

### **Directions of Test**

Test Name	me 2016 Bull CAT 20		2016 Bull CAT 20 Total Questions		100	Total	Time	180 Mins
Section Name	•	No. of Questions	Time limit	Mark	s per Qu	estion	Nega	tive Marking
Verbal Ability		34	1:0(h:m)		3	3		1/3
DI & Reasoning	9	32	1:0(h:m)		3			1/3
Quantitative Abil	ity	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

Prison time is a very severe punishment. JS Mill likened it to being consigned to a living tomb. Any society that employs it should do so with care and restraint. Yet we do not. Partly because we think that prison is a humane punishment, it is drastically overused in many countries, to the point of cruelty. Aside from failing in humanity, prison does not even perform well at the specific functions of a criminal justice system, namely, deterrence, retribution, security, and rehabilitation. We need to reconsider our overreliance on prison, and reconsider whether other types of punishment, including capital and corporal punishment, may sometimes be more effective and more humane.

The fundamental problem with prison time, as Mill notes, is that its severity is hard to imagine. After all, many of us frequently find that what with one thing and another we have spent the whole day indoors, and we don't find that we have really suffered for it. It is hard to imagine quite how it must be to be confined to a small space and narrow routine for periods of years, or even until death. There is no great drama to focus on. No particularly terrible things happen. Just more of the nothing. Attempting to multiply our feelings about spending one day indoors does not really get us there.

A punishment that is hard to imagine will not work very well. First, people contemplating breaking the law will not be especially deterred by dread of the punishment. In particular, though the concept of prison as an institution may be somewhat dismaying, it is hard to contemplate the difference in severity of spending different lengths of time in one. Duration is a rather abstract dimension, and the difference between 5 years and 10 years, especially the cumulative difference, is hard to imagine. Thus, contrary to the influential 'law and economics' perspective, people are not able respond 'rationally' to the schedule of prison time sentences for different crimes by making cost-benefit calculations for their actions that incorporate the 'price' of punishment. Nor do increases in sentences have the deterrent effect one might expect (so sending armed robbers to prison for 40 years instead of 10 doesn't much reduce the incidence of armed robbery). A punishment that is hard to imagine will also not satisfy the moral outrage of those who have been wronged. If a child is run down by a drunk driver, not only the parents but the society as a whole demands a severe punishment. Though a criminal justice system cannot be run on populist grounds in particular cases (that would just be mob rule), in order for justice to be seen to be done it does need to respond to those demands to some extent. Thus, even though the professionals staffing the justice system may understand the severity of prison time as a punishment, their judgement may be superseded by the pressures of popular opinion. This is most evident where populist politics are integrated into the justice system, such as in America where judges and prosecutors are often directly elected.

If prisons are understood as places of physical and sexual violence, then a prison sentence takes on a much more dramatic character that is easier to imagine for both potential criminals (deterrence) and victims of crime (retribution). But this is a very dissatisfactory fix. In effect the punishment of prison time comes in two parts. The judicial sentence that society's justice institutions decide is right and proper. And an additional physical punishment outsourced to the most vicious and violent thugs in the relevant prison community to determine and administer. Such punishment has the unfortunate characteristics of being only haphazardly related to the original crime, and in falling most heavily upon those who are weakest and most vulnerable.

The central idea of the author of the passage is:

A) Prison sentences do not help in gaining payback to those who have been victims

B) Prison sentences do not work well as they cannot really be visualized and envisioned

C) Prison sentences often lead to the exploitation of the weaker ones

D) Prison sentences, in actuality, do not add up the substantive justice they are made out to be

# Question No. : 2

What do the terms 'capital punishment' and 'corporal punishment' mean?

A) The former refers to the punishment of the soul and the latter refers to punishment of the body.

B) The former refers to death penalty and the latter refers to punishment of the body.

C) The latter refers to the punishment of the soul and the latter refers to punishment of the body. D) None of the above

# Question No. : 3

According to the author of the passage

I. Ideally, the justice system should able to maintain its impartiality and should not swayed by popular sentiment.

II. Objective justice is what is required of the justice system and subjectivity should be avoided.

III. Prison sentences are not only about the official punishments given but also about the indirect physical abuse endured by some of the punished.

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

# Question No. : 4

Paraphrase the sentence: a punishment that is hard to imagine will not work very well.

A) the non-visual narrative of punishments hinders their understanding

B) the lack of physical components of punishments renders them ineffective

C) the impact of punishments can only be gauged by their ability to be visualized

D) punishments can bring about substantive change only if they can be picturised and envisioned

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

# Question No. : 5

At the top of my list of favorite children's books is "Goodnight Moon," with its soft lines and easy rhymes (Goodnight stars/ Goodnight air/ Goodnight noises everywhere). I never tire of the story, no matter how many children I read it to. My other favorite is "Green Eggs and Ham," with its topsy-turvy sentences (I am Sam. Sam I am.) and subversive humor (And I will eat them in the rain. And in the dark. And on a train.).

The playful language found in children's books comes naturally to us when we are young. We start with "Bye, Bye!" and progress to sing-songy clapping games:

A sailor went to sea seasea To see what he could see seesee And all that he could see seesee Was the bottom of the deep blue sea seasea?

As we mature, our delight in sounds becomes less visceral. We study the couplets of Robert Frost, send the subversive punctuation of E.E. Cummings to paramours and contemplate the "widening gyres" of William Butler Yeats. However, we often lose the child's love of chaotic vowels and knocking syllables. Even when writing about poetry, we bog down in the language of academia. Our sentences get longer as we pile up clauses and struggle to state a thesis. Then, in our professional lives, we get tangled up in bureaucratese and forget our innate ability to play with sound and sense.

Language can still be an adventure if we remember that words can make a kind of melody. In novels, news stories, memoirs and even to-the-point memos, music is as important as meaning. In fact, music can drive home the meaning of words.

Let's review some of the devices that allow us to write for the ear. With assonance and consonance, we repeat, for effect, either vowel sounds (clean...neat) or consonants (Dr. Seuss's island of Sala-ma-sond). Alliteration refers to the repetition of the initial sound of words in a phrase or sentence ("Hooray for Diffendoofer Day"). Rhyme, seen in that last title with Hooray and Day, sets up an exact correspondence between the final syllables of words (Dr. Seuss excelled in unexpected rhyme, from "The Cat in the Hat" to "Yertle the Turtle"). With onomatopoeia, we name a thing (or action) by imitating the sounds associated with it. Comic books rely as heavily on onomatopoeia as children's books, with "words" like zap, zowie, bam, socko, wow, oof, wham, bing and grrr.

But sound conveys sense in more serious contexts, too, whether the splash of water, the sniffle of a crybaby or the snicker of a bully. Words can play with gravity (bump, dump and thump) and levity (float and flit). A verb like flutter implies not just action but lightness, speed, motion and emotion. It can also cast a metaphorical net, catching images of things that flutter — butterflies, eyes — as well as related traits like beauty, innocence or delicacy. These devices are often obvious in poetry, but we have to look harder to see them in prose, especially because they often work on a subliminal level.

An apt title for the passage is:

A) How music can shape literatureB) Phony Phonetics can change the way we writeC) Music can underpin the science of sentencesD) The sound of a sentence

# Question No. : 6

According to the author of the passage:

A) as we grow old, we depend on intuition rather than logic and reasoning when it comes to enjoying various soundsB) as we grow old, we depend on logic and reasoning rather than intuition when it comes to enjoying various soundsC) as we grow old, we depend on our senses rather than intuition when it comes to enjoying various soundsD) both (A) and (C)

## Question No. : 7

According to the information given in the passage:

A) literary devices are used more often in prose than in poetryB) literary devices are harder to identify in poetry than in proseC) literary devices work at a sub-conscious level in proseD) all of the above

## Question No. : 8

The phrase 'subversive humor' means:

A) humor that goes against governmentsB) humor that targets established practices and normsC) humor that reflects the changing timesD) humor that employs sarcastic wit

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

## Question No. : 9

Logocracy is the rule of—or government by—words. It is derived from the Greek  $\lambda \delta \gamma o \zeta$  (logos) - "word" and from  $\kappa \rho \dot{\alpha} \tau o \zeta$  (kratos) - to "govern". The term can be used either positively, ironically or negatively. The United States is described as a logocracy in Washington Irving's 1807 work, Salmagundi. A visiting foreigner, "Mustapha Rub-a-dub Keli Khan", describes it as such, by which he means that via the tricky use of words, one can have power over others. Those most adept at this are termed "slang-whangers", while Congress is a "blustering, windy assembly".

Mustapha describes how:"unknown to these people themselves, their government is a pure unadulterated LOGOCRACY or government of words. The whole nation does everything viva voce, or, by word of mouth, and in this manner is one of the most military nations in existence [...] In a logocracy thou well knowest there is little or no occasion for fire arms, or any such destructive weapons. Every offensive or defensive measure is enforced by wordy battle, and paper war; he who has the longest tongue or readiest quill, is sure to gain the victory - will carry horrour [sic], abuse, and ink shed into the very trenches of the enemy, and without mercy or remorse, put men, women, and children to the point of the - pen!"

The Soviet Union was described by Nobel Prize winner CzesławMiłosz, as a logocracy. It was for example, according to Christine D. Tomei, a "pseudo-reality created by mere words". Moreover, after the revolution Luciano Pellicani describes how a "language reform plan" was introduced by Kisselev. In it he "stressed that the old mentality would never be overthrown, if the structure of the Russian language was not also transformed and purged."

This process led to a Soviet language that George Orwell would later dub "neo-language", and was a precursor to his Nineteen Eighty-Four Newspeak. The new Soviet 'language' was less a real language than an 'orthogloxy', a "stereotyped jargon consisting of formulas and empty slogans, whose purpose was to prevent people from thinking outside the boundaries of collective thought" - i.e. it was speech which destroyed individuality. Janina Frentzel-Zagórska, however, queries the importance of political language in the USSR, saying that "the old ideological 'Newspeak' had completely disappeared in the Soviet Union long before" the fall of Communism.

Totalitarianism, according to political theorist Hannah Arendt, can be considered a logocracy, since in it ideas are no longer important, just how they are expressed. Academic Yahya Michot has referred to Sunni Islam as a "popular" or "laic logocracy", in that it is government by the word of the Koran.

The author of the passage is primarily concerned with:

A) providing us with the definition of logocracies B) highlight the widespread and historic prevalence of logocracies C) showcase the impact of logocracies on modern governance D) all of the above

# Question No. : 10

According to the views of Mustapha Rub-a-dub Keli Khan:

A) those with the most consistent logic are the ones who win in logocracies

B) those with the most convincing use of language are the ones who win in logocracies

C) those indulging in hyperbole are the ones who win in logocracies D) both B and C

## Question No. : 11

The description of logocracy by Mustapha Rub-a-dub Keli Khan can be labelled as:

A) vitriolic slander B) trenchant criticism C) ironic hyperbole D) all of the above

## Question No. : 12

In the given context of the passage, the phrase "slang-whangers" means:

A) people who employ slang in order to prove their pedigree B) people who employ slang in a forceful manner C) people who employ the forceful use of words to control others

D) people who employ adeptly use words to prove their point

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

## Question No. : 13

The connection of magic with religion and religious rites has also been interpreted in many ways. Sir James George Frazer thought that magic was founded on men and women's belief in their own potential to influence nature; this stands in contrast to the concept of religion, which is built on a belief in supernatural beings (gods, spirits, ghosts) that control natural phenomena. Other theories assert that religion is inseparably linked with magic. S. A. Tokarev gave a description of religious rites that can be classified as magic rites, depending on their form and function. The division of magic by form proceeds from the psychological mechanism behind the use of magic forces, including establishing contact, initial (beginning), imitative magic, apotropaic magic (to avert evil), cleansing, and verbal magic. The division of magic according to function is linked to real-world or practical roots of magical beliefs: for example, medical magic is connected with folk medicine, love magic is connected with courting, trade magic is associated with hunting techniques, and agrarian magic is linked to primitive agronomics.

Food is associated with almost every kind of magic. Magic rites connected with food production, processing, and presentation reflected ancient beliefs and motifs that had lost their primary mythological meanings over time and had become inalienable elements of different religions. For example, it is no coincidence that figures from Slavic mythology were identified with Christian saints, such as Peroun, the god of rain, or in India Pardjanja, Pirva (Hettish), Perkons (Lettish), with St. Eliash; Veles, the god of cattle

and wealth, with St. Vlasij; and Yarila, the god of fertility, with St. George. The roles of these figures are reflected in folklore, and especially in demonology. Traces of this type of folklore can still be found in modern times. For example, the Orthodox Church does not deny the presence of evil and other evil spirits in everyday life, but it does not support the spreading of superstitions among its followers. Nevertheless, such beliefs still exist and are reflected in ceremonies surrounding food production.

Beyond its main role of satisfying one of the vital requirements of the human organism, food plays a large symbolic role in every culture. Group meals and specific types of food are obligatory components of any festivity or event in most cultures. Depending on the societal and cultural context, food can be viewed as ritualistic, festive, sacred, funereal, prestigious, and non-prestigious. For example, many sacred rites are connected with the production of bread. It was common in many cultures to bless and to pray during bread baking and to put a cross on the bread before it was eaten. In Georgian beliefs, bread protected a child from evil spirits. Depending on the situation, a different number of loaves (accounts tell of anywhere from three to twenty-nine) could be used during magic actions. In Armenia, in order to protect her child from evil, a mother collected flour from seven families, baked bread (lavash in Armenian) in the shape of human being, put it under the pillow of the child, and on a certain day buried the bread. If a child became ill during the first forty days of life, he or she was passed through the hole made in a large loaf of bread. In Armenia bread was also seen as a form of sustenance in the afterlife: this belief was observed in a ceremony where fresh bread was offered for the deceased. The Udmurts often used similar magic. To return her child to health a mother baked bread three times in a day: the first time she baked five small loaves; the second time she baked seven loaves; and the third time, nine loaves. To strengthen the magic influence she formed dough on a kneading trough and hid herself from the daylight under a shawl.

What do form and function of magic refer to (in the respective order mentioned)?

A) the how and what of magic respectively	B) the how and when of magic respectively
C) the what and when of magic respectively	D) the when and which of magic respectively

# Question No. : 14

In the given context of the passage, the word 'apotropaic' means:

A) Having the power to prevent evilB) Having the power to sabotage evilC) Having the power to forbid evil

## Question No. : 15

A suitable title for the passage is:

```
A) Ritual and religion B) Theories about religion C) Man, Origin and Nature D) Geographies of Religion and Healing
```

## Question No. : 16

The central idea of the passage is:

A) magic can take a life of its own and be ubiquitous in natureB) magic and its origin has a deep connect with religionC) magic is present in and related to multiple aspects of life, including religion and foodD) magic is a derivate of religion and its form and function are reflections of the same

## Question No. : 17

Identify the true statements as per the information given in the passage:

I. Food cannot be perceived through a limited lens and it does have multifarious representations.
 II. Orthodox Church is against the spreading of falsehoods and myths.
 III. In Armenian culture, the practice of offering fresh bread to a dead person reflects the symbolic continuance of life after death.

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

## Question No. : 18

It can be inferred from the passage that:

A) The views and opinions of James George Frazer and S. A. Tokarevwere similar

B) The views and opinions of James George Frazer and S. A. Tokarevwere comparable

C) The views and opinions of James George Frazer and S. A. Tokarevwere disparate

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

## Question No. : 19

Skilled workers emigrating from developing countries are good for us, but bad for the developing countries At least, according to the received wisdom. When considering the facts, a different picture emerges. One with many economic upsides for the migrant's home country. Meet the brain gain. A statement that is often made in the European debate about the current influx of refugees is that a significant portion is well educated. Many believe this 'brain drain' will be problematic for the now war-torn countries when the time comes to rebuild them.

The unquestioned assumption here is that skilled workers leaving to work abroad is necessarily a bad thing for their country of origin. 'Brain drain' has been part of mainstream vocabulary for years. It designates a phenomenon that, according to the man in the street and policymakers alike, has clear negative consequences for developing countries. When a skilled migrant leaves, the country that is left behind supposedly loses, since it has invested money in education for which it now gets nothing in return. Strong moral judgments often accompany this idea, of both the rich countries that supposedly exploit their ability to extract the human resources of poorer countries and of the migrants themselves, who are considered to be selfish and unpatriotic.

A case in point is an article that recently appeared on the website of Foreign Policy. It is about educated Afghans leaving the country due to increased violence and a bleak economic outlook. John Ging, director of operations for the U.N. Office for the Coordination of Humanitarian Affairs, is quoted as saying: "The government is very concerned that the profile of most of these people is that they're the educated, which means it's a brain drain for Afghanistan and will undermine their economic potential."

This example illustrates how deeply-rooted beliefs about the brain drain are. From the fact that most of the people leaving Afghanistan are educated, Ging jumps right to the conclusion that their departure will be bad for the Afghan economy. And Foreign Policy, an influential and respectable publication, prints his argument without giving it a second thought. Even US President Barack Obama has spoken out about the issue. In August, when addressing young African leaders of the Mandela Washington Fellowship, Obama stated that African leaders could stop the 'brain drain' they were facing by ensuring the basics of the rule of law, democracy, governance and peace. On the face of it, it seems cause for optimism that the detrimental nature of the brain drain is something many can agree on. In the past it has formed a basis for policy coordination between Western and developing countries. One example is the moratorium on recruiting doctors from areas that have a shortage of them.

The only problem is that there is almost no evidence to support the idea that the emigration of educated people does harm to the country of origin and ample evidence to indicate the contrary. The benefits of skilled workers leaving in general greatly outweigh the costs. In other words, it is time to rename the brain drain. We should start calling it brain gain instead. I realise I am making a bold statement here. Where is the evidence to support it? Well, the arguments for brain gain can be found in numerous scientific research papers that have been published over the last years. For some reason their content has not permeated the public debate yet. It is high time that it does.

The first important fact that is usually overlooked is that skilled migration promotes trade. A 2014 study by the World Bank shows that the presence of migrants from Africa in a country increases exports from their home country to their country of residence. Institutions in Africa are often weak, causing the business climate to be rather insecure. The connections that migrants have in a country can compensate for this institutional weakness. This reduces the risk of doing business. The study also reveals that the positive effect of emigrants on exports is highest for so-called 'differentiated products'. Differentiated products are advanced products that can easily be distinguished from competitors', unlike more basic products such as raw materials or unprocessed food. Cars, wines and television programmes are examples of differentiated products.

The primary purpose of the author of the passage is:

A) to highlight an existing issue B) to debunk an existing notion C) to prove an alternate analysis D) to showcase a significant issue

# Question No. : 20

Which of the following can be inferred in the given context?

A) the concept of brain gain is often linked to moralityB) moral pronouncements are not on the side of brain drainC) moral judgements often obfuscate the matter of brain drainD) moral assertions often hinder the concept of brain gain

# Question No. : 21

It is implied by the author of the passage:

A) the ideas related to brain grain are not that well accepted B) the ideas related to brain drain are deeply-ingrained in society C) the idea related to brain drain are supercilious, at best D) both A and B

## Question No. : 22

The tone of the author of the passage can be identified as:

A) speculative B) condescending C) analytical D) theoretical

### Question No. : 23

What does the word 'moratorium' mean in the given context?

A) hiatus B) respite C) relief D) embargo

## Question No. : 24

According to the information provided in the passage, which of the following can be inferred?

I. It is not a given that media houses and even public leaders will always present watertight arguments in public accompanied with deep thought and evidence.

II. The concept of brain drain does not the necessary empirical evidence to support it.

III. The concept of brain gain does not have the sufficient representation it deserves.

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

**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. At his inaugural ceremony, the audience gave the Hitler salute and sang the Horst Wessel Song, the anthem of the Nazi party, before Heidegger spoke about "the glory and greatness of this new beginning."

2. In the spring of 1933, a few months after Hitler took power, Heidegger joined the Nazi Party and was elected rector of Freiburg University, where his expressed goal was Gleichschaltung—the "alignment" of the academy with the new party-state.

3. One of the greatest philosophers of the 20th century was a Nazi.

4. There is no disputing this stark fact: Few people would argue Martin Heidegger's claim to pre-eminence, and his Nazism, at least at first, was public and enthusiastic.

A) 3421 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. If every biography peddles the aura of the unknown with a promise of revelation, Diane Arbus: Portrait of a Photographer acknowledges a darker obfuscation from the start.

2. What is the relationship between a secret and knowledge?

3. As his book's fitting epigraph, Arthur Lubow chooses the artist's cryptic challenge to anyone attempting to uncover the meaning behind her work: "A photograph is a secret about a secret. The more it tells you the less you know."

4. How well can we understand someone, even with access to her confidences?

5. Arbuswrings out the cliché that a photograph doesn't lie and rehangs it as a riddle.

A) 13524 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. Abramovic, when she turns her tractor-beam Slavic-magic gaze on you, sees a lot.

2. And she is not wrong.

3. Marina Abramovic thinks I think too much, and am not very useful besides that.

4. Being with her, under the spell of that attention, makes you feel both protected by and protective of her.

5. It's a bit disorienting.

A) 32145 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. At least this is what you think you see; in fact, you live and work in virtual reality.

2. You feel no hunger, no cold, no heat, no pain; there's no need to eat or to take medicine, though you can if you like.

3. It's the year 2120.

4. You are beautiful, intelligent, and charismatic, as are your friends, co-workers, lovers.; though the economy is fiercely competitive, retirement is not far off.

5. You do not fear death. Look out your office window and you see sunlit spires towering over tree-lined boulevards.

A) 32451 B) C) D)

**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. : 29

1. He would probably be better off as the man who collects umbrellas and checks coats in a small, seldom-visited museum.

2. As Justin Smith points out, the word coined by the Greeks 2,500 years ago meaning "love of wisdom" and implying a simple, serene way of life has come to mean a credentialed, cordoned-off university profession consisting of people who "do philosophy" the way others do accounting.

3. George Santayana remarked in one of his books that there is no good reason for a philosopher to make his living teaching in a university.

4. And Santayana's onetime colleague at Harvard, William James, more or less seconded the motion: "What an awful trade that of professor is—paid to talk, talk, talk.... It would be an awful universe if everything could be converted to words, words, words."

A) 3142 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. As a critic and essayist, she was industrious but hardly prolific. As a writer of fiction, she had a couple of early misfires with her novels The Ghostly Lover (1945) and

2. Her best pieces are book reviews or occasional essays—best because most acute, most peculiar, most daring in pursuit of an elegantly weird style

3. In some respects—the brevity of her mature work, a certain hampering mandarin tone even in the midst of literary or political ferment—Elizabeth Hardwick was a minor writer.

4. The Simple Truth (1955), followed by the obliquely fragmented triumph of the svelte, semi-autobiographical fiction Sleepless Nights (1979).

A) 2 B) C) D)

DIRFCTIONS for auestion. Four sentences related to a tonic 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. It was 1961 and Dylan had just travelled to New York City from Duluth, Minnesota; he was twenty.

2. Dempsey took a good look at him, sized him up, and said that he'd have to get a lot bigger if he wanted to be a fighter.

3. On the first page of his 2005 memoir Chronicles, Bob Dylan recounts his experience signing with Leeds Music Publishing company.

4. He'd been written about once or twice in the music section of the Times, and that was enough to convince label executives that he was worth a deal.

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. : 32

1. Jefferson's words were accurate, and it's tempting to call them prophetic, but they weren't: Jefferson's nightmare had in fact come true before she wrote her article, even before "the night Jimi died."

2. The article's most striking moment arrived in its penultimate paragraph: The night Jimi died I dreamed this was the latest step in a plot being designed to eliminate blacks from rock music so that it may be recorded in history as a creation of whites. Future generations, my dream ran, will be taught that while rock may have had its beginnings among blacks, it had its true flowering among whites. The best black artists will thus be studied as remarkable primitives who unconsciously foreshadowed future developments.

3. The piece was partly a broad historical overview of white appropriations of black musical forms, from blackface minstrel pioneer T.D. Rice through the current day, and partly a more personal lament over what Jefferson, a black critic, had come to see as an endless cycle of cultural plunder.

4. In January of 1973—the same month that the Rolling Stones were banned from touring Japan due to prior drug convictions, the same month that a band called Kiss played its first gig in Queens, and the same month that a young New Jerseyan named Bruce Springsteen released his debut album on Columbia Records—Harper's magazine published an essay by future Pulitzer Prize winner Margo Jefferson titled "Ripping Off Black Music."

## 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. : 33

1. In the oppressive nineteenth-century classroom, that the mature Kierkegaard's radically individualistic, anti-authoritarian attitude developed – even if, for now, it could only manifest itself as naughtiness.

2. His family's grim medical history led him to assume that he would die young, and he felt that his short time would be more agreeably spent as a rural pastor.

3. The Danish philosopher and theologian Søren Kierkegaard (1813–55) was firmly convinced that his first philosophical book was also to be his last.

But "things did not go as I expected and intended", he later wrote. "Oh, no." Because that book,

4.Either/Or (1843), quickly propelled Kierkegaard to literary celebrity and signalled the beginning of one of history's most frantic writing careers.

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.

1. There are, for example, the minds of other animals, such as chimpanzees, crows and octopuses.

2. Sloman's phrase alludes to the fact that human minds, in all their variety, are not the only sorts of minds.

3. We must also consider the possibility of artificial intelligence (AI).

4. In 1984, the philosopher Aaron Sloman invited scholars to describe 'the space of possible minds'.

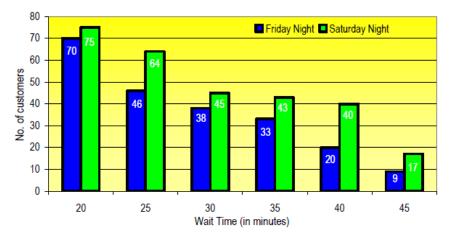
A) 3 B) C) D)

### Section : DI & Reasoning

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

### Question No. : 35

The management of Vaishali Restaurant has conducted a survey to determine how long customers are willing to wait for a table on Friday nights versus Saturday nights. Customers randomly received a survey for either Friday night or Saturday night. The graph below shows the results of the survey.



If a customer is chosen at random from all the survey respondents, what is the probability that the customer is willing to wait not more than 30 minutes for a table on Friday night?

A) 0.7129 B) 0. 6478 C) 0.308 D) 0.1759

#### Question No. : 36

If a customer is chosen at random from all the survey respondents, what is the probability that the customer is willing to wait at least 25 minutes for a table on Saturday night?

A) 0.4629 B) 0.5105 C) 0.6759 D) 0.7359

#### **Question No. : 37**

If a customer is chosen at random from all the survey respondents, what is the probability that the customer is willing to wait at least 30 minutes for a table?

A) 0.166 B) 0.324 C) 0.49 D) 0.676

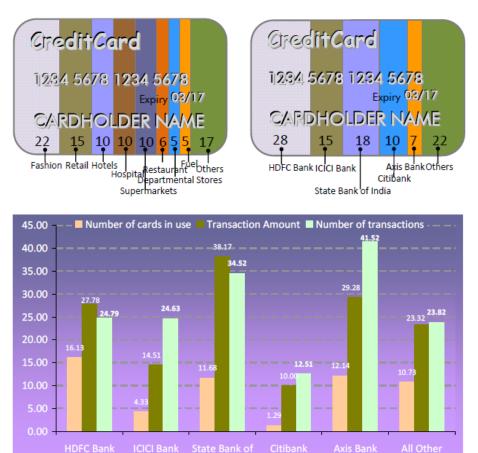
#### **Question No. : 38**

On an average, how many minutes longer are customers willing to wait for a table on Saturday night than of Friday night?

A) 0.6 B) 1 C) 1.3 D) 1.8

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

In India, the total number of credit cards issued by different banks in 2015 was 21.3 million. The first diagram shows the percentage spending on different categories across all credit cards and the second diagram shows the market share of different banks who have issued credit cards. The bar chart shows the number of credit cards in use (in lakhs), the total transaction amount (in billions) and the number of transactions (in lakhs).



What was the average amount per transaction? (in Rs, to the nearest thousand)

A) 9000 B) C) D)

## Question No. : 40

What percent of credit cards issued by HDFC Bank are actually in use? (in numerical value, to the nearest integer)

A) 27 B) C) D)

# Question No. : 41

How much more is spent on Fashion using State Bank of India credit cards than ICICI Bank credit cards. (in lakh)

A) 52052 B) C) D)

## Question No. : 42

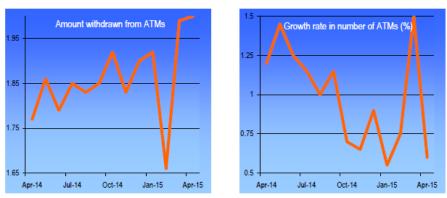
For the top four banks according to market share in the total number of credit cards, what is the highest number of cards in use as a percentage of number of cards issued by that bank? (in percentage, to the nearest integer)

A) 30 B) C) D)

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

The total number of ATMs in India in April 2014 was 162,543. The first line graph shows the number of ATM withdrawals per month (in millions) while the second line graph shows the total amount withdrawn from ATMs per month (in Rs. trillion). The third line graph shows the percentage growth in the number of ATMs per month as compared to the previous month.





What is the approximate number of ATMs in April 2015?

A) 59,235 B) 71,100 C) 182,500 D) 184,700

#### Question No. : 44

What is the average number of withdrawals per ATM in October 2014?

A) 3330 B) 3395 C) 3720 D) 3860

### Question No. : 45

What is the average amount withdrawn per ATM in January 2015?

A) Rs. 10.7 million B) Rs. 11 million C) Rs. 11.8 million D) Rs. 12.5 million

### Question No. : 46

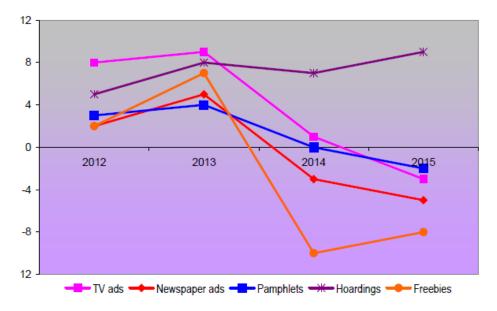
What is the average amount per withdrawal in July 2014?

A) Rs. 3200 B) Rs. 3300 C) Rs. 3600 D) Rs. 3850

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

#### Question No.: 47

In 2011, the Marketing Department of a FMCG company spent Rs. 87 lakh on TV ads, Rs. 42 lakh on Newspaper ads, Rs. 4 lakh on Pamphlets, Rs. 25 lakh on Hoardings and Rs. 2 lakh on Freebies. The graph below shows the percentage change in expenditure on each type of promotional activity as compared to the previous year.



What is the total budget for promotional activities in 2015?

A) Rs. 1.6 crore B) Rs. 1.75 crore C) Rs. 1.8 crore D) Rs. 1.92 crore

## Question No. : 48

What is the total expenditure on TV ads from 2011 to 2015?

A) Rs. 50 million B) Rs. 84 million C) Rs. 100 million D) Rs. 107 million

## Question No. : 49

How much more is spent on TV and Newspaper ads together as compared to other forms of promotional activities in 2014?

A) Rs. 36 lakh B) Rs. 58 lakh C) Rs. 110 lakh D) Rs. 147 lakh

#### Question No. : 50

In 2013, the expenditure on TV ads forms what percent of the total expenditure on promotional activities?

A) 44% B) 56% C) 63% D) 78%

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

#### **Question No. : 51**

The paper setting committee at an engineering college is made up of a Professor and an Assistant Professor, each from five departments – Electrical, Civil, Computer, Telecommunication and Mechanical. One of the Professors is designated as the Chairman of the committee and one of the Assistant Professors is designated as the Vice-Chairman of the committee. For a committee meeting, the members are seated at a rectangular table, with all the Assistant Professors on one side of the table and all the Professors on the opposite side of the table. The Chairman and the Vice-Chairman of the committee sit at the centre of the table on their respective sides.

- The Professor of Mechanical Engineering is seated farthest from the Professor of Electrical Engineering.
- The Assistant Professor of Electrical Engineering is seated to the extreme right of the Vice-Chairman.
- The Assistant Professor of Mechanical Engineering is not the Vice-Chairman of the committee.
- The Professor of Civil Engineering is seated exactly opposite the Assistant Professor of Civil Engineering.
- The Professors of Telecommunication Engineering and Civil Engineering are respectively seated to the immediate right and the immediate left of the Chairman of the committee.
- The Assistant Professors of Civil Engineering and Telecommunication Engineering are seated on the immediate either sides of the Assistant Professor of Computer Engineering.
- The Assistant Professor of Mechanical Engineering is seated at a corner diagonally opposite from the Professor of Electrical Engineering.

The Assistant Professor from which department is the Vice-Chairman of the committee?

A) Civil Engineering B) Telecommunication Engineering C) Mechanical Engineering D) Computer Engineering

# Question No. : 52

The Professor from which department is seated opposite the Assistant Professor of Electrical Engineering?

A) Mechanical Engineering B) Electrical Engineering C) Telecommunication Engineering D) Computer Engineering

# Question No. : 53

The Assistant Professor of Civil Engineering is seated \_\_\_\_\_

A) opposite the Professor of Telecommunication Engineering
 B) opposite the Professor of Civil Engineering
 C) to the left of the Assistant Professor of Mechanical Engineering
 D) to the right of the Assistant Professor of Electrical Engineering

# Question No. : 54

Which of the given clues is not required to determine the correct seating arrangement of the committee members?

- A) The Assistant Professor of Electrical Engineering is seated to the extreme right of the Vice-Chairman
- B) The Assistant Professor of Mechanical Engineering is not the Vice-Chairman of the committee
- C) The Professors of Telecommunication Engineering and Civil Engineering are respectively seated to the immediate right and the immediate left of the Chairman of the committee
- D) The Assistant Professor of Mechanical Engineering is seated at a corner diagonally opposite from the Professor of Electrical Engineering

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

## Question No. : 55

Santosh has arranged seven sessions by guest faculty to train students for the upcoming GD/PI processes of B-Schools. The seven sessions are conducted from Sunday to Saturday. The seven guest faculty – Avadhoot, Bhushan, Chetan, Pranav, Shivram, Satish and Prithviraj – are conducting sessions on Case Studies, Group Discussions, Personal Interviews, Extempore, Group Exercises, Written Assessment and Entrepreneurship.

- Tuesday's session is on Personal Interviews.
- Pranav's session is not on Written Assessment, and is conducted two days after Shivram conducts his session.
- Avadhoot will conduct the session on Extempore and the session on Case studies is conducted on Friday.
- The session on Group Discussions is conducted on the day immediately before the day on which the session on Written Assessment is conducted.
- Prithviraj conducts his session on the day immediately after the day on which Satish conducts his session and immediately before the day on which Bhushan conducts his session.
- Shivram conducts his session on Entrepreneurship on Thursday.

Who conducts the session on Sunday?

A) Avadhoot B) Bhushan C) Chetan D) Satish

# Question No. : 56

Which of the following statements is true?

A) Bhushan conducts the session on Extempore B) Chetan conducts the session on Case StudiesC) Pranav conducts the session on Personal Interviews D) Prithviraj conducts the session on Group Discussions

## Question No. : 57

Which of the following statements is not true?

A) Pranav conducts the session on Group Exercises B) Satish conducts the session on Group Discussions

C) Bhushan conducts the session on Written Assessment D) Avadhoot conducts the session on Extempore

## Question No. : 58

Which of the following statements is true?

- A) The session on Extempore is conducted on the day immediately after the day on which the session on Personal Interviews is conducted
- B) The session on Personal Interviews is conducted on the day immediately before the day on which the session on Group Discussions is conducted

C) Avadhoot conducts his session on the day immediately after the day on which Shivram conducts his session

D) Pranav conducts his session on the day immediately before the day on which Chetan conducts his session

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

## Question No. : 59

Amar and Sameer played a card-game where cards from Ace, two --- upto eight of all four suits are shuffled and then eight cards are dealt to each of the player. These cards are kept their with face down. Value of each card is same as the number of the card. Then each player takes out one card from one's own respective cards. The player with a card of higher face value is the winner. The loser pays the winner the amount equal to the difference between the full value of the two cards in case they are of same suit. But if the cards are of different suit then the loser has to pay twice the difference between the face value of the two cards. If the cards have same face value then nobody pays and moves to next card. Initially both Amar and Sameer has 100 rupees each and in one round all the eight cards are shown.

What is the maximum amount that Sameer can have at the end of one round? (in Rs.)

A) 185 B) C) D)

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

## Question No. : 60

Amar and Sameer played a card-game where cards from Ace, two --- upto eight of all four suits are shuffled and then eight cards are dealt to each of the player. These cards are kept their with face down. Value of each card is same as the number of the card. Then each player takes out one card from one's own respective cards. The player with a card of higher face value is the winner. The loser pays the winner the amount equal to the difference between the full value of the two cards in case they are of same suit. But if the cards are of different suit then the loser has to pay twice the difference between the face value of the two cards. If the cards have same face value then nobody pays and moves to next card. Initially both Amar and Sameer has 100 rupees each and in one round all the eight cards are shown.

If after the first round the 16 cards used for first round are not used in second and remaining 16 cards are dealt to the two players, what is the minimum amount won in two rounds? (in numerical value)

### A) B) C) D)

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

## Question No. : 61

20 persons are seated in a row, each assigned a number from 1 to 20 corresponding to his seating position. Every time, a count is made on the seats, and any person sitting on a seat corresponding to a prime number is removed and the seat numbers are rearranged beginning with one. This procedure is repeated until only 3 persons are left.

What is the original seat number corresponding to the 3rd person? (in numerical value)

## A) 16 B) C) D)

DIDECTIONIC for the another Calus the following question and mark the best possible ention

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

## Question No. : 62

20 persons are seated in a row, each assigned a number from 1 to 20 corresponding to his seating position. Every time, a count is made on the seats, and any person sitting on a seat corresponding to a prime number is removed and the seat numbers are rearranged beginning with one. This procedure is repeated until only 3 persons are left.

If the procedure is again repeated on the same 20 persons, this time the criteria being a seat with prime number and odd number is removed, then which is seat number corresponding to the third person, when only three persons are left?

### A) 14 B) C) D)

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

### Question No. : 63

At the recent Republic Day celebrations, five sportsmen were awarded the Arjuna Awards for achievements in their respective fields of archery, cricket, football, tennis and wrestling. In alphabetical order, the first names of the five sportsmen are Abhinav, Baichung, Gautam, Leander and Yogeshwar and their last names are Bhutia, Bindra, Gambhir, Kumar and Paes.

1. Abhinav, Bhutia, and the football player were on vacation in Dubai when the awards were announced.

- **2.** Baichung Gambhir isn't the tennis player.
- 3. Neither Bindra nor Kumar is the wrestler.
- 4. Neither Bhutia nor Paes is Gautam.
- 5. Leander received his award for his achievements in archery.
- **6.** Bhutia isn't the famous tennis player.
- 7. Bindra isn't the man awarded for his achievements in cricket.
- **8.** Yogeshwar received his award after the cricket player.
- 9. Abhinav, Paes, and the tennis player were the only married sportsmen at the awards ceremony.
- 10. Neither Bhutia nor Paes is the wrestler.

Which of the following is the correct order of first name, last name and the sport for which the sportsman won the Arjuna award?

A) Baichung Bhutia - Football B) Abhinav Kumar - Cricket C) Leander Gambhir - Tennis D) Yogeshwar Kumar - Wrestling

## Question No. : 64

Which of the following statements is true?

A) Bhutia did not win the award for archery	B) Yogeshwar did not win the award for football
C) Gautam did not win the award for tennis	D) Kumar did not win the award for Wrestling

## Question No. : 65

Leander is \_\_\_\_\_

A) the sportsman who won the award for tennisB) the sportsman who won the award for archeryC) the sportsman who won the award for wrestlingD) the sportsman who won the award for football

## Question No. : 66

Which of the following is not the correct order of the sportsmen who won the Arjuna awards for archery, cricket, football, tennis and wrestling respectively?

A) Leander, Abhinav, Paes, Bindra, Gambhir
 B) Leander, Kumar, Paes, Gautam, Baichung
 C) Bhutia, Kumar, Yogeshwar, Gautam, Gambhir
 D) Abhinav, Gautam, Baichung, Leander, Yogeshwar

# Section : Quantitative Ability

# Question No. : 67

UV rays, in excess, can be harmful to the skin. This is more so, especially at higher altitudes. In Leh, a person can usually stay in the sun for 8 minutes in a single day, before being sunburned. Using a sun tan lotion with SPF (Sun Protection Factor) 12 means you can stay in the sun  $8 \times 12 = 96$  minutes before you get a sunburn, in case you apply this lotion after being in sunlight for some time, then the multiplying factor would be applicable for the remaining time period only. On your second day of your Leh trip you leave your room for a walk – and realize that you have not put on your SPF 10 lotion. You rush back to the room and apply the lotion. By this time, you have already spent 5 minutes in the sun. How many more minutes can you now go for a 'safe' walk? (in numerical value)

A) 30 B) C) D)

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

# Question No. : 68

Vetal gives a tough quiz question to Vikram. Vikram answers it correctly – and hence is entitled to gifts for the next 10 days from Vetal. The first day Vetal gives him one alligator. On the second day he gives him two bats and an alligator. The third day, he gets three cats, two bats and an alligator. The pattern continues for seven more days. The remaining gifts are, in order of appearance: dog, elephant, fox, giraffe, hippo, iguana and jackal.

After 10 days, which gift did Vikram receive the most?

I. Cat	II. Elephant	III. Fox	IV. Giraffe
A) I and II	B) II and III	C) III and IV D) I	and IV

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

## Question No. : 69

Chendu Kumar takes part in a bowling tournament. There are a total of 6 rounds. Chendu's score in the first 5 rounds are 134, 99, 109, 117 and 101. He is the last participant in the final round. To win the tournament, his average score must be at least 114. Considering his past performance, what is the probability of his winning? (in percentage)

A) 20 B) C) D)

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

## Question No. : 70

In a month, Rohan goes to market for n times, all these days are decided by a rule that he will not go on same day again unless he covers all other days of a week. Also the difference between the days of his any two outings is never same. If 1st of July is Sunday, then what is the maximum value of n?

## A) 7 B) 6 C) 8 D) 9

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

## Question No. : 71

William feeds his cat with lizards that he and his gang of friends catch in his neighbourhood. In the last month, the cat was fed 24 lizards: six gray lizards, twelve lizards that had dropped their tails in an effort to escape capture, and fifteen lizards that were injured in the process of capture. Only one of the lizards was gray, injured, and tailless; two were gray and tailless but not injured; two were gray and injured but not tailless. How many of the lizards that William captured last month were tailless and injured but not gray? (in numerical value)

A) 3 B) C) D)

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

## Question No. : 72

In the Bulls Eye Lucknow center there are 100 students preparing for their entrance exams. 50 are preparing for law entrance, 35 for design entrance and 25 for neither. How many students are preparing for both law and design entrance? (in numerical value)

A) 10 B) C) D)

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

### Question No. : 73

At the 2008 Olympics, Shelly-Ann Fraser won the women's 100 m in a time of 10.78 s. If she had continued running, how much further would she have run by the time an athlete running at the qualifying speed (11.32 s) would have crossed the line? (in m, to the closest integer)

A) 5 B) C) D)

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

### Question No. : 74

A rabbit is feeding on some carrots at the corner of a square field. It has its burrow at an adjacent corner. During its carrotchewing, the rabbit spots a fox at the other adjacent corner and starts running towards its burrow. The fox keeps on running towards the rabbit during the chase (of course it does not know about the burrow). If the rabbit's speed is 10 m/s and given that the fox follows the shortest route then what should be the range of fox's speed, so that he is just able to catch the rabbit as it enters the burrow?

A) Between 10 m/s and 13.9 m/s B) Between 14.14 m/s and 20 m/s C) Between 20.1 m/s and 24.2 m/s D) Between 5.2 m/s and 9.1 m/s

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

## Question No. : 75

As per the National Family Health Survey, Telangana tops the list of States in terms of caesarean section rate (CSR). While the overall rate is stated to be 58 per cent, which is almost six times higher than the 10 per cent prescribed by the World Health Organization (WHO), private hospitals are doing almost 75 per cent of the C-Sections. C-Sections in government hospitals too are way beyond the limit, at 40.6 per cent.

What percentage of deliveries in Telangana happen in government hospitals?

A) Cannot be determined B) 49.4 C) 38.7 D) 64.3

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

## Question No. : 76

Anant Motwani decides that he has to start losing weight. He goes through the website of Harvard Medical school and finds that there are 3,500 calories are stored in a pound of body fat. Walking or jogging uses roughly 100 calories per mile. Anant wants to go to the finals of the IPL this year with maximum possible weight reduction. Which of the following strategies will ensure that he is losing weight at the target rate of approximately 1 pound per week. (tick all that apply)

A) Jogging (at a pace of 10 miles an hour) for 30 minutes every day of the week.

B) Walking briskly (at a pace of 4 miles per hour) for 30 minutes on five out of seven days

- C) Altering the diet and cut back by 250 calories a day
- D) Altering the diet and cut back by 250 calories a day AND walking briskly (at a pace of 4 miles an hour) for 30 minutes for all seven days of the week

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

# Question No. : 77

A tradesman sold an article at a loss of 20%. If the selling price had been increased by Rs. 100, there would have been a gain of 5%. The cost price of the article (in Rs.) was

A) 400 B) C) D)

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

# Question No. : 78

A mobile phone is listed at Rs. 1,500 and a discount of 10% is offered on the list price. What additional percentage discount must be offered to the customer now to bring the net price to Rs. 1,242 ? (in percentage)

A) 8 B) C) D)

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

# Question No. : 79

If the difference between S.I. and C.I. for 2 years on a sum of money lent at 5% is Rs. 6, then the sum is (ans in Rs.)

A) 2400 B) C) D)

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

## Question No. : 80

A bank gives 10% simple interest per annum in general but 10.5% simple interest per annum for senior citizens. If senior citizen an general customer receive same amount of interest in a year, the ratio of their principals :

A) 21 : 20 B) 21 : 22 C) 20 : 22 D) 19 : 20

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

## Question No. : 81

(|x| - 3)(|y| + 4) = 12. How many pairs of integers (x, y) satisfy this equation? (in numerical value)

A) 10 B) C) D)

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

## Question No. : 82

If the roots of the quadratic equation  $x^2 - 8x + 14 = 0$  are *a* and *b*, then calculate the ratio of the difference of the squares to the difference of cubes of the roots of the given equation.

A) (2/25) B)  $(2/5)^2$  C) 25/4 D) None of these

#### Question No.: 83

Joe Nguyen has imported a Tesla Model S electric vehicle to Singapore for his personal use. Singapore's government operates a Carbon Emissions-Based Vehicle Scheme (CEVS) to encourage its citizens to buy low-pollution vehicles. The cleaner the vehicle, the larger the tax rebate; the greater the emissions, the heavier the surcharge. Refer to the table for the scheme. The Land Transport Authority tested the vehicle and estimates that the vehicle consumes 444 Wh/km. For all electric vehicles, a grid emission factor of 0.5 g CO2/Wh is applied to the electric energy consumption.

	Revised	Revised CEVS							
Band	Carbon Emission(CO2g/km)	Cars	Taxis	Rebates/ Surcharges					
A1	Up to 95	\$30,000	\$45,000						
A2	96-105	\$15,000	\$22,500	Rebates					
A3	106-120	\$10,000	\$15,000	Repates					
A4	121-135	\$5,000	\$7,500						
В	136-185	\$0	\$0						
C1	186-200	\$5,000	\$7,500						
C2	201-215	\$10,000	\$15,000	Surcharges					
C3	216-230	\$15,000	\$22,500	Surcharges					
C4	Above 230	\$30,000	\$45,000						

What rebate or surcharge would Joe Nguyen have to pay in order to register his Tesla Model S in Singapore?

A) Rebate, \$ 22,500 B) Rebate, \$ 15,000 C) Surcharge, \$ 5,000 D) Surcharge, \$ 15,000

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

#### Question No.: 84

Each side of a square is 3a - 2b. Assume that the side of the square is a non-zero integer and if a and b are integers with values from 2 to 5, what is the difference between areas of the largest and smallest possible squares? (in numerical value)

A) 120 B) C) D)

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

#### **Question No. : 85**

The iPhone 5S sells without a contract between \$ 560 and 640. Apple pays between \$ 40 to 42 for the iPhone 5S integrated display and touchscreen. It is estimated that 21 to 23% of the bill-of-materials is dedicated to display and touchscreen. What is the maximum dollar price for the iPhone 5S Bill of Materials?

A) 200 B) C) D)

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

#### **Question No. : 86**

G is the centre of a regular hexagon ABCDEF. How many triangles can be formed by using vertices from amongst these seven points? (in numerical value)

A) 32 B) C) D)

# Question No. : 87

Let x, y, z be the numbers, such that x + y + z = 2,  $x^2 + y^2 + z^2 = 3$ , xyz = 4Evaluate  $\frac{1}{xy+z-1} + \frac{1}{yz+x-1} + \frac{1}{zx+y-1}$ 

A) 0 B)  $\frac{2}{9}$  C)  $\frac{2}{27}$  D) 1

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

# Question No. : 88

A function is defined as  $f(x) = ax^2 + bx + c$ , where a, b, c are real numbers. If f(3) = f(-2) = 0, what is the value of f(0)?

A) 6 B) – 6 C) 1 D) Cannot be determined

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

## Question No. : 89

In the USA good shale gas wells tend to produce between 2 and 5 million cubic feet per day at the start. Initial production from the Marcellus shale of Bradford County is typically 4 million cubic feet per day per well. A universal feature of shale gas is high decline rates, typically 40% in the first year and 20% in subsequent years.

Initial flow rates from the Ormen Lange off shore gas field in Norway were of the order 350 million cubic feet per day per well. Annual decline rates for offshore fields are typically 10%.

Over a 3 year period, how many shale wells in Marcellus would be required to produce the same oil as a single well in Ormen Lange?

A) 67 B) 88 C) 102 D) 114

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

# Question No. : 90

Which of the following statements are definitely true?

```
I. The maximum value of (x + 5)(x + 2) / (x + 1) is 9, for x > -1.
```

II. One side of a right angled triangle is 18. Let X and Y denote the maximum and minimum possible areas of this triangle. If the sides of the triangle are integers, then X - Y > 600.

III. A square of maximum possible area is drawn in an equilateral triangle of side  $(2 + \sqrt{3})$ . The area of the circle inscribed in the square is less than 2.

```
A) I and II B) II and III C) I, II and III D) None of these
```

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

# Question No. : 91

There are 2 signals on SB Road, which are 1 km apart and are always out of sync with each other. A pedestrian is trying to measure her walking speed by counting the number of spurts of opposing traffic that she sees as she walks the distance between the two signals. She sees traffic spurts coming in every 50 s. She knows that the signal is timed to turn on every 60 s. If the traffic is moving at 30 km/h, then what speed is she walking at?

A) 4 km/h B) 5 km/h C) 6 km/h D) 7 km/h

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

### Question No. : 92

Rule A.11.01.01 prescribes standards for cow milk; every sample of cow milk in U. P. must contain not less than 3.5 per cent of milk fats and not less than 8.5 per cent non-fatty solids. The standards prescribed for buffalo milk in U. P. in R. A.11.01.02 are that it must contain not less than 6 per cent of milk fats and not less than 9 per cent of non-fatty solid. A sample of milk will be deemed to be adulterated if the milk fats are less than the prescribed minimum or if the non-fatty solids are less than the prescribed minimum. A milkman takes buffalo milk which just meets the standards, adds water, and sells it as cow's milk. What is the maximum percentage (approximate) of water he can add so as to be on the right side of the law?

A) 70% B) 38% C) 6% D) 4%

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

### Question No. : 93

Chhavi had a collection of pencils, but did not have any pens. She exchanges 5 pencils for 3 pens with her sister Simran and thus amasses as many pens as she can. After the exchanges are done Chhavi is left with 25 writing instruments. What is the maximum number of pencils Chhavi could have had at the start?

A) 39 B) 40 C) 41 D) Cannot be determined

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

### Question No. : 94

Proxima Centauri is the closest star from our solar system. It is 4.24 light years away from us. The speed of light is 300,000 km/s. How long would it take the Juno spacecraft, the fastest man-made object, traveling at 40 km/s to reach this star? (Answer rounded off to closest year)

A) 31800 B) C) D)

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

#### **Question No. : 95**

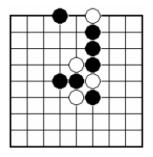
Bad loans, or NPAs, have cumulatively ballooned to about Rs 4 lakh crore or 1.5 times the market value of 24 listed PSU Banks. In comparison, bad loans of private sector banks are just about 6.6 per cent of their total valuation. An analysis of their latest quarter results shows that the cumulative gross NPAs of 24 listed public sector banks, including market leader SBI and its associates, stood at Rs 3,93,035 crore as on December 31, 2015. The gross NPA of 16 listed private sector lenders stood at Rs 46,271 crore as on December 30, 2015.

What is the NPA as a percentage of total market value of the (listed) Banking sector in India approximately?

A) 40 B) 67 C) 37 D) 45

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

Question No. : 96



*Go* is a popular game in Korea. In the game, there are two players who play alternately with black and white stones. Stones are placed at the intersection lines of a grid. Once placed on the board, stones may not be moved, but stones are removed from the board when captured. Capture happens when a stone or group of stones is surrounded by opposing stones on all orthogonally-adjacent points. If black is to play next in this game, where should the stone be placed in order to make a capture of a white stone?

Bottom LH Corner is (0, 0). Top RH corner is (8, 8).

A) (6, 4) B) (2, 4) C) (6, 8) D) (6, 5)

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

# Question No. : 97

A bottler had 5 empty casks, numbered 1 to 5, and he tried the following experiment:

First he filled up cask 1 and cask 2 with beer, and found that together they held 10.5 gallons. Then he poured the beer from cask 1 into cask 3, and to fill up cask 3 he had to add another 3.5 gallons. He then poured cask 2 into cask 4, and had to add another 1.5 gallons to completely fill cask 4. Then he poured cask 3 into cask 5, and to fill cask 5 he was obliged to add another 1.5 gallons. Then he filled cask 3 from cask 4, but as he had some left over in cask 4 he put it into cask 1. He then found that to fill 1 he had to add another 3.5 gallons. What was the capacity of each Cask?

A) 4, 6, 8, 5, 10 gallons B) 6, 9, 10, 12, 5 gallons C) 4, 6.5, 7.5, 8, 9 gallons D) 4, 7, 7.5, 8, 6 gallons

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

# Question No. : 98

The concentration of salt in seawater (salinity) is about 35 parts per thousand. Commercial salt produced in a saltpan has a moisture content of 0.5%. How many kg of seawater are required to produce 1 kg of this salt? (answer in kg, rounded to nearest integer)

A) 28 B) C) D)

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

## Question No. : 99

Suppose there is a video cassette. If it is played from the beginning, the time required to complete half the cassette is 72 minutes at a constant rate. What is the time required when the winding radius of the tape is further reduced by half of the unwinding side? (in numerical value)

A) 18 B) C) D)

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

# Question No. : 100

Following is a quotation from DMB Borewells, Bangalore:

A. Drilling Charges per foot for 6 <sup>1</sup>/<sub>2</sub> inch bore Up to 200 Feet 90
a) Above 200 Feet to 300 Feet 100
b) Above 300 Feet to 400 Feet 110
c) Above 400 Feet to 500 Feet 120
d) Above 500 Feet to 600 Feet 140
e) Above 600 Feet to 700 Feet 160
f) Above 700 Feet to 800 Feet 180
g) Above 800 Feet to 900 Feet 205
B. Water injection charges per feet 15
C. Transportation Charges Lump sum 1000
D. Setting and Alignment charges 2000

## Note: All figures are in Rupees

The company charges Rs. 50,000 advance. If you decide that you don't want to risk more than that amount, then what is the maximum depth (in integers) that you can go for a dry well?

A) 348 B) 443 C) 466 D) 492

# QNo:- 1 ,Correct Answer:- D

**Explanation:-** Remember, in this case, you need to provide the central idea of the passage and each of options 1, 2 and 3 commit the same mistake: these point out to single points in the passage. Option 4, on the other hand, provides the overall gist of the passage.

# QNo:- 2 ,Correct Answer:- B

**Explanation:-** The meanings of the two terms are: Capital punishment: Putting a condemned person to death Corporal punishment: The infliction of physical injury on someone convicted of committing a crime

## QNo:- 3 ,Correct Answer:- D

## **Explanation:**-

Statements I and II actually point to the same sentiment. Refer to the lines: Though a criminal justice system cannot be run on populist grounds in particular cases (that would just be mob rule), in order for justice to be seen to be done it does need to respond to those demands to some extent. Thus, even though the professionals staffing the justice system may understand the severity of prison time as a punishment, their judgement may be superseded by the pressures of popular opinion.

Statement III can be derived from the lines: And an additional physical punishment outsourced to the most vicious and violent thugs in the relevant prison community to determine and administer. Such punishment has the unfortunate characteristics of being only haphazardly related to the original crime, and in falling most heavily upon those who are weakest and most vulnerable.

## QNo:- 4 ,Correct Answer:- D

## **Explanation:**-

Refer to the lines: A punishment that is hard to imagine will not work very well. First, people contemplating breaking the law will not be especially deterred by dread of the punishment. In particular, though the concept of prison as an institution may be somewhat dismaying, it is hard to contemplate the difference in severity of spending different lengths of time in one. You need to understand the purpose of handing out punishments: it is to bring out reform and a sense of fear in people that their actions can lead to such consequences (this is the underlying sentiment of the author); in other words, punishments can have an impact or bring about substantive change if people fully understand them and can see what these punishments do. This sentiment is best expressed by option 4.

### QNo:- 5 ,Correct Answer:- D

**Explanation:-** In the given case, the author of the passage is clearly indicating the interplay of sounds (and various literary devices) that can be included in literature. He highlights the examples of poetic devices and then goes on the say that the same should be included in prose as well. In the overall scheme of things, the concern of the author is to highlight the various ways in which sentences can be enriched and this sentiment is best expressed by option 4. Option 1 is too generic in nature. Option 2 points to a negative association not implied in the passage. Option 3 is similar to option 1 and too generic in nature.

### QNo:- 6 ,Correct Answer:- B

**Explanation:-** The answer can be derived from the liens: As we mature, our delight in sounds becomes less visceral. The word visceral means:obtained through intuition rather than from reasoning or observation. We can see that option 2 is the correct answer in this case

### QNo:- 7 ,Correct Answer:- C

**Explanation:-** Refer to the lines: A verb like flutter implies not just action but lightness, speed, motion and emotion. It can also cast a metaphorical net, catching images of things that flutter — butterflies, eyes — as well as related traits like beauty, innocence or delicacy. These devices are often obvious in poetry, but we have to look harder to see them in prose, especially because they often work on a subliminal level.

The answer can be directly derived from the lines above.

Subliminal means 'below the threshold of conscious perception'.

#### QNo:- 8 ,Correct Answer:- B

**Explanation:-** You need to know the meaning of the word 'subversive' in order to identify the answer. Subversive means 'seeking or intended to subvert an established system or institution'. We can see that option 2 is the best answer in the given case.

#### QNo:- 9 ,Correct Answer:- C

**Explanation:-** In the given case, the author of the passage provides us various examples for logocracies and goes on to highlight the different logocracies that have existed at different points of time. Keeping this in mind, we find option 3 as the correct answer.

#### QNo:- 10 ,Correct Answer:- D

**Explanation:-** Refer to the lines: Every offensive or defensive measure is enforced by wordy battle, and paper war; he who has the longest tongue or readiest quill, is sure to gain the victory - will carry horrour [sic], abuse, and ink shed into the very trenches of the enemy, and without mercy or remorse, put men, women, and children to the point of the - pen! This helps us identify option 4 as the correct answer.

#### QNo:- 11 ,Correct Answer:- B

**Explanation:-** In order to identify the answer: you need to know the meanings of the given words: Vitriolic: Harsh or corrosive in tone Slander: Words falsely spoken that damage the reputation of another Trenchant: Having keenness and forcefulness and penetration in thought, expression, or intellect Criticism: Disapproval expressed by pointing out faults or shortcomings Ironic: Humorously sarcastic or mocking; characterized by often poignant difference or incongruity between what is expected and what actually is Hyperbole: Extravagant exaggeration We can see that option 2 is the best answer in the given case.

# QNo:- 12 ,Correct Answer:- C

**Explanation:** This is a tricky question where you need to understand the question: the meaning of the phrase in the given context is what you need to identify.

Whang refers to the act of hitting vigorously. Now refer to the following lines: A visiting foreigner, "Mustapha Rub-a-dub Keli Khan", describes it as such, by which he means that via the tricky use of words, one can have power over others. Those most adept at this are termed "slang-whangers", while Congress is a "blustering, windy assembly".

In the given context, we can see that option 3 is the best answer.

# QNo:- 13 ,Correct Answer:- A

**Explanation:-** In the given case, form refers to how magic acts and function refers to what is magic related to. This helps us identify option 1 as the correct answer.

# QNo:- 14 ,Correct Answer:- A

**Explanation:-** Refer to the following extract: apotropaic magic (to avert evil). The word avert is key here. It means prevent the occurrence of; prevent from happening. Considering this, we can see that option 1 is the correct answer.

## QNo:- 15 ,Correct Answer:- A

**Explanation:** In this case, it is important to identify the key topics of the passage. These are: magic, religion, food and rituals. Now you need to match these keywords with the given answer options and find the best fit. In this case, the best fit for us in option 1. It is the one closest to our key subjects of the passage.

## QNo:- 16 ,Correct Answer:- C

**Explanation:**- Remember, in this case, we need an answer option that represents the central idea of the passage. We do not have identify an answer option that reflects a single point in the passage. The option which reflects the central idea of the passage is option 3. It covers all aspects of the passage and encapsulates the central idea.

## QNo:- 17 ,Correct Answer:- D

**Explanation:-** Statement I can be derived from the lines: Depending on the societal and cultural context, food can be viewed as ritualistic, festive, sacred, funereal, prestigious, and non-prestigious.

Statement II can be derived from the lines: Orthodox Church does not deny the presence of evil and other evil spirits in everyday life, but it does not support the spreading of superstitions among its followers.

Statement III can be derived from the lines: In Armenia bread was also seen as a form of sustenance in the afterlife

## QNo:- 18 ,Correct Answer:- C

**Explanation:** James George Frazer believed that magic and religion are based on opposing principles. S. A. Tokarev believed that magic and religion were inseparably linked. Thus, their beliefs were disparate.

## QNo:- 19 ,Correct Answer:- B

**Explanation:-** The primary purpose of the author of the passage is to debunk an existing notion. In this passage, the author of the passage is challenging the notion of brain drain and in fact, he goes on to explain that the given situation is one of brain gain. Keeping this in mind, option 2 is the correct answer.

## QNo:- 20 ,Correct Answer:- C

**Explanation:-** The answer can be derived from the lines: Strong moral judgments often accompany this idea, of both the rich countries that supposedly exploit their ability to extract the human resources of poorer countries and of the migrants themselves, who are considered to be selfish and unpatriotic.

## QNo:- 21 ,Correct Answer:- D

**Explanation:-** Option 1 can be derived from the lines: We should start calling it brain gain instead. I realise I am making a bold statement here. Where is the evidence to support it?

Option 2 can be derived from the lines: This example illustrates how deeply-rooted beliefs about the brain drain are. Supercilious means having or showing arrogant superiority to and disdain of those one views as unworthy. We can see that option 3 does not make sense in the given case.

## QNo:- 22 ,Correct Answer:- C

**Explanation:-** In the given case, analytical is the best fit. It reflects the central idea of the passage and the approach adopted by the author. The author goes to explain an existing stream of thought that dominates mainstream and then goes on explain how the same is not applicable in the given case.

## QNo:- 23 ,Correct Answer:- D

**Explanation:-** The word moratorium means: suspension of an ongoing activity. The meanings of the given options are: Hiatus: An interruption in the intensity or amount of something Respite: A (temporary) relief from harm or discomfort Relief: The feeling that comes when something burdensome is removed or reduced Embargo: an official ban on trade or other commercial activity with a particular country. We can see that option 4 is the best answer in the given case.

#### QNo:- 24 ,Correct Answer:- D

#### **Explanation:**-

Statement I can be derived from the lines: And Foreign Policy, an influential and respectable publication, prints his argument without giving it a second thought. Even US President Barack Obama has spoken out about the issue. In August, when addressing young African leaders of the Mandela Washington Fellowship, Obama stated that African leaders could stop the 'brain drain' they were facing by ensuring the basics of the rule of law, democracy, governance and peace. On the face of it, it seems cause for optimism that the detrimental nature of the brain drain is something many can agree on.

Statement II can be derived from the lines: The only problem is that there is almost no evidence to support the idea that the emigration of educated people does harm to the country of origin and ample evidence to indicate the contrary.

Statement III can be derived from the lines: For some reason their content has not permeated the public debate yet. It is high time that it does.

**Explanation:-** Statement 3 is the generic opening sentence in this case. Statement 4 then provides us with the context and then the mandatory pair 2-1 provides us with further details about a event highlighted in the given paragraph.

## QNo:- 26 ,Correct Answer:- 13524

## **Explanation:**-

This is a complicated question and the paragraph in concern is quite difficult to understand. The easiest clue in this case is the opening sentence: statement 1 is the clear opening sentence in this case as it explains the given context. Statement 3 then provides us with further details and statement 5 follows it. Remember, statement 5 needs to precede statements 2 and 4. These two statements highlight the riddle mentioned in statement 5. Statement 2 is the generic question and statement 4 is a more specific question. Therefore, statement 4 follows statement 2.

Overall, this is a tough question and one which might not offer the best return in the exam.

## QNo:- 27 ,Correct Answer:- 32145

**Explanation:** Statement 3 is the opening sentence in this case as it introduces the subject of the paragraph. Statement 2 follows statement 3 as it is a connected comment on the author (extension of statement 3). Statement 1 then follows to provides us a sequence of events. Statement 4 continues the thread of thought and statement 5 concludes it in the given case.

## QNo:- 28 ,Correct Answer:- 32451

**Explanation:** Statement 3 is the opening sentence in this case. It sets up the given discussion. Statements 2 and 4 provides us further context. These two statements are the tricky ones. Statement 4 follows statement 2 in the given case. The reason for this is the link-up between statement 4 and statement 5. Statement 4 talks about retirement and statement 5 then continues the subject of the scene from the office window. Statement 1 follows statement 5 (as it a comment on the given scenery as well as it is the concluding statement in this case).

## QNo:- 29 ,Correct Answer:- 3142

**Explanation:-** This is a simple question. Statement 3 is the opening sentence in the given case. Statement 1 provides further details for the statement of George Santayana. Statement 4 then extends it and statement 2 takes up the discussion on the word 'word' in the last sentence of the para-jumble.

## QNo:- 30 ,Correct Answer:- 2

**Explanation:-** Statements 3-1-4 form the connected set of statements in the given case. These three statements focus on the negative aspects of Elizabeth Hardwicks work. Statement 2 is the odd one out as it highlights her positives.

## QNo:- 31 ,Correct Answer:- 2

**Explanation:** This is the easiest question in this set. Statement is the clear odd one out here and its subject does not find any mention in the other three statements. Statements 3-1-4 form the connected set of statements in the given case. In fact, the disconnection of statement 2 from the other statements is so glaringly obvious that you might be tempted to think that there is some trick in this question. This is a direct question; you do not need to worry about any trick.

## QNo:- 32 ,Correct Answer:- 1

**Explanation:**- This is a tough question on a couple of accounts:

1. the excessive amount of text in each of the statements.

2. you need to use some logic to identify the odd one out.

Statements 4-3-2 form the connected set of statements in the given case. How do you identify this set? These three statements are

descriptive in nature and are simply providing details for a certain essay and the lament of a critic. Statement 1 is an opinion on the other hand. This helps us rule out statement 1 as the odd one out (even though it is based on the same subject).

## QNo:- 33 ,Correct Answer:- 1

**Explanation:-** Statements 3-2-4 form the connected set of statements. These statements talk about Kierkegaard's writing career. Statement 1 is odd one out as it talks about Kierkegaard's personality rather than his work (which is the subject of the other sentences).

## QNo:- 34 ,Correct Answer:- 3

**Explanation:-** Statement 4 is the opening sentence in this case. Statement 2 then follows it and statement 1 provides examples for the topic mentioned in statement 1. Statement 3 is the odd one out as there is no mention on AI in the given paragraph.

## QNo:- 35 ,Correct Answer:- C

**Explanation:-** The total number of customers surveyed is 70 + 46 + 38 + 33 + 20 + 9 + 75 + 64 + 45 + 43 + 40 + 17 = 500. The number of customers willing to wait not more than 30 minutes on Friday night is 70 + 46 + 38 = 154. The required probability is 154/500 = 0.308

## QNo:- 36 ,Correct Answer:- D

**Explanation:** The total number of customers surveyed for Saturday night is 75 + 64 + 45 + 43 + 40 + 17 = 284. The number of customers willing to wait at least 25 minutes on Saturday night is 64 + 45 + 43 + 40 + 17 = 209. The required probability is 209/284 = 0.7359.

## QNo:- 37 ,Correct Answer:- C

**Explanation:** The total number of customers surveyed for Friday and Saturday nights is 70 + 46 + 38 + 33 + 20 + 9 + 75 + 64 + 45 + 43 + 40 + 17 = 500. The number of customers willing to wait at least 30 minutes for a table is 500 - 70 - 75 - 46 - 64 = 245. The required probability is 245/500 = 0.49.

## QNo:- 38 ,Correct Answer:- C

Explanation:- On Friday nights, on an average, a customer is willing to wait  $\frac{(70 \times 20) + (46 \times 25) + (38 \times 30) + (33 \times 35) + (20 \times 40) + (9 \times 45)}{(70 + 46 + 38 + 33 + 20 + 9)} = \frac{6050}{216} = 28.009 \text{ minutes.}$ 

On Saturday nights, on an average, a customer is willing to wait  $\frac{(75 \times 20) + (64 \times 25) + (45 \times 30) + (43 \times 35) + (40 \times 40) + (17 \times 45)}{(75 + 64 + 45 + 43 + 40 + 17)} = \frac{8320}{284} = 29.29 \text{ minutes.}$ 

So, on an average, customers are willing to wait 29.29 – 28.009 = 1.281 » 1.3 minutes more on Saturday night than on Friday night.

## QNo:- 39 ,Correct Answer:- 9000

**Explanation:-** The total transaction amount is 27.78 + 14.51 + 38.17 + 10 + 29.28 + 23.32 = Rs. 143.06 billion. The total number of transactions is 24.79 + 24.63 + 34.52 + 12.51 + 41.52 + 23.82 = 161.79 lakhs. So, the average amount per transaction is

 $\frac{143.06 \times 10^9}{161.79 \times 10^5} = 0.8842 \times 10^4 = \text{Rs.} \quad 8842 \approx \text{Rs.} \quad 9000.$ 

### QNo:- 40 ,Correct Answer:- 27

**Explanation:** The total number of credit cards issued by HDFC Bank is 28% of 21.3 million = 5.964 million. Of these, 16.13 lakh credit cards are in use. The required percentage is  $\frac{16.13 \times 10^5}{5.964 \times 10^6} \times 100 = 27.041\% \approx 27.04\%$ .

### QNo:- 41 ,Correct Answer:- 52052

**Explanation:** The expenditure on Fashion using SBI credit cards is 22% of 38.17 billion = Rs. 8.3974 billion. The expenditure on Fashion using ICICI Bank credit cards is 22% of 14.51 billion = Rs. 3.1922 billion. The required difference is Rs. 5.2052 billion = Rs. 52052 lakhs.

<u>Alternately</u>, the difference between the total expenditure using SBI and ICICI Bank credit cards is 38.17 – 14.51 = Rs. 23.66 billion. The difference in expenditure on Fashion is therefore 22% of 23.66 billion = Rs. 5.2052 billion = Rs. 52052 lakhs.

### QNo:- 42 ,Correct Answer:- 30

Explanation:- The top four banks according to market share are HDFC Bank, ICICI Bank, SBI and Citibank. For HDFC Bank, the 16.13×10<sup>5</sup> <100 number of credit cards in use as a percentage of credit cards issued is 28%×21.3×10<sup>6</sup> = 27.041% = 27.04%. For ICICI Bank. 4.33×10° ×100 the number of credit cards in use as a percentage of credit cards issued is  $15\% \times 21.3 \times 10^6$ = 13.552% = 13.55%. For SBI, the 11.68×10<sup>5</sup> number of credit cards in use as a percentage of credit cards issued is  $18\% \times 21.3 \times 10^6$ = 30.464% = 30.46%. For Citibank, 1.29×10<sup>5</sup> the number of credit cards in use as a percentage of credit cards issued is  $10\% \times 21.3 \times 10^6$ = 6.056% = 6.06%. Thus, for these four banks, the highest number of credit cards in use as a percentage of credit cards issued by that bank is 30.46%.

## QNo:- 43 ,Correct Answer:- C

#### **Explanation:**-

The number of ATMs in April 2014 was 162543. The third line graph shows the percentage increase in the number of ATMs as compared to the previous month. So, the number of ATMs in April 2015 is  $162543 \times 1.0145 \times 1.0125 \times 1.0115 \times 1.0115 \times 1.007 \times 1.0065 \times 1.009 \times 1.0055 \times 1.0075 \times 1.015 \times 1.006 = 182513 \approx 183,000.$ 

### QNo:- 44 ,Correct Answer:- B

**Explanation:** The number of ATMs in April 2014 was 162543. The third line graph shows the percentage increase in the number of ATMs as compared to the previous month. So, the number of ATMs in October 2014 is  $162543 \times 1.0145 \times 1.0125 \times 1.0115 \times 1.0115 \times 1.0115 \times 1.007 = 173739 \approx 173,740$ .

The number of withdrawals in October 2014 is around 590 million. So, the average number of withdrawals per ATM in October 2014 is  $590 \times 10^6 / 173740 = 3395$ .

#### QNo:- 45 ,Correct Answer:- A

**Explanation:** The number of ATMs in April 2014 was 162543. The third line graph shows the percentage increase in the number of ATMs as compared to the previous month. So, the number of ATMs in January 2015 is  $162543 \times 1.0145 \times 1.0125 \times 1.0115 \times 1.0115 \times 1.0115 \times 1.0065 \times 1.009 \times 1.0055 = 177,412 \approx 177,400.$ 

The amount withdrawn from ATMs in January 2015 is approximately Rs. 1.9 trillion. So, the average amount withdrawn per ATM in January 2015 is  $1.9 \times 10^{12}/177400 = 10710260 \approx \text{Rs.}$  10.7 million.

### QNo:- 46 ,Correct Answer:- A

**Explanation:-** In July 2014, the total amount withdrawn is approximately Rs. 1.85 trillion and the number of withdrawals is approximately 578 million. So, the average amount per withdrawal in July 2014 is  $1.85 \times 10^{12} / 578 \times 10^{6}$  = Rs. 3200.

### QNo:- 47 ,Correct Answer:- C

**Explanation:** The expenditure on TV ads in 2011 was Rs. 87 lakh. In 2012, this expenditure has increased by 8%. So, the expenditure on TV ads in 2012 was 87 × 1.08 = Rs. 93.96 lakh. Continuing in this manner, we can calculate the expenditure on TV ads in 2015 as 87 × 1.08 × 1.09 × 1.01 × 0.97 = Rs. 100.337 lakh. The expenditure on Newspaper ads in 2015 is  $42 \times 1.02 \times 1.05 \times 0.97 \times 0.95$  = Rs. 41.45 lakh. The expenditure on Pamphlets in 2015 is  $4 \times 1.03 \times 1.04 \times 1 \times 0.98$  = Rs. 4.199 lakh. The expenditure on Hoardings in 2015 is  $25 \times 1.05 \times 1.08 \times 1.07 \times 1.09$  = Rs. 33.064 lakh. The expenditure on Freebies in 2015 is  $2 \times 1.02 \times 1.02 \times 1.07 \times 0.92$  = Rs. 1.807 lakh. Thus the total expenditure on promotional activities in 2015 was 100.337 + 41.45 + 4.199 + 33.064 + 1.807 = Rs. 180.857 lakh ≈ Rs. 1.8 crore.

#### QNo:- 48 ,Correct Answer:- A

#### **Explanation:**-

The expenditure on TV ads in 2011 was Rs. 87 lakh. The expenditure on TV ads in 2012 was  $87 \times 1.08 = Rs. 93.96$  lakh. The expenditure on TV ads in 2013 was  $93.96 \times 1.09 = Rs. 102.416$  lakh. The expenditure on TV ads in 2014 was  $102.416 \times 1.01 = Rs. 103.44$  lakh. The expenditure on TV ads in 2015 was  $103.44 \times 0.97 = Rs. 100.33$  lakh. Thus the total expenditure on TV ads from 2011 to 2015 is 87 + 93.96 + 102.416 + 103.44 + 100.33 = Rs. 487.146 lakh = Rs. 48.71 million  $\approx 50$  million.

#### QNo:- 49 ,Correct Answer:- C

#### **Explanation:**-

The expenditure on TV ads in 2014 as  $87 \times 1.08 \times 1.09 \times 1.01 = \text{Rs}$ . 103.44 lakh. The expenditure on Newspaper ads in 2014 is 42  $\times 1.02 \times 1.05 \times 0.97 = \text{Rs}$ . 43.63 lakh. The expenditure on Pamphlets in 2014 is  $4 \times 1.03 \times 1.04 \times 1 = \text{Rs}$ . 4.28 lakh. The expenditure on Hoardings in 2014 is  $25 \times 1.05 \times 1.08 \times 1.07 = \text{Rs}$ . 30.334 lakh. The expenditure on Freebies in 2014 is  $2 \times 1.02 \times 1.07 \times 0.9 = \text{Rs}$ . 1.964 lakh. The total expenditure on TV ads and Newspaper ads in 2014 was 103.44 + 43.63 = Rs. 147.07 lakh and the total expenditure on Pamphlets, Hoardings and Freebies in 2014 was 4.28 + 30.334 + 1.964 = Rs. 36.58 lakh. The required difference is 147.07 - 36.58 = Rs. 110.49 lakh.

#### QNo:- 50 ,Correct Answer:- B

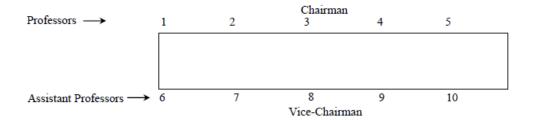
#### **Explanation:**-

The expenditure on TV ads in 2013 as  $87 \times 1.08 \times 1.09 = \text{Rs}$ . 102.41 lakh. The expenditure on Newspaper ads in 2013 is  $42 \times 1.02 \times 1.05 = \text{Rs}$ . 44.98 lakh. The expenditure on Pamphlets in 2013 is  $4 \times 1.03 \times 1.04 = \text{Rs}$ . 4.28 lakh. The expenditure on Hoardings in 2013 is  $25 \times 1.05 \times 1.08 = \text{Rs}$ . 28.35 lakh. The expenditure on Freebies in 2013 is  $2 \times 1.02 \times 1.07 = \text{Rs}$ . 2.18 lakh. The total expenditure on promotional activities in 2013 was 102.41 + 44.98 + 4.28 + 28.35 + 2.18 = Rs. 182.2 lakh. Thus, in 2013, the expenditure on TV ads forms (102.41/182.2)  $\times 100 = 56.2\%$  of the total expenditure on promotional activities.

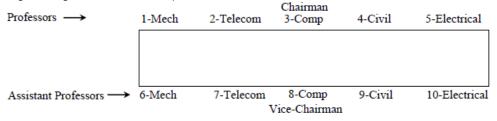
#### QNo:- 51 ,Correct Answer:- D

#### **Explanation:**-

Consider the following seating arrangement for Professors from 1 to 5 and Assistant Professors from 6 to 10. The Chairman and the Vice-Chairman of the committee are seated at positions 3 and 8 respectively.



From the 2<sup>nd</sup> clue, we know that the Assistant Professor of Electrical Engineering is seated at position 10. From the 5<sup>th</sup> clue, we know that the Professors of Telecommunication Engineering and Civil Engineering are seated at positions 2 and 4 respectively. From the 4<sup>th</sup> clue, we know that the Assistant Professor of Civil Engineering is seated at position 9. From the 6<sup>th</sup> clue, we know that the Assistant Professor of Civil Engineering and Computer Engineering are seated at positions 7 and 8 respectively. So, the Vice-Chairman of the committee is the Assistant Professor of Computer Engineering. Based on this arrangement, we now know that the Assistant Professor of Mechanical Engineering must be seated at position 6. From the 7<sup>th</sup> clue, we know that the Professor of Electrical Engineering is seated at position 5. From the 1<sup>st</sup> clue, we know that the Professor of Computer Engineering must be seated at position 1. Based on this arrangement, we now know that the Professor of Computer Engineering is seated at position 3, and is, therefore, the Chairman of the committee.

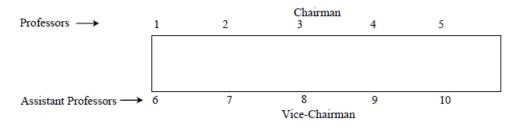


The Vice-Chairman of the committee is the Assistant Professor of Computer Engineering.

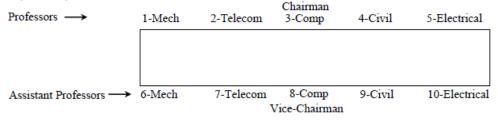
# QNo:- 52 ,Correct Answer:- B

## **Explanation:**-

Consider the following seating arrangement for Professors from 1 to 5 and Assistant Professors from 6 to 10. The Chairman and the Vice-Chairman of the committee are seated at positions 3 and 8 respectively.



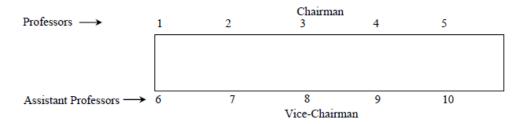
From the 2<sup>nd</sup> clue, we know that the Assistant Professor of Electrical Engineering is seated at position 10. From the 5<sup>th</sup> clue, we know that the Professors of Telecommunication Engineering and Civil Engineering are seated at positions 2 and 4 respectively. From the 4<sup>th</sup> clue, we know that the Assistant Professor of Civil Engineering is seated at position 9. From the 6<sup>th</sup> clue, we know that the Assistant Professor of Civil Engineering and Computer Engineering are seated at positions 7 and 8 respectively. So, the Vice-Chairman of the committee is the Assistant Professor of Computer Engineering. Based on this arrangement, we now know that the Assistant Professor of Mechanical Engineering must be seated at position 6. From the 7<sup>th</sup> clue, we know that the Professor of Electrical Engineering is seated at position 5. From the 1<sup>st</sup> clue, we know that the Professor of Computer Engineering is seated at position 3, and is, therefore, the Chairman of the committee.



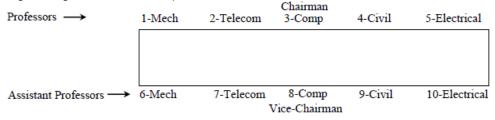
# QNo:- 53 ,Correct Answer:- B

### **Explanation:**-

Consider the following seating arrangement for Professors from 1 to 5 and Assistant Professors from 6 to 10. The Chairman and the Vice-Chairman of the committee are seated at positions 3 and 8 respectively.



From the 2<sup>nd</sup> clue, we know that the Assistant Professor of Electrical Engineering is seated at position 10. From the 5<sup>th</sup> clue, we know that the Professors of Telecommunication Engineering and Civil Engineering are seated at positions 2 and 4 respectively. From the 4<sup>th</sup> clue, we know that the Assistant Professor of Civil Engineering is seated at position 9. From the 6<sup>th</sup> clue, we know that the Assistant Professor of Civil Engineering and Computer Engineering are seated at positions 7 and 8 respectively. So, the Vice-Chairman of the committee is the Assistant Professor of Computer Engineering. Based on this arrangement, we now know that the Assistant Professor of Mechanical Engineering must be seated at position 6. From the 7<sup>th</sup> clue, we know that the Professor of Electrical Engineering is seated at position 5. From the 1<sup>st</sup> clue, we know that the Professor of Computer Engineering must be seated at position 1. Based on this arrangement, we now know that the Professor of Computer Engineering is seated at position 3, and is, therefore, the Chairman of the committee.

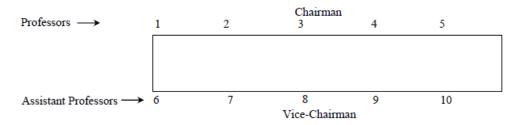


The Assistant Professor of Civil Engineering is seated opposite the Professor of Civil Engineering.

## QNo:- 54 ,Correct Answer:- B

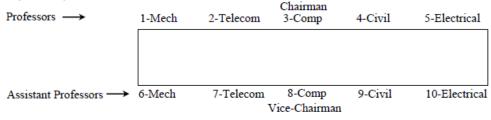
## **Explanation:**-

Consider the following seating arrangement for Professors from 1 to 5 and Assistant Professors from 6 to 10. The Chairman and the Vice-Chairman of the committee are seated at positions 3 and 8 respectively.



From the 2<sup>nd</sup> clue, we know that the Assistant Professor of Electrical Engineering is seated at position 10. From the 5<sup>th</sup> clue, we know that the Professors of Telecommunication Engineering and Civil Engineering are seated at positions 2 and 4 respectively. From the 4<sup>th</sup> clue, we know that the Assistant Professor of Civil Engineering is seated at position 9. From the 6<sup>th</sup> clue, we know that the Assistant Professor of Civil Engineering and Computer Engineering are seated at positions 7 and 8 respectively. So, the Vice-Chairman of the committee is the Assistant Professor of Computer Engineering. Based on this

arrangement, we now know that the Assistant Professor of Mechanical Engineering must be seated at position 6. From the 7<sup>th</sup> clue, we know that the Professor of Electrical Engineering is seated at position 5. From the 1<sup>st</sup> clue, we know that the Professor of Mechanical Engineering is seated at position 1. Based on this arrangement, we now know that the Professor of Computer Engineering must be seated at position 3, and is, therefore, the Chairman of the committee.



The Vice-Chairman of the committee is the Assistant Professor of Computer Engineering.

# QNo:- 55 ,Correct Answer:- D

## **Explanation:**-

From the basic clues, we can match the following information.

ſ	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					Shivram		
			Personal Interviews		Entrepreneurship	Case Studies	

From the 2<sup>nd</sup> clue, we can determine that Pranav's session is conducted on Saturday. From the 5<sup>th</sup> clue, we know that Satish, Prithviraj and Bhushan conduct their sessions on consecutive days. This leads to a possibility of either Sunday, Monday and Tuesday or Monday, Tuesday and Wednesday. From the 3<sup>rd</sup> clue, we know that Avadhoot conducts the session on Extempore. So, Avadhoot's session is conducted either on Sunday or on Wednesday. From the 4<sup>th</sup> clue, we know that the session on Group Discussions is conducted on the day immediately before the day on which the session on Written Assessment is conducted. The only possibility, therefore, is Group Discussions on Sunday and Written Assessment on Monday. Avadhoot will therefore conduct the session on Extempore on Wednesday. So, Satish, Prithviraj and Bhushan conduct their sessions on Sunday, Monday and Tuesday respectively. We can now complete the table as shown below.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Satish	Prithviraj	Bhushan	Avadhoot	Shivram	Chetan	Pranav
Group Discussions	Written Assessment	Personal Interviews	Extempore	Entrepreneurship	Case Studies	Group Exercises

Satish conducts the session on Group Discussions on Sunday.

## QNo:- 56 ,Correct Answer:- B

#### **Explanation:**-

From the basic clues, we can match the following information.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				Shivram		
		Personal Interviews		Entrepreneurship	Case Studies	

From the 2<sup>nd</sup> clue, we can determine that Pranav's session is conducted on Saturday. From the 5<sup>th</sup> clue, we know that Satish, Prithviraj and Bhushan conduct their sessions on consecutive days. This leads to a possibility of either Sunday, Monday and

Tuesday or Monday, Tuesday and Wednesday. From the 3<sup>rd</sup> clue, we know that Avadhoot conducts the session on Extempore. So, Avadhoot's session is conducted either on Sunday or on Wednesday. From the 4<sup>th</sup> clue, we know that the session on Group Discussions is conducted on the day immediately before the day on which the session on Written Assessment is conducted. The only possibility, therefore, is Group Discussions on Sunday and Written Assessment on Monday. Avadhoot will therefore conduct the session on Extempore on Wednesday. So, Satish, Prithviraj and Bhushan conduct their sessions on Sunday, Monday and Tuesday respectively. We can now complete the table as shown below.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Satish	Prithviraj	Bhushan	Avadhoot	Shivram	Chetan	Pranav
Group Discussions	Written Assessment	Personal Interviews	Extempore	Entrepreneurship	Case Studies	Group Exercises

Chetan conducts the session on Case Studies

# QNo:- 57 ,Correct Answer:- C

# **Explanation:**-

From the basic clues, we can match the following information.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				Shivram		
		Personal Interviews		Entrepreneurship	Case Studies	

From the 2<sup>nd</sup> clue, we can determine that Pranav's session is conducted on Saturday. From the 5<sup>th</sup> clue, we know that Satish, Prithviraj and Bhushan conduct their sessions on consecutive days. This leads to a possibility of either Sunday, Monday and Tuesday or Monday, Tuesday and Wednesday. From the 3<sup>rd</sup> clue, we know that Avadhoot conducts the session on Extempore. So, Avadhoot's session is conducted either on Sunday or on Wednesday. From the 4<sup>th</sup> clue, we know that the session on Group Discussions is conducted on the day immediately before the day on which the session on Written Assessment is conducted. The only possibility, therefore, is Group Discussions on Sunday and Written Assessment on Monday. Avadhoot will therefore conduct the session on Extempore on Wednesday. So, Satish, Prithviraj and Bhushan conduct their sessions on Sunday, Monday and Tuesday respectively. We can now complete the table as shown below.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Satish	Prithviraj	Bhushan	Avadhoot	Shivram	Chetan	Pranav
Group Discussions	Written Assessment	Personal Interviews	Extempore	Entrepreneurship	Case Studies	Group Exercises

Bhushan conducts the session on Personal Interviews. So option 3 is false.

## QNo:- 58 ,Correct Answer:- A

## **Explanation:**-

From the basic clues, we can match the following information.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				Shivram		
		Personal Interviews		Entrepreneurship	Case Studies	

From the 2<sup>nd</sup> clue, we can determine that Pranav's session is conducted on Saturday. From the 5<sup>th</sup> clue, we know that Satish, Prithviraj and Bhushan conduct their sessions on consecutive days. This leads to a possibility of either Sunday, Monday and Tuesday or Monday, Tuesday and Wednesday. From the 3<sup>rd</sup> clue, we know that Avadhoot conducts the session on Extempore. So, Avadhoot's session is conducted either on Sunday or on Wednesday. From the 4<sup>th</sup> clue, we know that the session on Group Discussions is conducted on the day immediately before the day on which the session on Written Assessment is conducted. The only possibility, therefore, is Group Discussions on Sunday and Written Assessment on Monday. Avadhoot will therefore conduct the session on Extempore on Wednesday. So, Satish, Prithviraj and Bhushan conduct their sessions on Sunday, Monday and Tuesday respectively. We can now complete the table as shown below.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Satish	Prithviraj	Bhushan	Avadhoot	Shivram	Chetan	Pranav
Group Discussions	Written Assessment	Personal Interviews	Extempore	Entrepreneurship	Case Studies	Group Exercises

The session on Extempore is conducted by Avadhoot on Wednesday and the session on Personal Interviews is conducted on Tuesday. So, option 1 is true.

### QNo:- 59 ,Correct Answer:- 185

#### **Explanation:**-

Maximum amount that Sameer can have when he has four eights and four sevens and Amar takes out four ones and four twos every time of different suit than that of Sameer. So maximum sum won =  $[2 \times (8 - 1) + 2 \times (7 - 2)]$  3 = 72 and 2\*(8-1) \*3 times because one 8 will be of same suit that of 1. again 2\*(7-2)\*3 times (similar reason)next two will be 8 and 1 of same suit. and other 2\*(6-3)

Total = 100+72+7+6=185

# QNo:- 60 ,Correct Answer:- 0

#### **Explanation:**-

Minimum amount won is zero when both the players have cards of same face value.

## QNo:- 61 ,Correct Answer:- 16

#### **Explanation:**-

Following is the procedure shown, with the count, and the person number (corresponding to the original seating number) We cross the count equal to a prime number.

```
Count 1 1 1 1 1 1 6 1 8 9 10 1 12 15 14 15 16 1 18 15 20
Seat No. 1 1 1 15 4 15 6 1 8 9 10 11 12 15 14 15 16 11 18 15 20
```

Count 1 2 3 4 5 6 7 8 9 10 1 12 Seat No. 1 6 5 8 5 10 2 14 15 16 8 20

Count 1 2 2 4 6 7 Seat No. 1 8 10 14 15 16 20

Count 1 2 3 Seat No. 1 14 (16) only 3 person are left, and the seat number corresponding to the 3<sup>rd</sup> person is 16 seat number.

# QNo:- 62 ,Correct Answer:- 14

### **Explanation:**-

Count 1 2 2 4 5 6 7 8 9 10 1 12 5 Seat No. 1 2 6 8 9 10 12 14 15 56 18 20

Count 1 2 5 4 5 6 7 8 Seat No. 1 2 5 9 12 14 25 18

Count 1 2 3 4 15 Seat No. 1 2 18 14 16

Count 1 2 3 Seat No. 1 2 0 So, the third person is corresponding to the seat number. 14.

## QNo:- 63 ,Correct Answer:- B

## **Explanation:**-

The three people mentioned in each of the  $1^{st}$ ,  $3^{rd}$ ,  $4^{th}$  and the  $9^{th}$  clues are three different people.

Abhinav could be the wrestler or the cricket player and his last name could be Bindra or Kumar.

But since Bindra is neither the wrestler nor the cricket player and Kumar is not the wrestler, Abhinav must be the cricket player and his last name must be Kumar.

Now, Gautam can only be Bindra.

Gautam and Yogeshwar are one of the football player and the tennis player and Baichung is one of football player and wrestler. So, Baichung must be the wrestler

Leander and Yogeshwar are one of Bhutia and Paes.

Since Yogeshwar is one of the football player and the tennis player and Bhutia is neither the football player nor tennis player, we can conclude that Leander is Bhutia.

Since Paes is not the tennis player, Paes must be the football player and therefore Bindra must be the tennis player. We can now match the given information as:

- Abhinav Kumar Cricket
- Baichung Gambhir Wrestling
- Gautam Bindra Tennis
- Leander Bhutia Archery
- Yogeshwar Paes Football ; Hence it can be seen that only second option matches with this. Hence 2.

## QNo:- 64 ,Correct Answer:- D

## **Explanation:**-

The three people mentioned in each of the 1<sup>st</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and the 9<sup>th</sup> clues are three different people. Abhinav could be the wrestler or the cricket player and his last name could be Bindra or Kumar. But since Bindra is neither the wrestler nor the cricket player and Kumar is not the wrestler, Abhinav must be the cricket player and his last name must be Kumar. Now, Gautam can only be Bindra. Gautam and Yogeshwar are one of the football player and the tennis player and Baichung is one of football player and wrestler. So, Baichung must be the wrestler Leander and Yogeshwar are one of Bhutia and Paes. Since Yogeshwar is one of the football player and the tennis player and Bhutia is neither the football player nor tennis player, we can conclude that Leander is Bhutia. Since Paes is not the tennis player, Paes must be the football player and therefore Bindra must be the tennis player. We can now match the given information as:

- Abhinav Kumar Cricket
- Baichung Gambhir Wrestling
- Gautam Bindra Tennis
- Leander Bhutia Archery
- Yogeshwar Paes Football. Hence 4th option is the answer.

# QNo:- 65 ,Correct Answer:- B

# **Explanation:**-

The three people mentioned in each of the  $1^{st}$ ,  $3^{rd}$ ,  $4^{th}$  and the  $9^{th}$  clues are three different people.

Abhinav could be the wrestler or the cricket player and his last name could be Bindra or Kumar.

But since Bindra is neither the wrestler nor the cricket player and Kumar is not the wrestler, Abhinav must be the cricket player and his last name must be Kumar.

Now, Gautam can only be Bindra.

Gautam and Yogeshwar are one of the football player and the tennis player and Baichung is one of football player and wrestler. So, Baichung must be the wrestler

Leander and Yogeshwar are one of Bhutia and Paes.

Since Yogeshwar is one of the football player and the tennis player and Bhutia is neither the football player nor tennis player, we can conclude that Leander is Bhutia.

Since Paes is not the tennis player, Paes must be the football player and therefore Bindra must be the tennis player. We can now match the given information as:

- Abhinav Kumar Cricket
- Baichung Gambhir Wrestling
- Gautam Bindra Tennis
- Leander Bhutia Archery
- Yogeshwar Paes Football. Hence 2nd option is the answer as Leander is the one who won the award for Archery.

# QNo:- 66 ,Correct Answer:- D

# **Explanation:**-

The three people mentioned in each of the  $1^{st}$ ,  $3^{rd}$ ,  $4^{th}$  and the  $9^{th}$  clues are three different people.

Abhinav could be the wrestler or the cricket player and his last name could be Bindra or Kumar.

But since Bindra is neither the wrestler nor the cricket player and Kumar is not the wrestler, Abhinav must be the cricket player and his last name must be Kumar.

Now, Gautam can only be Bindra.

Gautam and Yogeshwar are one of the football player and the tennis player and Baichung is one of football player and wrestler. So, Baichung must be the wrestler

Leander and Yogeshwar are one of Bhutia and Paes.

Since Yogeshwar is one of the football player and the tennis player and Bhutia is neither the football player nor tennis player, we can conclude that Leander is Bhutia.

Since Paes is not the tennis player, Paes must be the football player and therefore Bindra must be the tennis player. We can now match the given information as:

- Abhinav Kumar Cricket
- Baichung Gambhir Wrestling

- Gautam Bindra Tennis
- Leander Bhutia Archery
- Yogeshwar Paes Football

*Thus all the given orders are correct except for the last option. Hence 4th option is the answer.* 

# QNo:- 67 ,Correct Answer:- 30

*Explanation:-* An SPF 10 product used before going in the sun, and when the user normally burns in 8 minutes, provides about 8 × 10, or 80 minutes of protection.

Putting the lotion on 5 minutes after being in the sun uses 5/8 of the time before being burned. Thus, 3/8 of the normal protection time before burning is left.

Because (3/8)(80) is 30, a person has 30 minutes before burning.

# QNo:- 68 ,Correct Answer:- B

*Explanation:-* Use the pattern described to complete the table of gifts received on each day.

Day	1	2	3	4	5	6	7	8	9	10	Total
Alligator	1	1	1	1	1	1	1	1	1	1	10
Bat		2	2	2	2	2	2	2	2	2	18
Cat			3	3	3	3	3	3	3	3	24
Dog				4	4	4	4	4	4	4	28
Elephant					5	5	5	5	5	5	30
Fox						6	6	6	6	6	30
Giraffe							7	7	7	7	28
Нірро								8	8	8	24
Iguana									9	9	18
Jackal										10	10

## QNo:- 69 ,Correct Answer:- 20

**Explanation:-** Chendu will bowl a total of six games. To reach an average of at least 114, his total score must be at least 6 × 114, or 684. The sum of his scores after five games is 560. Subtracting 560 from 684 leaves 124. Therefore, any score 124 or higher will result in a win for Chendu.

Now, consider that Chendu has scored higher than 124 in only one of the previous five games. Based on these performances, you might estimate that his chances of winning are 1/5, or 20%.

## QNo:- 70 ,Correct Answer:- C

## **Explanation:**-

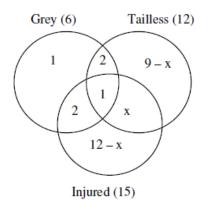
For n to be maximum we have to arrange days will minimum difference between them. Now total day in July are 31.

Let |' denotes the days on which Rohan goes to market then |0|1|2|3|4|5|6| = 29 days.

The number between 1' represents the difference in days between two visits.

Hence maximum days are 8. Note since we have to follow the first rule, the difference has to be arranged in different way and we can use 7 and 8 instead of 5 and 6 difference or any such combination as the total days are 31

One solution of this is 1, 9, 14, 17, 18, 20, 26, 29 or 30. Note multiple solutions are possible but in all case you cannot arrange them in such way that n > 8, as then numbers of days he does not go to market + number of days he goes to market > 31.



By using the information given in the question, we can make the following Venn diagram.

### **Explanation:**-

There were a total of 24 lizards for the month, so adding up all the sections of the diagram's circles gives me: 1 + 2 + 1 + 2 + x + (12 - x) + (9 - x) = 27 - x = 24So x = 3.

### QNo:- 72 ,Correct Answer:- 10

*Explanation:*  $D \cup L$  is 100 - 25 = 75, which means that 75 students are preparing for either law or design.

 $75 = D + L - D \cap L$   $75 = 50 + 35 - D \cap L$  $So D \cap L = 85 - 75 = 10$ 

#### QNo:- 73 ,Correct Answer:- 5

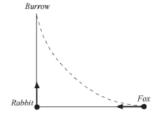
**Explanation:-** She runs for an additional 11.32 - 10.78 = 0.54 s If she runs 100 m in 10.78 s, so she would have run in 0.54 s,  $100/10.78 \times 0.54 = 5$  m.

## QNo:- 74 ,Correct Answer:- B

**Explanation:-** If the fox had moved in a straight line towards the burrow, to get to the burrow at the same time as the rabbit, he would need a speed of

 $\sqrt{2} \times 10 \text{ m/s} = 14.14 \text{ m/s}$ 

However he takes a longer path as shown in the diagram.



So he would take more than 14.14 m/s. Also the maximum speed will be  $2 \times 10 = 20$  m/s

# QNo:- 75 ,Correct Answer:- B

**Explanation:** Let's say 100 babies were born in Telangana. 58 of them were delivered by C section. Let x be the total number of deliveries at govt hospitals. So C sections at govt hospitals is 0.406xIn private hospitals, number of deliveries is 100 - xNumber of C sections there would be  $(100 - x) \times 0.75 = 75 - 0.75x$ Adding both we get 0.406x + 75 - 0.75x = 5817 = 0.344xx = 49.4So percentage of deliveries at govt hospitals is about 49 percent.

### QNo:- 76 ,Correct Answer:- A

**Explanation:-** 1 – He jogs for 5 miles a day or 35 miles a week. He would lose about one pound for the 35 miles he walks. So this fits.

2 - If you walk briskly (at a pace of 4 miles per hour) for 30 minutes on five out of seven days, you'll log 10 miles a week. That means it would take three-and-a-half weeks to lose one pound.

3 - If you altered your diet and cut back by 250 calories a day, you'd lose a pound in two weeks. (3500/250 = 14)

4 - If you ate 250 fewer calories a day and walked for 30 minutes a day, it would take just over a week to lose one pound. 250 × 7

 $+ 2 \times 7 \times 100 = 1750 + 1400 = 3150$  calories per week. So this would take more than one week.

## QNo:- 77 ,Correct Answer:- 400

#### **Explanation:**-

```
C. P. of aritcle = Rs. X

\therefore \text{ First SP} = \frac{80x}{100} = \text{Rs. } \frac{4x}{5}
Case II

\frac{4x}{5} + 100 = \frac{x \times 105}{100} = \frac{21x}{20}
\Rightarrow \frac{21x}{20} - \frac{4x}{5} = 100 \Rightarrow \frac{21x - 16x}{20} = 100
\Rightarrow 5x = 2000 \Rightarrow x = \frac{2000}{5} = \text{Rs. } 400
```

#### QNo:- 78 ,Correct Answer:- 8

#### **Explanation:**-

Here marked price = Rs. 1500 After 10% discount, new price = 90 % of 1500 = Rs. 1350 In order to bring selling price to 1242 Discount = 1350-1242 = Rs. 108 Discount % =  $\frac{108}{1350}$  ×100 = 8%

### QNo:- 79 ,Correct Answer:- 2400

## **Explanation:**-

Difference =  $\frac{Pr^2}{10000}$   $\Rightarrow 6 = \frac{P \times 5 \times 5}{10000}$  $\Rightarrow P = 6 \times 400 = Rs. 2400$ 

### QNo:- 80 ,Correct Answer:- A

### **Explanation:**-

Let P1 be the principal for 10% and P2 be the principal for 10.5%  $P1 \times 10 \times 1 = P2 \times 10.5 \times 1$  $\Rightarrow P1: P2 = 21: 20$ 

## QNo:- 81 ,Correct Answer:- 10

#### **Explanation:**-

We have (|x| - 3)(|y| + 4) = 12. Now 12 can be written as,  $(1 \times 12)$ ,  $(2 \times 6)$ ,  $(3 \times 4)$ **Case I:** Taking,  $x \ge 0$  and  $y \ge 0$ , we have  $(x - 3)(y + 4) = 12 = (1 \times 12)$  or  $(2 \times 6)$  or  $(3 \times 4)$ Possible solutions of (x, y) is (4, 8) or (5, 2) or (6, 0). Hence 3 solutions are possible. **Case II:** Taking,  $x \ge 0$  and y < 0, we have  $(x - 3)(-y + 4) = 12 = (1 \times 12)$  or  $(2 \times 6)$  or  $(3 \times 4)$ Possible solutions of (x, y) is (4, -8) or (5, -2). Hence 2 solutions are possible. **Case III:** Taking, x < 0 and y < 0, we have  $(-x - 3)(-y + 4) = 12 = (1 \times 12)$  or  $(2 \times 6)$  or  $(3 \times 4)$ Possible solutions of (x, y) is (-4, -8) or (-5, -2). Hence 2 solutions are possible. **Case IV:** Taking x < 0 and  $y \ge 0$ , we have  $(-x - 3)(y + 4) = 12 = (1 \times 12)$  or  $(2 \times 6)$  or  $(3 \times 4)$ Possible solutions of (x, y) is (-4, 8) or (-5, -2). Hence 3 solutions are possible. **Case IV:** Taking x < 0 and  $y \ge 0$ , we have  $(-x - 3)(y + 4) = 12 = (1 \times 12)$  or  $(2 \times 6)$  or  $(3 \times 4)$ Possible solutions of (x, y) is (-4, 8) or (-5, 2) or (-6, 0). Hence 3 solutions are possible. So totaling all these solutions = 3 + 2 + 2 + 3 = 10 solutions are possible.

#### QNo:- 82 ,Correct Answer:- B

### **Explanation:**-

Sum of the roots = a + b = 8 and Product of the roots, ab = 14

Thus, required ratio =  $\frac{a^2-b^2}{a^3-b^3} = \frac{(a-b)(a+b)}{(a-b)(a^2+b^2+ab)} = \frac{(a+b)}{[(a+b)^2-ab)]} = \frac{8}{64-14} = \frac{8}{50} = \frac{4}{25} = \left(\frac{2}{5}\right)^2$ 

## QNo:- 83 ,Correct Answer:- D

**Explanation:** Carbon dioxide emission =  $444 \times 0.5 = 222$  grams per km. This will put it in category C3, which means a surcharge of \$ 15,000

#### QNo:- 84 ,Correct Answer:- 120

#### **Explanation:**-

When a = 5 and b = 2, we get 15 - 4 = 11 as the longest side of the square. The area of the square is 121. When a = 3 and b = 4,

#### QNo:- 85 ,Correct Answer:- 200

**Explanation:-** For the upper limit of BoM price, we choose the highest display price and combine it with the lowest estimate on what it represents as a percentage of total BoM. So we say that \$ 42 is 21% of Bill of Material. So BoM is 42/0.21 = \$ 200

### QNo:- 86 ,Correct Answer:- 32

**Explanation:**-

The total number of triangles formed will be  ${}^{7}C_{3} = \frac{7!}{3!4!} = \frac{7 \times 6 \times 5}{3 \times 2} = 35$ . However the 2 vertices and the center contained in the 3 longest diagonals will not form a triangle. Hence the answer is 35 - 3 = 32.

#### QNo:- 87 ,Correct Answer:- B

#### **Explanation:**-

Since x + y + z = 2 xy + z - 1 = xy + 1 - x - y = (x - 1)(y - 1)Similarly, yz + x - 1 = (x - 1)(y - 1)And zx + y - 1 = (z - 1)(x - 1)So, give expression can be written as,  $\frac{1}{(x - 1)(y - 1)} + \frac{1}{(y - 1)(z - 1)} + \frac{1}{(z - 1)(x - 1)}$   $= \frac{x + y + z - 3}{(x - 1)(y - 1)(z - 1)}$   $= \frac{-1}{xyz - (xy + yz + zx) + x + y + z - 1}$   $= \frac{-1}{5 - (xy + yz + zx)} \dots (1)$ But  $x^2 + y^2 + z^2 + 2(xy + yz + zx) = (x + y + z)^2$ 

 $\Rightarrow 2(xy+yz+zx) = 2^2 - (3) = 1$ 

 $\Rightarrow xy + yz + zx$ 

 $=\frac{1}{2}$ So,  $1 \Rightarrow \frac{-1}{5-\frac{1}{2}} = \frac{-2}{9}$ So option 2.

## QNo:- 88 ,Correct Answer:- D

### **Explanation:**-

 $f(x) = ax^2 + bx + c$  and f(3) = f(-2) = 0 implies that 3 and (-2) are the roots of f(x). So, the function is  $f(x) = k(x-3)(x+2) = k(x^2 - x - 6)$ . Here root 3 and - 2 satisfy this expression. If you put x = 0 in this, then the value of f(0) is k(-6). Now this can take various values for different values of k. Hence the answer is cannot be determined.

## QNo:- 89 ,Correct Answer:- D

**Explanation:** First year production per day of Marcellus is 4 million cubic feet. In second year, it would drop to  $0.6 \times 4 = 2.4$  million cubic feet In third year, it would drop to  $0.8 \times 2.4 = 1.9$  million cubic feet. So 3 year average production per well is 8.3/3 million cubic feet per day.

First year production per day of Ormen Lange is 350 million cubic feet. In second year, it would drop to 0.9 × 350 = 315 million cubic feet In third year, it would drop to 0.9 × 315 = 284 million cubic feet. So 3 year average production per well is 949/3 million cubic feet per day.

Comparing the two we get 949/8.3 = 114 Marcellus wells would replace one Ormen Lange well.

### QNo:- 90 ,Correct Answer:- D

### **Explanation:**-

Suppose x = 0. Then the value of the expression in the first statement is 10/1 = 10 > 9. So statement I is false. In order to find the maximum area, we need to make the smallest side of the triangle as 18. Since the sides are integers, they could be 18, 24, 30 or 18, 80, 82. In the first case, the area of the triangle will be 216. Since X = 216, X – Y cannot exceed 600. In the second case, the area of the triangle will be 720 and X – Y could be greater than 600. So statement II is not definitely true. The largest square that will fit in the triangle will have side  $\sqrt{3}$ . So the area of the circle inscribed in the square will be  $\pi(\sqrt{3}/2)^2 = 9.42/4 > 2$ . So statement III is false.

# QNo:- 91 ,Correct Answer:- C

**Explanation:**- In 60 s, a vehicle traveling at 30 kmph covers 500 m. In 50 s, a vehicle traveling at 30 kmph covers 417 m. So she covers 83 m in 50 s. Or  $83 \times 3600/50$  m = 5976 m in one hour = 6 km/hr.

## QNo:- 92 ,Correct Answer:- C

**Explanation:**- When he adds water to the buffalo milk, both milk fats and non-fatty solids are diluted. Looking at the closeness of the figures, the constraint seems to be on the non-fatty solid part. If he adds x litres of water to 1 litre of buffalo milk, the percentage of non-fatty solid will become 9/(1 + x). Equate this to 8.5 to get the value of x, 9/(1 + x) = 8.51 + x = 9/8.51 + x = 1.059x = 0.059So he can add a maximum of 5.9% water.

## QNo:- 93 ,Correct Answer:- C

**Explanation:**-

If Chhavi has amassed as many pens as she can, then the maximum number of pens she has at the end will be 24 and the 25<sup>th</sup> writing instrument will be a pencil. Since 5 pencils are exchanged for 3 pens, she will have to exchange  $\frac{24\times5}{3} = 40$  pencils for 24 pens. Thus she had 40 + 1 = 41 pencils at the start.

### QNo:- 94 ,Correct Answer:- 31800

**Explanation:**- The distance of Proxima Centauri is  $4.24 \times 365 \times 24 \times 3600 \times 300000$ Time required by Juno to cover that distance would be  $(4.24 \times 300,000 \times 365 \times 24 \times 3600) / 40 \text{ s}$ =  $(4.24 \times 300,000 \times 365 \times 24 \times 3600) / (40 \times 365 \times 24 \times 3600)$  years =  $4.24 \times 300,000 / 40$ = 31,800 years

### QNo:- 95 ,Correct Answer:- D

**Explanation:** Total NPA is 393,035 + 46,271 = 439,306 cr Market cap of private banks is 46,271 / 0.066 = 701,075 cr Market cap of PSU banks is 400,000 / 1.5 = 266,667 cr Total market cap is 967,741 cr As a percentage NPA is 439,306 / 967,741 = 45.4 %

#### QNo:- 96 ,Correct Answer:- A

**Explanation:-** When a stone is placed at (6, 4) then the white at the center of this diamond will not be able to move anywhere – and so will be captured.

#### QNo:- 97 ,Correct Answer:- C

#### **Explanation:**-

Let a, b, c, d and e represents the quantity of cask 1, 2, 3, 4 and 5 respectively. a + b = 10.5; a + 3.5 = c; b + 1.5 = d; c + 1.5 = e d - c + 3.5 = a, a + c - d = 3.5a + a + 3.5 - b - 1.5 = 3.5

 $\therefore 2a - b = 1.5, a + b = 10.5$ 

 $\therefore 3a = 12, a = 4, b = 6.5, c = 7.5, d = 8, e = 9.$ 

### QNo:- 98 ,Correct Answer:- 28

**Explanation:** 35 parts per thousand is 3.5 % This means that 1000 g of sea water contains 35 g of salt. In 1 kg of final product, there is 995 g of salt. So we need 995/35 = 28.4 kg of sea water.

## QNo:- 99 ,Correct Answer:- 18

# **Explanation:**-

Let the initial winding radius be 4r i.e. when the casette is viewed from beginning to the end.

: Decrease in winding area a result reduction of the radius by half i.e. when half the casette is completed =  $\pi(4r)^2 - \pi(2r)^2 = [16r^2]$ 

 $-4r^2]\pi = 12\pi r^2$ 

This is equal to the product of the length of wound tape  $?_1$  and thickness d.

The length, in turn is equal to the product of the rate at which the casette is played and the time  $t_1$  required to complete half the casette. But rate at which the casette is played is constant (given). The thickness of the tape will also be constant throughout.

 $\therefore \ell_1 = rate \times t_1$ 

 $\therefore 12\pi r^2 = \ell_1 d$ 

 $: 12\pi r^2 = (72d) rate ----(i)$ 

Decrease in winding area as a result of further reduction of radius by half from 2r to r =  $\pi (2r)^2 - \pi (r)^2$ =  $[4r^2 - r^2]\pi = 3\pi r^2$ 

 $\therefore 3\pi r^2 = \ell_2 \mathbf{d}$ 

 $\therefore 3\pi r^2 = rate \times t^2 \times d$ 

 $\therefore 3\pi r^2 = (t_2 d) \ rate \ ---- \ (ii)$ 

: Dividing equation (i) by (ii), we get,

 $\therefore \frac{12\pi r^2}{3\pi r^2} = \frac{(72d)\text{rate}}{(t_2d)\text{rate}}$  $\therefore 4 = \frac{72}{t_2} \therefore t_2 = 18 \text{ minutes.}$ 

# QNo:- 100 ,Correct Answer:- C

**Explanation:-** Transportation and Setting charges = Rs. 3,000 200 foot will cost 90 × 200 = Rs. 18,000

Extra 100 foot till 300 foot will cost  $100 \times 100 = Rs. 10,000$ Extra 100 foot till 400 foot will cost  $110 \times 100 = Rs. 11,000$ Total cost till 400 foot is 42,000 In Rs. 8,000 we can now drill 8000/120 = 66.66 foot So the maximum depth is 466 feet..