

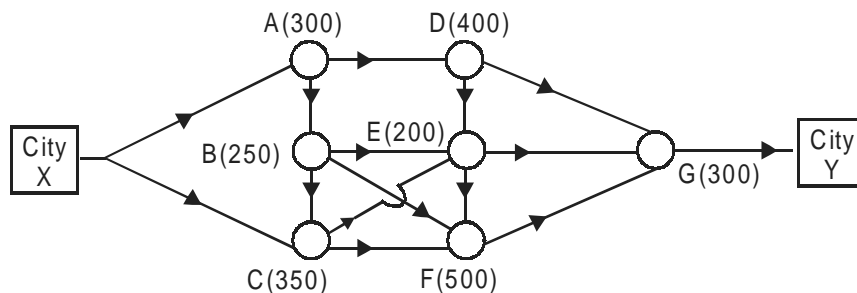
Unproctored Mock-3 2012

Section – I

1. There are two signals which keep changing their colours continuously according to a pattern. The first signal S_1 remains Red for 5 seconds, then turns Green for the next 7 seconds, then turns Blue for the next 6 seconds, then Red again for 5 seconds and so on. The second signal S_2 remains Red for 7 seconds, then turns Green for the next 11 seconds, then turns Blue for the next 6 seconds, then Red again for 7 seconds and so on. If S_1 and S_2 turn Red simultaneously, then after how much time (in seconds) will they turn Blue simultaneously for the first time?
(a) 140 (b) 66 (c) 72 (d) 78
2. The roots of $x^3 - ax^2 + bx - c = 0$ are p, q and r while the roots of $x^3 + dx^2 + ex - 90 = 0$ are $p + 3, q + 3$ and $r + 3$. What is the value of $9a + 3b + c$?
(a) 27 (b) 90 (c) 45 (d) 63
3. One man and six women working together can do a job in 10 days. The same job is done by two men in 'p' days and by eight women in $p+5$ days. By what percentage is the efficiency of a man greater than that of a woman?
(a) 300% (b) 500% (c) 600% (d) 700%
4. Two cards are drawn randomly from a deck of 52 playing cards. What is the probability that both of them are face cards but of different suits?
(a) $\frac{9}{221}$ (b) $\frac{18}{221}$ (c) $\frac{9}{663}$ (d) $\frac{12}{663}$

Directions for questions 5 to 7: Answer the questions on the basis of the information given below.

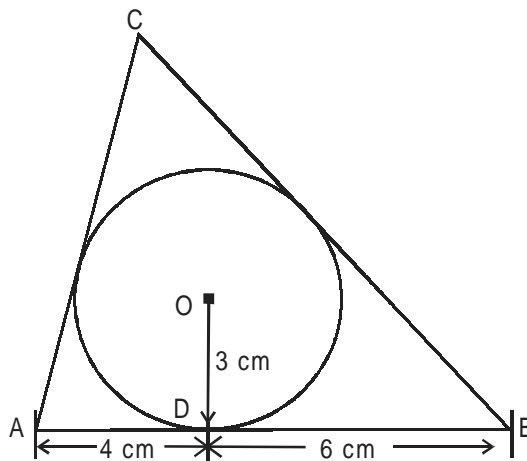
In the figure given below, all the routes of going from City X to City Y are shown by the help of arrows. Each route passes through some of the seven Refugee Camps called A, B, C, D, E, F and G. The number given in brackets along with the name of a Refugee Camp represents the number of people staying in that camp.



It is also known that:

- (i) A truck is loaded with food supply at City X. It takes one of the possible routes to City Y and distributes food packets among the people staying in all the camps along its route.
 - (ii) Each person staying in a camp is given a food packet weighing 1.5 kg. A truck is allowed to pass through a camp on its route only after each person staying in the camp gets the food packet.
5. How many different routes can a truck loaded with 2100 kg of food supply take from City X to City Y such that it can give food packets to all the people staying in camps along that route?
(a) 4 (b) 6 (c) 10 (d) 8

6. A truck loaded with 2100 kg of food supply is barely able to give food packets to all the people staying in camps along its route and is left with no food when it reaches City Y. How many camps fall in the route taken by the truck?
 (a) 5 (b) 4 (c) 3 (d) Cannot be determined
7. A pair of two routes on which the quantity of food that needs to be distributed by a truck is exactly the same is called an "F-pair". How many F-pairs are there among the different routes from City X to City Y?
 (a) 0 (b) 1 (c) 2 (d) 3
8. The ratio of the present ages of Bini and Coral is the same as the ratio of the ages of Anu and Bini six years ago. Coral, six years from now, will be as old as Anu was six years ago. If the present ages (in years) of exactly two of them are perfect squares, then which of the following can be the sum of the present ages of the three?
 (a) 27 years (b) 30 years (c) 36 years (d) 48 years
9. The figure given below shows a triangle ABC that circumscribes a circle of radius 3 cm. D is the point of contact of the circle with the side AB. AD = 4 cm and BD = 6 cm. What is the ratio of AC to BC?



- (a) 5 : 6 (b) 9 : 11 (c) 11 : 13 (d) 4 : 5
10. Find the number of positive integer solutions of the equation $\frac{2}{x} + \frac{15}{y} = 5$.
 (a) 0 (b) 1 (c) 2 (d) 3

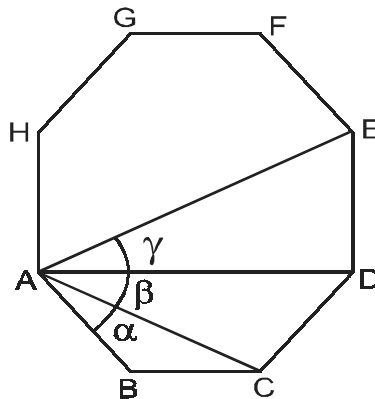
11. The question given below is followed by two statements, A and B. Mark the answer using the following instructions:
 Mark (a) if the question can be answered by using Statement A alone, but cannot be answered by using Statement B alone.
 Mark (b) if the question can be answered by using Statement B alone, but cannot be answered by using Statement A alone.
 Mark (c) if the question can be answered by using either statement alone.
 Mark (d) if the question cannot be answered by any of the two statements.

Q. The cost of 2 Apples, 3 Bananas and 1 Mango is Rs. 24. The cost of 2 Bananas and 4 Apples is equal to the cost of 3 Mangoes. What is the cost of one Mango?

A. The cost of 2 Bananas and 1 Mango is Rs. 12.

B. The cost of 4 Bananas and 5 Mangoes is Rs. 48.

12. Find the value of S if $S = \frac{5}{2} + \frac{13}{6} + \frac{25}{12} + \frac{41}{20} + \dots + \frac{4901}{2450}$.
- (a) 99 (b) $\frac{4969}{50}$ (c) $\frac{4949}{50}$ (d) None of these
13. If α and β are the roots of the equation $7x^2 - 6x + 1 = 0$, then what is the value of $\alpha + \beta + \alpha^2 + \beta^2 + \alpha^3 + \beta^3 + \alpha^4 + \beta^4 + \dots$ till infinity?
- (a) 1 (b) 2 (c) 4 (d) None of these
14. The figure given below shows a regular octagon ABCDEFGH. The measure (in degrees) of $\angle BAC$, $\angle CAD$ and $\angle DAE$ are α , β and γ respectively. What is the ratio $\alpha : \beta : \gamma$?



- (a) 1 : 1 : 1 (c) 2 : 1 : 3 (d) 1 : 2 : 3 (b) None of these

Directions for questions 15 and 16: Answer the questions on the basis of the information given below.

In a consulting firm, apart from the “Fixed Annual Income”, there is a “Variable component” which affects an employee’s “Total Annual Salary”. The Variable component is the difference of two factors called A and B. The “Average Salary (Per Deal)” of an employee is calculated by dividing the Total Annual Salary by the number of deals made by the employee in a year. To summarise,

(i) Total Annual Salary = Fixed Annual Income + Variable component

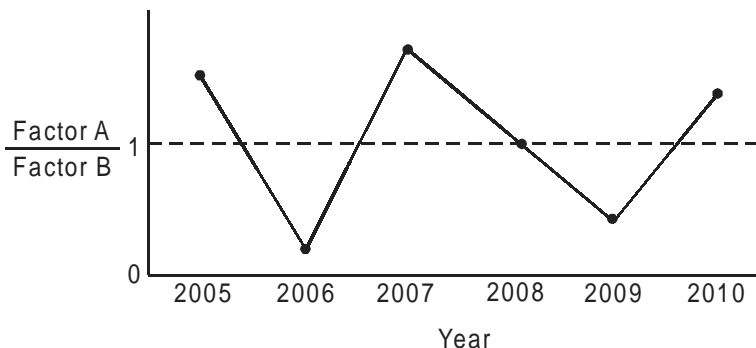
(ii) Variable component = Factor A – Factor B

(iii) Average Salary (Per Deal) = $\frac{\text{Total Annual Salary}}{\text{Number of Deals}}$

The table given below shows the Fixed Annual Income and the Average Salary (Per Deal) of an employee for each year from 2005 to 2010. It is known that $I_1 < I_4 < I_2 < I_3 < I_5$.

Year	Fixed Annual Income (In Rs.)	Average Salary (Per Deal) (In Rs.)
2005	I_1	A_1
2006	I_2	A_2
2007	I_3	A_2
2008	I_3	A_3
2009	I_4	A_4
2010	I_5	A_5

The line graph given below shows the ratio of Factor A to Factor B for the employee for each year from 2005 to 2010.



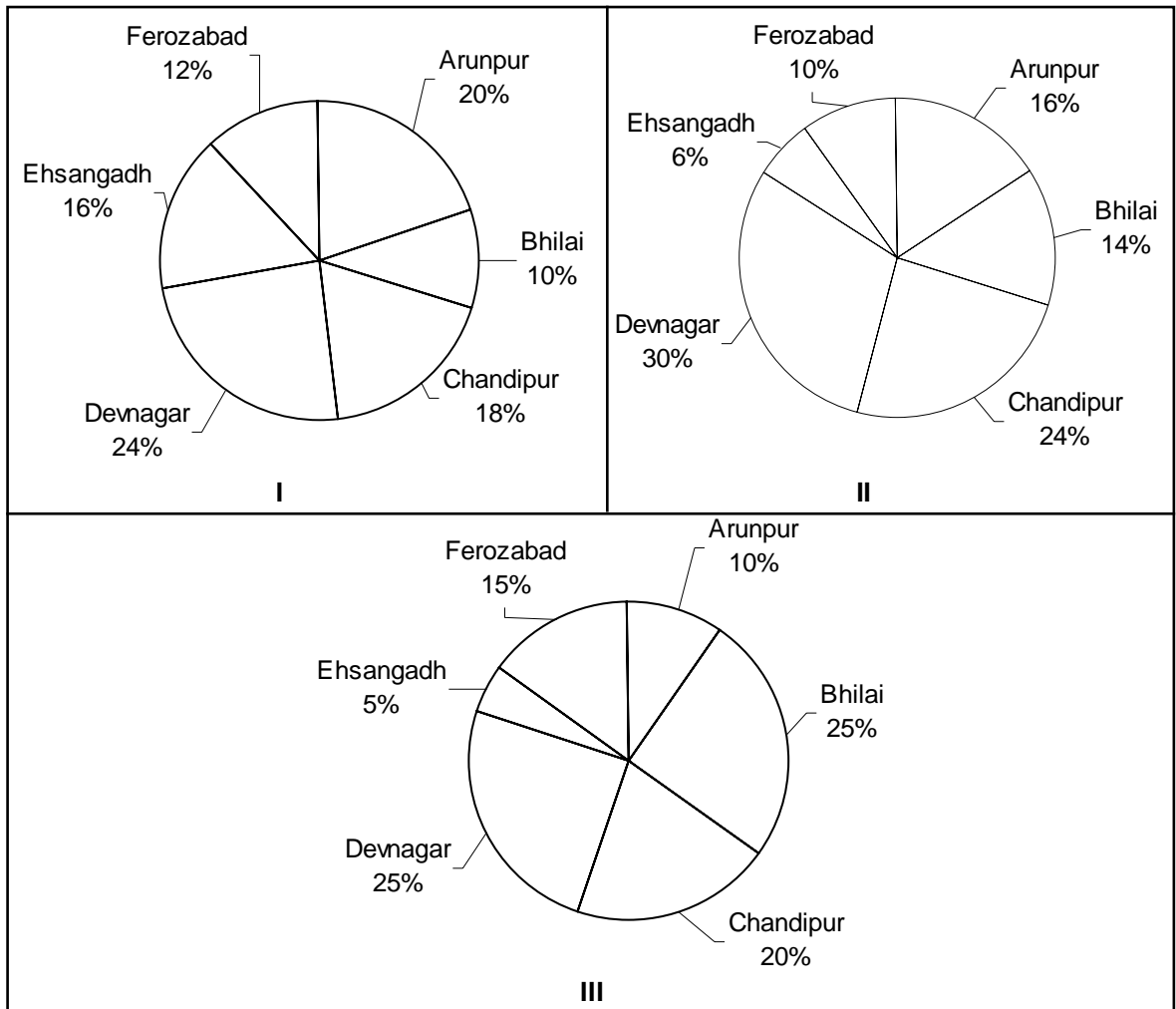
15. If $A_2 < A_1 < A_3 < A_4 < A_5$, then how many years are there for which it can be conclusively determined that the number of deals made by the employee in that year was definitely less than that in 2007?
 (a) 1 (b) 2 (c) 3 (d) 4
16. The number of deals made by the employee increased in each year as compared to the previous year in the period 2006–2010. In which of the following pairs of years can the Average Salary (Per Deal) of the employee not be equal?
 (a) 2005 and 2006 (b) 2006 and 2007 (c) 2007 and 2010 (d) 2008 and 2009

17. The question given below is followed by two statements, A and B. Mark the answer using the following instructions:
 Mark (a) if the question can be answered by using Statement A alone, but cannot be answered by using Statement B alone.
 Mark (b) if the question can be answered by using Statement B alone, but cannot be answered by using Statement A alone.
 Mark (c) if the question can be answered by using either statement alone.
 Mark (d) if the question cannot be answered by any of the two statements.
- Q.** The H.C.F. of two numbers is 64. If one of the numbers is 320, then what is the number of prime factors of the other number?
A. The L.C.M. of the two numbers is 1120.
B. The other number is divisible by 7.
18. Three varieties of rice with Cost Price (in Rs./kg) 28, 36 and 45 are mixed in the ratio $a : b : c$ respectively. It is known that a , b and c are in Geometric Progression where $a < b < c$. The Cost Price (in Rs./kg) of the mixture becomes 40. What would have been the Cost Price (in Rs./kg) of the mixture had the three varieties been mixed in the ratio $c : a : b$?
 (a) 24 (b) 28 (c) 34 (d) 38
19. $N = 7777 \dots 7777$, where the digit 7 repeats itself 429 times. What is the remainder left when N is divided by 1144?
 (a) 913 (b) 1129 (c) 777 (d) None of these
20. Ajit and Baba are standing at a distance of 120 m from each other. Ajit starts running towards Baba and at the same time Baba starts running away from Ajit. As soon as Ajit catches Baba, Ajit turns back and start running backwards. By the time Ajit reaches the point from where Baba started, Baba has covered a total distance of 120 m. What is the total distance (in metres) that has been covered by Ajit at this point?
 (a) $120(\sqrt{2} + 1)$ (b) $60(\sqrt{2} + 2)$ (c) $60(2\sqrt{2} + 1)$ (d) $60(\sqrt{2} + 1)$
21. A regular pentagon is drawn on a piece of paper. In how many ways can five identical Re.1 coins be placed on the five vertices of the pentagon if exactly one coin is to be placed on each vertex?
 (a) 6 (b) 32 (c) 16 (d) 8
22. A function $f(x)$ is defined for all real values of x as $\text{Min}(-x^2, x - 20, -x - 20)$. What is the maximum value of $f(x)$?
 (a) -16 (b) -20 (c) -25 (d) None of these
23. If a positive integer ' n ' is subtracted from the squares of three consecutive terms of an Arithmetic Progression, the numbers obtained are 120, 232 and 376 respectively. What is the sum of the digits of ' n '?
 (a) 3 (b) 5 (c) 6 (d) 10

Directions for questions 24 to 26: Answer the questions on the basis of the information given below.

A company called New Ideas Pvt. Ltd. has exactly one branch in each of the six cities – Arunpur, Bhilai, Chandipur, Devnagar, Ehsangadh and Ferozabad. The company operates in these six cities only. Each branch generates some revenue for the company and incurs some cost on its operations.

Pie chart I shows the percentage contribution of each branch in the total revenue generated by the company in the year 2010. **Pie chart II** shows the percentage contribution of each branch in the total cost incurred by the company in the year 2010. **Pie chart III** shows the percentage break-up of the total number of employees working in the company in the year 2010. Every employee works in just one of the branches.



Please Note:

- (i) Profit/Loss made by a branch = Revenue generated by the branch – Cost incurred by the branch
- (ii) Profit/Loss per employee of a branch = $\frac{\text{Profit/Loss made by the branch}}{\text{The number of employees in the branch}}$
- (iii) Profit/Loss percentage = $\frac{\text{Revenue Generated} - \text{Cost Incurred}}{\text{Cost Incurred}} \times 100\%$

24. If Ferozabad branch suffered a loss in 2010, then which of the following branches may have made a profit in 2010?
(a) Arunpur (b) Bhilai (c) Chandipur (d) Devnagar
25. If Profit/Loss per employee for Arunpur and Bhilai were the same in 2010, then how many branches made a profit in 2010?
(a) 4 (b) 3 (c) 2 (d) 1
26. If none of the six branches suffered a loss in 2010, then the profit percentage of New Ideas Pvt. Ltd. must have been at least
(a) 25% (b) 33.33% (c) 40% (d) 50%
27. A boy of height 100 cm starts walking along a straight line away from the base of a lamppost at a speed of 1.4 m/s. If the lamp is 42 m above the ground, find the length (in cm) of the boy's shadow after 40 seconds.
(a) 122.6 (b) 136.6 (c) 143.8 (d) 145.6
28. How many factors of $20!$ are there whose unit digit is 5?
(a) 2068 (b) 1868 (c) 1728 (d) None of these
29. What does the equation $x^4 - y^4 - 2x^3 + 2y^3 - 2yx^2 + 2xy^2 = 0$ represent?
(a) Two circles (b) Four straight lines
(c) A pair of straight lines and a circle (d) None of these
30. Two right circular cones, whose heights are different, have the same slant height. The product of their base radii is equal to the product of their heights. If the base radius and the height of one of the cones are 5 cm and 6 cm respectively, then find the sum of the volumes (in sq. cm) of the two cones.
(a) 100π (b) 110π (c) 120π (d) Cannot be determined

Section – II

31. The word given below has been used in sentences in four different ways. Choose the option corresponding to the sentence in which the usage of the word is *incorrect or inappropriate*.

Eat

- (a) During the downturn, many restaurants saw a drop in revenues because people were eating in.
- (b) Dinner-time manners included eating up everything that had been served on the plate.
- (c) Falling short even after the loan, she had no choice but to eat into her fixed deposits.
- (d) She was eating away at the restaurant when the earthquake struck.

32. The word given below has been used in sentences in four different ways. Choose the option corresponding to the sentence in which the usage of the word is *incorrect or inappropriate*.

Get

- (a) It was difficult to get across the basic idea.
- (b) His interpersonal skills were so good that he got away with many a blunder.
- (c) After much nagging, he finally got after doing his homework.
- (d) You have got to be sharp to get ahead.

Directions for questions 33 and 34: The passage given below is followed by a set of two questions. Choose the most appropriate answer to each question.

China's use of water is another rising source of tension. India's biggest rivers flow into the country from China. China is currently at work on constructing the world's largest hydroelectric dam on the Brahmaputra River, which is vital for Indian agriculture. India has agreed to treaties on water usage with its other neighbors, but China refuses to participate. This refusal to compromise underscores China's unreliability as a neighbor, says Srikanth Kondapalli, head of the Centre for East Asian Studies at New Delhi's Jawaharlal Nehru University. "While China argues for multilateralism in the international arena, it reverses that position when it comes to water," he says.

To try to overcome these political stalemates, both sides are looking to use their surging economies to rebuild relations and raise their political profiles, as they have become invaluable partners for Western markets still mired in a global downturn. "There is a desire with China to get along, and I know there is such a desire in India," says Maharaja Krishna Rasgotra, former Indian Foreign Secretary. Commerce will help soften political attitudes." Trade between India and China is expected to reach \$60 billion this year up from \$270 million 20 years ago, making China India's largest trading partner.

But there too, there are issues to resolve. India's trade deficit with China is expected to top \$20 billion this year. It's an asymmetry that both countries have pledged to correct, but India remains suspicious that, while China is happy to import its raw material while India buys China's refined goods, Chinese policy is standing in the way of Indian companies' exporting their own finished products. "They've turned India into an Africa-style raw material appendage," says Chellaney.

33. "This refusal to compromise underscores China's unreliability as a neighbor." Paraphrased the following sentence would mean
- (a) China's refusal to compromise highlights the fact that China is not a reliable neighbor to India.
 - (b) China's refusal to compromise weakens the fact that China is not a reliable neighbor to India.
 - (c) China's refusal to compromise undermines the fact that China is not a reliable neighbor to India.
 - (d) China's refusal to compromise conforms to the fact that China is not a reliable neighbor to India.
34. According to the author, which of the following is not a trade issue that needs to be resolved between India and China?
- (a) India's trade deficit with China is expected to top \$20 billion this year.
 - (b) China is content with exporting finished goods to India but not with importing them from India.
 - (c) China is willing to receive imports in the form of raw material from India but not in the form of finished goods.
 - (d) China's refusal to enter a treaty on water usage with India.
35. Anuj, Prem, Moksh and Gyan have different weights. Each of the three statements given below contains two pieces of information of which one is true and the other is false.
- (i) Anuj is lighter than Prem. Moksh is heavier than Gyan.
 - (ii) Anuj is heavier than Moksh. Prem is lighter than Gyan.
 - (iii) Anuj is heavier than Gyan. Prem is heavier than Moksh.

If Anuj is neither the lightest nor the heaviest among the four, then who are the lightest and the heaviest, in no particular order?

- (a) Prem and Moksh
- (b) Moksh and Gyan
- (c) Prem and Gyan
- (d) Cannot be determined

Directions for questions 36 to 38: The passage given below is followed by a set of three questions. Choose the most appropriate answer to each question.

Union Carbide's in-house investigation of the accident will probably not be completed before the end of February. But an inquiry under way in India is already reaching some initial conclusions. The investigation has identified a combination of design flaws, operating errors and managerial mistakes that helped cause the accident and intensified its effects. In addition, the accident has stirred serious questions about placing modern technology in less industrialized Third World nations.

The result of seven weeks' work by a team of Indian government officials, the report on the Bhopal accident will not be published until the opening of a judicial inquiry in India that is scheduled to begin in a month or so. But sources close to the investigation have disclosed some frightening findings. The main conclusions:

Plant safety procedures were inadequate to deal with a large-scale leak of the deadly methyl isocyanate, or MIC, despite the fact that the dangers such a leak would pose were known. Nor had any precautions been taken to protect people living near the plant site. Although a safety survey conducted by experts from Union Carbide headquarters in 1982 identified major hazards that could lead to serious incidents, no procedures were developed for alerting or evacuating the population that would be affected by an accident.

Leaky valves were a constant problem at the plant. Six serious accidents occurred at the Bhopal installation between 1978 and 1982, and three, one of which was fatal, involved gas leaks.

Some important safety systems were not working at the time of the accident. Refrigeration units designed to keep the highly reactive MIC cool so that it could not vaporize had been shut down before the accident. Other equipment, including devices designed to vent and burn off excess gases, was so inadequate, investigators hinted, that it would have been ineffective even if it had been operating at the time of the accident.

Plant workers failed to grasp the gravity of the situation as it developed, allowing the leak to go unattended for about an hour. Brief and frantic efforts to check the leak failed. As the situation deteriorated, the workers panicked and fled the plant.

Union Carbide, which disclosed late last month that leaks at its Institute, W. Va., plant had resulted in a revision of procedures there, has conceded that some of the information coming out of India is correct. The company has acknowledged that a backup storage tank that was supposed to be empty at the time of the accident had in fact been partly filled. But company officials declined to comment in detail on other findings until they could study the results of the investigation.

36. It can be inferred that the style of the passage is
(a) Incriminatory (b) Critical (c) Factual (d) Investigative
37. Which of these has not been featured in the conclusions of the investigation by the Indian government officials?
(a) Plant safety procedures were inadequate to deal with a large-scale leak of MIC.
(b) Failure of the plant workers to check the leak as it developed.
(c) Union Carbide never fully advised the national government of the dangers involved in producing and storing MIC.
(d) Some important safety systems were not working at the time of the accident.
38. Which of the following can be inferred from the main conclusions of the investigation?
(a) Union Carbide was aware of the steps it should take to avoid a major accident but shrewdly did not do so.
(b) Union Carbide knowingly took no steps to avoid a major accident.
(c) Companies take fewer precautions at their plants in the developing countries in comparison to what they take in developed countries. .
(d) The accident mentioned in the passage was a result of various factors that can be attributed to any plant functioning in the third world nations and not to Union Carbide's neglect.

Directions for questions 39 and 40: The passage given below is followed by a set of two questions. Choose the most appropriate answer to each question.

The source of income for the elderly has changed dramatically over the past three decades. Salaries were the most important source of money, but now they account for only 15% of retirees' income. Even so, the ranks of oldsters working at least part time are growing. About half the men 65 and over now work part time, vs. only 35% in 1960. A deterrent to full-time work for many retirees is that Social Security is in effect taxed at the 50% rate for earnings above \$7,320. Thus many people work just enough to keep under the cutoff.

The most important source of money for the majority of elderly people today is Social Security which, says the report, accounts for about 40% of retirees' income. Just behind that is the 25% provided by their own assets, such as savings and investments. Another major chunk comes from private pensions. Only a quarter of the work force was covered by pensions in 1950, but now half of all workers have them. In the future more and more employees will fall under various plans.

The perception that retired people are especially susceptible to inflation “is not supported by recent evidence,” says the council in the dry, scholarly tone of the report. In fact, the elderly have done relatively better in keeping up with rising prices in recent years than the population as a whole. Social Security payments, tied by a 1972 law to the rate of inflation, went up 46% in real terms since 1970, while wages and salaries of people still working withered by 7%. Prices increased 312% between 1950 and 1983. During that same period, wages and salaries rose 412%, but the typical monthly Social Security payment jumped 905%. Says the report: “Thus younger families have had to work more to keep up with inflation; older families have not.”

39. What is the primary purpose of the passage?
- (a) Discuss the sources of income for the elderly.
 - (b) Discuss the change in the source of income for the elderly.
 - (c) Assert that older families in the US are better off monetarily than younger families.
 - (d) Discuss the transition in the financial standing of the elderly.
40. According to the author, why do many retirees work part-time?
- (a) To ensure that their the total annual income falls above the taxable bracket.
 - (b) To ensure that their annual income does not lead to their being placed in the 50% tax bracket.
 - (c) To ensure that the total annual income they earn does not fall in the taxable bracket.
 - (d) To ensure that the total annual income they get does not go towards funding their Social Security.
41. The passage given below is followed by a question. Choose the most appropriate answer to the question.

I often think it's comical
How nature always does contrive
That every boy and every gal
That's born into the world alive
Is either a little liberal,
Or else a little conservative!

- Which of the following can be conclusively inferred from the above prose?
- (a) Everyone alive is bound to take sides about some central political issues.
 - (b) Liberal or conservative tendencies are inherent in human beings.
 - (c) Everything tends to reduce to two.
 - (d) Liberal and conservative tendencies can co-exist in every human being.

42. A paragraph is given below from which the last sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate way.
- “Day break” marks the completion of tunneling from two opposite faces. Conventionally, the tunneling work is conducted from both ends of the tunnel. But this being a very long tunnel, Railways decided to engage in simultaneous working at more than two faces by constructing a shaft towards the North end and an adit towards the South end.
- (a) Opening up of more working faces in this tunnel will enable a quicker completion.
 - (b) Railways got a step closer to finishing work on the country's longest tunnel.
 - (c) The Pir Panjal tunnel will also have a three-metre wide road for maintenance and emergencies.
 - (d) Railways is using PVC membranes to line the insides of the tunnel so as to make it waterproof.

Directions for questions 43 and 44: Answer the questions on the basis of the information given below.

Each of the six people – Akash, Binay, Chatur, Deepak, Ehsan and Fardeen – had two coins – one of Re. 1 and the other of Rs. 2. Each person gave his two coins to two different persons among the remaining five. It is also known that:

- (i) Each person received at least one coin.
- (ii) Akash, Deepak and Fardeen got two coins each but the total amount received by no two of the three was the same.
- (iii) Nobody among Akash, Deepak and Fardeen gave a coin to any of the other two.
- (iv) Binay received Rs. 6. The amount received by Chatur was the same as that received by Fardeen.
- (v) Chatur gave Re.1 coin to Deepak but Deepak did not give any coin to Chatur.
- (vi) Ehsan gave one of his coins to a person from whom he received a coin.

43. Who received the second highest amount among the six people?
(a) Akash (b) Deepak (c) Chatur (d) Cannot be determined
44. What was the absolute difference (in Rs.) between the total amounts received by Deepak and Ehsan?
(a) 2 (b) 1 (c) 3 (d) Cannot be determined
45. A paragraph is given below from which the last sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate way.

Musharraf has said the scientists were given wide latitude to develop the nuclear program and worked in secret even from top officials. That secrecy also has raised fears that nuclear workers may have transferred technology or equipment to terrorists, either for money or ideological sympathy. Experts say centrifuge technology would not be of much use to terror groups, who probably could not set up the vast facilities required to enrich useful quantities of uranium, with hundreds of technicians needed to run thousands of centrifuges.

- (a) The government also has denied official complicity in giving away technology.
 - (b) Pakistan is estimated to have produced more than 1,540 pounds of highly enriched uranium.
 - (c) It is hard enough for countries to do.
 - (d) The acquisition of weapons designs would make it far easier for terrorists to make a workable bomb.
46. There are two gaps in the sentence given below. From the pairs of words given, choose the one that fills the gaps most appropriately.

Unable to his wholehearted distaste for media events and publicity, the miffed actor continued to make comments throughout his interview.

- (a) disguise; elusive
- (b) control; garbled
- (c) conceal; caustic
- (d) express; vitriolic

47. There are two gaps in the sentence given below. From the pairs of words given, choose the one that fills the gaps most appropriately.

The sudden shift from to in the author's novel can startle readers, especially when he abruptly juxtaposes a scene of holy rituals with one of profane ceremonies.

- (a) decorum; frivolity
- (b) decorum; dilatory
- (c) piety; ribaldry
- (d) fidelity; adultery

Directions for questions 48 and 49: Answer the questions on the basis of the information given below.

Five persons – Ashoka, Bachan, Chandra, Mallya and Tendulkar – driving five different cars among Accord, Audi, BMW, Honda City and Skoda, not necessarily in the same order, are standing in a queue at a check post. The five cars are of the different colours among Black, Red, Silver, Violet and White, in no particular order. It is also known that:

- (i) Accord is ahead of Honda City and is not Red in colour.
- (ii) Bachan is not driving Audi and his car is behind Mallya's car.
- (iii) Skoda, which is Violet in colour, is not being driven by Tendulkar.
- (iv) Ashoka's car is behind the White car and is not Silver in colour.
- (v) Chandra is not driving Accord and his car is immediately ahead of the Black car.
- (vi) The Red car, which is ahead of three other cars, is being driven by Bachan.
- (vii) The only car between BMW and Honda City is White in colour.
- (viii) Mallya is not driving the Silver car. Honda City is not Black in colour.

48. Who is driving Audi?
(a) Ashoka (b) Chandra (c) Mallya (d) Tendulkar
49. Which car is Tendulkar driving?
(a) Honda City (b) Audi (c) Accord (d) BMW
50. The paragraph given below is followed by a question. Choose the most appropriate answer to the question.

The method by which the therapists at Vinayak Trauma Clinic bill for their time is inherently faulty. Accounting rules allow billing for a full hour even when the therapist has not worked on a specific client for a full 60 minutes. Inevitably, this practice will lead to therapists billing for more full hours than they actually work, passing on false expenses to clients anytime they counsel a client or answer the client's phone.

Which of the following, if true, constitutes the best piece of evidence for countering the claim that therapists at Vinayak Trauma Clinic are likely to bill for more full hours than they work?

- (a) Therapists at Vinayak Trauma Clinic are required to attend annual ethics seminars, during which over-billing is strongly discouraged.
- (b) Even the senior partners at Vinayak Trauma Clinic typically bill less than 40 hours per week.
- (c) Accounting rules at Vinayak Trauma Clinic only allow therapists to bill for a full hour if they have worked on more than one problem of a client in a given day.
- (d) Therapist's fees at Vinayak Trauma Clinic are calculated based on 15-minute segments of billing time.

51. The paragraph given below is followed by a question. Choose the most appropriate answer to the question.

Since children consistently imitate the behaviors they see on TV, continued exposure to aggressive programs will cause more children to consider aggression as an acceptable way of solving problems. In order to promote a peaceful society, the government should ban the broadcast of aggressive programs.

Which of the following is most similar in logical structure to the paragraph?

- (a) A mother in a family insists that a father not smoke in front of his children so that they don't pick up the habit.
 - (b) A father bans his teenage girl from watching television soaps after she is involved in a series of bickering sessions with her classmates.
 - (c) A mother hides the jar of candy she usually keeps on her kitchen shelf in order to prevent her children from gorging on it and ruining their lunch.
 - (d) A tour guide does not reveal to his clients the location of the town's best souvenir shop because he has been upbraided by the shop's owners for sending in too large a crowd.
52. Five sentences are given below, labeled A, B, C, D and E. They need to be arranged in a logical order to form a coherent paragraph. From the given options, choose the most appropriate one.

- A. Whatever the links between them, Greek and Egyptian mythology were very different in scope and function.
- B. The historian and philosopher Plutarch probably did visit Egypt during the first century AD.
- C. Sources like these gave rise to the habit of perceiving Egypt through Greek or Roman eyes.
- D. His book *Concerning Isis and Osiris* retells and interprets many myths about this important pair of deities.
- E. This has been particularly damaging for the study of Egyptian myth.

- (a) BDCEA (b) BDEAC (c) ABDCE (d) ABDEC

53. Given below are five sentences. Each sentence has a pair of words that are italicized. From the italicized words, select the most appropriate words (A or B) to form correct sentences. The sentences are followed by options that indicate the words, which may be selected to correctly complete the set of sentences. From the options given, choose the most appropriate one.

He was trying to *swat* (A) / *swot* (B) a fly with a rolled-up newspaper.
She heard a floorboard *creak* (A) / *creek* (B) upstairs.
They drew their wagons into a *laager* (A) / *lager* (B) and set up camp.
Her heels *clack* (A) / *claque* on the marble floor.
He *brayed* (A) / *braid* (B) with laughter.

- (a) AAABB (b) BABBA (c) AABBA (d) AAAAA

Directions for questions 54 to 56: Answer the questions on the basis of the information given below.

Twelve delegates participated in a conference, three from each of the four regions – East, West, North and South. Anu, Dev and Loni were from North; Bini, Iti and Kaya were from South; Cara, Goru and Jai were from West; and Esha, Fiza and Hina were from East. The delegates were divided into two groups – Apex and Pinnacle – having five and seven members respectively. It is also known that:

- (i) Each group had at least one delegate from each of the four regions.
- (ii) Apex had two delegates from South.
- (iii) Anu and Goru were in different groups.
- (iv) Kaya and Iti were in the same group whereas Cara and Hina were in different groups.
- (v) If Esha was in Apex, then both Jai and Goru were in Pinnacle.
- (vi) If Esha was in Pinnacle, then Loni and Dev were in different groups.

54. Who among the following was definitely in Pinnacle?
(a) Jai (b) Cara
(c) Esha (d) Hina
55. If Bini and Anu were in the same group, then which of the following statements is definitely true?
(a) Dev and Jai were in the same group. (b) Loni and Hina were in different groups.
(c) Hina and Esha were in different groups. (d) Both (a) and (c)
56. Which of the following statements cannot be true?
(a) Esha was in Pinnacle. (b) Fiza was in Apex.
(c) Goru was in Pinnacle. (d) Cara was in Apex.
57. Given below are five sentences. Each sentence has a pair of words that are italicized. From the italicized words, select the most appropriate words (A or B) to form correct sentences. The sentences are followed by options that indicate the words, which may be selected to correctly complete the set of sentences. From the options given, choose the most appropriate one.

This is one of the biggest weeks in the racing *calendar* (A)/ *calender* (B).

He traces his line of *descent* (A)/ *dissent* (B) from the Stuart kings.

The documentary shows the life of a fashion model, *warts* (A) / *works* (B) and all.

The reason for McCain's defeat was that his makeup could not hide wrinkles, blotches, liver spots, and *scarry* (A) / *scary* (B) tissue.

This national park provides a safe *heaven* (A) / *haven* (B) for wild life.

- (a) ABAAB (b) BBBBA (c) AAAAB (d) BABBA

58. The paragraph given below is followed by a question. Choose the most appropriate answer to the question.

No living person has ever experienced what comes after death, and what comes after death is totally unlike anything that comes before. No one can conceive of a thing unless it is either something that he or she has experienced or else something that is in at least some respect like something he or she has experienced. Therefore, no living person can have a concept of what comes after death.

Which of the following can be concluded from the passage?

- (a) One can only conceive of those things which one has experienced before or are made up of elements that have been experienced before.
 - (b) 'What comes after death' is an esoteric concept and cannot be understood by all.
 - (c) A near death experience can help a person understand death and its consequences.
 - (d) It is impossible for a living person to understand what comes after death as he has not experienced it.
59. Given below are four sequentially ordered statements. Each statement can be classified as one of the following:

- Facts, which deal with pieces of information that one has heard, seen or read, and which are open to discovery or verification (the answer option indicates such a statement with an 'F').
- Inferences, which are conclusions drawn about the unknown, on the basis of the known (the answer option indicates such a statement with an 'I').
- Judgments, which are opinions that imply approval or disapproval of persons, objects, situations and occurrences in the past, the present or the future (the answer option indicates such a statement with a 'J').

Select the answer option that best describes the set of four statements.

1. 16th century saw the rise of the post-war innovatory artists – Stockhausen, Boulez, Robbe-Grillet, Beckett, Coover, Rauschenberg, and Beuys.
2. This is a typically postmodernist object and doesn't resemble much in the canon of modernist sculpture.
3. His work has been classified as postmodernist art and this classification has the potential to inspire the question 'Is it really art, or just a heap of bricks pretending to be art?'
4. We should be prepared to see many postmodernist ideas as very interesting and influential.

- (a) FJIJ (b) JFJJ (c) JJIF (d) FJIF

60. Two words given below have a certain relationship with each other and they are followed by alternatives. Select the alternative that has the same relationship as depicted in the original pair of words.
Bumptious: Humble
- (a) Ignominious: Opprobrious
 - (b) Vituperative: Contumelious
 - (c) Capricious: Immutable
 - (d) Facetious: Witty