with HR and technological ..................make small and medium enterprises sector the most vulnerable component of our economy.
(1) except, loophole
(2) coupled, challenges
(3) armed, benefits
(4) registered, strategies
(5) strengthened, facilities

**Solution : 2**

**Directions (31-40) :** *In the following passage, there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words/phrases are suggested, one of which best fits the blank appropriately. Find out the appropriate word in each case.*

“Even after 69 years of independence it is disgraceful that we are yet to put our infrastructure in ...(31).... There are two types of infrastructure in the country. One is the basic infrastructure such as water supply, drainage, education etc. The other is for comfort such as excellent roads, high speed trains etc. We have not ...(32)... on either. What is the problem? Is it lack of money or funds? It may not ...(33)... be so. We simply do not know how to go about things. What we have done is that we have ...(44)... a number of layers of decision making authorities and too ...(35)... agencies and regulations. We must get a number of ...(36)... to get anything done. We need leadership not only in politics but also in administration. We need definition of our objectives such as what we need, why we need, and when we need it. ...(37)... important point is clarity of ideology. Lastly and most importantly identification of a right person for the job is ...(38) .... What we need is systematic change. Leadership and commitment make all the ...(39)... in getting things done. There has to be an appreciation that —(40)— in infrastructure delivers a force multiplier for the economy.”

31. (1) organize
(2) place
(3) vicinity
(4) commitment
(5) duty

**Solution : 2**
32. (1) accomplished
   (2) attained
   (3) established
   (4) qualified
   (5) delivered
   Solution: 5

33. (1) quietly
   (2) inevitably
   (3) because
   (4) necessarily
   (5) voluntarily
   Solution: 4

34. (1) created
   (2) resulted
   (3) caused
   (4) invented
   (5) influenced
   Solution: 1

35. (1) great
   (2) abundant
   (3) many
   (4) much
   (5) manifold
   Solution: 3

36. (1) hardships
   (2) attempt
   (3) bribe
   (4) clearances
   (5) skill
   Solution: 4

37. (1) Another
   (2) Different
   (3) Others
   (4) Moreover
   (5) Distinctly
   Solution: 1
38. (1) expected
   (2) dependent
   (3) awaited
   (4) inherent
   (5) essential
   **Solution : 5**

39. (1) basics
   (2) similarity
   (3) difference
   (4) rigidity
   (5) modesty
   **Solution : 3**

40. (1) building
   (2) investment
   (3) developing
   (4) generating
   (5) modifying
   **Solution : 2**
QUANTITATIVE APTITUDE

Directions (1-5) : Study the table and answer the given questions.
Percentage of marks obtained by seven students in six different subjects in an examination

<table>
<thead>
<tr>
<th>Student</th>
<th>Maths (150)</th>
<th>Chemistry (130)</th>
<th>Physics (120)</th>
<th>Geography (100)</th>
<th>History (160)</th>
<th>Computer Science (140)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90</td>
<td>50</td>
<td>90</td>
<td>60</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>B</td>
<td>100</td>
<td>80</td>
<td>80</td>
<td>40</td>
<td>80</td>
<td>70</td>
</tr>
<tr>
<td>C</td>
<td>90</td>
<td>60</td>
<td>70</td>
<td>70</td>
<td>90</td>
<td>70</td>
</tr>
<tr>
<td>D</td>
<td>80</td>
<td>65</td>
<td>80</td>
<td>80</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>E</td>
<td>80</td>
<td>65</td>
<td>85</td>
<td>95</td>
<td>50</td>
<td>90</td>
</tr>
<tr>
<td>F</td>
<td>70</td>
<td>75</td>
<td>65</td>
<td>85</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>G</td>
<td>65</td>
<td>35</td>
<td>50</td>
<td>77</td>
<td>80</td>
<td>80</td>
</tr>
</tbody>
</table>

Note : The maximum marks in each subject is written in parenthesis.

1. What are the average marks obtained by all the seven students in Physics?
   (1) 74.28
   (2) 89.14
   (3) 91.37
   (4) 96.11
   (5) 103.21

   Solution : 1

   \( \text{Required average} = \frac{90 + 80 + 70 + 80 + 85 + 65 + 50}{7} = \frac{520}{7} = 74.28 \)

2. What was the aggregate of marks obtained by C in all the six subjects?
   (1) 409
   (2) 419
   (3) 429
   (4) 439
   (5) 450

Note: The information provided here is only for reference. This may vary the original.
3. What is the overall percentage secured by A?
   (1) 52.5%
   (2) 55%
   (3) 60%
   (4) 63%
   (5) 64.5%

**Solution : 2**

(2) Required percentage = \( \frac{440}{800} \times 100 \)
   
   = 55%

4. The number of students who obtained 60% and above marks in all the subjects is:
   (1) None
   (2) Four
   (3) One
   (4) Three
   (5) Two

**Solution : 1**
In which of the following subject, the overall percentage of the students is best?

(1) History
(2) Maths
(3) Physics
(4) Chemistry
(5) Geography

**Solution:** 5
### Directions (6-10) :

Study the pie-charts carefully to answer the following questions.

**Percentage of Students Enrolled in Different Activities in a School**  
\( N = 3000 \)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Overall percentage of the students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maths</td>
<td>( \frac{575}{1050} \times 100 = 54.76% )</td>
</tr>
<tr>
<td>Chemistry</td>
<td>( \frac{430}{910} \times 100 = 47.25% )</td>
</tr>
<tr>
<td>Physics</td>
<td>( \frac{520}{840} \times 100 = 61.90% )</td>
</tr>
<tr>
<td>Geography</td>
<td>( \frac{507}{700} \times 100 = 72.42% )</td>
</tr>
<tr>
<td>History</td>
<td>( \frac{470}{1120} \times 100 = 41.96% )</td>
</tr>
<tr>
<td>Science</td>
<td>( \frac{510}{980} \times 100 = 52.04% )</td>
</tr>
</tbody>
</table>

**Percentage Break-up of Girls Enrolled in these Activities out of the Total Students**  
\( N = 1750 \)
6. Number of girls enrolled in Dancing form what per cent of total number of students in the school? (rounded off to two digits after decimal)
   (1) 12.35%
   (2) 14.12%
   (3) 11.67%
   (4) 10.08%
   (5) None of these

   **Solution : 3**
   
   \[
   \text{(3) : Required percentage} = \left( \frac{20}{100} \times 1750 \right) \times \frac{100}{3000} = 11.67\%
   \]

7. What is the respective ratio of number of girls enrolled in Swimming to the number of boys enrolled in Swimming?
   (1) 47 : 49
   (2) 23 : 29
   (3) 29 : 23
   (4) 49 : 47
   (5) None of these

   **Solution : 4**
   
   \[
   \text{(4) : Number of girls enrolled in Swimming} = \frac{14 \times 1750}{100} = 245
   \]
   
   Number of students enrolled in Swimming
   \[
   \text{Number of students enrolled in Swimming} = \frac{16 \times 3000}{100} = 480
   \]
   
   Number of boys enrolled in Swimming
   \[
   \text{Number of boys enrolled in Swimming} = 480 - 245 = 235
   \]
   
   Required ratio = 245 : 235 = 49 : 47

8. What is the approximate percentage of boys in the school?
   (1) 34%
   (2) 56%
   (3) 28%
   (4) 50%
   (5) 42%

   **Solution : 5**
9. How many boys are enrolled in Singing and Craft together?

(1) 505
(2) 610
(3) 485
(4) 420
(5) None of these

**Solution : 1**

(1) Required number of boys

\[
\begin{align*}
= 3000 \times \frac{(21 + 25)}{100} - 1750 \times \frac{(28 + 22)}{100} \\
= 1380 - 875 = 505
\end{align*}
\]

10. What is the total number of girls enrolled in Swimming and Drawing together?

(1) 480
(2) 525
(3) 505
(4) 495
(5) None of these

**Solution : 2**

(2) Required number of girls

\[
\begin{align*}
= \frac{(14 + 16) \times 1750}{100} \\
= 30 \times \frac{1750}{100} = 525
\end{align*}
\]

11. Train A crosses a pole in 25 sec and another Train B crosses a pole in 1Anin and 15 sec. Length of Train A is half the length of Train B. What is the respective ratio between speeds of Train A and Train B?

(1) 3 : 2
(2) 3 : 4
(3) 5 : 3
(4) 2 : 5
(5) 4 : 3

**Solution : 1**
Let the length of train A = \( x \) metre and the length of train B = \( 2x \) m.

Speed of train A = \( \frac{x}{25} \) m/sec

Speed of train B = \( \frac{2x}{75} \) m/sec.

\[
\therefore \text{Required ratio} = \frac{x}{25} : \frac{2x}{75} = 3 : 2.
\]

12. Amit and Roshan, two shopkeepers, buy articles for 1,000/- and 2,000/- respectively. Roshan marks his article up by \( 2x \)% and offers a discount of \( x \)% while Amit marks his article up by \( x \)%.

If both make the same profit, what is the value of \( x \)?

(1) 40%
(2) 37.5%
(3) 12.5%
(4) 25%
(5) 50%

**Solution :**

(4) Selling price of Roshan

\[
= 2000 \times \left( \frac{100 + 2x}{100} \right) \times \left( \frac{100 - x}{100} \right)
\]

And the selling price of Amit = \( 1000 \times \left( \frac{100 + x}{100} \right) \)

According to question,

Proficiency of Roshan = Proficiency of Amit

\[
2000 \times \left( \frac{100 + 2x}{100} \right) \times \left( \frac{100 - x}{100} \right) - 2000
\]

\[
= 1000 \times \left( \frac{100 + x}{100} \right) - 1000
\]

\[
2000 \left[ \frac{(100 + 2x)}{100} \times \frac{(100 - x)}{100} - 1 \right]
\]

\[
= 1000 \left[ \frac{100 + x}{100} - 1 \right]
\]

\[
= \frac{2 \left[ 10000 + 200x - 100x - 2x^2 - 10000 \right]}{100 \times 100}
\]

\[
= \frac{100 + x - 100}{100}
\]

\[
2(100x - 2x^2) = 100x
\]

\[
4x^2 = 100x
\]

\[
\therefore \quad x = 25\%
\]
13. A man was assigned to find the average age of a class of 13 students. By mistake he included the 35 years old teacher as well and hence the average went up by 2 years. Find the actual average age of the class.

(1) 8 years
(2) 7 years
(3) 15 years
(4) 11 years
(5) 9 years

Solution : 2

Let the actual average age of the class = \( x \) years

According to question,

\[
\frac{13 \times x + 35}{14} = (x + 2)
\]

\[
13x + 35 = 14x + 28
\]

\[
x = 7 \text{ years}
\]

\[\therefore \text{Actual average age of class} = 7 \text{ years}\]

---

14. The length and breadth of a rectangular plot are in the ratio of 9 : 7. If the cost of fencing the plot at the rate of 27.75 per metre is 3,552/-, what is the area of the plot ? (in sq m)

(1) 1236
(2) 1008
(3) 1152
(4) 1288
(5) 1056

Solution : 2

Let the length of the plot = 9\( x \)

\[\text{and the breadth of the plot} = 7x\]

According to question,

\[
2(9x + 7x) \times 27.75 = 3552
\]

\[
32x = \frac{3552}{27.75}
\]

\[
x = \frac{128}{32}
\]

\[
x = 4 \text{ m}
\]

\[\therefore \text{Area of plot} = 9x \times 7x
\]

\[= 36 \times 28
\]

\[= 1008 \text{ sq m}\]
15. How many kilogram of salt at 42 paise per kg must man mix with 25kg of salt at 24 paise per kg so that he may, on selling the mixture at 40 paise per kg gain 25% on the outlay ?
   (1) 15 kg
   (2) 18 kg
   (3) 20 kg
   (4) 24 kg
   (5) 26 kg

Solution: 3

(3) ; Let the added quantity of salt = x kg

According to question,

\[(x \times 42 + 25 \times 24) \times \frac{125}{100} = (x + 25) \times 40\]

\[(42x + 600) \times \frac{5}{4} = 40x + 1000\]

\[210x + 3000 = 160x + 4000\]

\[50x = 1000\]

\[x = 20 \text{ kg}\]

Directions (16-20) : What approximate value will come in place of the question mark (?) in the following questions ? (You are not expected to calculate the exact value)

16. 26.003 \times 37.998 - 309.010 = ?
   (1) 685
   (2) 695
   (3) 680
   (4) 670
   (5) 679

Solution: 5

(5) ; 26.003 \times 37.998 - 309.010 = ?

26 \times 38 - 309 = ?

988 - 309 = ?

\[\therefore \quad ? = 679\]

17. 7885.009 - 519.999 - 94.989 = ?
   (1) 7270
   (2) 7300
   (3) 7500
   (4) 7220
   (5) 7340
Solution : 1

(1) \(7885.009 - 519.99 - 94.989 = ?\)
\[7885 - 520 - 95 = ?\]
\[7885 - 615 = ?\]
\[? = 7270\]

18. \(86 \frac{1}{7} + 96 \frac{1}{4} + 106 \frac{3}{7} = ?\)
(1) 290
(2) 390
(3) 490
(4) 590
(5) 690

Solution : 1

\(86 \frac{1}{7} + 96 \frac{1}{4} + 106 \frac{3}{7} = ?\)
\[(86 + 96 + 106) \left(\frac{1}{7} + \frac{1}{4} + \frac{3}{7}\right) = ?\]
\[288 \frac{15}{28} = ?\]
\[? = 290\]

19. \(\sqrt[3]{17.576} \times 15 = ?\)
(1) 37
(2) 39
(3) 38
(4) 45
(5) 44

Solution : 2

\(\sqrt[3]{17.576} \times 15 = ?\)
\[\sqrt[3]{17576} \times 15 = ?\]
\[\sqrt[3]{1000} \times 15 = ?\]
\[\frac{26}{10} \times 15 = ?\]
\[? = 39\]
20. \( \sqrt{8^2 \times 7 \times 5^2 - 175} = ? \)
   (1) 105
   (2) 95
   (3) 115
   (4) 125
   (5) 135

   **Solution : 1**

   \( \sqrt{8^2 \times 7 \times 5^2 - 175} = ? \)
   \( \sqrt{11200 - 175} = ? \)
   \( \sqrt{11025} = ? \)
   \( \therefore \quad ? = 105 \)

21. A bag contains 20 tickets numbered from 1 to 20. Two tickets are drawn at random.

   (1) \( \frac{8}{20} \)
   (2) \( \frac{14}{95} \)

   What is the probability that both numbers are prime? (3) \( \frac{7}{20} \)
   (4) \( \frac{21}{190} \)
   (5) \( \frac{21}{95} \)

   **Solution : 2**

   (2) From 1 to 20 prime numbers
   \( = \{2, 3, 5, 7, 11, 13, 17, 19\} \)
   \( \therefore \) Required probability
   \( = \frac{\binom{8}{2}}{\binom{20}{2}} = \frac{28}{190} = \frac{14}{95} \)

22. A tank is filled in 5 hours by three pipes A, B and C. The pipe C is twice as fast as B and B is twice as fast as A. How much time will pipe A alone take to fill the tank?

   (1) 20 hours
   (2) 25 hours
   (3) 35 hours
   (4) 40 hours
   (5) 30 hours
Solution : 3

(3) ; Let A alone take to fill the tank = x hours
B alone take to fill the tank = \( \frac{x}{2} \) hours
C alone take to fill the tank = \( \frac{x}{4} \) hours

According to question,
\[
\frac{1}{x} + \frac{2}{x} + \frac{4}{x} = \frac{1}{5} \\
\frac{7}{x} = \frac{1}{5} \\
x = 35 \text{ hours}
\]

23. A certain amount of money is to be divided among P, Q and R in the ratio of 3 : 5 : 7 respectively. If the amount received by R is 4,000/- more than the amount received by Q, what will be the total amount received by P and Q together ?
(1) 8,000/-
(2) 12,000/-
(3) 10,000/-
(4) 16,000/
(5) 20,000/-

Solution : 4

(4) ; Let the amount of P = 3x
the amount of Q = 5x
and the amount of R = 7x

According to question,
\[7x = 5x + 4000\]
\[2x = 4000\]
\[x = ₹2,000/-\]
\[\therefore \text{Amount received by P and Q together} \]
\[= 3x + 5x = 8x\]
\[= 8 \times 2000 = ₹16,000/-\]

24. A number when divided by 627 leaves a remainder 43. By dividing the same number by 19, the remainder will be .............
(1) 32
(2) 43
(3) 13
(4) 5
(5) 7
25. In an examination, 34% of the students failed in mathematics and 42% failed in English. If 20% of the students failed in both the subjects, then what is the percentage of students who passed in both the subjects?

(1) 40%
(2) 42%
(3) 44%
(4) 46%
(5) 48%

Solution: 3

(3); Total number of students who failed in examination = 34 + 42 - 20 = 56%
Number of students who passed in both subjects = 100 - 56 = 44%

Directions (26-30): value will come in question mark (?) in number series?

26. 15 365 587 717 785 815 ?
(1) 825
(2) 835
(3) 828
(4) 832
(5) 838

Solution: 1

(1); 15 365 587 717 785 815 825

27. 1297 2117 3137 4357 5777 ?
(1) 7897
(2) 7367
(3) 7397
28. 8 288 968 2048 3528 5408 ?
(1) 7288  
(2) 7388  
(3) 7488  
(4) 7688  
(5) 7588  

Solution : 4

\[
\begin{array}{cccccc}
4 & 8 & 288 & 968 & 2048 & 3528 & 5408 & 7688 \\
\end{array}
\]

\[
\begin{array}{ccccccc}
+200 & +400 & +400 & +400 & +400 & +400 & +400 \\
+1080 & +1460 & +1880 & +2280 & & & \\
\end{array}
\]

29. 18 43 204 1145 8190 ?
(1) 73915  
(2) 73925  
(3) 73935  
(4) 73945  
(5) 73955  

Solution : 3

\[
\begin{array}{cccccc}
3 & 18 & 43 & 204 & 1145 & 8190 & 73935 \\
\end{array}
\]

\[
\begin{array}{cccccccc}
\times 1 + 25 & \times 3 + 75 & \times 3 + 125 & \times 7 + 175 & \times 1 + 225 \\
\end{array}
\]

30. 12 93 730 5097 30570 ?
(1) 152835  
(2) 152837  
(3) 152839  
(4) 152841  
(5) 152833  

Solution : 3
31. A and B enter into a partnership by making investments in the ratio 1 : 2, 5% of the total profit goes to charity. If B’s share is 760/-, then what is the total profit earned?

(1) 1,200/-
(2) 1,800/-
(3) 2,400/-
(4) 1,560/-
(5) 2,000/-

**Solution : 1**

(1) Let the total profit earned by A and B = ₹ \(x\)

According to question,

\[
\frac{95}{100} \times \frac{x}{3} = 760
\]

\[
x = \frac{760 \times 100 \times 3}{95 \times 2}
\]

\[
x = ₹ 1,200/-
\]

32. The simple interest on a certain sum for 8 months at 4% per annum is 129/- less than the simple interest on the same sum for 15 months at 5% per annum. What is the sum?

(1) 2,580/-
(2) 2,400/-
(3) 2,529/-
(4) 3,600/-
(5) 2,900/-

**Solution : 4**

(4) Let the sum = ₹ \(P\)

According to question,

\[
\frac{P \times 15 \times 5}{12 \times 100} - \frac{P \times 8 \times 4}{12 \times 100} = 129
\]

\[
P \left( \frac{75 - 32}{1200} \right) = 129
\]

\[
P = \frac{129 \times 1200}{43}
\]

\[
P = ₹ 3,600/-
\]
33. If the ratio of radius of two cylinders. A and B are in the ratio 3 : 5 and their heights in the ratio 10 : 9 respectively, then what is the ratio of volumes of their cylinders?

(1) 5 : 2
(2) 5 : 3
(3) 2 : 3
(4) 2 : 5
(5) 4 : 7

Solution : 4

\[
\text{Required ratio} = \frac{\pi \times (3)^2 \times 10}{\pi \times (5)^2 \times 9} = \frac{10}{25} = 2 : 5
\]

34. A boat can travel with a speed of 16 km/h in still water. If the rate of stream is 5 km/h, then what is the time taken by the boat to cover distance of 84 km downstream?

(1) 4 hours
(2) 5 hours
(3) 6 hours
(4) 7 hours
(5) 8 hours

Solution : 1

\[
\text{Speed of boat in still water} = 16 \text{ km/h} \\
\text{Speed of stream} = 5 \text{ km/h} \\
\text{Downstream speed of boat} = 16 + 5 = 21 \text{ km/h} \\
\therefore \text{Required time} = \frac{84}{21} = 4 \text{ hours}
\]

35. A can build up structure in 8 days and B can break it in 3 days. A has worked for 4 days and then B joined to work with A for another 2 days. In how many days will A alone build up the remaining part of the structure?

(1) 10
(2) 9
(3) 12
(4) 8
(5) 22/3

Solution : 5
(5) A’s 1 day’s work = \( \frac{1}{8} \)

B’s 1 day’s work = \( \frac{1}{3} \)

Work done by A in 4 days = \( \frac{4}{8} = \frac{1}{2} \)

Work done by A and B together in 2 days

\[
= 2 \left( \frac{1}{8} - \frac{1}{3} \right) = -\frac{5}{12}
\]

Remaining part to be built = \( \frac{1}{2} - \left( -\frac{5}{12} \right) \)

\[
= \frac{1}{2} + \frac{5}{12} = \frac{11}{12}
\]

\[
\therefore \text{Remaining part will be build up by A} = \frac{11}{12} \times 8
\]

\[
= \frac{22}{3} \text{ days}
\]

**Directions (26-30) :** What approximate value will come in place of question mark (?) in the given questions? (You are not expected to calculate the exact value)

36. \( 42.8 \times 13.5 \times 16.2 \times ? = 2340.09 \)

(1) 0.15
(2) 0.25
(3) 0.5
(4) 0.75
(5) 1

Solution: 2

\[
(2) \; 42.8 \times 13.5 \times 16.2 \times ? = 2340.09
\]

\[
43 \times 13 \times 16 \times ? = 2340
\]

\[
? = \frac{2340}{43 \times 13 \times 16}
\]

\[
? = 0.26 \approx 0.25
\]

37. \( (3.7)^{-3} \times (13.69)^{-2} \times \frac{1}{50.653} \div (13.69)^{-5} = (3.7)^{x} \)

(1) 0
(2) 1
(3) 2

Note: The information provided here is only for reference. This may vary the original.
(4) 3
(5) 5

Solution: 1

\[
(1) : (3.7)^{-3} \times (13.69)^{-2} \times \frac{1}{50.653} + (13.69)^{-5} = (3.7)^2
\]
\[
(3.7)^{-3} \times (3.7)^{-4} \times \frac{1}{(3.7)^3} \times \frac{1}{(3.7)^{-10}} = (3.7)^2
\]
\[
(3.7)^{-10} \times \frac{1}{(3.7)^{-10}} = (3.7)^2
\]
\[
(3.7)^{-10+10} = (3.7)^2
\]
\[
? = -10 + 10
\]
\[
? = 0
\]

38. \frac{27}{17} \text{ of } 2295 \div 9 - ? = \sqrt{729}

(1) 373
(2) 375
(3) 378
(4) 381
(5) 370

Solution: 3

\[
(3) : \frac{27}{17} \text{ of } 2295 \div 9 - ? = \sqrt{729}
\]
\[
\frac{27}{17} \times \frac{2295}{9} - ? = 27
\]
\[
405 - ? = 27
\]
\[
? = 405 - 27
\]
\[
? = 378
\]

39. \(486 \div ? \times 7392 \div 66 = 1008\)

(1) 54
(2) 55
(3) 52
(4) 53
(5) 51

Solution: 1
(1) \[ 486 + ? \times 7392 + 66 = 1008 \]
\[ \frac{486 \times 7392}{?} + 66 = 1008 \]
\[ \frac{486 \times 112}{?} = 1008 \]
\[ \therefore \quad ? = \frac{486 \times 112}{1008} = 54 \]

40. 17.8% of ? 427.2 × 8.4% of 135
(1) 21784
(2) 24378
(3) 27216
(4) 28120
(5) 25620

Solution : 5

(5) \[ 17.8\% \text{ of } ? = 427.2 \times 8.4\% \text{ of } 135 \]
\[ \frac{18}{100} \times ? = \frac{427}{100} \times \frac{8}{100} \times 135 \]
\[ ? = \frac{427 \times 8 \times 135}{18} \]
\[ ? = 25620 \]

Directions (41-45) : In these questions, two equations numbered I and II are given. You have to solve both the equations and mark the appropriate option.

Give answer :
(1) If \( x > y \)
(2) If \( x \leq y \)
(3) If \( x \geq y \)
(4) If \( x < y \)
(5) If relationship between \( x \) and \( y \) cannot be determined

41. I. \( 2x^2 - 13x - 24 = 0 \)
II. \( 3y^2 + 17y + 24 = 0 \)

Solution : 1
\[ 2x^2 - 13x - 24 = 0 \]
\[ 2x^2 - 16x + 3x - 24 = 0 \]
\[ 2x(x - 8) + 3(x - 8) = 0 \]
\[ (x - 8)(2x + 3) = 0 \]
\[ x = 8, -\frac{3}{2} \]

\[ 3y^2 + 17y + 24 = 0 \]
\[ 3y^2 + 9y + 8y + 24 = 0 \]
\[ 3y(y + 3) + 8(y + 3) = 0 \]
\[ (y + 3)(3y + 8) = 0 \Rightarrow y = -3, -\frac{8}{3} \]
\[ \therefore x > y \]

42. I. \( 3x^2 + 23x + 30 = 0 \)
II. \( 6y^2 + 13y + 5 = 0 \)

**Solution:** 2

\[ 3x^2 + 23x + 30 = 0 \]
\[ 3x^2 + 18x + 5x + 30 = 0 \]
\[ 3x(x + 6) + 5(x + 6) = 0 \]
\[ (x + 6)(3x + 5) = 0 \]
\[ x = -6, -\frac{5}{3} \]

\[ 6y^2 + 13y + 5 = 0 \]
\[ 6y^2 + 3y + 10y + 5 = 0 \]
\[ 3y(2y + 1) + 5(2y + 1) = 0 \]
\[ (2y + 1)(3y + 5) = 0 \]
\[ y = -\frac{1}{2}, -\frac{5}{3} \]
\[ \therefore x \leq y \]

43. I. \( 5x^2 - 44x + 63 = 0 \)
II. \( 15y^2 - 37y + 18 = 0 \)

**Solution:** 3
(3); I. \(5x^2 - 44x + 63 = 0\)
\(5x^2 - 35x - 9x + 63 = 0\)
\(5x(x - 7) - 9(x - 7) = 0\)
\((x - 7)(5x - 9) = 0\)
\(x = 7, \frac{9}{5}\)

II. \(15y^2 - 37y + 18 = 0\)
\(15y^2 - 27y - 10y + 18 = 0\)
\(3y(5y - 9) - 2(5y - 9) = 0\)
\((3y - 2)(5y - 9) = 0\)
\(y = \frac{2}{3}, \frac{9}{5}\)

\(\therefore x \geq y\)

44. I. \(x^2 = 1296\)
II. \(y = \sqrt[3]{32768}\)

**Solution : 5**

(5); I. \(x^2 = 1296\)
\(x = \pm 36\)

II. \(y = \sqrt[3]{32768}\)
\(y = 32\)

\(\therefore\) Relationship between \(x\) and \(y\) cannot be established.

45. I. \(12x^2 - 8x - 7 = 0\)
II. \(10y^2 + 23y + 12 - 0\)

**Solution : 1**
Direction (46-50) : These questions consist of a question and two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and choose the appropriate option.

Give answer:
(1) If the data in statement I alone are sufficient to answer the question while the data in statement II are not sufficient to answer the question.
(2) If the data in statement II alone are sufficient to answer the question while the data in statement I are not sufficient to answer the question.
(3) If the data either in statement I alone or statement II alone are sufficient to answer the question.
(4) If the data in both statements I and II together are not sufficient to answer the question.
(5) If the data in both statements I and II are necessary to answer the question.

46. How many workers are required for completing the construction work, in 10 days?
I. 20% of the work can be completed by 8 workers in 8 days.
II. 20 workers can complete the work in 16 days.

Solution : 3
(3); From statement I,
   Let the required number of men = x
   We know that,
   \[
   \frac{M_1 D_1}{W_2} = \frac{M_2 D_2}{W_2}
   \]
   \[
   \frac{8 \times 8}{1} = \frac{x \times 10}{1}
   \]
   \[
   8 \times 8 = x \times 10
   \]
   \[
   x = 32 \text{ men}
   \]
   From statement II,
   \[
   20 \times 16 = 10 \times x
   \]
   \[
   x = 32 \text{ men}
   \]

47. What is the monthly salary of Praveen?
   I. Praveen gets 15% more than Sumit while Sumit gets 10% less than Lokesh.
   II. Lokesh’s monthly salary is 2,500/-.

Solution: 5

(5); From statements I and II,
Lokesh’s monthly salary = ₹2,500/-
Sumit salary = 2500 × \(\frac{90}{100}\)
= ₹2,250/-
∴ Salary of Praveen = 2250 × \(\frac{115}{100}\)
= ₹2,387.5

48. How many people are there in the plane?
   I. 25% passengers are women and 35% are children.
   II. There are 24 men in the plane.

Solution: 5

(5); From statements I and II,
Let the total number of people in plane = x
According to statements,
\[
 x \times \frac{40}{100} = 24 \Rightarrow x = 60
\]
49. What is the distance between city P and city Q?
   I. Two persons started simultaneously from P to Q, with their speeds in the ratio 4 : 5.
   II. B reaches P one hour earlier than A to Q. The difference between speeds of A and B is 20 km/h.

   **Solution : 5**

   (5) From statements I and II,
   Let the distance between P and Q = \( y \) km
   Let the speed of A = 4x
   and the speed of B = 5x
   According to statement II,
   \[ 5x - 4x = 20 \text{ km/h} \]
   \[ x = 20 \text{ km/h} \]
   .: Speed of A = 80 km/h
   Speed of B = 100 km/h
   Again, from statement II,
   \[ \frac{y}{80} - \frac{y}{100} = 1 \]
   \[ \frac{10y - 8y}{800} = 1 \]
   \[ 2y = 800 \]
   \[ y = 400 \text{ km} \]

50. What is Vani’s present age?
   I. Vani is three years older than Ami.
   II. The ratio between Ami and Sammy’s age is 3 : 4.

   **Solution : 4**
REASONING ABILITY AND COMPUTER APTITUDE

Directions (1-3) : In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusions. Read them carefully and mark the appropriate answer.

Give answer :
(1) If either conclusion I or II follows
(2) If neither conclusion I nor II follows
(3) If only conclusion II follows
(4) If both conclusions I and II follow
(5) If only conclusion I follows

1. Statement :
   Y < J = P ≥ R > I

   Conclusions :
   I. J > I
   II. Y < R

   Solution : 5

   (5) ; Statements : Y < J = P ≥ R > I
   Conclusions : I. J > I → True
                  II. Y < R → False

2. Statements :
   V ≥ K > M = N; M > S; T < K

   Conclusions :
   I. T < N
   II. V = S

   Solution : 2

   (2) ; Statements : V ≥ K > M = N
                     M > S
                     T < K
                     T < K > M = N
                     V ≥ K > M > S

   Conclusions : I. T < N → False
                 II. V = S → False
3. **Statements**: 
G ≥ H = I < J ; J > K ; G < L

**Conclusions**:
I. K < H  
II. L > I  

<table>
<thead>
<tr>
<th>Solution : 3</th>
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</thead>
<tbody>
<tr>
<td>(3) : <strong>Statements</strong> : G ≥ H = I &lt; J</td>
</tr>
<tr>
<td>J &gt; K</td>
</tr>
<tr>
<td>G &lt; L</td>
</tr>
<tr>
<td>L &gt; G ≥ H = I &lt; J &gt; K</td>
</tr>
</tbody>
</table>

**Conclusions** :  
I. K < H → False 
II. L > I → True 

4. Which of the following expressions is wrong if the expression `G = B < C = D ≥ E` is definitely true ?  
(1) G < C  
(2) Other than those given as options  
(3) C ≥ E  
(4) G < D  
(5) B = D 

| Solution : 5 |

5. Anil walks 4m towards the cast, takes a right turn and walks 3m. He then takes a left turn and walks 5m before taking a final left turn and walking 3m. Towards which direction and how far should Anil walk to reach the point from where he initially started walking ?  
(1) 8m towards West  
(2) 8m towards East  
(3) 7m towards West  
(4) 9m towards West  
(5) 9m towards East 

| Solution : 4 |
6. Read the following information carefully and answer the given question. One of the main reasons behind the lack of applicants for teachers’ training/degree programmes is that teachers have not experienced any improvement in working conditions and their salaries have not kept pace with salaries in other professions. Which of the following can be inferred from the given paragraph?

(1) No direct relationship can be established between the work conditions of a particular profession and preference for it amongst the qualified candidates.
(2) Number of applicants for teachers’ training programmes will improve if the salaries in other professions are reduced.
(3) Training programmes for other professions are not as good as teachers’ training programmes.
(4) Very high entrance exam is also one of the reasons behind plunging number of applicants for teachers’ training programmes.
(5) In the years to come, the schools would face a crunch in terms of availability of qualified teachers if the salaries and working conditions of teachers do not improve.

**Solution : 5**

**Directions (7-9) : Study the following information and answer the given questions.**

Six people—A, B, C, D, E and F are of different heights. Only two people are taller than C. B is taller than both A and E but not 150. the tallest. F is taller than A and E but not as tall as C. Only one person is shorter than A. The one who is second tallest is 165 cm. The one who is the third 151. shortest is 155 cm.

7. Which of the following is true with respect to the given information?

(1) B’s height is definitely 165 cm.
(2) F is taller than both D and A.
(3) C is the tallest among them.
(4) A’s height is possibly 157 cm.
(5) All the given statements are true.

**Solution : 1**

(7-9)
8. Who amongst the following’ is shortest among them?
   (1) A  
   (2) F  
   (3) D  
   (4) E  
   (5) B  
   **Solution : 4**

9. Who amongst the following is possibly 170 cm?
   (1) A  
   (2) B  
   (3) C  
   (4) F  
   (5) D  
   **Solution : 5**

**Directions (10-14) :** These questions consist of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and mark the appropriate answer.

**Give answer :**
(1) The data even in both statements I and II together are not sufficient to answer the question.
(2) The data in statement I alone are sufficient to answer the question while the data in statement II alone are not sufficient to answer the question.
(3) The data either in statement I alone or in statement II alone are sufficient to answer the question.
(4) The data in both statements I and II together are necessary to answer the question.
(5) The data in statement II alone are sufficient to answer the question while the data in statement I are not sufficient to answer the question.

10. How many sisters does Madhu have?
    I. Madhu’s parents have four children.
    II. Madhu has three brothers.
    **Solution : 4**
11. Is R the granddaughter of C?
   I. The only sister of A is the mother of R’s brother B.
   II. C, the mother of A, has only one grandson B.

   Solution: 4

   ![Family Tree Diagram]

12. Four friends A, B, C and D are seated in circle facing the centre but not necessarily in the same order. Is any one seated exactly between C and D, when counted from the left of C?
   I. B is seated to the immediate right of C.
   II. B is seated to the immediate left of A. D is not an immediate neighbour of B.

   Solution: 4

   ![Circle Diagram]

13. Among five friends M, N, O, P and Q (each earning a different amount), while earns the least?
   I. M earns more than O, P and N.
   II. P earns more than only O.

   Solution: 5

14. Among A, B, C, D and E, seated in a straight line, but not necessarily in the same order, facing North, who sits exactly in the middle of the line?
   I. A sits third to left of D. B sits to the immediate right of C.
   II. B sits second to right of A. E is not an immediate neighbour of D.

   Solution: 4
15. How many meaningful English words, starting with P, can be formed with the letters ETPS using each letter only once in each word?

(1) More than three
(2) One
(3) Two
(4) None
(5) Three

Solution: 3

(3) Required words = \{PETS, PEST\}

Directions (16-21): In these questions, two/three statements followed by two conclusions numbered I and II are given. You have to take the given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer:

(1) If either conclusion I or II follows
(2) If neither conclusion I nor II follows
(3) If only conclusion II follows
(4) If both conclusions I and II follow
(5) If only conclusion I follows

16. Statements:
All trains are buses.
All buses are jeeps.
All jeeps are aeroplanes.

Conclusions:
I. Some buses are not aeroplanes.
II. All jeeps are trains.

Solution: 2

(2) ;

\[\text{(Train) Bus Jeep Aeroplane}\]
17. **Statements**:
Some parties are celebrations. All celebrations are occasions. No occasion is a festival.

**Conclusions**:
I. No celebration is a festival.
II. Some occasions are parties.

**Solution**: 4

![Diagram](image)

18. **Statements**: Some pens are erasers. All erasers are staplers.

**Conclusions**:
I. Atleast some staplers are pens.
II. There is a possibility that some erasers are neither staplers nor pens.

**Solution**: 5

![Diagram](image)

19. **Statements**: No red is black. Some black are yellow.

**Conclusions**:
I. No yellow is red.
II. All red being yellow is a possibility.

**Solution**: 3

![Diagram](image)

20. **Statements**: All shores are beaches. Some beaches are coasts. All banks are coasts.

**Conclusions**:
I. Some banks are beaches.
II. No bank is a shore.

**Solution**: 2
21. **Statements**: All benches are parks. No park is a tree. All trees are swings.

**Conclusions**:
I. All benches being swings is a possibility.
II. No tree is a bench.

**Solution**: 4

22. What is the code for `him` in the given code language?
   (1) Cannot be determined
   (2) ga
   (3) ye
   (4) aj
   (5) se

**Solution**: 5

23. Which of the following may represent `only for now` in the given code language?
   (1) zo ga ja
   (2) zo ga ye
24. What is the code for `profit' in the given code language?
   (1) ye
   (2) ho
   (3) ga
   (4) ja
   (5) bl

   **Solution : 1**

25. ‘fo ve du’ could be a code for which of the following in the given code language?
   (1) only in profit
   (2) order only him
   (3) place in right
   (4) in right spirits
   (5) order only now

   **Solution : 4**

26. What does ‘bl’ stand for in the given code language?
   (1) profit
   (2) for
   (3) place
   (4) order
   (5) now

   **Solution : 3**

**Directions (27-28)**: In these questions, a statement is given followed by two courses of action numbered I and II. A course of action is a practicable and feasible step or administrative decision to be taken for follow-up, improvement, or further action in regard to the problem, policy etc. On the basis of information given in the statement, you have to assume everything in the statement to be true, and decide which of the suggested courses of action logically follow(s) for pursuing.

**Give answer :**
(1) If only II follows
(2) If both I and II follow
(3) If only I follows
(4) If neither I nor II follows
(5) If either I or II follows

27. **Statement** : There is no motivation among today's generation to join the armed forces owing to frequent transfers to risky areas. Perhaps they are not aware of the good side of it.

**Courses of action** :
I. Short term internship should be introduced at high school level to give students a peek into the adventurous life of the forces and provide a more realistic job purview.
II. The salary level of the defence forces should be increased with immediate effect.

**Solution** : 3

28. **Statement** : People see tax as a burden and thus devise ways to underpay or avoid it altogether.

**Courses of action** :
I. Government should educate and inform citizens about the ways in which taxes help in development of the nation.
II. Tax rates should be increased so that the under-recovery in collection is compensated.

**Solution** : 3

**Directions (29-34)** : Study the following information carefully and answer the given questions. Eight friends— P, Q, R, S, T, V, W and Z, out of whom one is a pilot, professor, businessman, doctor, lawyer, banker, cricketer or an architect (but not necessarily in the same order), are sitting around a circular table, facing the centre. S, who is a banker sits third to the right of Z.

The professor and the architect are immediate neighbours of each other. Neither the professor nor the architect is an immediate neighbour of either Z or S.

The one who is a professor sits second to the right of T, who is a lawyer. V, who is a cricketer, is not an immediate neighbour of the banker.

Cricketer and the pilot are immediate neighbours of each other. Neither Z nor W is a pilot. Only R sits between the professor and the doctor. P sits third to the right of the pilot.

29. Who amongst the following sits exactly between T and Q?

(1) Doctor
(2) Banker
(3) Professor
(4) Cricketer
(5) Architect
30. Who sits third to the right of the professor?
   (1) Q
   (2) The Lawyer
   (3) The Banker
   (4) S
   (5) The Cricketer

   **Solution:** 5

31. Which of the following is true regarding R?
   (1) He is an immediate neighbour of the professor.
   (2) He is a doctor.
   (3) None is true.
   (4) He is an immediate neighbour of the pilot.
   (5) R sits exactly between Q and T when counted from the right of Q.

   **Solution:** 1

32. What is the position of the businessman with respect to the pilot?
   (1) Third to the left
   (2) Second to the left
   (3) Immediately to the right
   (4) Fourth to the right
   (5) Second to the right

   **Solution:** 1
33. What is the profession of Z?
   (1) Doctor
   (2) Other than those given as options
   (3) Businessman
   (4) Professor
   (5) Architect

   Solution: 1

34. How many people sit between the ‘banker’ and ‘W’ when counted in anti-clockwise direction from banker?
   (1) Three
   (2) Four
   (3) One
   (4) None
   (5) Two

   Solution: 5

Directions (35-49): Study the following information to answer the given questions.

Seven friends, T, U, V, W, X, Y and Z are sitting in a straight line facing north but not necessarily in the same order. W sits fifth to the right of T. W does not sit at any of the extreme ends. Two people sit between Z and X. Y sits third to the left of U. Y sits exactly in the middle. Z is not an immediate neighbour of Y.

35. What is Z’s position with respect to W?
   (1) Fourth to the left
   (2) Second to the left
   (3) Fourth to the right
   (4) Third to the right
   (5) Third to the left

   Solution: 1

(35-39)

```
T Z V Y X W U
```

36. Who is second to the right of T?
   (1) Other than those given as options
   (2) Y
(3) X  
(4) V  
(5) U  

**Solution : 4**  

37. Four of the following five are alike in a certain way based on their seating positions in the given arrangement and so form a group. Which is the one that does not belong to the group?  
(1) WX  
(2) ZT  
(3) YV  
(4) UW  
(5) XV  

**Solution : 5**  

38. Who sit at the extreme ends of the line?  
(1) VX  
(2) XT  
(3) TU  
(4) YZ  
(5) XZ  

**Solution : 3**  

39. If all the seven friends are made to sit alphabetically from right to left, positions of how many will remain unchanged?  
(1) Three  
(2) Two  
(3) Four  
(4) One  
(5) None  

**Solution : 5**  

**Directions (40-44) :** Study the following information to answer the given questions.  
Seven friends— A, B, C, D, E, F and G work in three departments of an organisation viz. Finance, Marketing and HR. Not less than two and not more than three work in each department. Each of them likes a different colour—Red, Blue, Green, White, Yellow, Pink and Black, but not necessarily in the same order,
E does not work in the HR department and likes Yellow. The one who likes Pink works in the Marketing department. C works in the Finance department only with G. B likes red and works in the same department as D and F No one working in the HR department likes Blue or Green. C does not like Green and D does not like Black.

40. Which of the following represents the friends working in Marketing department?

(1) A, E  
(2) B, F  
(3) F, D  
(4) A, C  
(5) E, D  

Solution : 1

41. Which colour does G like?

(1) White  
(2) Blue  
(3) Pink  
(4) Cannot be determined  
(5) Green  

Solution : 5

42. Which colour does A like?

(1) Cannot be determined  
(2) Black  
(3) Green  
(4) White  
(5) Pink  

Solution : 5
43. Who likes the colour Black?
   (1) D  
   (2) A  
   (3) G  
   (4) F  
   (5) Other than those given as options  
   Solution: 4

44. Which of the following combinations of person-department-colour is correct?
   (1) F-HR-White  
   (2) A-HR-Pink  
   (3) D-Marketing-Black  
   (4) None is correct  
   (5) E-Marketing-Red  
   Solution: 4

45. The position of first and the fourth letters of the word PRICED are interchanged, similarly, the positions of second and fifth letters and third and sixth letters. In the new arrangement thus formed, how many letters are there in the English alphabetical series between the alphabets which are at the extreme ends?
   (1) Three  
   (2) Five  
   (3) More than Five  
   (4) Two  
   (5) Four  
   Solution:
   (2) Given word = P R I C E D  
      After interchanging the position according to question, we get  
      C E D P R I  
      So, the Alphabet between the word C and I are ‘D, E, F, G, H, I’  
      So, there are five alphabet between C and I.

Directions (46-50): A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement. (All the numbers are two-
digit numbers.)
Input : gate 20 86 just not 71 for 67 38 bake sun 55
Step II : for bake 20 just not 67 38 sun 55 86 71
Step III : gate for bake 20 just not 38 sun 55 86 71 67
Step IV : just gate for bake 20 not 38 sun 86 71 67 55
Step V : not just gate for bake 20 sun 86 71 67 55 38
Step VI : sun not just gate for bake 86 71 67 55 38 20
Step VI is the last step of the above input.
As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

Input : 31 rise gem 15 92 47 aim big 25 does 56 not 85 63 with moon

46. How many steps will be required to complete the rearrangement?
   (1) Eight
   (2) Six,
   (3) Seven
   (4) Five
   (5) Nine

**Solution : 1**

<table>
<thead>
<tr>
<th>Input</th>
<th>Step I</th>
<th>Step II</th>
<th>Step III</th>
<th>Step IV</th>
<th>Step V</th>
<th>Step VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 rise gem 15 92 47 aim big 25 does 56 not 85 63 with moon</td>
<td>aim 31 rise gem 15 47 big 25 does 56 not 85 63 with moon 92</td>
<td>big aim 31 rise gem 15 47 25 does 56 not 83 with moon 92 85</td>
<td>does big aim 31 rise gem 15 47 25 56 not with moon 92 85 63</td>
<td>gem does big aim 31 rise 15 47 25 not with moon 92 85 63 56</td>
<td>moon gem does big aim 31 rise 15 25 not with 92 85 63 56 47</td>
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<tr>
<td>Step VII</td>
<td>rise not moon gem does big aim 15 with 92 85 63 56 47 31 25</td>
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<td>Step VIII</td>
<td>with rise not moon gem does big aim 92 85 63 56 47 31 25</td>
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</tbody>
</table>

47. Which word/number would be at 7th position from the left of step IV?
   (1) rise
   (2) aim
   (3) big
   (4) 15
   (5) does

**Solution : 4**

48. Which step number is the following output? rise not moon gem does big aim 15 with 92 85 63 56 47 31 25
(1) Step V
(2) Step VII
(3) Step IV
(4) Step VIII
(5) Step III

**Solution : 2**

49. Which of the following represents the position of ’92’ in step VI?
(1) Ninth from the left
(2) Fifth from the right
(3) Sixth from the right
(4) Ninth from the right
(5) Seventh from the left

**Solution : 3**

50. Which word/number would be at fifth position from the right in the last step?
(1) gem
(2) 63
(3) 56
(4) 85
(5) Other than those given as options

**Solution : 3**