1. If $\frac{a}{3}=\frac{b}{4}=\frac{c}{6}=\frac{3 a+4 b-5 c}{k}$, then $k$ is
(1) 5
(2) 15
(3) -10
(4) 7
(5) -5
2. The value of diamond is directly proportional to the square of its weight. If a diamond weighing 8 kg breaks into 2 pieces, its total value decreases by $\frac{3}{8}$ times. Find the weights of the two pieces.
(1) $4 \mathrm{~kg}, 4 \mathrm{~kg}$
(2) $5 \mathrm{~kg}, 3 \mathrm{~kg}$
(3) $6 \mathrm{~kg}, 2 \mathrm{~kg}$
(4) $4.5 \mathrm{~kg}, 3.5 \mathrm{~kg}$
(5) None of these
3. What is the last digit of $7^{27^{16^{13}}}$ ?
(1) 7
(2) 9
(3) 1
(4) 3
(5) 2
4. In a mixture of 80 L , milk and water are-in the ratio 5 : 3 . If $20 \%$ of this mixture is replaced by 16 L of milk, the ratio of milk and water becomes.
(1) $2: 1$
(2) $5: 3$
(3) $7: 3$
(4) $8: 3$
(5) $1: 3$
5. Coke and Pepsi are two competitors racing on a circular track with the speed of 72 kmph and 90 kmph respectively. Find the length of the track if they meet 20 sec after the start of race.
(1) 100 m
(2) 200 m
(3) 300 m
(4) 400 m
(5) 500 m
6. A and B can do a piece of work in 10 and 15 days respectively. If with the help of $C$, they can finish twice the work in 8 days. What percent of work is done by C ?
(1) $40 \%$
(2) $20 \%$
(3) $33 \frac{1}{3} \%$
(4) $25 \%$
(5) $66 \frac{2}{3} \%$
7. A leak in the bottom of a cylindrical tank can empty it in 6 hrs. A pipe fills the tank at 6 litre/min. When the tank is full, the inlet is opened, but due to the leak the cylindrical tank is emptied in 8 hr . What is the capacity of the tank?
(1) 8840 litres
(2) 6480 litres
(3) 6840 litres
(4) 8640 litres
(5) 8460 litres
8. A cube named $P$ whose side is equal to the diagonal of the cube named $Q$ of side 2 cm is taken. What is the ratio of the volume of the largest sphere $S$, inside the cube $R$ of side equal to the diagonal of cube $P$ and volume of cube Q ?
(1) $2 \pi: 9$
(2) $8 \pi: 9$
(3) $9 \pi: 8$
(4) $9 \pi: 2$
(5) $\pi: 2$
9. If $x \%$ of $y$ is $z, y \%$ of $z$ is $x$ and $z \%$ of $x$ is 100 , then which among the following is not true?
(1) $x=100$
(2) $x=z$
(3) $y=100$
(4) $x+z=y$
(5) $z=y$
10. If $\frac{\log a}{\log 10}-\frac{10 \sqrt{a}}{\log 16}=\frac{2 \log 10}{\log a}$, then what possible value can a have
(1) 100
(2) $\frac{1}{100}$
(3) $\frac{1}{1000}$
(4) (1) and (2)
(5) (2) and (3)
11. What is the unit digit of $m-n$, if
$m=2^{99}+4^{99}+6^{99}+8^{99}+$ $\qquad$ $+100^{99}$
and $\mathrm{n}=1^{99}+3^{99}+5^{99}+7^{99}+$ $\qquad$ $+99^{99} ?$
(1) 0
(2) 1
(3) 2
(4) 3
(5) 7
12. Sachin and Anjali Tendulkar have a son. When their son will be as old as Anjali, the ratio of Sachin's and Anjali's age will be 18: 17. When Anjali will be as old as Sachin, the ratio of age of Sachin and his son will be 3: 1. Find the ratio of age of Anjali and her son.
(1) $11: 3$
(2) $10: 3$
(3) $8: 1$
(4) $12: 5$
(5) can't be determined
13. If $x-\frac{1}{x}=2$, what is the remainder when $x^{8-}+\frac{1}{x^{8}}$ is divided by $2^{8}$ ?
(1) 0
(2) 126
(3) 2
(4) 254
(5) 130
14. The total market price of 10 items is equal to the cost price of 14 items. If a shopkeeper allows a discount, equal to the selling price of 2 items. What will be the percentage profit/loss a shopkeeper will make?
(1) $25 \%$
(2) $20 \%$
(3) $16.67 \%$,
(4) $12.5 \%$
(5) Data insufficient

Direction for questions 15-17: Answer the following questions based on the given information.
10 coins have to be distributed among four friends namely Humpa, Mampa, Champa and Sampa such that each one has different number of coins. It is given that Mampa gets more coins than Humpa and Sampa gets fewer coins than Champa.
15. If the number of coins given to Mampa is twice the number given to Humpa, then which one of the following statement is necessarily true?
(1) Champa gets an even number of coins
(2) Champa gets an odd number of coins
(3) Sampa gets an odd number of coins
(4) Sampa gets an even number of coins
(5) Both (2) and (4) true.
16. If Champa gets at least two more coins than Sampa, then which one of the following statement is necessarily true?
(1) Mampa gets at least two more coins than Sampa
(2) Mampa gets move coins than Sampa
(3) Humpa gets more coins than Sampa
(4) Humpa or Mampa together get at least five coins
(5) Humpa and Mampa together get 40\% of the total coins.
17. If these ten coins contain equal number of 25 paisa, 50 paisa, Rs $1, R s 2$ and Rs 5 coins. What will be minimum difference between Humpa's and Sampa's total amount, if Mampa gets fewer numbers of coins than Champa?
(1) Rs. 1.00
(2) Rs. 0.75
(3) Rs. 0.50
(4) Rs. 0.25
(5) Rs. 0
18. If $A, B$ and $C$ are distinct digits forming three different 3-digit numbers; $m, n$ and $p$ having all the three digits same, and $m+n+p=B A A C$. Then, what is the value of $A+B+C$ ?
(1) 15
(2) 18
(3) 16
(4) 12
(5) 14
19. If $f(a, b, c)=\max \{\min (a, b), \min (b, c), \min (c, a)\}$
$g(a, b, c)=\min \{\max (a, b), \max (b, c), \max (c, a)\}$
Find $f(a, b, c)-g(a, b, c)$, if $a, b, c$ are in an arithmetic progression and common difference is 2 ?
(1) -4
(2) 4
(3) 0
(4) -4 or 4
(5) data insufficient
20. A spherical ball has a diameter of 1 unit. How many balls are required to form an equilateral triangle of edge $n$ units?
(1) $\frac{n(n+1)}{2}$
(2) $n^{2}-1$
(3) $n(n-1)$
(4) $n$ !
(5) None of these $\frac{n^{2}}{4}$
21. An engine runs at a speed of 50 kmph without any bogie. For every bogie attached to it, the speed of engine reduces by $10 \%$ of the earlier speed. At most how many bogies can be attached so that the train can cover a distance of 225 km in a maximum of 10 hr ?
(1) 5
(2) 6
(3) 7
(4) 8
(5) 9
22. A bridge has to be completed in 25 weeks with the help of 120 men. After 10 days, 60 men leave. How many more weeks over and above the schedule time will be required to complete the bridge if the remaining men increase their working rate by $50 \%$ of initial rate?
(1) 15
(2) 30
(3) 20
(4) 5
(5) 25
23. In the figure, $O$ is the centre of circle with diameter $A B$ and $P, Q$ are the midpoints of $A O$ and $B O$. What is the ratio of the area of shaded region M to shaded region N ?
(1) $8: 27$
(2) $4: 3$
(3) $1: 1$
(4) $11: 3$
(5) Data insufficient


Direction for question 24 - 25: Answer the following questions based on the following information. In a party of 150 Guests, 50 people did not eat Shahi Paneer, 90 ate Dal fry and 20 neither had Shahi paneer nor Dal fry.
24. How many guests ate both, Shahi paneer and Dal fry?
(1) 40
(2) 50
(3) 60
(4) 20
(5) Can't say
25. How many guests had only Shahi paneer?
(1) 40
(2) 50
(3) 60
(4) 70
(5) Can't say


## SECTION - II

Direction for questions 26 - 30: The last sentence in the following passages has been deleted. Select the sentence, out of the available options, that best suits the end of the passage.
26. Contrary to Thomas Friedman's fervent imperiatist plea - "Please, Mr. President, do it right" - the Bush people have no plans of installing a "self-sustaining, progressive, accountable" government in Baghdad. At the end of the long sledge of Iraq, the result will not be a democracy, but another client regime, with an obligation to carry out Washington's strategic brief.
(1) "Armed democratisation" might be a noble aim in theory, but it has few strategic benefits in practice.
(2) It may turn out to be a pyrrhic victory, though the survival and sustainability of the regime may still have a big question mark.
(3) For, example is always better than precept. Let Washington "do it right" first.
(4) Is Washington really serious about the long term implications of its foreign policy? The answer is "Well! You know".
(5) This, perhaps, is in line with the history of Washington's bunglings elsewhere. The memories of Vietnam have perhaps stopped hounding policy makers in Washington
27. With the assault on New York, the anarchy that has been one of the by-products of globalisation in much of the world can no longer be ignored. The ragged, irregular armies of the world's most collapsed zones have proved that they can reach to the heart of its richest and most powerful state. Their brutal coup is an example of what military analyst' call "asymmetric threat" - in other words, the power of the weak against the strong.
(1) The lesson that we draw for posterity is: Don't do to others what you don't want others to do to you.
(2) Given the guerrilla warfare of today, the definition of the strong and the weak is hazy indeed.
(3) The oppressed always find a way-out to give it back.
(4) What it has shown is that the strong are weaker than anyone imagined.
(5) That is the flip side of globalization.
28. The first lecture, the one that was supposed to explain what: scientific thinking is about what Feynman called "The Uncertainty of Science." The uncertainty he had in mind was not that of Heisenberg, but rather that of Kari Popper: that scientists should be skeptical of their own theories, or in other words, have an open mind. As with most scientists who profess to follow Popper, he consistently refutes himself throughout his lectures.

To Feynman, science has three parts: the facts or body of knowledge, the method or process that we use to establish those facts, and the applications of science, that is to say, technology: To him it's an article of faith that technology follows science. He would regard technology arising on its own as something akin to the Virgin Birth.
(1) But scientific precepts are a priori before technology can set store for us.
(2) When the irrefutable scientific facts take shape, the applications in the form of technology are bound to follow.
(3) But his real point is that technology is only incidental to the importance of science.
(4) The body, the method, and the application, therefore, form the triumvirate of science.
(5) Feynman's ideas find great acceptance in today's scientific world.
29. The framers of curriculums have differed greatly in the knowledge they prescribe. If there have been times when all the students at school or college studied the same things, as if it were obvious that without exposure to a common body of knowledge they would not be educated at all, there have been other times when specialization ran so wild that it might almost seem as if educated men had abandoned the thought of ever talking to each other once their education was completed.
If knowledge is one of our marks, we can hardly be dogmatic about the kind or the amount. However, if the framer of a curriculum wants to minimize his risks,
(1) he ought to take lessons from history and devise curriculums, the relevance of which is time tested.
(2) he ought not to be so iconoclastic at the same time; the interests of the taught have to be get the top priority in all his schemes of things.
(3) he ought to give due cognition to specialization in today's world, for after all it's the specialist who got us all where we are.
(4) he has to take views of the student community as well, for the aim of all education ought to be to recognize the innate talents and hone them for the society to put them to good use..
(5) he can invoke an ancient doctrine which holds that an educated man ought to know a little about everything and a lot about something.
30. A shrewd peasant was always well enough protected against impostors in the market place, and we have all sorts of businessmen who have made themselves excellent judges of phoniness without the benefit of a high-school diploma; but this kind of shrewdness goes along with a great deal of credulity. Outside the limited field within which experience has taught the peasant or the illiterate businessman his lessons, he is often hopelessly gullible.
(1) The skepticism and the gullibility go hand in hand, and the proportion of the two will determine how wise or unwise the man is deemed to be in the eyes of the others.
(2) The situation has, however, changed remarkably of late, given the exposure the technology has provided.
(3) The educated man, by contrast, has tried to develop a critical faculty for general use, and feels fortified against imposture in all its forms.
(4) The peasant and the businessman of today can hardly make do with such crude differentiation.
(5) It is this gullibility which is ultimately exploited by the unscrupulous, and the man becomes susceptible to trickery.

Direction for questions 31-35: Identify the incorrect sentence or sentences.
31. A. Once at greenwood, we walked the familiar hilly path to great grandma Van Patten's grave.
B. As we talked, I felt myself relaxed forgetting the tensions of unemployment.
C. With 10 children and one on the way, every day was a bit hectic.
D. She was always there, her steady blue eyes shinning, her voice encouraging, her gentle touch conveyed her trust and love for the little boy.-
(1) B
(2) B and C
(3) A and C
(4) B and D
(5) A and B
32. A. A mad scramble and we were off, 'running and stopping, peering and bobbing, as we hunted for epitaphs of long ago.
B. I found a tall, leafy tree and leaned against it's massive trunk.
C. A missionary was serving as a medic at a small field hospital in Africa.
D. She began to describe the sceneries of Manali streets as she would to a blind tourist.
(1) B and D
(2) A and C
(3) A, B and C
(4) A
(5) B and C
33. A. Periodically he had to travel with bicycle through the jungle to a nearby city for supplies.
B. I looked back at Mandeep, seated besides her.
C. Frantic to escape, I tried forcing my body through the half open window.
D. I realized then that teaching me a skill and providing me an opportunity to make few bucks were far less important to him than the time went together.
(1) C and A
(2) A and B
(3) A, B and D
(4) A and D
(5) B and C
34. A. I had such wonderful plans laid out for my life, and they all seemed to be right in track.
B. She is one of those who has sought the warmth of a fire that got out of hand.
C. The wife was afraid that if she told him they had just won such a large sum, he would have another heart attack and die.
D. Walking beside my husband and meeting his needs was a challenge, and God gave me the strength to meet those challenges one step at a time.
(1) A and B
(2) C and D
(3) A,'B and C
(4) B, C and D
(5) A and D
35. A. The political system of the allied powers is essentially different from America.
B. Taiwan and Korea had systems originating in government by corrupt oligarchies which left a legacy of malpractice after even the political scenery had changed.
C. The IMF is still reeling under the shock of the barrage of criticism it received over their handling of the Asian Crisis.
D. A dangerous coincidence of circumstances laid behind the great Asian Miracle.
(1) B and C
(2) C and D
(3) A and C
(4) A, B, C and D
(5) A and B

Direction for questions 36 - 40: Each of the following questions has a paragraph with one italicized and underlined word that does not make sense. Choose the most appropriate replacement for that word from the options given below that paragraph.
36. Focusing on applications and the effective and efficient implementation of the programme will move the companies closer to Arthurian integration of e-learning into their organization's performance management and other key processe's.
(1) botched
(2) gross
(3) seamless
(4) universal
(5) wholesome
37. That is the theme running through the trend discussion; a theme easily summed up in one word: excrescence. It is increasingly being used in harmony with other management tools, providing managers with a unified view of all financial, customer and employee concerns.
(1) obsolescence
(2) concurrence
(3) adherence
(4) convergence
(5) confluence
38. You have to go out 'garroting' up data from people's memories. You can then slice it and dice it to see what is really working and what isn't.
(1) scraping
(2) scouring
(3) touching
(4) burnishing
(5) licking
39. The link is needed to ensure that the skills learned in training are detruded, developed, and reinforced further on the job, and that people are held accountable for their own performances.
(1) remodeled
(2) shuffled
(3) interchanged
(4) metamorphosed
(5) calibrated
40. The physical universe is an expression of conscioúsness of the Creative Principle that manifests itself as 'energy', inextricably interconnected and an exact persiflage of the whole infinite universe. Despite the illusory perception of separateness that we experience, our minds remain connected to the whole universe at all 'times'.
(1) delineation
(2) explanation
(3) rendition
(4) metaphrase
(5) variant

Direction for questions 41 - 50: Read the following passages and answer the questions given at the end of the passage.

## PASSAGE - 1

Marxian criticism deals with certain undisputable facts, which have excited the interest of many critics, and scholars'. If Karl Marx and Frederick Engels are better known for their political and economic rather than literary writings, this is not in the least because they regarded literature as insignificant. Leon Trotsky once aptly remarked that there were many people in this world who thought as revolutionists but felt as philistines, but Marx and Engles were of a different genre. Marx was the youthful author of a comic novel; he wrote on art and religion, and planned a journal of dramatic criticism, a full-length study of Balzac, and a treatise on aesthetics. It is discovered from the autobiographical details of Marx's life that art and literature were part of the very air Marx breathed, as a cultured German intellectual. Marx was a regular theatre-goer, a declaimer of poetry, a voracious reader who had read every species of literary art from Augustan prose to ballads.

But Marx and Engels had rather more important tasks on their hands than the formulation of a complete aesthetic theory. They have become the exponents of sociology of literature concerned chiefly with literary production, distribution and exchange of a particular society. This new approach was followed as Marx came under the influence of Hegel and enunciated the Dialectical Theory of Materialism to explain the economic impact on human relations. The chief aim of Marxist criticism is to explain the literary work more elaborately, and this means a sensitive attention to its forms, and meanings as the products of a particular history. For Marx, the greatest art is that which timelessly transcends its historical conditions. In fact, historical analysis of literature did not begin with Marxism. Many thinkers opine that Marx had tried to account for literary works in terms of history. Hegel had a profound influence on Marx's sociological thoughts. The originality of Marxist criticism lies not in its historical approach to literature, but in its revolutionary understanding of history. The seeds of that revolutionary understanding are 'planted in his famous passage which states "consciousness does not determine life; life determines consciousness". Marx observes, "in the social production of their life, men enter into definite relations that are indispensable and independent of their will, relations of production which correspond to a definite stage of development of their material productive forces. In economic determinism, the sum total of these relations of production constitutes the economic structure of society. Marxian sociological system states that the real foundation on which is raised a legal and political superstructure is the economic set up and the economic needs of man actually lead to his social consciousness.

In Marxian dialectical determinism, relations between men are bound up with the way they produce their material life. The development of new modes of productive organization is based on a changed set of social relations - this time between the capitalist class who owns these means of production, and the proletariat class whose labor power the capitalist buys for profit. Briefly stated, these relations of production are called the economic structure of society. From this económic base, in every historical period, emerges a superstructure - certain forms of law and politics, a certain kind of state, whose essential function is to legitimate the power of the social class which owns the means of economic production. This superstructure also consists of definite forms of the political, religious, ethical, and aesthetic, called ideology. In Marxian terminology, the function of ideology is to legitimate the-power of ruling class in society.

Art then for Marx forms the part of the superstructure of society. To understand literature means understanding the total social process of which it is part. In fact, the social mentality of an age is conditioned by that age's social relations; literary works are not mysteriously inspired, or explicable simply in terms of their author's psychology. They are forms of perception, particularly ways of seeing the world; and as such they have a relation to the social mentality or ideology of an age. Men are not free to choose their social relations; they are constrained into them by material necessity.

To understand Shakespeare's King Lear and Pope's The Dunciad, we have to do more than interpret their symbolism; we have to understand their social history, the relevance of their themes, preoccupations in a particular society. Since ideology is always a complex phenomenon, we have to understand and analyze the precise relation between different classes in a society. Interestingly, the pessimism of Conrad's worldview is rather a unique transformation into an art of an ideological pessimism rife in his period. Every writer is individually placed in society; it also penetrates to the realities of man's experience in a certain situation.

Marxist criticism sees that in the absence of revolutionary art, only radical conservatism could produce the most significant literature. It would be a mistake to infer that Marxian criticism moves mechanically from "text" to "ideology" to "social relations" to productive forces. Thus, literature may be part of the superstructure, but it is not merely the passive reflection of the economic base.
41. Marx's sociological ideas of literature, as conceptualized in the passage, can best be described as
(1) Utopian, as his ideas are impractical and unrealistic based on his theory of dialectical materialism derived from Hegel
(2) Hypothetical, as his ideas are not empirically verified by any society in the East or the West.
(3) Revolutionary, as he is concerned about the social welfare of the proletariat in society, struggling against the capitalist class who owns the means of production.
(4) Historical, as he investigates history from feudalism to capitalism.
(5) Materialistic, for men enter into definite relations of production, and the material productive forces constitute the real foundation of society.
42. Why according to the author have Marx and Engels become the exponents of the theory of sociology of literature?
(1) The Marxian criticism concerns itself with the superstructure of society, based chiefly on material productive forces; the literary production and' evaluation being only a reflection of the history of society, which produced it.
(2) Marxian criticism examines the sociological relevance of a work of art; it examines the serious aesthetic tastes of the people living in a commity.
(3) Marxian criticism brings into focus the historical antagonism between the Feudalism and Capitalism.
(4) The Marxian Criticism examines art and literature not from aesthetic angle but from the deterministic point of view.
(5) Marxian criticism is a part of the base and super structure of his ideology.
43. What can be best inferred from the passage about the "base" and "superstructure"?
(1) All ideas and concepts are the direct flow of materialistic behavior of man. The growth of superstructure emerges from this base of society.
(2) Base is an expression of definite relations of production determining the tastes of men in society.
(3) Base is quite independent from the "superstructure". It defines and regulates man's relations with the productive forces and governs his social consciousness.
(4) "Base" and "superstructure" are dialectically linked together; base forms law and politics, superstructure forms the historical antagonism of capitalists and the proletarian class.
(5) The depiction of dichotomy between 'base' and 'superstructure' is in its best form in Marxian ideology.
44. Which of the following statements sum up the passage?
(1) Marx and Engels were revolutionary critics of society who rejected the traditional approach to literature and propounded deterministic view of art and literature.
(2) For Marx and Engels, social life constitutes the economic structure of society. The mode of production of material life conditions the social and political life; hence, it is the consciousness that determines life.
(3) It is the economic structure of society, which governs all human relations; art and literature emerge from this social structure.
(4) Art and literature of a society are the forms of perceptions of Marx and Engels' particular ways of seeing the world or interpreting differently, class-relations.
(5) Art and literature emerge from the superstructure of a society; they promote the social ideology and act as determinants of taste.
45. What does the assertion 'consciousness does not determine life, life determines consciousness' imply?
(1) Mind and spirituality are insignificant things in life; it is the mundane existence that take precedence.
(2) Art is not primary requirement of life, social factors are.
(3) Art and literature do not determine life, the economic needs create art and literature.
(4) Social structure of society is the only reality and the economic needs determine life.
(5) Art and literature cannot be abstracted from social and economic structure.

## PASSAGE - II

In his famous essay, Hero as a Man of Letters, Carlyle discussed the various traits of a hero at the metaphysical level and regarded heroism as a godly virtue. Carlyle eulogized Robert Burns and Rousseau who devoted their lives to transform society by their revolutionary ideas. Carlyle contends that no one can forget the contribution of Rousseau who gave the ideals of Liberty, Equality and Fraternity to the world. Rousseau made serious efforts to free French people from the quagmire of conventionality and dogmatism. Carlyle wrote a full-length treatise on the idea of 'He'roism' in the great Victorian age and published essays to depict the exceptional qualities of a hero.

In classical literature, Herodotus, Plato and Socrates háve enumerated invincible spirit, dogged determination, and a rare stoicism in the blood as the exceptional qualities of a hero. John Milton wrote Paradise Lost, and in the first two books of the great epic created Satan, eulogizing these heroic qualities in his character. Critics unwittingly alleged that Milton belonged to the Devil's Party. Shakespeare, in his great tragedies, created Macbeth, Hamlet, King Lear and Othello who were towering personalities struggling against the forces of society and Nature to bring order out of chaos. They believed that God has sent man to explore the objective reality. Since antiquity, the evil has been enveloping each society. God sent heroes from time to time to assume warlike attitude against evils, and to this military attitude, we give the title of heroism. It is a self-trust and inner strength of the soul which gives nuclear energy to a hero to fight the odds of life and to suffer the anguish, alienation and privation smilingly.

Socrates was made to drink the cup of poison, Jesus was crucified, but they were great heroes who came into this world to give peace and eternal happiness to humankind and fought against evils and dogmatism heroically. The hero cannot be shaken and he cannot lose his balance and presence of mind; he is always inspired by his own inner music and is always above the trivial things of life. He enjoys a rare pride of the soul called hubris in Greek language, Aristotle in his Poetics called this 'hamartia, the Zen Buddhists called this detachment of life. There is not something philosophical but it is the instinctive mental faculty to follow the unbeaten track of life, to be the torchbearer. Whatever he does is of highest order but is not always understood by the traditionalists. He finds a rare divine spark in him; he is not worried about his physical comforts and he is always ready to make supreme sacrifice without bothering about life, health, and dangers of existence. Heroism always works against the voice of the multitude that is dogmatic, resists change, and thus turns against him. Heroism is individualism, to follow the dictates of conscience and to become unanswerable to any external agency. All heroic actions are condemned and censured by the 'prudent' men who protect the society. Heroic action is eulogized after the death of the hero but in his lifetime, the people do not have the inner strength to understand his ideas. Heroic actions are extolled only after death. A hero has a rare self-trust and his soul is at war, there is an inner urge to fight against the evil, falsehood, mediocrity, mendacity, dogmatism, conventionality, and the agents of evil. There is an inner strength, a Promethean fortitude not to be wearied out in the face of oodds. A hero has boundless courage, a fine spirit, and his heart is the fountain of love. The soul of a hero is poetic, sensitive, elegant, romantic, passionate but calculating, committed to the service of humanity.

A Shakespearian hero does not sell his soul for worldy comforts, he lives with penury, remains calm and cheerful in adversity and derides plenty and loves austerity of life. The heroic soul does not sell its justice and its nobleness. It does not ask to dine nicely and to sleep, warm. The essence of heroism is the perception that virtue is not enough. Poverty is its ornament. It does not need plenty, and can very well abide its loss. Great people exhibit good humor and hilarity in adverse situations. They attain a height of nobility goodness and grandeur and dignity beyond the imagination of common people. A hero loves persistency, generosity, benevolence, fortitude; the heroic times are the times of terror. A hero shines like a pole star in the firmament of heaven forever and forever.
46. Which of the following statements about heroism is most directly derived from the passage?
(1) Heroism is a war like attitude to encounter the evils of life and society.
(2) Heroic deeds are rare and intellectual deeds; the heroic actions are not guided by any philosophy or divinity.
(3) Heroic will is transcendental in nature as heroism works in contradiction to the voice of society.
(4) Heroism is an inner spiritual wisdom, which inspires an individual to take independent and unconventional decisions unmindful of the social laws.
(5) Heroic actions are bold and impulsive and are resisted by the antagonists.
47. Which of the following sentences extracted from the passage best states the central idea?
(1) "God sent heroes from time to time to assume warlike attitude against evils, and to this military attitude, we give the title of heroism".
(2) "It is a self-trust and inner strength of the soul which gives nuclear energy to a hero to fight the odds of life and to suffer the anguish, alienation and privation smilingly."
(3) "Whatever he does is of highest order but is not always understood by the traditionalists. He finds a rare divine spark in him; he is not worried about his physical comforts and he is always ready to make supreme sacrifice."
(4) "Heroism is individualism, to follow the dictates of conscience and to become unanswerable to any external agency."
(5) "Heroism always works against the voice of the multitude that is dogmatic, resists change, and thus turns against him."
48. The primary purpose of the passage is
(1) to enumerate and eulogize the various traits of a hero in classical and renaissance literature
(2) to propound a philosophical treatise on heroism.
(3) to highlight the cult of heroism from modern perspective.
(4) to illustrate the effects of heroic deeds on society.
(5) To discuss heroism as a quality of mind that dares to differ and act in philanthropic interest against all odds.
49. According to the passage, the author has dealt with which all of the following?

I Heroism is a rare inborn quality in exceptional people who believe in reason and esoteric pursuits.

II Heroism leads to sufferings due to the wrath of the antagonists; it is an expression of pride and war-like persistence in a spirit to fight.
III The essence of heroism is fortitude, a free will to think and to act unmindful of the repercussions
(1) I
(2) I and II
(3) II and III
(4) III
(5) All the above
50. What is the tone of the passage?
(1) Facetious
(2) exemplary
(3) analytical
(4) hyperbolic
(5) adulatory

## SECTION - III

## Direction for questions 51-55:

There are 8 major rivers flowing in India. The following information gives the number of states, in which each river flows (table 1) and the number of the rivers flowing in each state (table 2).
' k ' in table 2 represents the number of rivers that flow in Uttar Pradesh.


Read the information given below and answer the questions that follow:
There is no other river flowing in the states where the'river Binga flows.

- The three rivers namely, Andus, Seelum and Mavi flow through one common state.
- Hasna and Badavari flow through one common state and Hasna and Laveri also flow through one common state.
- The river flowing in Kerala also flows in Tamil Nadu.
- The river which flows in UP, also flows in Uttaranchal and Bihar.
- The river which flows in Punjab also flows in Himachal Pradesh and there is no other river in these states.


## Answer the following questions.

51. How many rivers flow in UP?
(1) 1
(2) 2
(3) 3
(4) 0
(5) 4
52. Which river flows in Punjab?
(1) Badavari
(2) Atluj
(3) Seelum
(4) Andus
(5) Mavi
53. In which of the following state does the river Binga flows?
(1) Tamil Nadu
(2) Kerala
(4) Jammu \& Kashmir
(5) Himachal Pradesh
(3) West Bengal
54. If Badavari doesn't go to Karnataka, which rivers flow in Andhra Pradesh?
(1) Hasna and Laveri
(2) Hasna and Badavari
(3) Badavari and Laveri
(4) Badavari and Mavi
(5) None of these
55. If 'river number' of a river is defined as the number of states in which the river flows and state value is the sum of river numbers of all the rivers which flow in that state. What are the possible maximum and minimum state values?
(1) 5 and 4
(2) 5 and 2
(3) 6 and 2
(4) 6 and 1
(5) 1 and 3

Direction for questions 56 - 60: An organization, TCY, has offices in six cities namely Ludhiana, Chandigrah, Jammu, Amritsar, Patiala and Jalandhar. The director of the organization Mr. Kamal decides to visit all the six branches, one each day in a week. His PA informs all the branches and according to the availability of branch heads, he prepares a schedule that is given below.

Ludhiana - Monday, Saturday (either of the day)
Chandigarh - Tuesday, Thursday, Saturday (either of the day)
Jammu - Wednesday, Friday, Saturday (either of the day)
Amritsar - Saturday, Wednesday (either of the day)
Patiala - Thursday, Monday, Friday (either of the day)
Jalandhar - Monday, Wednesday, Friday (either of the day)
56. On which day, Mr. Kamal has the maximum number of options to select a branch to visit?
(1) Monday
(2) Wednesday
(3) Friday
(4) Saturday
(5) None of these
57. If Mr. Kamal decides to go to Jammu on Wednesday, in how many different ways can he schedule his entire week?
(1) 0
(2) 1
(3) 2
(4) 3
(5) 4
58. How many different schedules can Mr. Kamal plan for his visit?
(1) 2
(2) 3
(3) 4
(4) 5
(5) 1
59. Whatever may be his plan, which of the following branches can Mr. Kamal visit on a particular day only?
(1) Ludhiana
(2) Jalandhar
(3) Chandigarh
(4) Jammu
(5) None of these
60. If the above plan of schedule is sent to all the branches, how many branch heads can expect Mr. Kamal to arrive on a particular day only?
(1) 0
(2) 2
(3) 3
(4) 4
(5) 5

Direction for questions 61-64: In a CAT Coaching Centre, some students are very strong in math, some are strong in verbal ability, some are strong in interpretation and some are strong in logical reasoning. Some students are strong in more than one area. The following diagram gives the details of this.


8 students are good in none of the areas.

## Now, based on the above information, answer the following questions.

61. How many students are good in all the areas?
(1) 8
(2) 10
(3) 22
(4) 142
(5) None of these
62. How many students are good in both verbal 'and interpretation?
(1) 25
(2) 30
(3) 32
(4) 35
(5) 40
63. How many students are not good in math?
(1) 76
(2) 26
(3) 53
(4) 61
(5) 67
64. How many students are good in math and interpretation but not in verbal or logical reasoning?
(1) 6
(2) 18
(3) 24
(4) 48
(5) 52

Direction for questions 65-70: I asked five of my friends, Aman, Deepak, Isha, Priya, and Swetha to guess my debit card pin code, which is a 4 digit number. I gave them a clue that no digit is greater than 4 and there is no zero in my pin. I offered Rs. 100 for the persons, who guessed the first digit right, 200, 300 and 400 for the persons who correctly guessed $2^{\text {nd }}, 3^{\text {rd }}$ and $4^{\text {th }}$ digits respectively. Actually all the 4 digits of my pin number are different, but my friends don't know that. After some time,, they told me their guesses which are depicted below.

|  | $\mathbf{1}^{\text {st }}$ digit | $\mathbf{2}^{\text {nd }}$ digit | $\mathbf{3}^{\text {rd }}$ digit | $\mathbf{4}^{\text {th }}$ digit |
| :--- | :---: | :---: | :---: | :---: |
| Aman | 4 | 3 |  | 2 |
| Deepak |  | 3 | 1 | 2 |
| Isha |  | 3 |  |  |
| Priya |  |  | 1 | 2 |
| Swetha |  | 3 | 1 | 2 |

It is also known that

- Priya guessed all the different digits and earned the lowest amount. Deepak earned less than Swetha.
- The guesses made by Isha and Swetha differ by at least two digits.
- Deepak did not guess " 2 " or " 4 " for the first two digits and he guessed two different digits.
- No two persons guessed the same number of correct digits.


## Then answer the following questions.

65. Who will get the maximum money?
(1) Aman
(2) Deepak
(3) Isha
(4) Swetha
(5) Priya
66. What is my pin number?
(1) 1234
(2) 1324
(3) 4231
(4) 4321
(5) 3142
67. How much money did I loose to my friends?
(1) 800
(2) 1200
(3) 1000
(4) 1800
(5) 2100
68. How much money did Swetha earn?
(1) 100
(2) 200
(3) 300
(4) 400
(5) 500
69. Which digit was correctly guessed by the maximum number of persons?
(1) $1^{\text {st }}$
(2) $2^{\text {nd }}$
(3) $3^{\text {rd }}$
(4) $4^{\text {th }}$
(5) Cannot be determined
70. How many people guessed all the 4 digits right?
(1) 1
(2) 2
(3) 3
(4) 4
(5) 0

Direction for questions 71-75: In an examination, there are 10 questions, each carries 1 mark. If a student gets two questions correct in continuation, he will be given a bonus mark. Similarly, if he gets four questions and six questions correct in continuation, he will be given 3 bonus points and 5 bonus points respectively. There is no negative marking for a wrong answer, but if a student gets two questions wrong in continuation, he will be awarded one negative mark. Similarly if he gets four questions and six questions wrong in continuation, he will be given 3 negative marks and 5 negative marks respectively. All questions were attempted by all the students.

## Answer the following questions.

71. If a student gets 9 marks in total, what would be maximum number of wrong attempts made by him?
(1) 2
(2) 3
(3) 4
(4) 5
(5) None of these
72. If a student attempts 6 questions correctly, what will be the difference between the maximum possible and minimum possible marks?
(1) 2
(2) 3
(3) 4
(4) 5
(5) 6
73. What could be the maximum number of wrong attempts; a student can make, so that his marks should not be negative?
(1) 1
(2) 4
(3) 7
(4) 10
(5) None of these
74. If a student attempts four incorrect questions but not any two questions in a continuation, then which question he must have done wrong, if he gets the maximum possible marks?
(1) $1^{\text {st }}$
(2) $3^{\text {rd }}$
(3) $5^{\text {th }}$
(4) $8^{\text {th }}$
(5) None of these
75. If he gets 5 marks then what is the maximum possible number of correct questions he could have attempted?
(1) 4
(2) 5
(3) 6
(4) 7
(5) 9

