## SBI \& SBI ASSOCIATES CLERK EXAM, 25-11-2007- PREVIOUS YEAR PAPER

## GENERAL AWARENESS

1. India on June 30, 2007, signed the inter-governmental agreement on the 80,900 km long trans-Asian railway. This railway proposes to connect. $\qquad$ nations across the world.
(1) 12
(2) 18
(3) 24
(4) 28
(5) None of these

## Solution:4

2. The Union Health and Family Welfare Ministry, on June 30, 2007, approved the proposal for com-
pulsory rural posting for .
(1) Doctors
(2) School teachers
(3) Bank Probationers
(4) Civil Servants
(5) None of these

## Solution:1

3. In which of the following countries did IGNOU (Indira Gandhi National Open University), on June 10, 2007, launch its MBA programme?
(1) Sri Lanka
(2) Ethiopia
(3) Congo
(4) Belarus
(5) None of these

## Solution:2

4. The Union Minister who was, on June 10. 2007, presented the honorary doctorate in business administration by the Leeds Metropolitan University of the United

Kingdom is
(1) Lalu Yadav
(2) P. Chidarnbaram
(3) Praful Patel
(4) Jairam Ramesh
(5) None of these

## Solution:3

5. Hong Kong recently celebrated in grandious manner the anniversary marking a decade of its return to the Chinese rule. When was the anniversary celebrated ?
(1) June 15, 2007
(2) June 21, 2007
(3) June 26, 2007
(4) July 1, 2007
(5) None of these

## Solution:4

6. The Nepal Rashtra Bank Governor against whom the Commission for Investigation of Abuse of Authority (CIAA), a constitutional anti-graft body, on June 30, 2007, filed a case for serious financial crimes is -
(1) Bijaya Nath Bhattarai
(2) Krishna Bahadur Sherpa
(3) Manikchand Koirala
(4) Dipak Gaurav Shreshtha
(5) None of these

## Solution: 1

7. The asylum seeker Nigerian immigrant who, on June 30, 2007, became the first black mayor of Ireland is
(1) Patrick Sihuli
(2) Daniel Croft Museveni
(3) Rotimi Adebari
(4) Phillips Brian Boothlezi
(5) None of these

## Solution:3

8. On which of the following days did East Timor went to polls to elect their representatives in Parliament ?
(1) June 20, 2007
(2) July 1, 2007
(3) June 30, 2007
(4) June 21, 2007
(5) None of these

## Solution:3

9. The team which beat Punjab in the finals on June 30, 2007. to win the St. Joseph's

- TNHA junior National men's hockey championship at Chennai is?
(1) Air India
(2) Indian Bank
(3) Orissa
(4) Punjab National Bank
(5) None of these


## Solution: 1

10. Rafael Nadal reasserted his supremacy on clay on June 10, 2007, with a victory over Roger Federer in the French Open final in Paris. To which country does Nadal belong ?
(1) Sweden
(2) Argentina
(3) Spain
(4) Australia
(5) None of these

## Solution:3

11. The team which thrashed Indian Overseas Bank on June 10, 2007, to win the Daily Thanthi Trophy (volleyball) is
(1) Punjab National Bank
(2) Canara Bank
(3) Indian Bank
(4) State Bank of India
(5) None of these

## Solution:3

12. The 23-year old tennis player who beat Karan Rastogi on June 9, 2007, to win the ONGC $\$ 10,000$ ITF Futures men's tennis tournament in Dehradun is
(1) Abhishek Tiwary
(2) Prakash Amritraj
(3) Mrinal Singh
(4) Chandana Mathur
(5) None of these

## Solution:2

13. The Hyderabad-based marketer of dairy products which on June 30, 2007, launched 'Fresh o' chain of retail stores in Chennai is-
(1) Crisp Foods
(2) Foodie
(3) Fresh n' Healthy
(4) Heritage Foods
(5) None of these

## Solution:4

14. The project launched by IBM, the leading information technology company, in India on June 8, 2007, to help companies reduce their energy consumption by almost 50 per cent is
(1) Big Green
(2) Power Saver
(3) Big Saver
(4) Green Power
(5) None of these

## Solution: 1

15. On which of the following dates did the Telecom Regulatory Authority of India (TRAI) allowed operators offering global services, access to submarine cable landing stations, a move that can lower international bandwith tariffs ?
(1) June 2, 2007
(2) June 5, 2007
(3) June 7, 2007
(4) June 9, 2007
(5) None of these

## Solution:3

16. On June 7, 2007, the Securities and Exchange Board of India sus, pended the certificate of registration of
a. Woodstock Securities
b. Omega Equities
c. Woodstock Broking
d. Garner Securities

Select the correct answer using the codes given below
(1) a, b, c and d
(2) a, b and c
(3) b and c
(4) a and d
(5) None of these

## Solution:2

17. The former Delhi Chief Minister and senior Bharatiya Janata Party leader Sahib Singh Varma was killed onJune 30, 2007, in a road accident in the. $\qquad$ district of Rajasthan.
(1) Jodhpur
(2) Jaipur
(3) Alwar
(4) Sikar
(5) None of these

## Solution:3

18. The Glasgow international airport was in international news on June 30, 2007, when a Cherokee Jeep in flames crashed into the airport terminal building. Where is this airport located?
(1) United Kingdom
(2) Scotland
(3) Ireland
(4) Sweden
(5) None of these

## Solution:2

19. The senior Indian Administrative Service officer who was, on June 30, 2007, appointed as the new State Chief Secretary of Rajasthan, is
(1) D. C. Samant
(2) Vinod Paharia
(3) Anil Vaish
(4) Pushkar Verma
(5) None of these

## Solution:1

20. The Indian city which on June 7, 2007. found its place in the watch list of 100 most endangered sites across the world for 2008 by the New York based World Monuments Fund (WMF) is
(1) Kanpur
(2) Srinagar
(3) Kolkata
(4) Patna
(5) None of these

## Solution:2

21. Which of the following countries rejected, on June 9, 2007, India's plea for the extradition of Bofors case accused Ottavio Quattrochi to the country ?
(1) Argentina
(2) Portugal
(3) Mexico
(4) Italy
(5) None of these

## Solution: 1

22. The state government which on June 9, 2007. gave administrative clearance to the proposed 1000-MW Kali Sindh Super thermal power project is
(1) Madhya Pradesh
(2) Rajasthan
(3) Gujarat
(4) Chhattisgarh
(5) None of these

## Solution:2

23. Consider the following icons of Indian cinema :
a. Amitabh Bachchan
b. Shahan a Azmi
c. Yash Chopra
d. Javed Akhtar

Who among the above-given personalities was/were presented an honorary doctorate by the Leeds Metropolitan University on June 9, 2007 ?
Select the correct answer using the codes given below :
(1) a, b and c
(2) b, c and d
(3) a, b, c, and d
(4) a and b
(5) None of these

## Solution: 1

24. Which political party warned the United Progressive Alliance (UPA) on June 8, 2007, of a nation-wide agitation against setting up Special Economic Zones ?
(1) Bahujan Samaj Party
(2) Janata Dal (United)
(3) Bharatiya Janata Party
(4) Trinamool Congress
(5) None of these

## Solution:2

25. The European leader, who on June 10, 2007, called for creating a Eurasian alternative to the World Trade Organisation is
(1) Angela Merkel
(2) Vladimir Putin
(3) Tony Blair
(4) Nicolas Sarkozy
(5) None of these

## Solution:2

26. To whom did George Bush, the U.S. President, present a walking stick, hand curved by a former homeless man from Texas, on June 10, 2007?
(1) Francois Mitterand
(2) Atal Behan Vajapayee
(3) Mikhail Gorbachev
(4) Pope Benedict XVI
(5) None of these

## Solution:4

27. Which of the following countries on June 9, 2007, withdrew a controversial ordinance imposing sweeping curbs on media following nationwide protests?
(1) Myanmar
(2) Pakistan
(3) Croatia
(4) Ghana
(5) None of these

## Solution:2

28. The Prime Minister of which of the following countries re-married on June 9, 2007 ?
(1) Thailand
(2) Combodia
(3) Malaysia
(4) Laos
(5) None of these

## Solution:3

29. Which of the following women teams, on June 9, 2007, annexed the Kalimark Trophy in the St. Joseph's P. John memorial all-India volleyball tournament in Chennai?
(1) Kerala State Electricity Board
(2) Western Railway
(3) Manipur State Electricity Board
(4) Central Railway
(5) None of these

## Solution: 1

30. Justin Henin claimed her third consecutive French Open title at Roland Garros on June 9, 2007. Whom did she beat to clinch the title?
(1) Alicia Molik
(2) Mara Santangelo
(3) Katarina Srebotnik
(4) Ana Ivanovic
(5) None of these

## Solution:4

31. The legendary U.S. tennis player who was honoured with the International Tennis Federation's highest accolade, the Philippe Chatrier Award at Paris on June 7, 2007, is
(1) Ivan Lendl
(2) Bob Bryan
(3) John McEnroe
(4) Robin Amerlaan
(5) None of these

## Solution:3

32. The Cricket South Africa President who was on June 7, 2007, appointed as the acting President of the International Cricket Council following the death of Percy Sonn in May 2007, is
(1) Ray Mali
(2) Peter Combo
(3) Ronald Zanu
(4) Martin Slater
(5) None of these

## Solution: 1

33. A meeting of the Nepal-India Exchange Committee took place in Kathmandu on June 7, 2007, to deal with problems related to sharing of electricity between the two countries. When was this Committee first established ?
(1) 1988
(2) 1990
(3) 1992
(4) 1994
(5) None of these

## Solution:3

34. The most significant oil and gas discoveries of the Oil and Natural Gas Commission (ONGC) as announced on June 7, 2007, is in the. $\qquad$ basin.
(1) Mahanadi
(2) Godavari
(3) Krishna
(4) Tungabhadra
(5) None of these

## Solution: 1

35. With which of the following Australian firms did, Sify, an Internet service provider, announced its tie-up on June 7, 2007?
(I) $\mathrm{C}_{2}$ Company
(2) $\mathrm{Co}_{2}$ Corporation
(3) 04 Corporation
(4) $\mathrm{O}_{2} \mathrm{Co}$
(5) None of these

## Solution:3

36. The U.S.-based Signet Solar on June 7, 2007, announced plans to invest $\$ 2$ billion in India for establishing its manufacturing base. Which of the following Indian cities will serve as headquarters of the company for its Asian market?
(1) Mumbai
(2) Bangalore
(3) Chennai
(4) Delhi
(5) None of these

## Solution: 4

37. Which of the following recent Bollywood movies bagged the honour of 'Best Film' In the eighth IIFA Awards ceremony at Sheffield (Yorkshire) on June 9, 2007?
(1) Lage Raho Munna Bhai
(2) Omkara
(3) Rang de Basanti
(4) Krrish
(5) None of these

## Solution:3

38. Who among the following took over as executive director of Punjab National Bank on June 9, 2007?
(1) J.M. Garg
(2) Dipak Parmar
(3) Gaurav Sharma
(4) Mukul Sinha
(5) None of these

## Solution: 1

39. The Hindi film-music composer of yesteryears who, on June 9, 2007, died in Mhavlingem, on June 9, 2007, is
(1) Shankar
(2) Jaikishen
(3) Dattaram Wadkar
(4) O.P. Nayyar
(5) None of these

## Solution:3

40. The famous criminal lawyer, who, on June 9, 2007, served notice on NDTV asking it to immediately stop telecasting any news story relating to him, is
(1) Ram Jethmalani
(2) R.K. Anand
(3) Prajapati Krishnaswamy
(4) D.K. Mathur
(5) None of these

## Solution:2

## GENERAL ENGLISH

Directions (1-15) : Read the following passage and answer the questions given below it. Certain words/phrases in the passage have been printed in bold to help you locate them while answering some of the questions.
Marc Rodin flicked-off the switch of his transistor radio and rose from the table, leaving the breakfast tray almost untouched. He walked over to the window, lit another in the endless chain of cigarettes and gazed out at the snow-en-crusted landscape which the late arriving spring had not yet started to dismantle.
He murmured a word quietly and with great venom, following up with other strong nouns and epithets that expressed his feeling towards the French President, his Government and the Action Service.
Rodin was unlike his predecessor in almost every way. Tall and spare, with a cadaverous face hollowed by the hatred within, he usually masked his emotions with an un-Latin frigidity. For him there had been no Ecole Polytechnic to open doors to promotion. The son of a cobbler, he had escaped to England by fishing boat in the halcyon days of his late teens when the Germans overran France, and had enlisted as a private soldier under the banner of the Cross of Lorraine.
Promotion through sergeant to warrant officer had come the hard way, in bloody battles across the face on North Africa under Koenig and later through the hedgerows of Normandy with Leclerc. A field commission during the fight for Paris had got him the officer's chevrons his education and breeding could never have obtained and in post-war France the choice had been between reverting to civilian life or staying in the Army. But revert to what? He had no trade but that of cobbler which his father had taught him, and he found the working class of his native country dominated by Communists, who had also taken over the Resistance and the Free French of the Interior. So he stayed in the Army, later to experience the bitterness of an officer from the ranks who saw a new young generation of educated boys graduating from the officer schools, earning in theoretical lessons carried out in classrooms the same chevrons he had sweated blood for. As he wanted them pass him in tank and privilege the bitterness started to set in.
There was only one thing left to do, and that was join one of the colonial regiments, the tough crack soldiers who did the fighting while the conscript army paraded round drill squares. He managed a transfer to the colonial para-troops.
Within a year he had been a company commander in Indo-China, living among other men who spoke and thought as he did. For a young man from a cobbler's bench, promotion could still be obtained through combat, and more combat. By the end of the Indo-China campaign he was a major and after an unhappy and frustrating year in France he was sent to Algeria.

The French withdrawal from Indo-China do the year he spent in France had turned his latent bitterness into a consuming loathing of politicians and Communists, whom he regarded as one and the same thing. Not until Franco was ruled by a soldier could she ever be weaned away from the grip of the treators and lickspittles who permeated her public life. Only in the Army were both breeds extinct.
Like most combat officers who had seen their men die and occasionally buried the hideously mutilated bodies of those unlucky enough to be taken alive. Rodin worshipped soldiers as the true salt of the earth, the men who sacrificed themselves in blood so that the bourgeoisie could live at home in comfort. To learn from the civilians of native land after eight years of combat in the forests of Indo-China that most of them cared not a fig for the soldier, to read the denunciations of the military by the left-wing intellectuals for more trifles like the toturing of prisoners to obtain vital information, had set off inside Marc Rodin a reaction which combined with the native bitterness stemming from his own lack of opportunity, had turned into zealotry.
He remained convinced that given enough backing by the civil authoritieS on the spot and the Government and people back home, the Army could have beaten the Viet-Minh. The cession of Indo-China had been a massive betrayal of the thousands of fine young men who had died there seemingly for nothing. For Rodin there would be, could be, no more betrayals. Algeria would prove it. He left the shore of Marseilles in the spring of 1956 as ner a happy man as he would ever be, convinced that the distant hills of Algeria would see the consummation of what he regarded as his life's work, the apotheosis of the French Army in the eys of the world.

1. What was the period when Rodin escaped to England ?
(1) First half of the late arriving spring
(2) The time when Germany occupied France
(3)The period when Cross of Lorraine was disbanded
(4) When Rodin was a child cobblers work
(5) None of these

## Solution:2

2. Which of the following best describes the phrase....cared not a fig.... as used in the passage ?
(A) Ignoring the contribution made by a person or group
(B) Under estimating the hidden potential
(C) Overlooking the service rendered ' by an employee
(1) Only A
(2) Only A and B
(3) Only C
(4) Only B
(5) Only B and C
3. Which factors made Rodin stay in the Army?
(A) He did not have any big business in civil life
(B) The parent country had Communist domination
(C) He wanted to experience the bitterness of officer rank.
(1) Only A
(2) Only A and B
(3) Only C
(4) Only B
(5) Only B and C

## Solution:2

4. According to the passage, who resisted the dominance of Communists ?
(1) The native of Viet Mihn
(2) The fredom loving citizens of Algeria
(3) The Marc Rodin
(4) The people of France
(5) None of these

## Solution:3

5. Which of the following best describes the meaning of the phrase officer from the ranks as used in the passage ?
(1) The person who has all essential academic qualifications and experience required to become
(2) The person who grows in the organization from lowest hierarchical position
(3) An officer who is given a rank of an officer to perform a specific task
(4) The person who struggles hard but falls to obtain a rank
(5) None of these

## Solution: 1

6. What favourable situations did Rodin find in Indo-Chian campaign ?
(1) he could attain his lost seniority
(2) He could manage his desired posting to Algeria
(3) The people around him were of the same nature as he was
(4) He attained the rank of Major in the Army
(5) None of these

## Solution:3

7. What option did Robin choose in post war-France situation?
(1) He joined an officers' school for Army
(2) He monitored the army parade in drill squares
(3) He Joined a colonial regiment
(4) He preferred a cobbler's bench
(5) None of these

## Solution:3

8. Why the Army could "not overpower Viet-Minh ?
(1) The compating army Ignored the local civil authority
(2) The Government lacked political will to support army operation
(3) The built-in hate of the commandor did not percolate atthe soldier level
(4) The conviction held by the army chief proved to be false
(5) None of these

## Solution:2

9. What were the outcome of battles in Indo-China?
(1) It removed the in-built hatred in Rodin
(2) It did not achieve the objectives for which it had been fought
(3) The French Army betrayed Rodin
(4) Rodin regarded it as his life's achievement
(5) None of these

## Solution:3

10. Which of the following statements is TRUE in the context of the passage ?
(1) Marc Rodin was a qualified officer from Ecole Polytechnic
(2) Unlike his predecessor, the achievements in the army for Rodin were easy
(3) Rodin believed that only people who are worth their salt are soldiers
(4) Rodin's father did not teach him the trade of a cobbler
(5) None of these

## Solution:3

Directions (11-13): Choose the word which has most nearly the SAME meaning as the word printed in bold as used in the passage.
11. chevrons
(1) colours
(2) badges
(3) skills
(4) crowns
(5) ranks

## Solution:5

12. conscript
(1) commissioned
(2) secret
(3) detailed
(4) compulsive
(5) registered

## Solution:4

13. lickspittles
(1) spoons
(2) approvers
(3) sycophant
(4) witnesses
(5) sincere

## Solution:3

Directions (14-15): Choose the word which is MOST OPPOSITE in meaning to the word printed in bold as used in the passage.
14. frigidity
(1) warmth
(2) heat
(3) embrace
(4) negation
(5) calm

## Solution: 1

15. denuciations
(1) enrolment
(2) greeting
(3) rejections
(4) honouring
(5) acceptance

## Solution:2

Directions (16-20): In each question, a sentence with two words/ groups of words printed in bold type are given. One of them or both may have certain error. You have to find out the correct word or group of words from among the three choices A, B or
C given below each sentence which can replace the wrong word/group of words. if any, and makes the sentence grammatically correct. If the sentence is correct as It is, mark (5) i.e. 'No Correction Required' as your answer.
16. Aerobics are found to be of exreme helpful to diabetes patients.
(A) extremely helpful
(B) of extreme help
(C) of extremely helpful
(1) A only
(2) 5 only
(3) C only
(4) Either A or B
(5) No Correction Required

## Solution:2

17. Our emphasis is also on the quality of the product but not on its appearance alone.
(A) emphasizing and
(B) stress $\qquad$ .but
(C) emphasis $\qquad$ and
(1) A only
(2) B only
(3) C only
(4) None
(5) No Correction Required

## Solution:3

18. Investors have been receiving better services from Insurance Companies.
(A) demanding. $\qquad$ by
(B) received $\qquad$ from
(C) received .by
(1) A only
(2) B only
(3) C only
(4) Either A or C
(5) No Correction Required

## Solution: 5

19. Our insistence had duly impact on their decision-making process.
(A) due impact $\qquad$ their
(B) duly impacted. $\qquad$ their
(C) due impacting $\qquad$ them
(1) A only
(2) B only
(3) C only
(4) None
(5) No Correction Required

## Solution: 1

20. Before the doctor comes, the patient had been escaped from the ward.
(A) reached $\qquad$ has
(B) came $\qquad$ .had
(C) arrived $\qquad$ had been
(1) A only
(2) B only
(3) C only
(4) Either A or B
(5) No Correction Required

## Solution:2

Directions (21-25) : In each question below a sentence with four words printed in bold type is given. These are numbered as (1), (2). (3) and (4). One of these four boldly printed words may be either wrongly spelt or inappropriate in the context of the sentence. Find out the word which is wrongly spelt or inappropriate, if any. The number of that word is your answer. If all the boldly printed words are correctly spelt and also appropriate in the context of the sentence, mark (5) i.e., 'All Correct' as your answer.
21. The questionaire/(1) reflected/(2) vailous phenomena(3)/that are sparingly(4)/ experienced. All correct/(5)

## Solution:4

22. Countrary / (1) to popular belief, (2)/ripe fruits are not necessarily (3)/ delicious. (4) All Correct (5)

## Solution: 1

23. The most ambitious (1)/ enterprise (2)/undertaken in the ancient (3)/Egypt was of the construction (4)/ of pyramids. All Correct (5)

## Solution:2

24. The astronomical (1)/calculations (2)/v/ere admiringly (3)/ accurate.
(4) All Correct (5)

## Solution:5

25. Looking inward from the top of the ramparts, (1)/the sentries (2)/ had a
marvellous panerama (3)/ spread (4)/ before them. All Correct (5)

## Solution:3

Directions (26-30) : Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph: then answer the questions given below them.
(A) No one knows their names.
(B) With irrigation systems, farmers were able to raise more food with less labour.
(C) The first engineers lived in the middle East, probably around 3500 B.C.
(D) Today's city, thus, is essentially still a place where specialists live and work.
(E) Thus, an increasing number of people were relieved of agricultural chores and able to gather in cities tc practise specalities.
(F) However, they conceived and built the elevated irrigation canal.
26. Which of the following will be the FOURTH sentence after rear rangement ?
(1) A
(2) B
(3) C
(4) D
(5) E

## Solution:2

27. Which of the following will be the FIFTH sentence after rearrangement ?
(1) A
(2) B
(3) C
(4) D
(5) E

## Solution:5

28. Which of the following will be the SECOND sentence after rear - rangement?
(1) A
(2) B
(3) C
(4) D
(5) E

## Solution: 1

29. Which of the following will be the SIXTH (LAST) sentence after rearrangement ?
(1) A
(2) B
(3) C
(4) D
(5) E

## Solution:4

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

## Solution:3

Directions (31-40) : In the following passage there are blanks each of which have been numbered. Against each number, there are five words one of which fills the blank appropriately. Find the appropriate word in each case.
In any organized group of mammals, no matter how co-operative, there is always a 31 for social dominance. As he pursues this, each adult individual 32 a particular social rank, giving him his position, or status, in the group hierarchy. The situation never remains 33 for very long. largely because all the status strugglers are 34 oldre. when the overlords, or Stop-dogs', become senile, their seniority is challenged and they are 35 by their immediate subordinates. there is then renewed dominance squabbling as 36 moves a littel farther up the social ladder. At the other end of the scale, the younger members of the group are maturing rapldly, keeping up the pressure from 37. In addition, certsin members of the group may suddenly be 38 down by discase or accidental death, leaving gaps in the hierarchy that have to be quickly filled.
The general result is a constant condition of status tension. Under natural 39 this tension remains tolerable because of the limited size of the social groupings. If, however, in the artificial environment of captivity, the group size becomes too big, or the space available too small, then the status 'rat race' soon gets out of hand, dominance battles rage uncontrollably, and the leaders of the packs, prides, colonies or tribes come under 40 strain.
31. (1) feel
(2) struggle
(3) war
(4) envy
(5) stress

## Solution:2

32. (I) allots
(2) inherits
(3) approves
(4) acquires
(5) desires

## Solution:4

33. (1) stable
(2) equitable
(3) equal
(4) calm
(5) unstable

## Solution: 1

34. (1) aheading
(2) looking
(3) feeling
(4) moving
(5) growing

## Solution:5

35. (I) throned
(2) thrown
(3) overthrown
(4) insulted
(5) picked

## Solution:3

36. (I) they
(2) junior
(3) elder
(4) everyone
(5) each one

## Solution:4

37. (1) above
(2) sides
(3) top
(4) behind
(5) below

## Solution:5

38. (1) go
(2) feel
(3) struck
(4) run
(5) come

## Solution:3

39. (1) forces
(2) conditions
(3) pressures
(4) preconditions
(5) upbringing

## Solution:2

40. (1) severe
(2) unwanted
(3) stress
(4) productive
(5) desirable

Solution: 1

## MARKETING APTITUDE / COMPUTER KNOWLEDGE

1. Dos and windows $3 . x$ support file names upto $\qquad$ characters in length.
(1) Two
(2) Four
(3) Six
(4) Eight
(5) None of these

## Solution:4

2. $\qquad$ .is collection of web-pageS and is the very first page and $\qquad$ is the very
frist page that we see on opening of a web-site.
(1) Home-page, Web-page
(2) Web-site, Home-page
(3) Web-page-, Home-page
(4) Web-page, Web-site
(5) None of these

## Solution:2

3. When we run a program in HTML coding.... is used as backend and. $\qquad$ works as frontend.
(1) Notepad - Internet-Explorer
(2) Notepad - Msn-messenger
(3) MS-word - Internet Explorer
(4) Both (1) and (2)
(5) None of these

## Solution: 1

4. In Dos, the "Label" command is used to
(1) display the label of disk
(2) change the label of disk
(3) remove the label of disk
(4) Both (1) and (2)
(5) None of these

## Solution: 1

5. The subsystem of the kernel and hardware that cooperates to translate virtual to physical addresses comprises
(1) Process Management Subsystem
(2) Memory Management \&lb-system
(3) Input/Output Management Subsystem
(4) All of the above
(5) None of these

## Solution:2

6. If the $\qquad$ .bit in X. 25 standard is set to 1, it means that there is more than one packet.
(1) Q
(2) D
(3) M
(4) P
(5) None of these

## Solution:3

7. A device operating at the physical layer is called a
(1) Bridge
(2) Router
(3) Repeater
(4) All of the above
(5) None of these

## Solution:3

8. For separating channels in FDM, it is necessary to use
(1) Time slots
(2) Bandpass filters
(3) Differentiation
(4) All of the above
(5) None of these

## Solution: 1

9. Encryption and decryption are functions of
(1) Transport layer
(2) Session layer
(3) Presentation layer
(4) All of the above
(5) None of these

## Solution:2

10. Which of the following computer languages is a mathematically oriented languages used for scientific problems?
(1) FORTRAN
(2) COBOL
(3) LISP
(4) PROLOG
(5) APPLE

## Solution: 1

11. Which of the following types of tables constraints will prevent the entry of duplicate rows?
(1) Primary key
(2) Unique
(3) Null
(4) Foreign key
(5) None of these

## Solution:2

12. Which type of switching uses the entire capacity of a dedicated link?
(1) Circuit switching
(2) Virtual Circuit Packet Switching
(3) Datagram Packet Switching
(4) Message Switching
(5) None of these

## Solution:3

13. The $\qquad$ is a device that connects n inputstom outputs.
(1) Crosspoint
(2) Crossbar
(3) Modem
(4) RAM
(5) None of these

## Solution:3

14. In $\qquad$ , each packet of a message follows the same path from sender to receiver.
(1) Circuit switching
(2) Message switching
(3)The virtual approach to packet switching
(4) The datagram approach to packet switching

## Solution:4

15. A permanent virtual circuit involves
(1) Connection establishment
(2) Data transfer
(3) Connection release
(4) All of the above
(5) None of these

## Solution:2

16. The sharing of a medium and its path by 2 or more devices is called $\qquad$ .
(1) Modulation
(2) Encoxing
(3) Line discipline
(4) Multiplexing
(5) None of these

## Solution:4

17. Which multiplexing technique transmits analog signals?
(1) FDM
(2) Synchronous TDM
(3) Asynchronous TDM
(4) Both (2) and (3)
(5) None of these

## Solution: 1

18. The search tool used to text that appears in gotherspace is
(1) Gobler
(2) Archie
(3) Mikky
(4) Veronica
(5) None of these

## Solution:4

19. X. 21 protocol consists of
(1) Physical and frame levels
(2) Frame and packet levels
(3) Physical, frame and packet levels
(4) Only physical level
(5) None of these

## Solution:4

20. Array is -
(1) linear data structure
(2) non-linear data structure
(3) complex data structure
(4) simple data structure
(5) None of these

## Solution: 1

21. Prior to the Industrial Revolution, selling was no problem and no sales team is required because
(1) Marketing was not a subject then
(2) People was not a subject then
(3) People don't want to sell anything
(4) Small-scale enterprises dominated the economic scene
(5) None of these

## Solution:4

22. A form of distribution in which manufacturer makes an agreement, with a middleman in each market area stipulating that the distribution of the product within that is to be confined solely to that middleman is known as -
(1) Mass distribution
(2) Exclusive agency distribution
(3) Selective distribution
(4) Price distribution
(5) None of these

## Solution:2

23. The long term objective of marketing is -
(1) Customer satisfaction
(2) Profit maximisation
(3) Cost cutting
(4) Profit maximisation with customer
(5) None of these

## Solution:4

24. Which among the following is statistical indicator for equality in income distribution (1) Gini coefficient
(2) Price indices
(3) GNP
(4) GDP
(5) None of these

## Solution: 1

25. Short-term planning focuses on
(1) functional plans
(2) long term objectives
(3) specific goals
(4) both (1) and (3)
(5) None of these

## Solution:4

26. In marketing terms, Attitude can best be defined as a
(1) rude behaviour of salesperson
(2) rude behaviour of consumer
(3) mental state of consumer
(4) ego of the marketing executive
(5) None of these

## Solution:3

27. The nominal scale used for marketing research, refers to-
(1) population characteristics based on age or sex or ownership of a specific consumer durable
(2) ordering of scale
(3) Both (1) and (2)
(4) Neither (1) nor (2)
(5) None of these

## Solution: 1

28. Reference group influences vis-a-vis consumption decision, is a function of the -
(1) product category
(2) group characteristics
(3) group communication process
(4) All of the above
(5) None of these

## Solution:4

29. Just in time (JIT) technique is getting wider acceptance world over. The technique
was first introduced in
(1) India
(2) Indonesia
(3) Japan
(4) America
(5) None of these

## Solution:3

30. 'Gate keepers -
(1) use the products
(2) reports on product performance
(3) control the flow of information into buying centre
(4) issue challan for discharge of products
(5) None of these

## Solution:3

31. Consumer Day is celebrated on-
(1) 15 th March
(2) 16 th March
(3) 20th April
(4) 20th March
(5) None of these

## Solution: 1

32. A situation whereby market is expanded by developing new products to satisfy new consumer needs is called -
(1) Market development
(2) Diversification
(3) Both (1) and (2)
(4) Neither (1) nor (2)
(5) None of these

## Solution:2

33. The level of commitment that consumers feel toward a given brand is called -
(1) Brand equity
(2) Brand name
(3) Brand loyalty
(4) Brand utility
(5) None of these

## Solution:3

34. Assigning specific jobs and work places to the selected candidates is known as -
(1) Placement
(2) Recruitment
(3) Transfer
(4) Promotion
(5) None of these

## Solution: 1

35. As a counsellor, a personnel manager -
(1) reminds the management of moral obligations towards employees
(2) encourages the employees
(3) tries to settle the disputes between labour and management
(4) All of the above
(5) None of these

## Solution:2

36. Which among the following is not included in fringe benefits available to an employee?
(1) old age survivors benefits
(2) pensions
(3) gratuities
(4) Both (1) and (2)
(5) None of these

## Solution:5

37. Which among the following is an example of tele conferencing ?
(1) Computer conferencing
(2) Audio conferencing
(3) Video conferencing
(4) All of the above
(5) None of these

## Solution:4

38. Information systems can assist managers by -
(1) providing information
(2) providing data on internal sources
(3) directing
(4) All of the above
(5) None of these

## Solution:4

39. Which among the following is a disadvantage of an EDI system?
(1) Speed
(2) Errors
(3) Expensive
(4) Mismatch
(5) None of these

## Solution:3

40. In online marketing, there is
(1) no exchange
(2) exchange is the core of marketing
(3) Guarantee
(4) Only warranty
(5) None of these

## Solution:2

## QUANTITATIVE APTITUDE

1. Three-fourth of a number is equal to $60 \%$ of another number. What is the difference between the numbers?
(1) 18
(2) 32
(3) 24
(4) Cannot be determined
(5) None of these

## Solution:4

(4) Let the numbers be $x$ and $y$ respectively. Then,
$\frac{3}{4} x=60 \%$ of $y$
$\Rightarrow \frac{3}{4} x=\frac{60}{100} y$
$\Rightarrow \frac{3}{4} x=\frac{3}{5} y$
$\Rightarrow y=\frac{3}{4} \times \frac{5}{3} x=\frac{5}{4} x$
$\therefore y-x$
$=\frac{5}{4} x-x=\frac{x}{4}$
Clearly, no unique answer is possible.
2. Abhijit invested in three schemes $A, B$ and $C$ the amounts in the ratio of $2: 3: 4$ respectively. If the schemes offered interest @ 20 p.c.p.a. 16 p.c.p.a. and 15 p. c.p. a. respectively, what will be the respective ratio of the amounts after one year ?
(1) $10: 8: 5$
(2) $12: 14: 15$
(3) $12: 15: 22$
(4) Cannot be determined
(5) None of these

## Solution:5

(5) Let Abhijit invested Rs. $2 x$.

Rs. $3 x$ and Rs. $4 x$ in three
schemes A, B and C respec-
tively.
$\therefore$ The required ratio
$=2 x \times \frac{120}{100}: 3 x \times \frac{116}{100}: 4 x \times \frac{115}{100}$
$=2 \times 120: 3 \times 116: 4 \times 115$
$=60: 87: 115$
3. A train crosses a 300 metre long platform in 38 seconds while it crosses a signal pole in 18 seconds. What is the speed of the train in Irrnph?
(1) Cannot be determined
(2) 72
(3) 48
(4) 54
(5) None of these

## Solution:3

(3) 48
4. If $2 x+5 y=109$ and $2 x+5=y+12$ then $y-x=$ ?
(1) 7
(2) 6
(3) 8
(4) 9
(5) None of these

## Solution: 5

(5) $2 x+5 y=109$
$2 x+5=y+12$
$\Rightarrow 2 x-y=12-5$
$\Rightarrow 2 x-y=7$
On subtracting equation (ii)
from (i),
$2 x+5 y-(2 x-y)=109-7$
$\Rightarrow 2 x+5 y-2 x+y=102$
$\Rightarrow 6 y=102$
$\Rightarrow y=\frac{102}{6}=17$
From equation (ii),
$2 x-17=7$
$\Rightarrow 2 x=24$
$\Rightarrow x=12$
$\therefore y-x=17-12=5$
5. Four of the following five parts numbered (1), (2), (3), (4) and (5) are exactly equal. The number of the part, which is not equal to the other four parts, is your answer.

$$
\begin{equation*}
45 \times 12+60=80 \% \text { of } 800-40 \tag{1}
\end{equation*}
$$

(2)

$$
=\frac{3}{5} \text { of } 1200-150=1260 \div 3 \div
$$

180
(3)
(4) -
$=8640 \div 16+60$
(5)

## Solution:3

(3) (1) $\rightarrow 45 \times 12+60$
$=540+60=600$
(2) $\rightarrow 80 \%$ of $800-40$
$=\frac{80 \times 800}{100}-40$
$=640-40=600$
(3) $\rightarrow \frac{3}{5}$ of $1200-150$
$=\frac{3}{5} \times 1200-150$
$=720-150=570$
(4) $\rightarrow \frac{1260}{3}+180=420+180=600$
(5) $\rightarrow \frac{8640}{16}+60=540+60=600$
6. Certain number of pieces of an article are to be packed in boxes, such that each box contains 145 pieces. If after packing them in 32 boxes 25 pieces are left out, what was the number of pieces to be packed?
(1) 4566
(2) 4655
(3) 4465
(4) 4640
(5) None of these

## Solution:5

(5) Number of pieces
$=32 \times 145+25$
$=4640+25=4665$
7. Which of the following set of fractions is in ascending order ?
(1) $\frac{13}{15}, \frac{11}{13}, \frac{7}{8}, \frac{8}{9}$
(2) $\frac{11}{13}, \frac{13}{15}, \frac{7}{8}, \frac{8}{9}$
(3) $\frac{8}{9}, \frac{7}{8}, \frac{13}{15}, \frac{11}{13}$
(4) $\frac{7}{8}, \frac{8}{9}, \frac{11}{13}, \frac{13}{15}$
(5) None of these

## Solution:2

(2) Decimal equivalent of :

$$
\begin{aligned}
& \frac{13}{15}=0.87 \frac{11}{13}=0.85 \\
& \frac{7}{8}=0.875 \\
& \frac{8}{9}=0.89
\end{aligned}
$$

Clearly.
$0.85<0.87<0.875<0.89$
$\therefore \frac{11}{13}<\frac{13}{15}<\frac{7}{8}<\frac{8}{9}$
8. 3 Girls and 4 boys are to be seated in a row on 7 chairs in such a way that all the three girls always sit together. In how many different ways can it be done ?
(1) 720
(2) 576
(3) 144
(4) 480
(5) None of these

## Solution: 1

(1) Total number of persons $=3$ girls +4 boys $=7$
The girls always sit together. Considering three girls as one person, we have 5 persons who can be arranged in 5! ways. But corresponding to each way of these arrangements, the girls can be arranged together in 3 ! ways. Hence, required number of ways $=5!\times 3!=120 \times 6=$ 720
9. In how many different ways can the letters of the word DRASTIC be arranged in such a way that the vowels always come together ?
(1) 720
(2) 360
(3) 1440
(4) 540

## Solution:3

(3) There are 7 letters in the word 'DRASTIC' including 2 vowels ( $\mathrm{A}, \mathrm{I}$ ) and 5 consonants (D,R.S,T,C.). Considering two vowels as one letter, we have 6 letters which can be arranged in $6!$ ways. But corresponding to each way of these arrangements, the vowels can be put together in 2 ! ways.
Hence, required number of words $=6!\times 2$ !
$=720 \times 2=1440$
10. Area of circle is equal to the area of a rectangle having perimeter of $50 e m s$. and length more than the breadth by 3 cms . What is the diameter of the circle?
(1) 7 cms .
(2) 21 cms .
(3) 28 cms .
(4) 14 cms .
(5) None of these

## Solution:4

$\Rightarrow x=\frac{22}{2}=11$
$\therefore$ Breadth $=11 \mathrm{cms}$.
(4) Let the breadth of the rect- and length $=x+3=11+3$
angle be $x \mathrm{cms}$.
$\therefore$ Length $=(x+3) \mathrm{cms} . \quad \therefore$ Area of circle $=$ Area of rect-
Now, $2(x+x+3)=50$
$\Rightarrow 2 x+3=25$
$\Rightarrow 2 x=22$
$=14 \mathrm{cms}$.
angle
$\Rightarrow \pi r^{2}=14 \times 11$
$\Rightarrow r^{2}=\frac{14 \times 11 \times 7}{22}$
$\Rightarrow r=7 \mathrm{cms}$.
$\therefore$ Diameter $=14 \mathrm{cms}$.

Directions (11-15) : What will come in place of the question mark (7) in following equations?
11. $\frac{3}{8}$ of $\frac{4}{7}$ of $\frac{7}{9}$ of $738=$ ?
(I) 123
(2) 132
(3) 142
(4) 143
(5) None of these

## Solution: 1

(1) ? $=\frac{3}{8} \times \frac{4}{7} \times \frac{7}{9} \times 738=123$
12. $3 \frac{2}{5} \times \frac{4}{17}+1 \frac{2}{3} \times \frac{2}{15}=$ ?
(1) $2 \frac{1}{45}$
(2) $1 \frac{1}{45}$
(3) $1 \frac{1}{9}$
(4) $1 \frac{2}{5}$
(5) None of these

## Solution:2

(2) ? $=\frac{17}{5} \times \frac{4}{17}+\frac{5}{3} \times \frac{2}{15}$

$$
\begin{aligned}
& =\frac{4}{5}+\frac{2}{9}=\frac{36+10}{45} \\
& =\frac{46}{45}=1 \frac{1}{45}
\end{aligned}
$$

13. $135 \%$ of $480+7 \%$ of $320=728$
(1) 25
(2) 28
(3) 125
(4) 115
(5) None of these

## Solution: 1

(1) 25
14. $\frac{36}{?}=\frac{90}{195}$
(1) 76
(2) 72
(3) 78
(4) 84
(5) None of these

## Solution:3

(3) $\frac{36}{?}=\frac{90}{195}$

$$
\begin{aligned}
& \Rightarrow 90 \times ?=36 \times 195 \\
& \Rightarrow ?=\frac{36 \times 195}{90}=78
\end{aligned}
$$

15. $323.001 \times 15+?=5000.015$
(1) 145.014
(2) 155
(3) 145
(4) 155.014
(5) None of these

## Solution:2

(2) $323.001 \times 15+?=5000.015$
$\Rightarrow 4845.015+9=5000.015$
$\Rightarrow$ ? $=5000.015-4845.015$
$=155$

Directions (16-20) : What approximate value will come in place of the question mark (?) in following equations ?
16. $35 \%$ of $121+85 \%$ of $230.25=$ ?
(1) 225
(2) 230
(3) 240
(4) 245
(5) 228

## Solution:3

(3) Taking approximate integral values, we have
? $\approx 35 \%$ of $120+85 \%$ of 230
$[\because 121 \approx 120,230.25 \approx 230]$
$=\frac{35 \times 120}{100}+\frac{85 \times 230}{100}$
$\approx 42+195.50 \approx 237.5 \approx 240$
17. $3.2 \times 8.1+3185 \div 4.95=$ ?
(I) 670
(2) 660
(3) 645
(4) 690
(5) 685

## Solution:2

(2) $?=3.2 \times 8.1+3185 \div 4.95$
$=3 \times 8+3185 \div 5$
$=24+\frac{3185}{5}$
$=24+637 \approx 661 \approx 660$
18. $2508 \div 15.02+$ ? $\times 11=200$
(1) 13
(2) 8
(3) 3
(4) 4
(5) 6

## Solution:3

(3) $2508 \div 15.02+? \times 11=200$

Taking approximate values,
$\Rightarrow 2505 \div 15+? \times 11 \approx 200$
$\Rightarrow 167+$ ? $\times 11 \approx 200$
$\Rightarrow ? \times 11=200-167$
$\Rightarrow ? \approx \frac{33}{11} \approx 3$
Note - We have written 2505 for 2508, as 2505 is divisible by 15 .
19. $42.07 \times 7.998+(?)^{2}=20^{2}$
(1) 6
(2) 12
(3) 32
(4) 64
(5) 8

## Solution:5

(5) Taking approximate values,

$$
\begin{aligned}
& 42 \times 8+?^{2}=20^{2} \\
& \Rightarrow ?^{2} \approx 400-336=64 \\
& \Rightarrow ? \approx \sqrt{64}=8
\end{aligned}
$$

20. $2375.85 \div 18.01-4.525 \times 8.05=$ ?
(1) 105
(2) 96
(3) 88
(4) 90
(5) 112

## Solution:4

(4) $? \approx 2376 \div 18-5 \times 8$

$$
\begin{aligned}
& \approx \frac{2376}{18}-40 \\
& \approx 132-40 \\
& \approx 92 \approx 90
\end{aligned}
$$

Directions (21-25): Each of the questions below consists 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-
Give answer (1) if the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question
Give answer (2) if the data in statement II alone is sufficient to answer the question, while the data in statement $I$ alone is not sufficient to answer the question
Give answer (3) if the data either in statement I alone or in statement II
alone is sufficient to answer the question.
Give answer (4) if the data in both the statements I and II together are not sufficient to answer the question.
Give answer (5) if the data in both the statements I and II together are necessary to answer the question.
21. What is the rate of interest p.c.p. a.?
I. Simple interest earned in 3 years is Rs. X.
II. The amount increases by $80 \%$ in 5 years.

## Solution:2

(2) if the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question
22. What is the speed of the cum
I. A man can swim a distance of 9 kms . in $11 / 2 \mathrm{hrs}$. down streams.
II. While coming back up streams it takes him 3 hours to cover the same distance

## Solution:5

(5) If the rate of swimming in still water be $x \mathrm{kmph}$ and speed of stream be $y \mathrm{kmph}$, then from statement I,
$x+y=\frac{9}{\frac{3}{2}}=6 \mathrm{kmph}$

From statement II,
$x-y=\frac{9}{3}=3 \mathrm{kmph}$

Clearly, both statements I and II are required to find the value of $y$.
23. How many children are there in the class ?
I. Boys and girls are in the ratio of $8: 5$ respectively and number of girls is less than that of boys by 24 .
II. Number of girls in the class is 40

## Solution: 1

(1) From statement I,

Let the number of boys and girls be $8 x$ and $5 x$ respectively. Then,
$8 x-5 x=24$
$\Rightarrow 3 x=24$
$\therefore x=8$
Hence, the number of children can be determined. that is, $13 x=13 \times 8=104$
Statement II does not give any specific relation between the number of boys and girls.
24. What is the two digit number ?
I. Difference between the digits is 7 .
II. Sum of the digits is 11 .

## Solution:4

.(4) Let the number be $10 x+y$
From statement I,
$x-y=7$ or $y-x=7$

From Statement II,
$x+y=11$
Now, solving $x-y=7$
and $x+y=11$.
we get $x=9, y=2$
Solving $y-x=7$ and $x+y=$ 11 ,
we get $y=9$ and $x=2$
Hence, the possible numbers are 92 and 29. Cearly, uniqueness of answer is not satisfied. Hence, the correct answer choice is (4).
25. How much time will Ravindra take to complete one round, cycling around the boundary of a circular ground ?
I. Speed of cycling is 12 kmph
II. Diameter of the ground is 700 metres

## Solution:5

(5) From statement I,

Speed $=12 \mathrm{kmph}$
$=12 \times \frac{5}{18}=\frac{10}{3} \mathrm{~m} / \mathrm{sec}$.
From statement II,
Circumference of ground
$=\frac{22}{7} \times 700$
$=2200$ metres
When both statements are combined, the required time can be determined, that is,

$$
\begin{aligned}
& \text { Time }=\frac{\text { Distance }}{\text { Speed }} \\
& =\frac{2200 \times 3}{10} \\
& =660 \text { seconds }
\end{aligned}
$$

Directions (26-30) : Study the following graphs carefully to answer these questions.

## Quantity of various items produced and the amount earned by selling them <br> Quantity produced Total $=\mathbf{2 0 0 0}$ tons



Income by selling the products
Total $=$ Rs. 45 millions

26. If the expenditure incurred in production of product ' $C$ ' per ton was Rs. 16000 , what was the per cent profit earned ?
(1) 12.5
(2) 11.11
(3) 12.25
(4) 11.28
(5) None of these

## Solution: 1

.(1) Quantity of item 'C' produced
$=15 \%$ of $2000=300$ tons
Expenditure incurred
$=$ Rs. $16000 \times 300$
$=$ Rs. 48,00,000
Income earned
$=12 \%$ of Rs. 45000000
$=$ Rs. $54,00,000$
Profit
$=$ Rs. $(5,40,0000-48.00,000)$
$=$ Rs. 600,000
$\therefore$ Profit \%
$=\frac{600000}{4800000} \times 100=\frac{25}{2}$
27. What is the average per ton selling price of all the six products together?
(1) Rs. 20,525
(2) Rs. 18,500
(3) Rs. 22,500
(4) Rs. 20,500
(5) Rs. 18,525

## Solution:3

(3) Rate of selling $=\frac{45000000}{2000}$
$=$ Rs. 22500 per ton
28. What is the selling price of product ' A ' per ton ?
(1) Rs. 17,580
(2) Rs. 18,570
(3) Rs. 17,850
(4) Rs. 18,750
(5) None of these

## Solution:4

.(4) Quantity of product A
$=18 \%$ of 2000
$=360$ tons
Income earned by selling prod-
uct $\mathrm{A}=15 \%$ of Rs. 45 millions
$=\frac{15 \times 4,50,00,000}{100}$
$=$ Rs. 6750000
$\therefore$ S.P. $=\frac{6750000}{360}$ per ton
$=$ Rs. 18750 per ton
29. Approximately, what was the average selling price per ton of products D \& E together ?
(1) Rs. 21,800
(2) Rs. 22,800
(3) Rs. 22,000
(4) Rs. 22,500
(5) Rs. 23,500

## Solution:5

(5) Rs. 23,500
30. Which product has the highest selling price per ton?
(1) A
(2) B
(3) C
(4) D
(5) None of these

## Solution:2

.(2) From the chart, it is obvious.
For product B,
quantity $=13 \%$ of 2000
$=260$ tons
Income $=17 \%$ of Rs. 45 mil-
lions
$=$ Rs. $\frac{17 \times 45000000}{100}$
$=$ Rs. 7650000
$\therefore$ S.P. $=\frac{7650000}{260}$
$=$ Rs. 29423 per ton.

Directions (31-35) : Study the following table to answer these questions. Number of Officers in various Departments of an Organization in different Scales

| Deptt. <br> Scale | Personnel | Operations | Systems | Accounts | Maintenance | Public <br> Relations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | 225 | 725 | 750 | 300 | 325 | 175 |
| II | 120 | 426 | 576 | 288 | 240 | 150 |
| III | 75 | 250 | 320 | 120 | 85 | 100 |
| IV | 40 | 126 | 144 | 60 | 30 | 50 |
| V | 25 | 65 | 70 | 35 | 20 | 35 |
| V | 4 | 20 | 28 | 15 | 8 | 5 |

31. What is the ratio between the total number of employees in Scale III and Scale IV respectively?
(1) $19: 9$
(2) $9: 19$
(3) $17: 9$
(4) $9: 17$
(5) None of these

## Solution: 1

(1) Number of employees in scale III
$=75+250+320+120+85$
$+100=950$
Number of employees in scale
$I V=40+126+144+60+$
$30+50=450$
$\therefore$ Required ratio $=950: 450$
$=19: 9$
32. Total number of employees in Scale VI is what per cent of the total number of employees in Scale-I ?
(1) 2.8
(2) 2.4
(3) 3.6
(4) 3.2
(5) None of these

## Solution:4

(4) Total number of employees in scale I
$=225+725+750+300+$ $325+175=2500$
Total number of employees in scale VI.
$=4+20+28+15+8+5=$ 80
33. In Public Relations department the number of employees in Scale II is less than that in Scale I by what percent? (rounded off to two digits after decimal).
(1) 14.67
(2) 16.67
(3) 14.29
(4) 16.27
(5) None of these

## Solution:3

.(3) Number of employees in public relations department in :

Scale $I=175$
Scale $\mathrm{II}=150$
Difference $=175-150=25$
$\therefore$ Required percentage
$=\frac{25}{175} \times 100$
$=14.285 \approx 14.29$
34. Out of the total number of employees in 'Personnel' department, approximately what per cent of employees are in scale II?
(1) 30
(2) 28
(3) 22
(4) 20
(5) 25

## Solution:5

.(5) Number of employees in per-
sonnel department
$=225+120+75+40+25$
$+4$
$=489$
Number of employees in
Scale $\mathrm{II}=120$
$\therefore$ Required percentage
$=\frac{120}{489} \times 100$
$\approx \frac{120}{500} \times 100 \approx 24 \approx 25$
35. What percentage of Scale IV officers are deployed in 'Operations' department?
(1) 26.5
(2) 28
(3) 28.5
(4) 27
(5) None of these

## Solution:2

(2) Total number of scale IV employees $=40+126+144+$ $60+30+50=450$
$\therefore$ Required percentage

$$
=\frac{126 \times 100}{450}=28
$$

Directions (36-40) : Study the following graph carefully to answer these questions.

## Per cent rise in population of two states from the previous year


36. If the ratio between the population of states A \& B in year 2000 was $3: 4$ respectively, what was the respective ratio in 20019
(1) $7: 9$
(2) $29: 36$
(3) $81: 116$
(4) Cannot be determined
(5) None of these

## Solution:2

(2) $29: 36$
37. Total population of the two states in 1996 was 87.5 lakhs, what was the total population of the two states in 1998 ?
(1) 107 lakhs
(2) 22 lakhs
(3) 105 lakhs
(4) Cannot be determined
(5) None of these

## Solution:4

(4) Cannot be determined
38. If population of state B in 1996 was 20 lakhs, what was the average population of the state in 1997 and 1998 ?
(1) 22.5 lakhs
(2) 25 lakhs
(3) 27.6 lakhs
(4) 24 lakhs
(5) None of these

## Solution:3

.(3) Population of State B in 1999
$=20 \times \frac{120}{100}=24$ lakhs
Population of State B in 1998
$=24 \times \frac{130}{100}=31.20$ lakhs
Required average
$=\frac{24+31.2}{2}=27.6$ lakhs
39. If the population of state A in 1998 was 67.5 lakhs, what was its population in 1996 ?
(1) 50 lakhs
(2) 42 lakhs
(3) 45 lakhs
(4) 40 lakhs
(5) None of these

## Solution:4

(4) 40 lakhs
40. What was the effective percentage increase in population of state 'A' from 1999 to 2001?
(1) 103
(2) 85
(3) 118
(4) Cannot be determined
(5) None of these

## Solution: 1

(1) Let the population of State A in 1999 be $x$.
$\therefore$ Population in 2000
$=x \times \frac{140}{100}$
Population in 2001
$=\frac{x \times 140 \times 145}{100 \times 100}=\frac{203 x}{100}$
$=x\left(1+\frac{103}{100}\right)$
Clearly, effective percentage increase $=103$

## REASONING

1. Four of the following five pairs of alphas and numerals have same relationship between their elements as in the case of the pair PROBLEM : 2948375 and hence form a group. Which one does not belong to the group ?
(1) BORE : 8497
(2) MOEP : 5972
(3) LBOR : 3849
(4) OMEP : 4572
(5) EROL : 7943

## Solution:2

(2) PROBLEM
$\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
29488375
$\left.\begin{array}{llllllll}\text { B } & O & R & E & & M & O & E\end{array}\right)$
2. In a certain code 'GROWTH' is written as HQPVUG and 'FOUR as GNVQ. How is 'PROBLEMS' written in that code?
(1) OQPAMDNR
(2) QQNCMDNR
(3) QQPAKDNR
(4) QQPAMDNR
(5) None of these

## Solution:4

(4) GQPAMDNR

3. How many such pairs of letters are there in the word 'CHILDREN' each of which has as many letters between them in the word as there are between them in the English alphabet?
(1) 3
(2) 5
(3) 4
(4) 2
(5) None of these

## Solution:3

(3)

4. Pointing to the lady in the photograph, Seema said, "Her son's father is the son-inlaw of my mother". How is Seema related to the lady?
(1) Sister
(2) Mother
(3) Cousin
(4) Aunt
(5) None of these

## Solution: 1

(1) Her son's father means the husband of lady. Son-in-law of Seema's mother means brother-in-law of Seema. Therefore, the lady is sister of Seema.
5. Four of the following five pairs are alike in a certain way and hence form a group. Which one does not belong to that group 7
(1) DONE : NOED
(2) WANT : NATW
(3) WITH : TIHW
(4) JUST : SUTJ
(5) HAVE : AVEH

## Solution:5

(5) HAVE : AVEH
6. Each of the vowels in the word 'MAGNIFY is replaced by number ' 2 ' and each consonant is replaced by a number which is the serial number of that consonant in
the word, i.e. M by 1 , o by 3 and so on. What is the total of all the numbers once the replacement is completed?
(1) 25
(2) 24
(3) 26
(4) 22
(5) None of these

## Solution: 1

(1) $\begin{array}{ccccccc}M & A & G & N & & F & Y \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 1+ & 2+ & 3+ & 4+ & 2+ & 6+ & 7=25\end{array}$

Directions (7-10) : Suresh did the homework for the five subjects viz., Maths, English, Physics, Geography and Marathi within the total available time of continuous six hours.
(I) He took rest (R) for one hour immediately after the homework of Physics. lie had allotted one hour's time for each subject.
(if) He did the homework of Geography earlier than that of Marathi, but not immediately before.
(iii) He did not begin his homework with either Maths or Physics.
(iv) He started doing homework of English at 2.00 p.m. i.e. immediately after rest.
(v) There was a gap of two hours between the hours during which he did homework of Maths and English.
7. When did he begin homework of Physics ?
(1) $1.00 \mathrm{p} . \mathrm{m}$.
(2) $11.00 \mathrm{a} . \mathrm{m}$.
(3) 12 noon
(4) Cannot be determined
(5) None of these

## Solution:3

## (7-10) :

| Hour | Time | Subject |
| :--- | :--- | :--- |
| 1st <br> hour | 10.00 to <br> 11.00 am | Geography |
| 2nd <br> hour | 11.00 am to <br> 12.00 noon | Maths |
| 3rd <br> hour | 12.00 non <br> to 1.00 pm | Physics |
| 4th <br> hour | 1.00 to <br> 2.00 pm | REST |
| 5th <br> hour | 2.00 to <br> 3.00 pm | English |
| 6th <br> hour | 3.00 to <br> 4.00 pm | Marathi |

7. 

(3) He began homework of Physics at 12.00 Noon.
8. How many hours gap was there between the homework of Marathi and Maths ?
(1) One
(2) Two
(3) Three
(4) Nil
(5) None of these

## Solution:3

(3) There was a gap of three hours.
9. When did he do the homework of Marathi ?
(1) Immediately before Geography
(2) Immediately after Geography
(3) Two hours after Geography
(4) Cannot be determined
(5) None of these

## Solution:5

(5) He did the homework of Marathi four hours after the homework of Geography.
10. Which of the following is the correct statement?
(1) He did homework of Geography earlier than that of English
(2) He did homework of Maths in the end
(3) He did homework of Maths earlier than that of Geography
(4) He took rest between 12 noon and 1.00 p.m.
(5) All are correct

## Solution: 1

(1) The first statement is correct

Directions (11-15) In the following questions, the symbols @ \#. \$. \%, * are used with the following meaning as illustrated below :
' $\mathrm{P} @ \mathrm{Q}$ ' means ' P is not greater than Q '.
' $P$ \# Q' means ' $P$ is greater than or equal to $Q$ '.
$\mathrm{P} \$ \mathrm{Q}$ ' means ' P is neither greater than nor less than Q .
' P \% Q' means ' P is less than Q '.
' P * Q ' means ' P is neither less than nor equal to Q '.
Now in each of the following questions assuming the given statements to be true,
find which of the three conclusions I, II and III given below them is/are definitely true?

## 11. Statements:

B \$ R, R * N, K @ N

## Conclusions :

I. B * K
II. K \% R
III. B \# N
(1) All are true
(2) Only I is true
(3) Only I and II are true
(4) Only I and III are true
(5) None of these

## Solution:3

(3) Statements :

## B \$ R, R * N, K © N

or, $\mathrm{B}=\mathrm{R}, \mathrm{R}>\mathrm{N}, \mathrm{K} \leq \mathrm{N}$
or, $B=R>N \geq K$
Conclusions:
I. $B * K \Rightarrow B>K$ : True
II. $K \% R \Rightarrow K<R$ : True
III. $B \# N \Rightarrow B \geq N$ : Not True

## 12. Statements :

M \% R, R \# T, T * N

## Conclusions :

I. N \% R
II. M \% T
III. $\mathrm{M}^{*} \mathrm{~N}$
(1) Nine is true
(2) Only I is true
(3) Only II is true
(4) Only I and III are true
(5) All are true

## Solution:2

(2) Statements

$$
\mathrm{M} \% \mathrm{R}, \mathrm{R} \# \mathrm{~T}, \mathrm{~T} * \mathrm{~N}
$$

or, $\mathrm{M}<\mathrm{R}, \mathrm{R} \geq \mathrm{T}, \mathrm{T}>\mathrm{N}$
or, $\mathrm{M}<\mathrm{R} \geq \mathrm{T}>\mathrm{N}$
Conclusions :
I. $\mathrm{N} \% \mathrm{R} \Rightarrow \mathrm{N}<\mathrm{R}$ : True
II. $\mathrm{M} \% \mathrm{~T} \Rightarrow \mathrm{M}<\mathrm{T}$ : Not True
III. $\mathrm{M} * \mathrm{~N} \Rightarrow \mathrm{M}>\mathrm{N}$ : Not True

## 13. Statements:

V \# T, T \% N, N * M

## Conclusions:

I. V \% N
II. $\mathrm{M}^{*} \mathrm{~T}$
III. V \# M
(1) All are true
(2) Only I is true
(3) Only II and III are true
(4) Only I and II are true
(5) None of these

## Solution:5 <br> (5) None of these

## 14. Statements :

D \$ K, K \% W, F @ W
Conclusions :
I. F \% K
II. D * W
III. D * F
(1) None is true
(2) Only II is true
(3) Only II and III are true
(4) Only III is true
(5) All are true

## Solution: 1

(1) Statements :

D \$ K, K \% W, F © W
or, $\mathrm{D}=\mathrm{K}, \mathrm{K}<\mathrm{W}, \mathrm{F} \leq \mathrm{W}$
or, $\mathrm{D}=\mathrm{K}<\mathrm{V} \geq \mathrm{F}$

## Conclusions :

I. $\mathrm{F} \% \mathrm{~K} \Rightarrow \mathrm{~F}<\mathrm{K}$ : Not True
II. $\mathrm{D} \neq \mathrm{W} \Rightarrow \mathrm{D}>\mathrm{W}$ : Not True
III. $\mathrm{D} * \mathrm{~F} \Rightarrow \mathrm{D}>\mathrm{F}$ : Not True

## 15. Statements :

J @ H, H \% M, D \# M
Conclusions :
I. J \% D
II. D * H
III. $\mathrm{M}^{*} \mathrm{~J}$
(1) Only land II are true
(2) Only II and III are true
(3) Only I and III are true
(4) All are true
(5) None of these

## Solution:4

(4) Statements :

J © H, H \% M, D \# M
or, $\mathrm{J} \leq \mathrm{M}, \mathrm{H}<\mathrm{M}, \mathrm{D} \geq \mathrm{M}$
or, $\mathrm{J} \leq \mathrm{H}<\mathrm{M} \leq \mathrm{D}$

## Conclusions :

I. $J \% D \Rightarrow J<D: T r u e$
II. $\mathrm{D} \neq \mathrm{H} \Rightarrow \mathrm{D}>\mathrm{H}$ : True
III. $\mathrm{M} * \mathrm{~J} \Rightarrow \mathrm{M}>\mathrm{J}$ : True

Directions (16-20): Study the following information carefully and answer the questions given below :
$P, T, M, J, V, R$ and $W$ are seven friends studying in a college. Three of them are in
B.Sc. and two each are in B.A. and B.Com. Each of them has a favourite colour from Blue, Red, Yellow, White, Black, Violet and Brown, not necessarily in the same order. None of them studying in B.Sc. likes either Red or Black. M is in B. A. and likes Blue. R is in B.Com. and likes Brown. J is in B.Sc. and likes Yellow. P who does not like Red is in the same discipline of R , and T is in the same discipline of $\mathrm{M} . \mathrm{V}$ does not like Violet.
16. Which colour does T like ?
(1) Black
(2) Blue
(3) White
(4) Data inadequate
(5) None of these

## Solution:5

(16-20) : On the basis of given information and conclusions as well as sub-conclusions drawn from them we can construct the following.table :

| Friend | Class | Colour |
| :--- | :--- | :--- |
| P | B. Com | Black |
| T | BA | Réd |
| M | BA | Blue |
| J | B Sc | Yellow |
| V | B Sc. | White |
| R | B Com | Brown |
| W | B Sc | Violet |

16. 

(5) T likes Red colour.
17. Which colour does P like ?
(1) Black
(2) Violet
(3) Red
(4) Data inadequate
(5) None of these

## Solution: 1

(1) P likes Black colour.
18. Which of the following groups is in B.Sc. ?
(1) MVW
(2) JPW
(3) JVT
(4) 'VFW
(5) None of these

## Solution:5

(5) J, V and W study in B Sc.
19. What is the colour combination of those who are in B.Sc. ?
(1) Yellow, Black, Violet
(2) Yellow, Brown, Violet
(3) Violet, Black, Brown
(4) Yellow, White, Violet
(5) None of these

## Solution:4

(4) $\mathrm{J} \rightarrow$ Yellow, $\mathrm{V} \rightarrow$ White, $\mathrm{W} \rightarrow$ Violet
20. Which colour does V like ?
(1) Red
(2) White
(3) Black
(4) Data inadequate
(5) None of these

## Solution:2

(2) V likes white colour.
21. In a class, among the passed students Neeta is 22nd from the top and Kalyan, who is 5 ranks below Neeta is 34 th from the bottom. All the students from the class have appeared for the exam. If the ratio of the students who passed in the exam to those who failed is $4: 1$ in that class, how many students are there in the class?
(1) Data inadequate
(2) 60
(3) 75
(4) 90
(5) None of these

## Solution: 4

(4) Neeta is 22 nd from the top and Kalyan is $22+5=27$ th from the top and 36th from the bottom who passed the examination. Therefore, total number of students who passed the examination.
$=27+36-1=72$
Therefore, total number of students in the class $=\frac{72}{4} \times$ $5=90$
 as ' M ', ' I ' as ' A ', ' P ' as ' N ' and ' C ' as ' S '. then how will 'COMPANIES' be written in that code?
(1) SEIACPAMO
(2) SMINCPAMO
(3) SEINCPAMO
(4) SEINCPMIO
(5) None of these

## Solution:3

(3) $\mathrm{C} \circ \mathrm{M} \mathrm{P}$
$\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$

SEINCCAMO
23. If a meaningful word beginning with $B$ can be formed from 'HACEB', then the fourth letter of that word is your answer. If no such word can be formed then your answer is ' 5 ' i.e, 'None of these'.
(1) A
(2) C
(3) E
(4) H
(5) None of these

## Solution:2

(2) Meaningful word $\Rightarrow B E A \subset H$
24. In a certain code 'what else can you do for me, Mr. Ajay' is writ- ten as 'You Mr. what can Ajay else do me for'. How will anyone else who can do such favour to me' be written in that code?
(1) can to who anyone me else do favour such
(2) can favour anyone who me' else do to such
(3) can to anyone who me else do such favour
(4) can to anyone who me do else favour such
(5) None of these

## Solution:5

24. (5)
$\begin{array}{lllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9\end{array}$
what else can you do for me Mr. Ajay
It has been coded as
$\begin{array}{lllllllll}4 & 8 & 1 & 3 & 9 & 2 & 5 & 7 & 6\end{array}$
you Mr. what can Ajay else do me for
Therefore,
$\begin{array}{llllllllll}* & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9\end{array}$
anyone else who can do such favour to me
It will be coded as
$\begin{array}{lllllllll}4 & 8 & 1 & 3 & 9 & 2 & 5 & 7 & 6\end{array}$
can to anyone who me else do favour such
25. B is the husband of $\mathrm{P} . \mathrm{Q}$ is the only grandson of E , who is wife of D and mother-inlaw of P . How is B related to D ?
(1) Cousin
(2) Son-in-law
(3) Son
(4) Nephew
(5) None of these

## Solution:3

.(3) B is the husband of P . Therefore, $P$ is wife of $B$. $D$ is husband of $E . E$ is mother-in-law of $P$. $B$ is son of $D$.

Directions (26-35) : Study the following information carefully and answer the questions given below :
Following are the criteria for short listing candidates for calling for interview for Management Trainees in an organization :

The candidates must-
(i) not be less than 21 years and more than 28 years as on 1.11.04.
(ii) have secured at least 60 per cent marks in graduation.
(iii) have secured at least 65 per cent marks in the preliminary selection examination.
(iv) have secured at least 55 per cent marks in the final selection examination.
(v) be ready to join work immediately after the interview.

In the case of a candidate who fulfills all other criteria EXCEPT-
(A) at (iv) above but has secured more than 75 per cent marks in preliminary selection examination his/her case is to be referred to Deputy General Manager. (B) at (ii) above but has secured at least 65 per cent marks in post graduation, his/her case is to be referred to General Manager.
In each of the questions below is given the information of one candidate. You have to study the information provided with reference to the conditions given above and decide whether the candidate is to be called for interview or some other course of action as stated below is to be taken. You are not to assume other than the information provided in each question. All these cases are given to you as on 1.11.2004.
Now read the information provided in each question and decide which of the following courses of actions is to be taken with regard to each candidate and mark your answer.
Mark answer (1) if the candidate is to be called for interview.
Mark answer (2) if the case is to be referred to General Manager.
Mark answer (3) if the candidate is not to be called for interview.
Mark answer (4) if the data provided are not sufficient to take a decision.
Mark answer (5) if the case is to be referred to Deputy General Manager.
26. Neelam Srivastava has secured 75 per cent marks in the preliminary selection examination. She was 22 years old as on 5th December, 2000. She has secured 65 per cent and 60 per cent marks in the Final selection examination and in graduation respectively. She is ready to join immediately after the interview.

## Solution: 1

| Candidate | CRITERIA |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (i) | (ii) or |  | (Biii) | (iv) | or | (A) |  |
|  |  |  |  |  |  |  |  |  |
| Neelam | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | - | $\checkmark$ |  |
| John | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | - | $\checkmark$ | $\checkmark$ |  |
| Subhash | $\times$ | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |
| Rahul | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | - | $\checkmark$ |  |
| Sudha | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | - | $\checkmark$ |  |
| Santosh | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | - | $\checkmark$ |  |
| Sunita | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | - | NG |  |
| Vikas | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | - | $\checkmark$ |  |
| Anup | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | - | $\checkmark$ | $\checkmark$ |  |
| Mohan | $\checkmark$ | $\checkmark$ | - | $\times$ | $\checkmark$ | - | $\checkmark$ |  |

27. John D'Costa has secured 54 per cent marks in the final selection examination after obtaining 80 per cent marks in both graduation and preliminary selection examination. He is ready to join work immediately after the interview. He was 22 years old as on 4th August, 2001.

## Solution:5

28. Subhash Malhotra was 26 years old as on 9th September 2002. He has secured 75 per cent marks each in graduation. preliminary selection examination and the final selection examination. He is ready to join work immediately after the interview.

## Solution:3

29. Rahul Biswas was born on 21st January, 1977. He is ready to join work immediately after the interview. He has secured 70 per cent marks in all the graduation, preliminary• and final selection examination.

## Solution: 1

30. Sudha Nagpal has secured 75 per cent and 65 per cent marks in graduation and preliminary selection examination. She is ready to join immediately after interview. She stood third in the final selection examination, She was born on 2nd July, 1981.

## Solution: 1

31. Santosh Ghodpade was born on 25 th May 1977. He is ready to join work immediately after interview. He has secured 70 per cent marks in the preliminary selection examination and 60 per cent marks in the final selection examination. He has also secured 55 per cent marks in graduation and $68 \%$ marks in post graduation.

Solution: 2
32. Sunita Jaiswal has secured 65 per cent marks in both graduation and preliminary selection examination. She was born on 8th February 1979. She has secured 60 per cent marks in the final selection examination.

## Solution:4

33. Vikash Agrawal was born on 12th March, 1980. He has secured 62 per cent marks in graduation. He is ready to join work immediately after the interview. He has secured 70 per cent marks in both the preliminary and final selection examination.

Solution: 1
34. Anup Mahajan is ready to join work immediately after the interview. He has secured 62 per cent and 78 per cent marks in graduation and the preliminary selection examination respectively. He was born on 25th June 1979. He has secured 52 per cent marks in the final selection examination.

## Solution: 5

35. Mohan Sharma was born on 17th August in 1981. He has secured 65 per cent marks in graduation and 60 percent marks in the preliminary selection examination. He Is ready to join immediately after the interview. He has secured 60 per cent marks in the final selection examination.

## Solution:3

Directions (36-40) : In each question below five figures are given. Four are similar in a certain way and so for a group. Which one of the figures does not belong to that group?
36.

| $2 x$ | $\cos$ | $2 x$ | $\operatorname{coc}$ | $2 x$ |
| :--- | :--- | :--- | :--- | :--- |
| $\pi$ | $\pi$ | $\pi$ | $\pi$ | $\pi x$ |

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

## Solution:4

(4) In figure (4) all the four curves of each line segment face the same direction.
37.


## Solution:2

(2) Except in figure (2), in all other figures the design (C) is ahead of both the white and black circles.
38.


## Solution:4

(4) Except in figure (4) in all other figures two triangles on a side are identical.
39.


## Solution:3

(3) Except in figure (3) in all other figures all the four designs face different directions.
40.


## Solution:2

(2) Except in figure (2), in all other figures the line segment inside the triangle is parallel

