Directions of Test

Test Name	2016 Bull CAT 15	Total Questions	100	Total Time	180 Mins

Section Name	No. of Questions	Time limit	Marks per Question	Negative Marking
Verbal Ability	34	1:0(h:m)	3	1/3
DI & Reasoning	32	1:0(h:m)	3	1/3
Quantitative Ability	34	1:0(h:m)	3	1/3

Section : Verbal Ability

DIRECTIONS for the question : *Read the passage and answer the question based on it.*

Question No. : 1

Samuel Bowles' slim, fascinating, and thought-provoking book, The Moral Economy: Why Good Incentives Are No Substitute for Good Citizens starts with two assertions. The first is that policymakers have over-learned Adam Smith's lesson that people achieve collective good when they pursue private interest. Smith noted that pursuit of self-interest often produces societal benefit. But Smith hedged his bets. Bowles charges that economists, jurists, and policymakers often don't hedge theirs, and they have come to rely excessively on incentives based on the proposition that people's behaviour is entirely self-interested and amoral.

To be clear, most policymakers probably recognize that people behave from diverse motives. But standard economic analysis indicates that policy should normally be based solely on the self-interest assumption. Bowles' second assertion is that policies based on the assumption that people are motivated primarily or entirely by selfish motives often work poorly and sometimes backfire. Worse, such policies may actually promote selfishness and amorality.

Put more positively, public and private policies often work much better if they are designed with the recognition that people act in part from self-interest and in part from "social preferences," which include "altruism, reciprocity, intrinsic pleasure in helping others, aversion to inequity, ethical commitments, and other motives that induce people to help people more than is consistent with maximizing their own wealth or material payoff." Furthermore, incentive-based policies may strengthen or weaken these motivations. Simply put, public policy can promote or erode civic virtue.

The view of government as moral tutor may seem odd today, especially to those on the political right. But not to all. The belief that government should shape and, in fact, cannot avoid shaping public character is the sum and substance of George Will's 1981 Godkin Lectures, published two years later under the title Statecraft as Soulcraft: What Government Does. Writing soon after Ronald Reagan was sworn in as President, Will argued that government willy-nilly shapes public character by what it does. He warned that legislators, especially conservatives, should take that duty seriously and posed what has turned out to be a question of increasing relevance: "Can conservatives come to terms with a social reality more complex than their slogans?"

In the given context of the passage, what does 'Smith hedged his bets' mean?

A) Adam Smith stuck to his guns in order to promote self-interest.
B) Adam Smith did cover all his bases by introducing contrarian views to his primary assertion
C) Adam Smith did not believe in self-interest whole-heartedly, and therefore, talked about societal benefit
D) All of the above

Question No. : 2

Paraphrase the given extract from the passage: Will argued that government willy-nilly shapes public character by what it does.

A) the government does not have choice when it comes to shaping public character by its actions.

B) the government does not have an impact on public character by virtue of its actions.
C) the government does have very little impact on public character through its actions.   D) All of the above

Question No. : 3

It can be inferred from the passage that conservatives:

A) support policies that promote civic virtues.   B) are not supporters of policies that promote civic virtues.
C) do not believe that the government should act as a moral tutor.   D) both (2) and (3)

Question No. : 4

According to Samuel Bowles:

A) Public and private policy should keep the sentiment of unselfishness in mind.
B) Public and private policy should keep mutuality in mind.   C) Public and private policy should keep self-interest in mind.
D) All of the above

Question No. : 5

It is given in the passage that:

I. policymakers, by adhering excessively on a certain approach, end up promoting something they wished to avoid in the first place.
II. policymakers excessively adhere to a standard policy.
III. policymakers do, in part, understand basic human behaviour.

A) Only I   B) Only III   C) Only II and III   D) All of the above

Question No. : 6

According to the information provided in the passage, the views of Samuel Bowles and George Will are:

A) are fairly dichotomous   B) are almost contrarian   C) are almost the same   D) are built on similar grounds

DIRECTIONS for the question : *Read the passage and answer the question based on it.*

Question No. : 7

In 1614, when the telescope was new technology, a young man in Germany published a book filled with illustrations of the exciting new things being discovered telescopically: moons circling Jupiter, moon-like phases of Venus, spots on the Sun, the rough and cratered lunar surface. The young man was Johann Georg Locher, and his book was Mathematical Disquisitions Concerning Astronomical Controversies and Novelties. And while Locher heaped praise upon Galileo, he challenged ideas that Galileo championed – on scientific grounds.

You see, Locher was an anti-Copernican, a fan of the ancient astronomer Ptolemy, and a student within the Establishment (his mentor was Christoph Scheiner, a prominent Jesuit astronomer). Locher argued that Copernicus was wrong about Earth circling the Sun, and that Earth was fixed in place, at the centre of the Universe, like Ptolemy said. But Locher was making no religious argument. Yes, he said, a moving Earth messes with certain Biblical passages, like Joshua telling the Sun to stand still. But it also messes with certain astronomical terms, such as sunrise and sunset. Copernicans had work-arounds for all that, Locher said, even though they might be convoluted. What Copernicans could not work around, though, were the scientific arguments against their theory. Indeed, Locher even proposed a mechanism to explain how Earth could orbit the Sun (a sort of perpetual falling – this decades before Isaac Newton would explain orbits by means of perpetual falling), but he said it would not help the Copernicans, on account of the other problems with their theory.

What were those problems? A big one was the size of stars in the Copernican universe. Copernicus proposed that certain oddities observed in the movements of planets through the constellations were due to the fact that Earth itself was moving. Stars show no such oddities, so Copernicus had to theorise that, rather than being just beyond the planets as astronomers had traditionally supposed, stars were so incredibly distant that Earth's motion was insignificant by comparison. But seen from Earth, stars appear as dots of certain sizes or magnitudes. The only way stars could be so incredibly distant and have such sizes was if they were all incredibly huge, every last one dwarfing the Sun. Tycho Brahe, the most prominent astronomer of the era and a favourite of the

Establishment, thought this was absurd, while Peter Crüger, a leading Polish mathematician, wondered how the Copernican system could ever survive in the face of the star-size problem.

Locher thought much was up in the air and ripe for study. In light of the star-size problem, he thought that the Earth clearly did not move; the Sun circled it. But the telescope made it clear that Venus circled the Sun, and that sunspots also went around the Sun. Brahe had theorised that all planets circled the Sun, while it circled Earth. Locher noted that Brahe might be right, but what was clear was that the telescope supported Ptolemy.

Ptolemy had explained those oddities in planetary movement by theorising that, as planets circled the Earth, they also rode on a smaller circle, or epicycle, creating an odd motion like a 'Scrambler' ride at a carnival. Locher wrote that, prior to the telescope, this was just an idea – no one knew if epicycles really existed. But the telescopically discovered moons of Jupiter were proof of epicyclic motion: the moons rode in circles around Jupiter, while those circles rode with Jupiter on its orbit. The telescope had proven Ptolemy correct; it was just that Venus and sunspots (and maybe all the planets) had their epicycles centred on the Sun. Locher thought the epicycle question could be probed further through telescopic observation of Saturn, and in particular of the protrusions seen on Saturn (at the time, no one understood these to be rings). Locher argued that a long-term study of how those protrusions change might show that Saturn rode on an epicycle.

The author of the passage adopts:

A) a subjective approach in the passage   B) a descriptive approach in the passage   C) a narrative approach in the passage
D) a critical approach in the passage

Question No. : 8

According to the information given in the passage, Georg Locher was:

I. in agreement with some of views of Ptolemy
II. supported the views of Isaac Newton
III. not a supporter of Copernicus
IV. was related to Catholicism in some way or the other.

A) I, II & III   B) I, III & IV   C) II, III & IV   D) All of the above

Question No. : 9

The meaning of the word 'epicylce' is:

A) A circle that revolves around the Sun.   B) A circle that revolves around a circling planet.
C) A circle that revolves around the Sun, which is further revolving around the Earth.
D) A circle that rolls around (inside or outside) another circle.

DIRECTIONS for the question : *Read the passage and answer the question based on it.*

Question No. : 10

Some 2,400 years ago, in 399 BCE, Athens put Socrates on trial. The charge was impiety, and the trial took place in the People's Court. Socrates, already 70 years old, had long been a prominent philosopher and a notorious public intellectual. Meletus, the prosecutor, alleged that Socrates had broken Athenian law by failing to observe the state gods, by introducing new gods, and by corrupting the youth.

Meletus, as prosecutor, and Socrates, as defendant, delivered timed speeches before a jury of 501 of their fellow citizens. There is no dispute about the basic facts of the trial of Socrates. It is less obvious why Athenians found Socrates guilty, and what it might mean today. People who believe in both democracy and the rule of law ought to be very interested in this trial. If the takeaway is either that democracy, as direct self-government by the people, is fatally prone to repress dissent, or that those who dissent against democracy must be regarded as oligarchic traitors, then we are left with a grim choice between democracy and intellectual freedom.

But that is the wrong way to view Socrates' trial. Rather, the question it answers concerns civic obligation and commitment. The People's Court convicted Socrates because he refused to accept that a norm of personal responsibility for the effects of public speech applied to his philosophical project. Socrates accepted the guilty verdict as binding, and drank the hemlock, because he

acknowledged the authority of the court and the laws under which he was tried. And he did so even though he believed that the jury had made a fundamental mistake in interpreting the law.

The conventional wisdom maintains that the impiety charge against Socrates was a smokescreen, that politics motivated his trial. Just four years earlier, a democratic uprising had overthrown a junta that ruled Athens for several tumultuous months. Meletus' prosecution speech at the trial likely urged the citizens of Athens to focus on Socrates' long association with members of this vicious and anti-democratic junta.

In his influential interpretation The Trial of Socrates (1988), the US journalist-turned-classicist I F Stone saw this trial as an embattled democracy defending itself. In Stone's view, Socrates had helped to justify the junta's savage programme of oligarchic misrule and was a traitor. More commonly, Socrates is seen as a victim of an opportunistic prosecutor and a wilfully ignorant citizenry. In truth, politics is indispensable to understanding the trial of Socrates, but in a slightly more sophisticated way. Seeing Socrates as the paradigm of the autonomous individual, as a simple martyr to free speech, is wrong. Athenian political culture and, specifically, the civic commitments required of Athenian citizens are essential to understanding the trial. Socrates' own commitments to his city influenced the trial's course, and those commitments were core parts of Athenian political culture, shaping the relationship between public speech and responsibility. Indeed, the actions of Socrates, Meletus and the jury must be understood in the context of the Athenians' emphasis on the role of the responsible citizen in the democratic state, on their ideal of civic responsibility. Thus it is a story, in many ways, of civic engagement, in some respects far removed from the politics of recognition that characterise contemporary US debates.

It is clear from the information given in the passage that:

A) Socrates was unfairly persecuted for expressing his views.
B) There is more to the trial of Socrates than the theory of his unfair persecution.
C) Socrates did not curry favour with those in power to escape his punishment.   D) none of the above

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Question No. : 11

The primary purpose of the author of the passage is:

A) to showcase how individuals and state are embroiled in contentious issues with one another.
B) to highlight the repercussions of taking a particular approach.
C) to elicit reaction to a new approach to problem concerning personal ethics.
D) to debunk a popular interpretation of a particular event in history.

Question No. : 12

According to Stone:

A) Socrates acted contrary to democratic principles by supporting the junta.
B) Socrates' trial was a democracy's fight against its opposition.   C) Both (1) and (2)   D) Neither (1) nor (2)

DIRECTIONS for the question : *Read the passage and answer the question based on it.*

Question No. : 13

It is a sin to write this. It is a sin to think words no others think and to put them down upon a paper no others are to see. It is base and evil. It is as if we were speaking alone to no ears but our own. And we know well that there is no transgression blacker than to do or think alone. We have broken the laws. The laws say that men may not write unless the Council of Vocations bid them so. May we be forgiven!
But this is not the only sin upon us. We have committed a greater crime, and for this crime there is no name. What punishment awaits us if it be discovered we know not, for no such crime has come in the memory of men and there are no laws to provide for it.

It is dark here. The flame of the candle stands still in the air. Nothing moves in this tunnel save our hand on the paper. We are alone here under the earth. It is a fearful word, alone. The laws say that none among men may be alone, ever and at any time, for this is the great transgression and the root of all evil. But we have broken many laws. And now there is nothing here save our one body, and it is strange to see only two legs stretched on the ground, and on the wall before us the shadow of our one head. The walls are cracked and water runs upon them in thin threads without sound, black and glistening as blood. We stole the candle from the larder of the Home of the Street Sweepers. We shall be sentenced to ten years in the Palace of Corrective Detention if it

be discovered. But this matters not. It matters only that the light is precious and we should not waste it to write when we need it for that work which is our crime. Nothing matters save the work, our secret, our evil, our precious work. Still, we must also write, for—may the Council have mercy upon us!—we wish to speak for once to no ears but our own. Our name is Equality 7-2521, as it is written on the iron bracelet which all men wear on their left wrists with their names upon it. We are twenty-one years old. We are six feet tall, and this is a burden, for there are not many men who are six feet tall. Ever have the Teachers and the Leaders pointed to us and frowned and said: "There is evil in your bones, Equality 7-2521, for your body has grown beyond the bodies of your brothers." But we cannot change our bones nor our body. We were born with a curse. It has always driven us to thoughts which are forbidden. It has always given us wishes which men may not wish. We know that we are evil, but there is no will in us and no power to resist it. This is our wonder and our secret fear, that we know and do not resist.

The author of the passage uses the pronoun 'we' instead of 'I' as:

A) he wants to showcase how his world needs change and reformation
B) he wishes to use language in a figurative way that leaves an impact on the reader
C) he wants to impress upon the reader with his distinctive narrative style
D) he wishes to showcase how individuality is not allowed to foster in the world he lives

Question No. : 14

The narrator/author of the passage clearly:

A) exhibits a feeling of strong reverence for the Council.   B) exhibits a feeling of faint adoration for the Council.
C) exhibits a feeling of nonchalant indifference for the Council.   D) exhibits a feeling of crippling fear for the Council.

Question No. : 15

The underlying theme of the passage can be identified as which one of the following?

A) sarcastically emblematic   B) figuratively realistic   C) whimsically inflated   D) symbolically dystopian

Question No. : 16

The author of the passage:

A) highlights a world where individual eccentricity and nuisance is ended
B) highlights a world where structure and discipline rule the roost   C) highlights a world where personalities cease to exist
D) highlights a world where indiscipline is brought to an end

Question No. : 17

The author of the passage:

I. in unique with respect to his physical attributes.
II. believes he is driven to thoughts which malefic in nature.
III. thinks he was born with the scourge of independent thinking.

A) I & II   B) II & III   C) I & III   D) All of the above

Question No. : 18

From the information given in the passage, it can be said that the society mentioned:

I. does not allow individuals to write down their thoughts.
II. does not allow individuals to be alone at any given point of time.
III. does not allow individuals to be with others at any given point of time.

A) I & II   B) II & III   C) I & III   D) All of the above

DIRECTIONS for the question : *Read the passage and answer the question based on it.*

Question No. : 19

The term insight refers to the action of the mind when it is freed from the blocks of accumulated knowledge and is full of high mental energy that is generated by passion. For example, Einstein's work was the result of great passion. He did not mean to disprove Newton. He broke new grounds.

Insight is an act of perception, permeated with intense energy and passion. It involves getting free from emotional, linguistic, intellectual, social and other pressures which hold the mind in rigid grooves. It involves a further perception that is not contained in the existing knowledge. This perception includes new forms of imagination and new types of reason. Imagination consists of mental images, a kind of imitation to how things look like and feel like. These images are produced in the mind and not outside. They bring about a conscious experience. They include sensations similar to those arising in the sensory perception, but their origin is internal rather than external. A continuous flow of imagery is called fantasy.

Generally, imagination tends to play a primary role in arts and literature; pure reason becomes secondary here. Without insight, imaginative thought becomes confined within the barriers which are inherent in fancy; and results in mediocrity in arts and literature. As in scientific work, in arts too, the intense energy of insight is needed to free oneself from barriers of accumulated knowledge. Imagination without barriers gives rise to imaginative insights.

Reason, on the other hand, is a perception of new relationships in abstract thought. In general, reason is a process in which no definable feature can safely be assumed to be fixed forever. However, some content from this flow of reason can be abstracted, and for the sake of convenience, it may be regarded as a given framework. Reason then gets reduced to formal logic: complete fixing of a set of assumptions, axioms and hypothesis which provides what is called the universe of discourse. Under such conditions, the movement from premises to conclusion could be compared to a game played within this 'make believe' abstraction of a universe. Formal logic is actually the intellectual counterpart of rearrangement of known images taking place in imaginative fancy. It can be both useful and necessary. But if it is assumed that the fixed framework of formal logic is always valid, it will become a presupposition which would determine the general disposition of the mind; producing urges, motivations and desires resulting in blocks and barriers to new perceptions.

The primary purpose of the author of the passage is:

A) to understand reason   B) to understand insights   C) to distinguish between reason and insights
D) to semantically probe reason and insights

Question No. : 20

According to the author of the passage, insights:

A) are a form of perception wherein existing knowledge is linearly explored
B) are a form of perception wherein existing knowledge is non-linearly explored
C) are a form of knowledge that go beyond the existing norms of perception
D) are a form of perception which challenge the existing realms of knowledge and go beyond them

Question No. : 21

According to the author of the passage, formal logic:

A) can only have limited use.   B) can create new frameworks for discussing existing perceptive knowledge
C) can block pathways to new perceptions   D) none of the above

DIRECTIONS for the question : *Read the passage and answer the question based on it.*

Question No. : 22

There is one fact which should make an impression upon every person of conscience, upon all who have at heart a concern for human dignity and justice; that is, for the liberty of each individual amid and through a setting of equality for all. That is the fact that all of the intelligentsia, all of the great applications of science to the purpose of industry, trade and to the life of society in general have thus far profited no one, save the privileged classes and the power of the State, that timeless champion of all political and social iniquity. Never, not once, have they brought any benefit to the masses of the people. We need only list the machines and every workingman and honest advocate of the emancipation of labour would accept the justice of what we say. By what power do the privileged classes maintain themselves today, with all their insolent smugness and iniquitous pleasures, in defiance of the all too legitimate outrage felt by the masses of the people? Is it by some power inherent in their persons? No - it is solely through the power of the State, in whose apparatus today their offspring hold, always, every key position (and even every lower

and middle range position) excepting that of soldier and worker. And in this day and age what is it that constitutes the principle underlying the power of the State? Why, it is science. Yes, science - Science of government, science of administration and financial science; the science of fleecing the flocks of the people without their bleating too loudly and, when they start to bleat, the science of urging silence, patience and obedience upon them by means of a scientifically organised force: the science of deceiving and dividing the masses of the people and keeping them allays in a salutary ignorance lest they ever become able, by helping one another and pooling their efforts, to conjure up a power capable of overturning States; and, above all, military science with all its tried and tested weaponry, these formidable instruments of destruction which 'work wonders' and lastly, the science of genius which has conjured up steamships, railways and telegraphy which, by turning every government into a hundred armed, a thousand armed Briareos, giving it the power to be, act and arrest everywhere at once - has brought about the most formidable political centralisation the world has ever witnessed.

Who, then, will deny that, without exception, all of the advances made by science have thus far brought nothing, save a boosting of the wealth of the privileged classes and of the power of the State, to the detriment of the well-being and liberty of the masses of the people, of the proletariat? But, we will hear the objection; do not the masses of the people profit by this also? Are they not much more civilised in this society of ours than they were in the societies of bygone centuries?

The author of the passage refers to the State as a:

A) supporter of equality   B) supporter of inequality   C) supporter of justice   D) supporter of impropriety

Question No. : 23

The tone of the author of the passage can be said to be:

A) Indifferent   B) Toadying   C) Haughty   D) Cynical

Question No. : 24

According to the author of the passage, the primary cause for maintaining position of the privileged classes is:

A) science   B) military   C) government   D) the masses themselves

DIRECTIONS for the question: *The four sentences (labelled 1,2,3 and 4) given in this question, when properly sequenced, from a coherent paragraph. Decide on the proper order for the sentence and key in this sequence of four numbers as your answer.*

Question No. : 25

1. Suddenly, with a mechanical clatter and the hiss of an oxyacetylene lamp, a moving image appeared on the screen.
2. A white sheet hung against one wall, and in the gloaming the only light came from a wood-and-brass construction at the back of the room.
3. Behind the drawn curtains of his home in Palo Alto, California, the railroad magnate Leland Stanford waited for his horse to be brought to life.
4. It was little more than a silhouette, but Stanford and his astonished guests could clearly see Hawthorn, Stanford's stallion, walking along as if it were right there in the room among them.

A) 3214   B)   C)   D)

DIRECTIONS for the question: *The five sentences (labelled 1,2,3,4, and 5) given in this question, when properly sequenced, form a coherent paragraph. Decide on the proper order for the sentence and key in this sequence of five numbers as your answer.*

Question No. : 26

1. Muybridge set up as a professional photographer and, in 1872, he married Flora Shallcross Stone, a young divorcee half his age.
2. The place inspired the first of Muybridge's many name changes when, at 20, he appropriated the 'Eadweard' spelling of the Anglo-Saxon kings that had been carved upon an ancient coronation stone near his home.
3. Muybridge was born in 1830 as Edward Muggeridge, into a merchant family that traded in corn and coal in Kingston upon Thames in England.
4. He set off to New York as a young man, in 1850, before crossing the country to the frontier town of San Francisco.
5. Over time, for reasons he never explained, his surname evolved to Muygridge and then Muybridge.

A) 32451   B)   C)   D)

DIRECTIONS for the question: *The five sentences (labelled 1,2,3,4, and 5) given in this question, when properly sequenced, form a coherent paragraph. Decide on the proper order for the sentence and key in this sequence of five numbers as your answer.*

Question No. : 27

1. By directing the Centre to constitute a Cauvery Management Board within four weeks, the Supreme Court has created space for the water-sharing dispute to be handled in a scientific and responsible manner by a legally constituted technical body.
2. It will be a technical body consisting of irrigation engineers and agronomists, and will have independent members as well as representatives of the basin States.
3. The board, assisted by a regulation committee, is the mechanism prescribed by the Tribunal in its final order for implementing its award.
4. Judicial intervention often resolves questions that the executive finds too sensitive to handle.
5. It can formulate the manner in which water should be shared in a season of distress.

A) 41325   B)   C)   D)

DIRECTIONS for the question: *The five sentences (labelled 1,2,3,4, and 5) given in this question, when properly sequenced, form a coherent paragraph. Decide on the proper order for the sentence and key in this sequence of five numbers as your answer.*

Question No. : 28

1. These are men, women and children who take to sport not merely to fill in their leisure hours; they are the ones who believe that given the right breaks at the right time, they can become champions – maybe even world-beaters with great wealth and fame.
2. But try to fit this perspective into the Indian context, and you run into a huge road-block.
3. In every city, town and village in most parts of the world, there is a Nobody — or two — who wants to become a Somebody in sports.
4. As recently as in the late 1990s, in a cafe in Tokyo, a couple adjacent to our table turned to me and said, "Rajnikanth, Tendulkar." Getting their pronunciation right was tough enough for the ears; putting it down on paper is almost impossible.
5. For until quite recently much of the fame and recognition was reserved for one sport alone — cricket.

A) 31254   B)   C)   D)

DIRECTIONS for the question: *The five sentences (labelled 1,2,3,4, and 5) given in this question, when properly sequenced, form a coherent paragraph. Decide on the proper order for the sentence and key in this sequence of five numbers as your answer.*

Question No. : 29

1. The latest ruling by the European Union competition commissioner may not be the last against U.S. multinationals in what is increasingly being viewed as harmful to tax diplomacy.
2. Notably, the Commission has not taken issue with Dublin's 12.5 per cent rate of corporate taxation.
3. The hefty €13 billion in back taxes the European Commission imposed on Apple should have drawn Europe and the U.S. closer in their common quest to crack down on corporate tax avoidance.
4. As with the Starbucks decision in 2015 and the ongoing probe into McDonald's, both concerning two different countries, the Commission alleges that Ireland's ultra-low, single-digit tax arrangements with Apple were in violation of EU state aid rules.
5. But the unprecedented penalty to hit the American tech giant has triggered angry outbursts at home and could well put paid to hopes for transatlantic cooperation, especially on the trade and investment partnership agreement, in the immediate future.

A) 35142   B)   C)   D)

DIRECTIONS for question: *Four sentences related to a topic are given below. Three of them can be put together to form a meaningful and coherent short paragraph. Identify the odd one out. Choose its number as your answer and key it in.*

Question No. : 30

1. The Cauvery water dispute is turning out to be less about water and irrigation and more about linguistic chauvinism and regional identity.

2.On some previous occasions when Karnataka released water in a distress year the State government did so quietly so as to not give chauvinistic elements any opportunity to inflame passions.

3. Emotions often trump reason.

4. Nothing else can explain the mindless violence in Karnataka and Tamil Nadu over the Supreme Court order asking the former to release water to the latter, keeping in view the distress situation in both States in a season of deficit rainfall.

A) 2   B)   C)   D)

DIRECTIONS for question: *Four sentences related to a topic are given below. Three of them can be put together to form a meaningful and coherent short paragraph. Identify the odd one out. Choose its number as your answer and key it in.*

Question No. : 31

1. As a result, his life was precarious – there were times when he was even homeless – but I would still long for the school holidays when I could visit him.

2. My father had so much promise as a young man – he was witty, academically gifted and handsome, and I can absolutely understand why my mum had fallen for him when they met at university.

3. But he struggled to deliver on that early potential.

4. They had me young, and I think the responsibility was too great.

A) 1   B)   C)   D)

DIRECTIONS for question: *Four sentences related to a topic are given below. Three of them can be put together to form a meaningful and coherent short paragraph. Identify the odd one out. Choose its number as your answer and key it in.*

Question No. : 32

1. The Silicon Valley line has been given an academic imprimatur by theorists from universities and think tanks.

2. The virtual world, they argue, provides an escape from repressive social, corporate and governmental constraints; it frees people to exercise their volition and creativity unfettered, whether as entrepreneurs seeking riches in the marketplace or as volunteers engaged in 'social production' outside the marketplace.

3. By the turn of the century, Silicon Valley was selling more than gadgets and software: it was selling an ideology.

4. Intellectuals spanning the political spectrum, from Randian right to Marxian left, have portrayed the computer network as a technology of emancipation.

A) 3   B)   C)   D)

DIRECTIONS for the question: *Five sentences related to a topic are given below. Four of them can be put together to form a meaningful and coherent short paragraph. Identify the odd one out. Choose its number as your answer and key it in.*

Question No. : 33

1. There was a sharp increase in the incidence of chikungunya in the country in 2015 over the previous year, although official data do not attribute any deaths to the infection.

2. The irony is that India, with its focus on rapid economic growth and prosperity, is nowhere near victory in the battle against productivity-sapping infections spread by mosquitoes and other insects, while a nimble neighbour like Sri Lanka could declare itself malaria-free.

3. The death of several people in Delhi linked to an outbreak of dengue, chikungunya and malaria has once again exposed the inadequacy of national public health programmes that aim to eliminate vector-borne diseases.

4. Dengue cases have also steadily risen, from 75,808 in 2013 to 99,913 last year, with the death toll rising from 193 to 220 during this period.

5. The footprint for malaria has grown, with over 1.1 million cases last year, although the number of people dying from the infection has shown a recent decline, going by official statistics.

A) 2   B)   C)   D)

DIRECTIONS for the question: *Five sentences related to a topic are given below. Four of them can be put together to form a meaningful and coherent short paragraph. Identify the odd one out. Choose its number as your answer and key it in.*

Question No. : 34

1. The agreement reached between Russia and the United States in Geneva on a ceasefire in Syria is perhaps the best opportunity for a solution to the five-and-a-half-year old civil war.
2. Vladimir Putin wanted Syrian statehood to be restored and the major powers to come together in the fight against the jihadists.
3. Under it, Russia will prevent the regime of President Bashar al-Assad from bombing rebel-held areas, while the U.S. will join hands with Russia in the fight against jihadist groups, including the Islamic State.
4. This stalemate and the fear of more bloodshed may have prompted both the U.S. and Russia to play down their differences.
5. The broad framework of the deal is the Putin Plan, made public a year ago while announcing Russia's intervention in Syria.
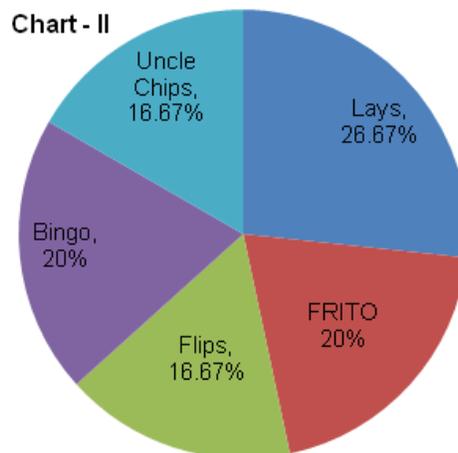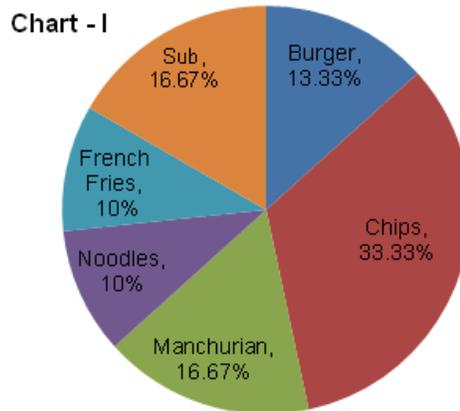
A) 4   B)   C)   D)

Section : DI & Reasoning

DIRECTIONS for the question: *Go through the pie chart/s given below and answer the question that follows.*

Question No. : 35

ABC Company conducts a survey. It is taken among 9000 people about their favourite junk food. Chart I shows the percentage breakup of their favourite food. Chart II shows further breakup of their favourite chips.

Chart - I

Sub, 16.67%
Burger, 13.33%
French Fries, 10%
Chips, 33.33%
Noodles, 10%
Manchurian, 16.67%

Chart - II

Uncle Chips, 16.67%
Lays, 26.67%
Bingo, 20%
FRITO 20%
Flips, 16.67%

What is the difference between the number of people who like chips & who like burgers? (in numerical value)

A) 1800   B)   C)   D)

Question No. : 36

If the people who like FRITO were to be subtracted from people who like chips and added to those who like Manchurian, by what % would the number of those people who like Manchurian increase? (in percentage)

A) 40   B)   C)   D)

Question No. : 37

How many people are there who like Bingo chips & French fries? (in numerical value)

A) 1500   B)   C)   D)

Question No. : 38

If 10% of the people who like Uncle Chips shift their choice to Flips, what is the new difference between the number of people who like Uncle Chips & Flips? (in numerical value)

A) 100   B)   C)   D)

DIRECTIONS for the question: *Read the information given below and answer the question that follows.*

Question No. : 39

On the annual day, of people tree school, 12 squads have their stalls in the play ground. These stalls are on the either sides of the pathway. Stalls from 1 to 6, in that order are on the left side of the path and stalls from 7 to 12, in that order are on the right side of the path. Stall 1 is opposite to 7, 2 is opposite to 8 and so on. Also, we know following:-

(i)   Dhwani is in stall 1 & is diagonally opposite to Shabad.
(ii)   Kalaa is opposite to Teerandazi.
(iii)   Nritya is opposite to Bharatnatyam.
(iv)   Bhartnatyam's immediate neighbours are Shabad & Kathak.
(v)   Gymnastic & Rasaa are diagonally opposite to each other.

If Kathak is opposite to Salsa and Movers & Shakers is adjacent to Rasa, then which stall is adjacent to Dhwani?

A) Quilling   B) Kalaa   C) Movers & Shakers   D) Teerandazi

Question No. : 40

If Kalaa & Bharatnatyam are on same side of the path, then which of the stall cannot be between Nritya & Teerandazi?

A) Quilling   B) Kalaa   C) Salsa   D) Movers & Shakers

Question No. : 41

If Teerandazi is exactly in between Salsa & Quilling, then in how many ways can the squads be arranged in stalls?

A) 4   B) 2   C) 6   D) 8

Question No. : 42

If Movers & Shakers is exactly in between the Kalaa & Quilling and Dhwani is interchanged with the squad in stall 12, then which squad is opposite Kathak?

A) Teerandazi   B) Kalaa   C) Salsa   D) Quilling

DIRECTIONS for the question: *Read the information given below and answer the question that follows.*

Question No. : 43

In a 'Young old society' annual programme, five people named A, B, C, D & E participated in Tambola. They all draw Tambola ticket from a bowl. All the tickets are of different colors.
Following facts are known about them:-
(i) Every person's age is a multiple of 10(in years). Their ages are distinct.
(ii) Oldest & youngest person's ages are 60 years & 20 years respectively.

(iii) Colors of their tickets are Red, Blue, Green, Yellow, and Grey.
(iv) Ticket Red is drawn by the oldest person & yellow ticket is drawn by the youngest person.

Also, Sum of ages of A & D is equal to twice the age of B. The age of the person who's ticket color is green is more than that of the person whose ticket color is blue but less than that of the person whose ticket color is Grey. C & E are not the eldest & youngest respectively. B's age is more than A. At most 3 persons are younger than D & at least one person is younger than A.

Who has drawn grey ticket?

A) A   B) D   C) C   D) A person whose age is 30

Question No. : 44

What is the color of ticket drawn by A?

A) Blue   B) Green   C) Yellow   D) Grey

Question No. : 45

What is the difference of sum of ages of (A & B) & (C & D)? (in numerical value)

A)   B)   C)   D)

Question No. : 46

What is the sum of ages of those who has drawn yellow & grey ticket? (in numerical value)

A) 70   B)   C)   D)

DIRECTIONS for the question: *Read the information given below and answer the question that follows.*

Question No. : 47

Five students named Ankit, Kashish, Karan, Vishal and Priya are given scores based on the mistakes done in the exams corresponding to subjects English, Hindi, Maths, Science GK. The score per student per subject is calculated as per below approach.

For a given subject student with lowest number of mistake is identified. The difference of number 20 and the mistake is calculated. The result is multiplied by 5 and the subsequent result obtained is the score for the student with the lowest number of mistake in that subject. Likewise the student with second lowest number of mistake is identified. The result of difference of 20 and misttake is multiplied by 4. Similarly, the result of difference (20 and mistake) for the student with third lowest mistake number is multiplied by 3, of that with second highest mistake is multiplied by 2 and of the person with highest number of mistake is multiplied by 1.

The data for score of all these 5 students and 5 subjects is detailed below.

	English	Hindi	Maths	Science	Gk
Ankit	32	18	6	35	3
Kashish	10	28	24	15	18
Karan	4		15	8	32
Vishal	50	10	35	24	45
Priya	18	4	2	3	10

It is also known that the exam for English was the easiest and the total score obtained by all students is 114.
The exam for Maths was difficult and total mistakes are 77.
Vishal was the topper of the class with score of 164.
Ankit ranked 4th in the class with the score of one less that of Kashish. Score of Karan in Hindi is four times the score of Priya in GK.

How many mistakes did Karan make in Hindi? (in numerical value)

A) 12   B)   C)   D)

Question No. : 48

Which among the following students did least mistakes in science?

A) Ankit   B) Vishal   C) Karan   D) Kashish

Question No. : 49

What is the total number of mistakes made by Ankit in all the subjects?

A) Can't be determined   B) 73   C) 27   D) 76

Question No. : 50

How many more mistakes should Priya have avoided so as to get 4th rank in the class? (in numerical value)

A) 9   B)   C)   D)

DIRECTIONS for the question: *Read the information given below and answer the question that follows.*

Question No. : 51

Five Students Aamya, Bani, Carl, Dinesh and Eshwar wrote GMAT in 2015 and 2016. The increase percentages in their marks are ranging from 10% to 50% in the year 2016 over 2015. It is also known that in 2015, marks of all students were multiple of 50. Aamya with the least marks 300 in 2015 had the maximum increase of 50%. Dinesh with the highest marks saw the least increase of 10%.Bani's marks in 2016 was equal to that of Dinesh in 2015, while Carl's 2016 marks was equal to that of Bani's in 2015, Aamya's 2016 marks was equal to that of Eshwar in 2015.

Harinder, their teacher observes that one of the students has percentage increase twice that of the other student.
Monika, another teacher corrects him and informs that this is the case in two different instances.

It was also observed that in 2015 marks of Eshwar were equal to the average of that of Aamya and Dinesh, and same is true for the percentage increase.
Ajay said that if Carl's marks had increase at the same rate as that of Aamya in 2015, it would have been the marks of Bani in 2016.

What is the average of the percentages' increase in marks of all 5 students?

A) 27%   B) 24.2%   C) 28.5%   D) 23.5%

Question No. : 52

Which student had the maximum increase in marks?

A) Aamya   B) Bani   C) Carl   D) Eshwar

Question No. : 53

What is the average of marks of all students in 2015?

A) 450   B) 500   C) 550   D) 400

Question No. : 54

What is the difference between marks of Dinesh and Eeshwar in 2016?

A) 75   B) 85   C) 95   D) 65

DIRECTIONS for the question: *Go through the following graph/information and answer the question that follows.*

Question No. : 55

A publishing house based in Delhi publishes a weekly magazine. The magazine offers discounts to customers based on different subscription schemes as shown below.

Period	No. of Issues	Discount
1 year	52	17%
3 years	156	25%
5 years	260	35%

The news stand price of the magazine is Rs. 25.
A year is made up of 52 weeks.
Subscriptions can be paid for by cash, D.D. or cheque.
Subscriptions are rounded off to the nearest Rs. 50.
The publishing house charges Rs. 50 as D.D. collection charges and Rs. 100 for out station cheques.
The issues are delivered by ordinary postal mail at no extra cost. If a customer wishes the issues be delivered by courier, the publishing house collects a one time courier charge equivalent to 10% of the news stand value of the subscription.

Mr. Rajat lives in Kolkata. His bank charges Rs. 45 as D.D. making charges for values below Rs. 5000. If Mr. Rajat pays the subscription charges by D.D. and requests that the issues be delivered by ordinary postal mail, what is the effective discount that he gets for a 1 year subscription to the magazine?

A) 9.69%   B) 11.53%   C) 8.07%   D) 15.84%

Question No. : 56

Nikhil and Savita stay in Mumbai. Nikhil's bank charges Rs. 100 for a D.D, if the value is up to Rs. 5000 and 5% if the value is above Rs. 5000. Nikhil pays for a 3-year subscription by D.D. and requests that the issues be delivered by ordinary postal mail. Savita pays for a 3-year subscription by a cheque drawn on a bank in Delhi and requests that the issues be delivered by courier. What is the absolute difference between the effective discounts that Nikhil and Savita get?

A) 3.72%   B) 6.16%   C) 8.72%   D) 9.18%

Question No. : 57

Pankaj stays in Delhi and has a 5-year subscription to the magazine. He paid in cash and asked that the issues be delivered by courier. Jasleen stays in Ahmedabad and has a 5-year subscription to the magazine. She paid by D.D., for which her bank charged 5% of the value as D.D. making charges. Jasleen asked that the issues be delivered by ordinary postal mail. What is the difference between the effective discounts earned?

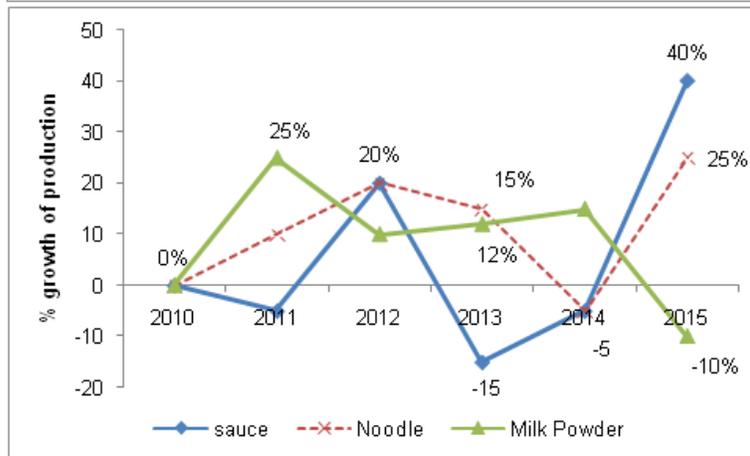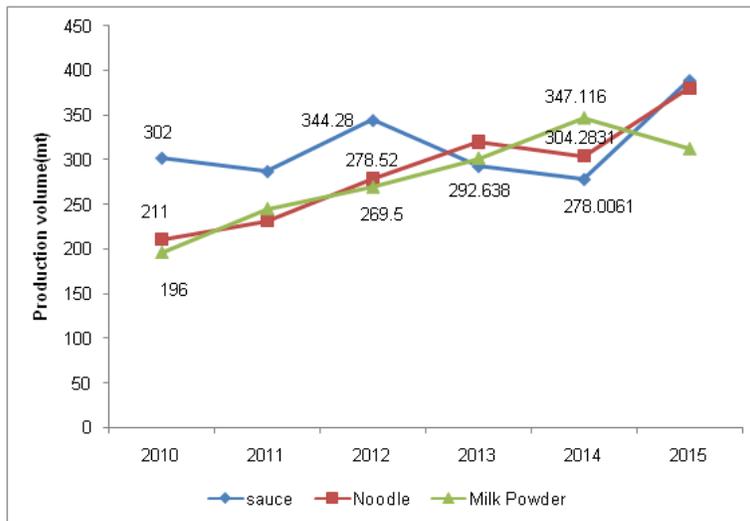A) Rs. 675   B) Rs. 275   C) Rs. 435   D) Rs. 385

Question No. : 58

Navneet stays in Bangalore and is contemplating two different options for a 5-year subscription to the magazine. Under option A, he plans to have two 1-year subscriptions followed by a 3-year subscription. Under option B, he plans to take up a 5-year subscription. He plans on paying by DD as his bank does not charge for making a D.D. He wants the issues delivered by courier. Which option should Navneet choose and how much would he save in, as compared to the other option?

A) Option B, Rs. 1000   B) Option A, Rs. 950   C) Option B, Rs. 200   D) Option A, Rs. 1090

DIRECTIONS for the question: *Analyse the graph/s given below and answer the question that follows.*

Question No. : 59

A German food giant produces 3 varieties of food products viz. sauce, Noodles and milk powder. Below given graphs demonstrates the production volume of the three variant of products in span of 6 years. The second graph demonstrates the percent change in the growth for each of the variant in span of 6 years.

What is the total production in year 2013 for all the three products?

A) 914.78   B) 892.3   C) 960.89   D) 1011.98

Question No. : 60

What is the % increase in the total production of all 3 products in 2015 over 2010?

A) 49.8%   B) 52.6%   C) 65%   D) 68.8%

Question No. : 61

Which of the following experiences the minimum percent increase in growth rate?

A) Milk powder for the year 2014   B) Sauce for the year 2013   C) Milk powder for the year 2013
D) Noodles for the year 2014

Question No. : 62

Which among the following shows maximum increase in the production?

A) Sauce for the year 2014 – 15   B) Sauce for the year 2011 – 12   C) Noodle for the year 2014 – 15
D) Milk powder for the year 2010 – 11

DIRECTIONS for the question: *Read the information given below and answer the question that follows.*

Question No. : 63

Eight persons of a committee are sitting around a circular table. The names of these 8 persons are Aditya, Abhishek, Acharya,

Aakash, Ahilya, Aeena, Ajtak & Agastya. The persons are wearing different colors as white, brown, black, grey, blue, red, and yellow, green.
It is seen that,

(1) Agastya, who is wearing white is as many seats away to the right of Aeena as from the right of Acharya and is looking away from the centre.
(2) Atleast 3 persons are sitting between Aeena & Acharya
(3) Only one couple is sitting diametrically opposite to each other and are looking towards centre. They are wearing red and yellow and are equidistant to Aditya
(4) Ahilya wearing brown can see that the person opposite to him is not wearing black or white.
(5) Abhishek wearing green is looking towards the center.

How many persons are looking towards centre?

A) 4   B) 3   C) 6   D) 5

Question No. : 64

Who is sitting opposite to Ahilya?

A) Agastya   B) Aditya   C) Abhishek   D) Aditya or Abhishek

Question No. : 65

If Ahilya is sitting adjacent left to Abhishek and adjacent left to the person wearing Blue, then how many sitting arrangements are possible?

A) 4   B) 8   C) 16   D) 0

Question No. : 66

If person adjacent to the person wearing white is looking away centre, then how many sitting arrangements are possible?

A) 4   B) 8   C) 16   D) None of these

Section : Quantitative Ability

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 67

In a month of June, price per kg of brown rice and white rice is same. In July, price of brown rice increases by $1/5^{th}$ & that of white rice decreases by $2/5^{th}$. If 2 kgs of a mixture containing both qualities of rice in ratio 3 : 2 respectively costs Rs.36 in July, what is price per kg of brown rice in July.

A) 11.25 Rs.   B) 18.75 Rs.   C) 22.5 Rs.   D) 10.8 Rs

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 68

If a shopkeeper calculates his profit to be 20% his selling price, find his actual profit % ?

A) 20%   B) 25%   C) 16.67%   D) 30%

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 69

Harinder spent a total of Rs.426 on buying groceries, home decor and flowers for his home. If Rs. 21, 22 & 23 were subtracted

from the amounts spent on groceries, home decor & flowers respectively, then the ratio of the expenditures on these heads would have been 23 : 29 : 20. How much was spent on flowers? (in Rs.)

A) 123   B)   C)   D)

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 70

t_1, t_2, t_3, ..., t_{n-1}, t_n is a sequence such that t_1 = 2 & t_n = t_{n-1} + 2n - 2 for n ≥ 2. Find t_{99}. (in numerical value)

A) 9704   B)   C)   D)

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 71

A triangle PQR is inscribed in a circle where ∠Q is obtuse. The altitude PS of the triangle is tangent to the circle at P. Find PS if QR

= 9m & QS = 3m.

A) 3m   B) 4m   C) $\sqrt{27}$ m   D) 6m

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 72

Find equation of the perpendicular bisector of the line segment joining the points (3,6) & (5,2).

A) x-2y+4=0   B) x-3y+4=0   C) x-2y+2=0   D) x-2y+8=0

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 73

A & B run 2 kilometres race & A wins by 60 seconds. A & C run 2 kilometres race & A wins by 720 metres. B & C run 2 kilometres and B wins by 30 seconds. Find the time taken by A to run 2 kilometres.

A) 190 secs.   B) 250 secs.   C) 160 secs.   D) 220 secs.

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 74

There are two friends FAN & SULTAN. If working alone, FAN would take 12 minutes more to complete a movie than if both FAN & SULTAN worked together on it. If SULTAN worked alone, he would take $16\frac{1}{3}$ minutes more to complete the movie than if they both worked together on it. How long will they take to complete the movie if they worked together?

A) 14 hrs   B) 9 mins   C) 12 mins   D) None of these

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 75

Electricity bill is directly proportional to the number of units of electricity consumed. If Rs 16100 is charged for 2300x units, how much should be the bill for 13y units?

A) $\dfrac{91x}{y}$ Rs.   B) $91\dfrac{y}{x}$ Rs.   C) 91 Rs.   D) $101\dfrac{y}{x}$ Rs.

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 76

Find maximum sum of the following sequence 40, 36.25, 32.50, 28.75,......

A) 467.5   B) 223.75   C) 477.5   D) 233.75

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 77

A faulty clock uniformly gains between 8.30 a.m. on a Wednesday and 8.30 p.m. on the following Saturday. If at 8.30 p.m on Saturday, the clock shows 10 p.m., how many minutes does the clock gain per hour?

A) 2 mins   B) $\dfrac{1}{24}$ hrs   C) $\dfrac{1}{48}$ hrs.   D) $\dfrac{1}{56}$ hrs.

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 78

There are 20 students in a class. 5 of them like vanilla cake, 8 like strawberry cake & 10 like none. A student is selected at random. What is the probability that the selected student like both types of cakes?

A) 13/20   B) 7/20   C) 3/20   D) 17/20

DIRECTIONS for the question : Solve the following question and mark the best possible option.

Question No. : 79

Find the number of digits in $(250)^{15}$ (Given that $log_{10} 2 = 0.3010$). (in numerical value)

A) 36   B)   C)   D)

DIRECTIONS for the question : Solve the following question and mark the best possible option.

Question No. : 80

Find solution set of inequality :
$Log_{0.2} (x^2+x-2) - log_{0.2} (x+3) > 0$

A) $\left(-\sqrt{5},\sqrt{5}\right)$ B) $\left(-\sqrt{5},-2\right) \cup (1,\sqrt{5})$ C) $(-\infty,-2) \cup (1, \sqrt{5})$ D) $\left(-\sqrt{5},-2\right) \cup (1,\infty)$

DIRECTIONS for the question : Solve the following question and mark the best possible option.

Question No. : 81

Find number of solutions of equation :
$log_4 (y+2) = 2-log_2 y$. (in numerical value)

A) 1   B)   C)   D)

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 82

How many keystrokes are needed to type numbers from 1 to 1000? (in numerical value)

A) 2893   B)   C)   D)

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 83

Let g (x) = $2x^7 + ax^5 + bx^3 + 5x + 6$. If g(17)=17, then find g (-17)

A) -17   B) 17   C) -5   D) Cannot be determined

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 84

Twinkle and Purab are playing a game. They have a bowl containing 9 slips. Each slip is bearing a distinct digit from 1 to 9. Twinkle draws a slip. After noticing its result, she puts it back in bowl. Then Purab picks a slip. Which digit is the most probable to be the unit digit of the sum of Twinkle's number & Purab's number?

A) 0   B) 1   C) 8   D) 9

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 85

In how many ways 16 blocks can be arranged in a line such that 5 are red and identical, other 6 are black & identical and remaining 5 are pink but are of different sizes? (write the answer option)

1. $\dfrac{16!}{5!6!5!}$ 2. 16!   3. $\dfrac{16!}{5!6!}$ 4. $\dfrac{16!}{5!5!}$

A) 3   B)   C)   D)

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 86

Lion, the boss gives his secretary Mona darling a letter to type at various time each time putting the letter on top of the pile in Mona darling's rack. Mona darling is caught up in many works. So, whenever she gets time, she takes the top letter of the pile & types it. If there are 5 letters in all, and lion gives them in the order 12345, which of the following not be the order in which Mona darling types them ?

A) 24351   B) 32415   C) 54321   D) 45231

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 87

Below is a magic square where sums of numbers in each row, column & diagonal are the same.

★	24	#
18	<	>
25	$	21

Find sum of <, $, ★. (in numerical value)

A) 65   B)   C)   D)

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 88

Amika wants to buy 4 cupcakes from an infinite supply of three types of cupcakes: chocolate, vanilla & gems-laden. In how many different ways can she buy cupcakes? (in numerical value)

A) 15   B)   C)   D)

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 89

A standard six faced die (sum of numbers on opposite faces is 7) is rolled. Let x be the product of the five visible numbers. What is the largest number that surely divides x?

A) 6   B) 12   C) 120   D) 24

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 90

The two digits in Ajay's age are the same as the digits in Kapoor's age, but not in the same order. After 5 years, Ajay will be twice as old as Kapoor will be then. What is the sum of their ages? (in numerical value)

A) 44   B)   C)   D)

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 91

Equation $4x^2+(b+8)x=-9$ has only one solution for x. Find sum of all possible values of b.

A) 24   B) -16   C) 16   D) -24

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 92

If we draw graph of $(x+y)^2-x^2-y^2 = 0$, then which of the following statement is true for the graph?

A) It is an empty set   B) It contains only one point   C) It contains 2 lines   D) It represents a circle

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 93

Given is a triangle XYZ such that XY=XZ. R is any point on XY and between X & Y. Also, XR =RZ=YZ. Find ∠X. (in degrees)

A) 36   B)   C)   D)

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 94

Find value of $\dfrac{1-\cos^2\theta}{(1+\cos\theta)^2}$, If $\tan\theta = \frac{3}{4}$ and $0 < \theta < 90^0$.

A) 1/9   B) 9/16   C) 4/9   D) 1/3

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 95

Vandana invests a certain sum of money at compound interest which becomes Rs.2880 at the end of 2 years and further it becomes Rs.3456 at the end of 3 years. Find principal? (in numerical value)

A) 2000   B)   C)   D)

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 96

let (x) = greatest integer less than or equal to x. How many of the following statements are true? (write the answer option)

i. (x+1) =(x)+1   ii. (x+y)=(x) +(y)   iii. (xy)= (x) (y)

1. none   2. exactly 1   3. exactly 2   4. exactly 3

A) 2   B)   C)   D)

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 97

$\dfrac{2\left(\sqrt{2}+\sqrt{6}\right)}{3\sqrt{2+\sqrt{3}}}$ is equal to

A) 16/9   B) 4/3   C) 2/3   D) 0.75

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 98

Sum of two or more consecutive +ve integers is 100. How many such sets are possible? (in numerical value)

A) 2   B)   C)   D)

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 99

ABC is a triangle such that AB=20& BC=32. Also,∠ABC=150^0. Find area of ΔABC (in sq.units)

A) 160   B)   C)   D)

DIRECTIONS for the question: *Solve the following question and mark the best possible option.*

Question No. : 100

A triangle with integral sides has perimeter 19 units. How many such scalene triangles are there? (in numerical value)

A) 5   B)   C)   D)