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### Directions of Test

| Test Name | 2016 Bull CAT 09 | Total Questions | 100 | Total Time | 180 Mins |
|---|---|---|---|---|---|

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

## Section : Verbal Ability

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

*Question No. : 1*

Email, ughhhh. There is too much of it, and the wrong kind of it, from the wrong people. When people aren't hating their inboxes out loud, they are quietly emailing to say that they're sorry for replying so late, and for all the typos, and for missing your earlier note, and for forgetting to turn off auto-reply, and for sending this from their mobile device, and for writing too long, and for bothering you at all.

For an activity that's so mundane, email seems to be infused with an extraordinary amount of dread and guilt. Several studies have linked frequent email-checking with higher levels of anxiety. One study found that constant email-checkers also had heart activity that suggested higher levels of cortisol, a hormone associated with stress—until they were banned from their inboxes.

In the mobile Internet age, checking email is simultaneously a nervous tic and, for many workers, a tether to the office. A person's email inbox is where forgotten passwords are revived; where mass-mailings are collected; and where pumpkin-pie recipes, toddler photos, and absurd one-liners are shared. The inbox, then, is a place of convergence: for junk, for work, for advertising, and still sometimes for informal, intimate correspondence. Email works just the way it's supposed to, and better than it used to, but people seem to hate it more than ever.

Over the course of about half a century, email went from being obscure and specialized, to mega-popular and beloved, to derided and barely tolerated. With email's reputation now cratering, service providers offer tools to help you hit "inbox zero," while startups promise to kill email altogether. It's even become fashionable in tech circles to brag about how little a person uses email anymore.

People seem to hate email for the same reasons they once loved it. Email's underlying triumph, the quality that made it revolutionary, was that you could instantly deliver a written message to someone even if they weren't there to receive it. (Though fax machines offered some of the same benefits, they were more frequently used for business-to-business communication than person-to-person correspondence.) But leaving messages for people to pick up later means contributing to swelling inboxes that require time to maintain.

Email is neutral, meaning that anyone can email anyone else with an email address. If you have a person's email address, your message will be delivered no matter who you are—whether the recipient is your oldest friend, your granddaughter, your boss's boss, or Beyoncé. The year the web was born, this flattening effect was astonishing. Anyone in an organization could communicate directly and immediately with anyone else, "regardless of rank," as the The New York Times put it in an article about "computer mail" in 1989. That neutrality is part of what makes email so special. It is, however, what makes inboxes overflow, too.

In 2016, instead of being the subject of romantic comedies and love songs, email is at the center of conversations about digital overload and work-life imbalances. The words "drowning," "avalanche," and "tyranny" are used. People resent their inboxes

because they are not in control of them. Email takes a psychological toll. It "emotionally weighs on us," said Alex Moore, CEO of Boomerang, which offers a suite of efficiency tools like email scheduling, snooze features, read receipts, and reminders.

Which of the following can be used to describe the passage in one line?

A) Email is hell unleashed     B) Email became an overkill tough to manage     C) Email sabotaged our work-life balance
D) Email killed what was there of innocent conversation

## Question No. : 2

The author will agree with which of the following statements:

I. Emails do not carry any inherent preference bias.
II. Neutrality of emails is a solution as well as a problem.
III. Emails solved the problem of people not being able to receive messages.

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

## Question No. : 3

The author of the passage accomplishes which of the following in the passage?

A) He traces the journey of a utility tool.     B) He outlines the life-cycle of primary user-level product.
C) He projects the possible outcomes for a product cycle.     D) He highlights the mechanisms of production of a product.

## Question No. : 4

 According to the information given in the passage, which of the following cannot be inferred?

A) E-mails have an impact on the work schedules of employees.
B) It is not necessary that a person will have complete control over the contents of his inbox.
C) Highers levels of cortisol lead a person to check his email more often.
D) Attempts to replace emails with other tools are being made.

## Question No. : 5

One of the requirements to manage email inboxes is:

A) A certain minimum level of intellect.     B) Proficiency in the English language.
C) An investment of time to enable inbox management.     D) None of the above

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

## Question No. : 6

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According to the passage, e-mail is:

A) unaffected by rank structures     B) Incompatible with rank hierarchies     C) incomplete without rank and file structures
D) Intertwined with rank structures

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

*Question No. : 7*

When Isaac Newton was 17 years old, he performed a series of experiments with prisms and light beams. Within weeks he discovered the scientific explanation for color, invented the reflecting telescope, proposed the particle theory of light, and deduced that the human eye contained three receptor types corresponding to the three primary colors. Not bad for a teen.

Newton's insights were not easily accepted. At the time, the prevailing theory of color was metaphysical. White light was thought to be pure, heavenly, and scrubbed of all contaminants, whereas colored light was contaminated by the worldly surfaces it touched. To scholars, the exact process by which white light became dirtied was a philosophical hard problem worthy of debate.

We now know why that hard problem was so darn hard. The brain processes the world in a simplified and inaccurate manner, and those inaccuracies gave people the wrong idea about color. Deep in the visual system, the brain reconstructs information about light. In that simplified code, white corresponds to the color channels registering zero and the brightness channel cranked up high. Pure luminance without color is a physical impossibility, because white light is a mixture of all colors. The pre-Newtonian problem of color was hard because it had no possible solution.

Why would the brain evolve such an inaccurate, simplified model of the world? The reason is efficiency. The brain didn't evolve to get all the scientific details right. That would be a waste of energy and computing time. Instead, it evolved to process information about the world just well enough, and quickly enough, to guide behavior. All the brain's internal models are simplified caricatures of the world it models. Arguably, science is the gradual process by which the cognitive parts of our brains discover the profound inaccuracies in our deeper, evolutionarily built-in models of the world.

When the author says, 'Not bad for a teen', he adopts a tone of:

A) Condescension     B) Admiration     C) Disbelief     D) Incredulity

*Question No. : 8*

At one point of time, the prevailing theory of color:

A) had no role in the world of consciousness     B) had no basis in reality     C) was limited by physical precepts
D) was dictated by individual dogma

***Question No. : 9***

According to the views expressed by the author of the passage:

A) science helps us define a framework to understand our evolution through models and processes
B) science is a process which uses the learning and reasoning prowess of our brain to correct the flaws in our instinct-driven understanding of the world
C) science is a process which discovers the internal biases of human beings and benchmarks these against factual data
D) science only exposes the inherent incongruence between our models of the world and the real models of the world

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

***Question No. : 10***

President Obama, greyer and jowlier but still sounding a little like the earnest community activist of a decade ago, has delivered his last State of the Union address.

His unflappable moderation always seems astonishing, in a man who has been dogged by the ravings of conspiracy theorists spreading pernicious untruths alleging that the first black president is in fact a secret Muslim, an impostor and not even a US citizen. When Obama speaks of the dangers of division, he knows what he's talking about.

But never has his message about the politics of race and creed been more important. "When politicians insult Muslims" he said, "when a mosque is vandalised or a kid bullied, that doesn't make us safer. That's not telling it like it is. It's just wrong. It diminishes us in the eyes of the world."

He was addressing a domestic audience, partly for party political purposes. But in the fetid atmosphere of a Europe struggling to work out how to respond to the angry claims that police have been covering up assaults on young women by bands of young men – refugees, apparently from Muslim countries – never has his calm authority been more badly needed globally.

The New Year's Eve events in Cologne and some other German cities – and, it now emerges (just as support for the far-right Sweden Democrats is taking off, curiously), at a youth festival in Sweden the summer before last – are terrible for the women concerned. But they could also be disastrous for social cohesion as the layers of cultural significance are gleefully unpacked in the binary world of Twitter trolls.

This is a minefield for the rest of us who still inhabit the complex world of greys. The only easy bit is the beginning: there is never an excuse for a sexual assault. But there are – pause – often explanations.

These cases involved gangs of young men. Youth, maleness and crowds all in the one place are identifiers of trouble, wherever you are in the world. Add in a shared foreignness, late nights and the atmosphere of licence that tends to accompany New Year's Eve, and maybe the biggest surprise is that the German police appeared so unprepared.

But the fact that these attacks happened looks more like a vehicle for another agenda altogether. The terrifying experience of the women has not much occupied people since news of the attacks first broke; the mileage is in the time it took for the truth to come out.

The assumption is that it was covered up in a liberal conspiracy to disguise the social harm that Germany's open-hearted approach to refugees is provoking. That is reasonable, if you think that some refugees have behaved criminally– but there are many, many more that haven't. And when there are already serious issues of social cohesion, many sensible people would think it sensible to avoid a naming-and-shaming exercise.

But there are other explanations. For example, rather than this being a liberal conspiracy, might it have been the more basic human emotion when faced with a total misjudgement: denial?

Without exonerating the perpetrators, it does seem possible that events were aggravated by a failure of policing; that possibly the mindset of the authorities in Cologne, where the mayor and police chief both subsequently resigned (the latter because he had initially reported a quiet night, the former for suggesting that it was the victims' faults for being there) was a contributory factor?

And possibly, there is another bunch of assumptions at work, based on the perception of Islam as a misogynistic faith that encourages young Muslim men (in a group etc) to assume that if they see a young woman on her own, and not covered up, that

she is theirs for the taking. (Let's not draw comparisons with the "she was asking for it" line of defence, which even now is the staple of the rape defendant in many a European court.)

I happen to agree that Islam often appears misogynistic. I hate wearing a headscarf in a strict Muslim country. But I don't think this behaviour was a matter of faith: it is ordinary, nasty criminal behaviour. Bring the perpetrators to court. And then consider the circumstances in which the crime occurred.

There is an important obligation on those of us who pride ourselves on occupying the moral high ground. It is this: if we want to protect all those fleeing persecution, we must recognise that it will not be cost free. And unless we do address the costs – social and financial – we will play right into the hands of the people President Obama was pointing at last night: the people who believe that slamming the brakes on change is somehow the way to restore past glories.

What does the word 'fetid' mean as used in paragraph four of the passage ?

A) extremely unpleasant    B) offensively malodorous     C) evil-smelling     D) pungent

*Question No. : 11*

It can be inferred from the passage that:

A) people largely take one side when it comes to contentious issues such as migration of the persecuted from their own country to another
B) people are almost always  divided into two sides when it comes to contentious issues such as migration of the persecuted from their own country to another
C) people are not always  divided into opposing sides when it comes to contentious issues such as migration of the persecuted from their own country to another
D) people take to different sides when it comes to contentious issues such as migration of the persecuted from their own country to another

*Question No. : 12*

According to the information given in the passage, when people take open stands against particular factions in a society:

A) they help in exposing conspiracies of particular factions     B) they risk destroying the underlying social fabric
C) they stand a chance to deliver justice     D) they help in forming an opinion in society

*Question No. : 13*

The author of the passage suggests that:

A) Those, who are fleeing persecution, by virtue of their foolish acts, aid and abet those who resist change
B) Those who oppose change use incidents of violence carried out by some to sully the image of all those who are fleeing persecution
C) Those who oppose change are not open to rational arguments and they are helped further by the foolish actions of those who are fleeing persecution
D) Both A and B

*Question No. : 14*

The author of the passage:

A) Postulates different explanations for a particular situation     B) Highlights sources for a particular stream of thoughts
C) Outlines various explanations for a certain event     D) provides varying viewpoints in a particularly tricky debate

*Question No. : 15*

The author of the passage uses the example of President Obama in order to:

A) prove that key decision makers might not necessarily get it right when it comes to contentious issues
B) showcase the kind of thinking process that needs to adopted by those in key decision making roles
C) provide us an insight into the thinking of those in power     D) illustrate how the prejudice of race can be overcome

**Question No. : 16**

"As smoking gives us something to do with our hands when we aren't using them, Time gives us something to do with our minds when we aren't thinking," Dwight Macdonald wrote in 1957. With smartphones, the issue never arises. Hands and mind are continuously occupied texting, e-mailing, liking, tweeting, watching YouTube videos, and playing Candy Crush.

Americans spend an average of five and a half hours a day with digital media, more than half of that time on mobile devices, according to the research firm eMarketer. Among some groups, the numbers range much higher. In one recent survey, female students at Baylor University reported using their cell phones an average of ten hours a day. Three quarters of eighteen-to-twenty-four-year-olds say that they reach for their phones immediately upon waking up in the morning. Once out of bed, we check our phones 221 times a day—an average of every 4.3 minutes—according to a UK study. This number actually may be too low, since people tend to underestimate their own mobile usage. In a 2015 Gallup survey, 61 percent of people said they checked their phones less frequently than others they knew.

Our transformation into device people has happened with unprecedented suddenness. The first touchscreen-operated iPhones went on sale in June 2007, followed by the first Android-powered phones the following year. Smartphones went from 10 percent to 40 percent market penetration faster than any other consumer technology in history. In the United States, adoption hit 50 percent only three years ago. Yet today, not carrying a smartphone indicates eccentricity, social marginalization, or old age.

What does it mean to shift overnight from a society in which people walk down the street looking around to one in which people walk down the street looking at machines? We wouldn't be always clutching smartphones if we didn't believe they made us safer, more productive, less bored, and were useful in all of the ways that a computer in your pocket can be useful. At the same time, smartphone owners describe feeling "frustrated" and "distracted." In a 2015 Pew survey, 70 percent of respondents said their phones made them feel freer, while 30 percent said they felt like a leash. Nearly half of eighteen-to-twenty-nine-year-olds said they used their phones to "avoid others around you."

The statement, 'In a 2015 Gallup survey, 61 percent of people said they checked their phones less frequently than others they knew', showcases that:

A) people want to avoid questions asked in such surveys.     B) people don't claim they check their phone as often as they do.
C) people claim that they check their phone as often as they do.
D) people claim that they do not check their phone as often as they do not.

**Question No. : 17**

The author of the passage highlights:

A) the sudden and rapid adoption of smartphone devices.
B) the change in social behaviour brought about by smartphone devices
C) content consumption on mobile devices forms a significant portion of our digital media consumption     D) All of the above

**Question No. : 18**

The author of the passage implies that:

A) smartphones are probably not as smart as we make them out to be
B) smartphones offer a much simpler and cheaper solution when compared to desktop computers and this fuels their rapid
   adoption
C) the simplicity of smartphones leads to their extensive use
D) the beliefs in the supposed efficiency of smartphones pushes us towards using these devices more

**Question No. : 19**

DISMAL may not be the most desirable of modifiers, but economists love it when people call their discipline a science. They consider themselves the most rigorous of social scientists. Yet whereas their peers in the natural sciences can edit genes and spot new planets, economists cannot reliably predict, let alone prevent, recessions or other economic events. Indeed, some claim that

economics is based not so much on empirical observation and rational analysis as on ideology.

In October Russell Roberts, a research fellow at Stanford University's Hoover Institution, tweeted that if told an economist's view on one issue, he could confidently predict his or her position on any number of other questions. Prominent bloggers on economics have since furiously defended the profession, citing cases when economists changed their minds in response to new facts, rather than hewing stubbornly to dogma. Adam Ozimek, an economist at Moody's Analytics, pointed to Narayana Kocherlakota, president of the Federal Reserve Bank of Minneapolis from 2009 to 2015, who flipped from hawkishness to dovishness when reality failed to affirm his warnings of a looming surge in inflation. Tyler Cowen, an economist at George Mason, published a list of issues on which his opinion has shifted (he is no longer sure that income from capital is best left untaxed). Paul Krugman, an economist and New York Times columnist, chimed in. He changed his view on the minimum wage after research found that increases up to a certain point reduced employment only marginally (this newspaper had a similar change of heart).

Economists, to be fair, are constrained in ways that many scientists are not. They cannot brew up endless recessions in test tubes to work out what causes what, for instance. Yet the same restriction applies to many hard sciences, too: geologists did not need to recreate the Earth in the lab to get a handle on plate tectonics. The essence of science is agreeing on a shared approach for generating widely accepted knowledge. Science, wrote Paul Romer, an economist, in a paper published last year, leads to broad consensus. Politics does not.

Nor, it seems, does economics. In a paper on macroeconomics published in 2006, Gregory Mankiw of Harvard University declared: "A new consensus has emerged about the best way to understand economic fluctuations." But after the financial crisis prompted a wrenching recession, disagreement about the causes and cures raged. "Schlock economics" was how Robert Lucas, a Nobel-prize-winning economist, described Barack Obama's plan for a big stimulus to revive the American economy. Mr Krugman, another Nobel-winner, reckoned Mr Lucas and his sort were responsible for a "dark age of macroeconomics".

As Mr Roberts suggested, economists tend to fall into rival camps defined by distinct beliefs. Anthony Randazzo of the Reason Foundation, a libertarian think-tank, and Jonathan Haidt of New York University recently asked a group of academic economists both moral questions (is it fairer to divide resources equally, or according to effort?) and questions about economics. They found a high correlation between the economists' views on ethics and on economics. The correlation was not limited to matters of debate —how much governments should intervene to reduce inequality, say—but also encompassed more empirical questions, such as how fiscal austerity affects economies on the ropes. Another study found that, in supposedly empirical research, right-leaning economists discerned more economically damaging effects from increases in taxes than left-leaning ones.

That is worrying. Yet is it unusual, compared with other fields? Gunnar Myrdal, yet another Nobel-winning economist, once argued that scientists of all sorts rely on preconceptions. "Questions must be asked before answers can be given," he quipped. A survey conducted in 2003 among practitioners of six social sciences found that economics was no more political than the other fields, just more finely balanced ideologically: left-leaning economists outnumbered right-leaning ones by three to one, compared with a ratio of 30:1 in anthropology.

According to the information given in the passage:

I. Scientists and economists are similar.
II. Scientists and economists are not similar.
III. Scientists are more accurate than economists.
IV. Scientists are less disputative that economists.

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

***Question No. : 20***

Economics is closer to:

A) Science    B) Politics    C) Both (A) and (B)    D) Neither (A) nor (B)

***Question No. : 21***

It can be inferred from the passage that:

A) there is limited impact of ethics and politics on economic thought
B) there is sudden impact of ethics and politics on economic thought
C) there is discernable impact of ethics and politics on economic thought
D) there is negligible impact of ethics and politics on economic thought

**Question No. : 22**

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

A) unforgiving criticism    B) implied criticism    C) trenchant criticism    D) both (A) and (C)

**Question No. : 23**

A suitable title for the passage is:

A) All sizzle and no steak    B) A chilles heel    C) All in your head    D) All at sea

**Question No. : 24**

According to the information provided in the passage, an economist's view on one issue can be extrapolated to find his views on other issues. How is this possible?

A) The viewpoints of economists are driven by their inner insecurities and these are reflected in their overall approach
B) The viewpoints of economists are not limited by their academic learning and in fact, are a reflection of their overall ethical and political leanings
C) Economists learn from one another and this means their viewpoints are a reflection of one common pool of ideas
D) Both (B) and (C)

**DIRECTIONS for the question:** *Identify the most appropriate summary for the paragraph and write the key for most appropriate option.*

**Question No. : 25**

It's been a good run for magazine writing—at least 150 years, by most calculations. But I've been reading up on the state of the business and I can report back that the future is dire. The enemy, it turns out, is you and I. Or rather, it is what the demon Internet has done to us, through the Web and the smartphones upon which it is consumed. Always in the pocket, always bleeping its siren call of apps and games, Twitter and Snapchat, and every other flashing distraction—or, as us magazine-lovers might say, affliction. Always conspiring to eliminate our desire for prose longer than a brunch photo caption.

1) The future of magazines is now solely in the hands of the consumer and he decides what content goes into magazines
2) The form and structure of magazines will undergo a positive transformation as they are challenged by new consumption patterns in a world dominated by Internet
3) Magazines, in their current prosaic form, are under severe threat of being wiped out as modern day Internet changes the very way we consume information
4) The Twitters and Snapchats of the world have come to rule the roost and become the new-age media companies that magazines are afraid of
(write the answer key)

A) 3    B)    C)    D)

**DIRECTIONS for the question:** *Identify the most appropriate summary for the paragraph and write the key for most appropriate option.*

**Question No. : 26**

Pretentiousness is always someone else's crime. It's never a felony in the first person. You might cop to the odd personality flaw; the occasional pirouette of self-deprecation is nothing if not good manners. Most likely one of those imperfections nobody minds owning up to, something that looks charming in the right circumstances. Being absent-minded. A bad dancer. Partial to a large gin after work. But being pretentious? That's premier-league obnoxious, the team-mate of arrogance, condescension, careerism and pomposity. Pretension brunches with fraudulence and snobbery, and shops for baubles with the pseudo and the vacuous. Whatever it is you do, I'll bet you'd never think it pretentious. That's because you do it, and pretension never self-identifies. Pretentiousness happens over there. In the way he writes. In her music taste. In the way they dress. And who hasn't before described a person, place or thing as pretentious?

1) Pretentiousness is something that urges for tacit approval but only conjures non-compliant snobbery

2) Pretentiousness is something that signifies inner hollowness but on the public side helps maintain a façade of cheerfulness and glee
3) Pretentiousness is something that escapes the lens of self-scrutiny but is easy to use as tool to depreciate others
4) Pretentiousness is something that is built on vacuous precepts of low self-esteem that help in poking holes in the personalities of others
(write the answer key)

A) 3    B)    C)    D)

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**DIRECTIONS for the question:** *Identify the most appropriate summary for the paragraph and write the key for most appropriate option.*

**Question No. : 27**

Market-based emissions trading has become the modern world's primary pollution control mechanism, forming a key part of various national and international bodies' commitment to climate change mitigation.To understand why the emissions-trading regime has come to dominate, it is important to understand its appeal. The first step is a government's imposing of a cap on carbon emissions within a country for any given year. Permits are then created up to the level of this cap, with one permit representing 1 tonne of $CO_2$. These permits are then allocated to businesses, which can then trade the permits amongst one another. This trading amongst permit users puts a price on pollution, incentivising businesses to reduce their carbon footprint so as to be able to sell permits to businesses which are more carbon-dependent, which in turn strive to reduce the number they must buy. Thus, the social goal of reducing carbon emissions is internalised into the profit motive. By ensuring that companies can trade permits, the emissions trading system ensures that the emissions reductions will happen at the lowest possible cost.

1) Market-based emissions is the only way forward if one has to reduce the carbon emissions as the introduction of profit motive the incentive businesses have been looking forward when it comes to reducing their carbon footprint
2) Market-based emissions trading incentivizes emissions reduction by enabling trading in emissions which helps countries swap their carbon emission targets and thereby, maintain a check on global carbon emission levels
3) Market-based emissions trading has become a part of climate change mitigation as it incentivizes the process of $CO_2$ reduction and introduces a profit motive for businesses to walk on the path of carbon footprint reduction
4) Market-based emissions trading, the de-facto mechanism to control pollution, is growing increasingly popular among nations and businesses, and going forward, it could become the default mechanism for cutting down emissions
(write the answer key)

A) 3    B)    C)    D)

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

**Question No. : 28**

1. The couple, both in their mid-30s, were on their way to adopt a baby girl.
2. Porto swallowed two tablets of Orfidal – a common anti-anxiety medicine that she had used before then – but remained too agitated and excited to sleep.
3. One day in late June 2001, Rosario Porto, a petite, dark-haired lawyer from Santiago de Compostela, northern Spain, sat nervously on a flight to China beside her husband Alfonso Basterra, a quiet man from the Basque country, who worked as a freelance journalist.
4. The couple had had no trouble persuading local Spanish authorities that they would make good parents and that their child would be surrounded by a loving extended family.
5. The child's bedroom would have wallpaper covered in clouds and suns.
(write the ans key)

A) 5    B)    C)    D)

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

**Question No. : 29**

1. More worryingly, advanced countries' growth rates have also become more volatile.
2. Seven years after the global financial crisis erupted in 2008, the world economy continued to stumble in 2015.
3. In the US, quantitative easing did not boost consumption and investment partly because most of the additional liquidity returned to central banks' coffers in the form of excess reserves.
4. According to the United Nations' report World Economic Situation and Prospects 2016, the average growth rate in developed economies has declined by more than 54% since the crisis.
5. An estimated 44 million people are unemployed in developed countries, about 12 million more than in 2007, while inflation has reached its lowest level since the crisis.
(write the ans key)

A) 3    B)    C)    D)

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

*Question No. : 30*

1. Self-control is "like" a muscle in that muscles get tired with use over the short term and, second, that muscles get stronger with use over the long term.
2. Muscles are a bit like foreign languages and health flexible spending accounts: use it or lose it.
3. Or, at least, my sense is that people think that in order for muscles to get big and stay that way, they need to be used.
4. Human muscles seem to atrophy with disuse, as anyone will tell you who has had to take a six week hiatus from the gym because of a bunch of injuries.
5. My sense is that many people think that this is a general property of muscles.
(write the ans key)

A) 1    B)    C)    D)

*Question No. : 31*

1. The volatility affecting global markets last month appears set to continue amid concern about Chinese economic growth, falling oil prices and speculation that the US federal reserve could change course with interest rates.
2. "The combination of concerns that the United States could be heading toward a recession and the global stock sell-off is curbing risk appetite and is sending investors to the safe-haven yen," Takuya Takahashi, senior strategist at Daiwa Securities, told Kyodo News.
3. After hovering around the 117-yen line on Monday, the Japanese currency briefly rose to the upper 114 zone to its strongest level against the dollar since November 2014.
4. Investors regard the yen as a "save haven" currency when global markets are hit by the kind of turmoil witnessed in recent weeks.
5. The yen is expected to make further gains – a trend that eats into the repatriated profits of Japanese auto and other exporters.
(write the ans key)

A) 12345    B)    C)    D)

*Question No. : 32*

1. Those exposed to particulate air pollution were more likely to die from respiratory problems, like pneumonia, emphysema and bronchitis, and also from cardiovascular problems, like heart attacks.
2. The analysis of 368,000 British people over 38 years also showed that those living in the most polluted places have a 14% higher risk of dying than those in the least polluted areas.
3. "There is an imperative that, because the effects are so long-lasting, we really ought to act on it. We have to think about what we are doing to the long-term health of the population."
4. "What this study shows is that the [health] effects of air pollution persist for a very long time," said Dr Anna Hansell, at Imperial College London, who led the new study.
5. Air pollution raises the risk of death for many decades after exposure, according to the longest-running study to date.
(write the ans key)

A) 52143    B)    C)    D)

*Question No. : 33*

1. But it's a lot worse than that as today's Chinese GDP report suggests.
2. It might be easy to minimize this and conclude that China's unwary stock market investors have now simply paid for their profligacy.
3. It's easy to think that China's economy has just hit a bump in the road and will now endure a further slowing and perhaps a few of years of pain but remain on its path of good growth.
4. China grew at a rate of 6.9 percent in 2015, its slowest pace in 25 years—only adding to mounting global concerns about China's economy.
5. China's stock market tanked badly again last week, and is now down over 40 percent since June 2015.
(write the ans key)

A) 52314     B)     C)     D)


### Question No. : 34

1. From the flatlands of Kentucky to the seaport district of Boston, we are not built to withstand the harms we are likely to face in the years ahead.
2. But in all these discussions of how to build resiliency into our domestic fabric, we may be getting far ahead of ourselves.
3. Our nation faces multibillion-dollar disasters, a changing climate, a rising sea, fires that can't seem to be put out, and many other varieties of mayhem.
4. Public-policy experts and politicians talk of building a more resilient nation, the de rigueur notion of our time.
5. Resiliency is understood as the capacity to create systems that can regroup, bounce back, adapt, and return stronger, and this notion of resiliency has taken on a life of its own as leaders in industries as far-ranging as business, health care, law, and psychology all have jumped on the bandwagon.
(write the ans key)

A) 31452     B)     C)     D)


## Section : DI & Reasoning

**DIRECTIONS for the question:** *Study the table/s given below and answer the question that follows.*


### Question No. : 35

Suvidha.com is an online company which is in the business of collecting details of potential employees and selling these details to other organizations. The company collects data regarding people of different categories of one or more of the six features, name, age, address, hobbies, contact number and e-mail ID. The following table gives the information available in the database of the company about the number of people in each category, and the percentage of people in that category for whom the details of each feature are available.

| Category | Number of people | Percentage of people for whom the details of the feature are available | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| | | Name | Age | Address | Hobbies | Contact number | Email ID |
| School Teachers | 3200 | 100% | 85% | 70% | 90% | 65% | 80% |
| Pharmacists | 600 | 100% | 75% | 95% | 80% | 70% | 60% |
| Doctors | 12000 | 100% | 50% | 60% | 70% | 65% | 100% |
| Professors | 2000 | 100% | 70% | 75% | 60% | 85% | 90% |
| Civil Engineers | 5000 | 100% | 40% | 60% | 50% | 65% | 85% |
| MBAs | 30000 | 100% | 50% | 55% | 70% | 65% | 100% |
| CAs | 520 | 100% | 80% | 50% | 40% | 50% | 90% |
| Mechanical Engineers | 8400 | 100% | 85% | 70% | 95% | 60% | 80% |
| Nurses | 3600 | 100% | 50% | 40% | 60% | 75% | 40% |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Accountants | 2400 | 100% | 40% | 70% | 75% | 90% | 85% |
| Ex-Servicemen | 3000 | 100% | 65% | 75% | 40% | 80% | 60% |
| Electrical Engineers | 4400 | 100% | 70% | 65% | 60% | 70% | 90% |
| Computer Engineers | 5200 | 100% | 80% | 60% | 65% | 50% | 100% |

In the above table, for example, the contact numbers of 65% of the School Teachers in the database (i.e., 65% of 3200) are available. Assume that no person belongs to more than one category.

The number of mechanical engineers, for whom the details of exactly four of the six features are available, is at least

A) 420    B) 1260    C) 2100    D) None of these

### Question No. : 36

The number of professors for whom at least two of the three features, address, contact number and e-mail ID, are available, is at least (in numerical value)

A) 1500    B)    C)    D)

### Question No. : 37

For at the most how many of the CAs, the details of exactly five of the six features available?

A) 260    B) 390    C) 400    D) 364

### Question No. : 38

For at least how many of the given engineers (i.e., Civil, Mechanical, Electrical and Computer engineers, put together) are both the contact number and the e-mail ID available?

A) 10000    B) 11200    C) 10700    D) 11100

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**DIRECTIONS for the question:** *Study the table/s given below and answer the question that follows.*

### Question No. : 39

Priyanka, from city Ahmedabaad, decided to visit city Dhanbaad. in the month of april. She decided to go by air to city Dhanbaad from city Ahmedabaad. As there were no direct flights between these cities, she had to first fly to either city Bangluru or city Chennai and then fly to city Dhanbaad from there. Only a single airline operates flights from Ahmedabaad to either Bangluru or Chennai and the same was the case with travel from Bangluru or Chennai to Dhanbaad. As she wanted to minimize the cost of travel, she collected the following information regarding the airfares (in Rs.) on each date of the month of April.

| Date | Air fare (Rs.) | | | | Date | Air fare (Rs.) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | A – B | A – C | B – D | C - D | | A – B | A – C | B – D | C - D |
| 1 | 165 | 202.5 | 415 | 505 | 16 | 183 | 217.5 | 360 | 350 |
| 2 | 182.5 | 150 | 377.5 | 600 | 17 | 215 | 175 | 352.5 | 330 |
| 3 | 210 | 185 | 505 | 485 | 18 | 260 | 187.5 | 340 | 340 |
| 4 | 180 | 170 | 325 | 462.5 | 19 | 275 | 192.5 | 342.5 | 342.5 |
| 5 | 157.5 | 155 | 365 | 427.5 | 20 | 210 | 215 | 365 | 375 |
| 6 | 187.5 | 262.5 | 322.5 | 402.5 | 21 | 185 | 207.5 | 375 | 385 |
| 7 | 165 | 207.5 | 315 | 420 | 22 | 192.5 | 215 | 380 | 400 |
| 8 | 170 | 215 | 305 | 405 | 23 | 200 | 232.5 | 392.5 | 415 |

| 9 | 190 | 200 | 397.5 | 377.5 | 24 | 215 | 197.5 | 402.5 | 405 |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 202.5 | 190 | 422.5 | 385 | 25 | 187.5 | 150 | 415 | 320 |
| 11 | 215 | 180 | 410 | 390 | 26 | 192.5 | 142.5 | 427.5 | 367.5 |
| 12 | 195 | 165 | 400 | 415 | 27 | 177.5 | 135 | 435 | 375 |
| 13 | 177.5 | 192.5 | 382.5 | 417.5 | 28 | 185 | 175 | 387.5 | 380 |
| 14 | 152.5 | 225 | 382.5 | 365 | 29 | 190 | 195 | 362.5 | 390 |
| 15 | 152.5 | 157.5 | 342.5 | 340 | 30 | 180 | 157.5 | 350 | 365 |

Here A stands for Ahmedabaad, B stands for Bangluru, C stands for Chennai and D stands for Dhanbaad. The flights are connected in such a way that a person can go from Ahmedabaad to Dhanbaad, via Bangluru or Chennai, on the same day.

What is the minimum fare for travelling by flight from Ahmedabaad to Dhanbaad on any day in the month of April? (in Rs.)

A) 470    B)    C)    D)

### Question No. : 40

The airline offers a 25% discount on its fares for travel from Chennai to Dhanbaad on weekdays, i.e., from Monday to Friday but not on weekends, i.e., Saturdays and Sundays. If April 1st is a Wednesday, the minimum possible cost of flying from Ahmedabaad to Dhanbaad on any day in the month of April is

A) Rs. 405    B) Rs. 410    C) Rs. 412.5    D) Rs. 422.5

### Question No. : 41

It Priyanka wants to limit her travelling expenses to Rs.500, then on how many days of the month, does she have the option of travelling from Ahmedabaad to Dhanbaad, via. Bangluru?

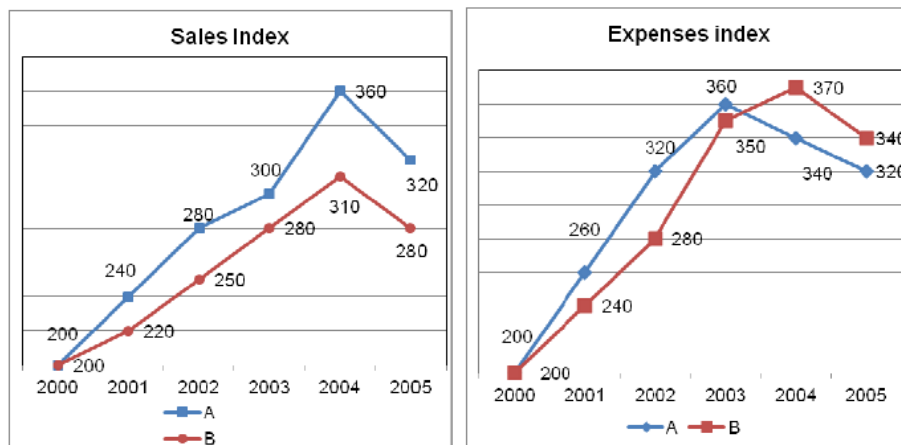A) 2    B) 3    C) 4    D) 5

### Question No. : 42

If en route to city Dhanbaad, Priyanka wants stop at city Bangluru for one day, then the cost of flying from Ahmedabaad to Dhanbaad in the month of April, is at least

A) Rs. 460    B) Rs. 465    C) Rs. 470    D) Rs. 485

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

### Question No. : 43

The following line graphs give the values of sales and expenses for two banana ripening plants, Healthy Farm Fresh and Super Banana plant 2000 to 2005. The values of sales and expenses of both the companies are each indexed to 200 in the year 2000.

In the above graph, the values of the sales and expenses of company Healthy Farm Fresh are indexed to the corresponding values in the year 2000 and same is the case with Super Banana plant. For example, if the sales value of Healthy Farm Fresh is 200k in 2000, it is 240k in 2001 and so on and if the sales value of Super Banana plant is 200k in 2000, it is 220k in 2001 and so on.

It is also known that neither of the ripening plants made a loss in any of the years.

Profit = Sales – Expenses
Profitability (in %) = Profit / Sales × 100

The profitability (in %) of company Healthy Farm Fresh in the year 2005 was at least

A) 12.25    B) 15    C) 16.67    D) 20

*Question No. : 44*

If the profit earned by company Super Banana plant in 2002 was Rs. 12 crores, then in how many years from 2001 to 2005, did the sales of company Super Banana plant increase by more than 10% when compared to the previous year?

A) 0    B) 1    C) 2    D) 3

*Question No. : 45*

If in the year 2004, the profits earned by companies Healthy Farm Fresh and Super Banana plant were in the ratio 5 : 12 and the expenses of the companies were in the ratio 1 : 2, then what was the ratio of their sales values?

A) 5 : 12    B) 7 : 5    C) 5 : 7    D) Cannot be determined

*Question No. : 46*

In at least how many of the given years did company Super Banana plant have a profitability of more than 10%? (in numerical value)

A) 3    B)    C)    D)

*DIRECTIONS for the question: Study the table/s given below and answer the question that follows.*

*Question No. : 47*

Brain tree school has organized a festival where 4 stalls - Selfie stall, Puppet stall, Snack stall & Tattoo stall has been displayed by teacher for students. Each student who has attended the festival has gone to at least one of the four stalls. Also following observations are made:

| | No. of students of age more than 6 years who went to the stall | No. of students of age more than 3 years but not more than 6 years who went to the stall | No. of students of age not more than 3 years, who went to the stall | No. of people who went to only that stall |
|---|---|---|---|---|
| Selfie stall | 50 | 110 | 90 | 100 |
| Puppet stall | 30 | 60 | 110 | 40 |
| Snack stall | 40 | 50 | 60 | 30 |
| Tattoo stall | 30 | 70 | 70 | 20 |

What is the minimum possible number of students who have attended the festival?

A) 350    B) 370    C) 300    D) 190

## Question No. : 48

Brain tree school has organized a festival where 4 stalls - Selfie stall, Puppet stall, Snack stall & Tattoo stall has been displayed by teacher for students. Each student who has attended the festival has gone to at least one of the four stalls. Also following observations are made:

| | No. of students of age more than 6 years who went to the stall | No. of students of age more than 3 years but not more than 6 years who went to the stall | No. of students of age not more than 3 years, who went to the stall | No. of people who went to only that stall |
|---|---|---|---|---|
| Selfie stall | 50 | 110 | 90 | 100 |
| Puppet stall | 30 | 60 | 110 | 40 |
| Snack stall | 40 | 50 | 60 | 30 |
| Tattoo stall | 30 | 70 | 70 | 20 |

The number of students who went to all the 4 stalls is at most:

A) 125    B) 130    C) 120    D) 140

## Question No. : 49

Brain tree school has organized a festival where 4 stalls - Selfie stall, Puppet stall, Snack stall & Tattoo stall has been displayed by teacher for students. Each student who has attended the festival has gone to at least one of the four stalls. Also following observations are made:

| | No. of students of age more than 6 years who went to the stall | No. of students of age more than 3 years but not more than 6 years who went to the stall | No. of students of age not more than 3 years, who went to the stall | No. of people who went to only that stall |
|---|---|---|---|---|
| Selfie stall | 50 | 110 | 90 | 100 |
| Puppet stall | 30 | 60 | 110 | 40 |
| Snack stall | 40 | 50 | 60 | 30 |
| Tattoo stall | 30 | 70 | 70 | 20 |

The number of students of age not more than 6 years, who attended the festival is at least:

A) 150    B) 170    C) 210    D) 220

## Question No. : 50

Brain tree school has organized a festival where 4 stalls - Selfie stall, Puppet stall, Snack stall & Tattoo stall has been displayed by teacher for students. Each student who has attended the festival has gone to at least one of the four stalls. Also following observations are made:

| | No. of students of age more than 6 years who went to the stall | No. of students of age more than 3 years but not more than 6 years who went to the stall | No. of students of age not more than 3 years, who went to the stall | No. of people who went to only that stall |
|---|---|---|---|---|
| Selfie stall | 50 | 110 | 90 | 100 |
| Puppet stall | 30 | 60 | 110 | 40 |

| Snack stall | 40 | 50 | 60 | 30 |
| Tattoo stall | 30 | 70 | 70 | 20 |

The number of students who went to exactly two of the four stalls is at the most

A) 280    B) 340    C) 300    D) 290

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

**Question No. : 51**

There are 6 members – P, Q, R, S, T and U in a family. Out of them, three are gents and three ladies. There are two married couples and two people are unmarried. All of them read different newspapers as The Times of India, Indian Express, Hindustan Times, Business Herald, Nav Bharat Times and Tribune.

T, who reads Indian Express, is the mother in law of P who is the wife of R. S is the father of U and he does not read Times of India and Tribune. Q reads Nav Bharat Times and is the sister of U, who read Hindustan Times. R does not read Tribune.

How many sons T has? (in numerical value)

A) 2    B)      C)      D)

**Question No. : 52**

There are 6 members – P, Q, R, S, T and U in a family. Out of them, three are gents and three ladies. There are two married couples and two people are unmarried. All of them read different newspapers as The Times of India, Indian Express, Hindustan Times, Business Herald, Nav Bharat Times and Tribune.

T, who reads Indian Express, is the mother in law of P who is the wife of R. S is the father of U and he does not read Times of India and Tribune. Q reads Nav Bharat Times and is the sister of U, who read Hindustan Times. R does not read Tribune.

Which of the following newspapers is read by P?

A) Business Herald    B) The Times of India    C) Nav Bharat Times    D) None of these

**Question No. : 53**

There are 6 members – P, Q, R, S, T and U in a family. Out of them, three are gents and three ladies. There are two married couples and two people are unmarried. All of them read different newspapers as The Times of India, Indian Express, Hindustan Times, Business Herald, Nav Bharat Times and Tribune.

T, who reads Indian Express, is the mother in law of P who is the wife of R. S is the father of U and he does not read Times of India and Tribune. Q reads Nav Bharat Times and is the sister of U, who read Hindustan Times. R does not read Tribune.
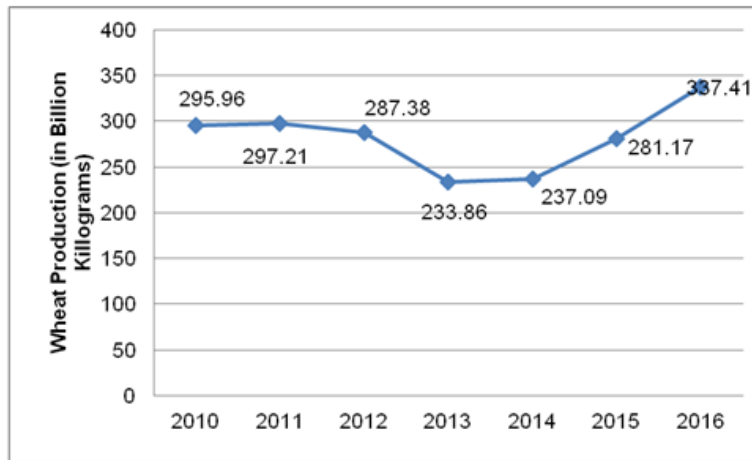
How is U related to P?

A) Son    B) Daughter    C) Brother    D) None of these

**Question No. : 54**

There are 6 members – P, Q, R, S, T and U in a family. Out of them, three are gents and three ladies. There are two married couples and two people are unmarried. All of them read different newspapers as The Times of India, Indian Express, Hindustan Times, Business Herald, Nav Bharat Times and Tribune.

T, who reads Indian Express, is the mother in law of P who is the wife of R. S is the father of U and he does not read Times of India and Tribune. Q reads Nav Bharat Times and is the sister of U, who read Hindustan Times. R does not read Tribune.

Which of the following is one of the married couples?

A) U Q    B) T U    C) S Q    D) S T

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

## Question No. : 55

The annual Wheat production (in billion kilograms) in country Joyland for the period 2010-2016 is shown in the line graph given below.



What is the approximate average annual wheat production (in million tonnes) in Joyland for the period 2010-2015?

A) 281.4    B) 326.5    C) 272.1    D) 328.3

## Question No. : 56

The wheat production in Joyland in the year 2017 increases by 15% over the year 2016. What is the approximate compounded annual growth rate of wheat production in Joyland over the period 2014-2017?

A) 19%    B) 17%    C) 16%    D) 18%

## Question No. : 57

Out of the following years, which year has shown the highest percentage increase in wheat production in Joyland compared to the previous year?

A) 2011    B) 2014    C) 2015    D) 2016

## Question No. : 58

What is the net percentage growth for the given period?
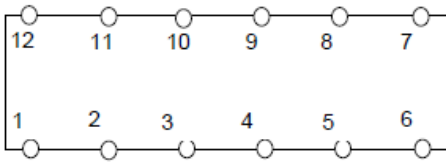
A) 14%    B) 15%    C) 10%    D) 11%

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

## Question No. : 59

Twelve people Abhishek, Bachchan, Varun, Dhawan, Shahrukh, Khan, Ranbir, Kapoor, Deepika, Padukon, Priyanka and Chopra are sitting at a rectangular table which has 12 chairs numbered from 1 to 12 (as shown in the figure). Each person is sitting at one of the chair and no chair is empty.

It is also observed that

1. Khan, sitting at chair number 1, is diagonally opposite Varun who is sitting opposite Dhawan.
2. Shahrukh is sitting opposite Deepika who is the only person sitting between Abhishek and Chopra.
3. Bachchan is sitting opposite Priyanka who is the only person sitting between Varun and Padukon.

If Padukon is not sitting opposite Chopra, then who is sitting next to Khan?

A) Abhishek    B) Shahrukh    C) Chopra    D) Either Shahrukh or Chopra

## Question No. : 60

How many different seating arrangements are possible if Khan is not sitting next to Chopra? (write the ans key)

1. Two                    2. Three
3. Four                   4. Six

A) 4    B)    C)    D)

## Question No. : 61

If Kapoor is sitting at one of the corner seats, then who is sitting opposite him?

A) Khan    B) Shahrukh    C) Dhawan    D) Bachchan

## Question No. : 62

If Shahrukh is sitting next to Ranbir, how many seating arrangements are possible? (in numerical value)

A) 4    B)    C)    D)

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

## Question No. : 63

Eight floors in a building (from 1 to 8) are occupied by persons Aala, Bala, Cala, Dala, Eala, Fala, Gala and Hala, with each person occupying a distinct floor. Further it is known that:

1. Aala lives 5 floors above Bala.
2. Hala lives on the only floor between Cala and Eala.
3. Dala and Fala live on adjacent floors.
4. Bala does not live on the 1st floor.

How many different values of difference between the floor numbers of Cala and Dala are possible? (in numerical value)

A) 5    B)    C)    D)

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

## Question No. : 64

Six beads, each of different variety, are equally distributed among three girls Riya, Rekha and Risha. The beads are of variety Acrylic, Crystal, Bugle, Glass, Spacer and Pearl. All the girls make three Statements each. All the Statements are true except Statement 3 made by two of the girls.

| | |
|---|---|
| Riya | Statement 1 : I don't have the spacer bead. |
| | Statement 2 : I have the crystal bead. |
| | Statement 3 : Risha does not have the glass bead |
| | Statement 1 : I don't have the pearl bead |

| Rekha | Statement 2 : I have the spacer bead |
|---|---|
| | Statement 3 : Riya does not have the acrylic bead |
| Risha | Statement 1 : I don't have the bugle bead |
| | Statement 2 : I have the pearl bead |
| | Statement 3 : Rekha does not have the acrylic bead |

Who speaks the truth in all the three statements?

A) Riya   B) Rekha   C) Risha   D) Cannot be determined

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

### Question No. : 65

A book rack contains four novels of different genres, mystery, horror, comedy and thriller. The novels are written by Raja, Ram, Mohan and Rai and published by Babbu, Meshi, Sanjeev and Pawan, not necessarily in the same order. The horror novel is published by Meshi and the thriller novel is written by Mohan. Each novel is written by a different author and published by a different publisher. It is also known that Raja and Ram get their books published by Babbu or Meshi only.

If the mystery novel is written by Rai, then who can be the publisher of the comedy novel?

A) Babbu or Meshi   B) Only Babbu   C) Babbu or Sanjeev   D) Babbu or Sanjeev or Pawan

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

### Question No. : 66

A book rack contains four novels of different genres, mystery, horror, comedy and thriller. The novels are written by Raja, Ram, Mohan and Rai and published by Babbu, Meshi, Sanjeev and Pawan, not necessarily in the same order. The horror novel is published by Meshi and the thriller novel is written by Mohan. Each novel is written by a different author and published by a different publisher. It is also known that Raja and Ram get their books published by Babbu or Meshi only.

How many combinations of publisher and author are possible for the mystery novel? (in numerical value)

A) 4   B)   C)   D)

## Section : Quantitative Ability

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

### Question No. : 67

Find the digit at unit place of $(327)^{448} \times (78)^{664}$. (in numerical value)

A) 6   B)   C)   D)

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

### Question No. : 68

A 14-digit number has all 5's. Find the remainder when the number is divided by 74.

A) 1   B) 55   C) 73   D) None of these

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

**Question No. : 69**

Both roots of the quadratic equation $x^2 - 33x + k = 0$ are prime. Find the possible value of $k$.

A) 95    B) 33    C) -62    D) None of these

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

**Question No. : 70**

If July of any year has five Sundays, which of the following must occur 5 times in August of the same year?

A) Wednesday    B) Thursday    C) Tuesday    D) Friday

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

**Question No. : 71**

$$\begin{array}{r} ABC10 \\ + ABC12 \\ \hline 123422 \end{array}$$ for digits A, B, C above addition holds good. Find A + B + C. (in numerical value)

A) 14    B)    C)    D)

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

**Question No. : 72**

A cuboid is of dimensions 45m × 30m × 24m. A new solid is formed by removing a cube of 9m side from each corner of this cuboid. What percent of the volume is removed?

A) 0%    B) 18%    C) 54%    D) 9%

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

**Question No. : 73**

Let g(x) be a linear function for which g(5) – g(2) = 12. Find g(7.5) –g(3.5).

A) 16    B) 0    C) 12    D) Cannot be determined

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

**Question No. : 74**

Shruti & Monika are two friends. One day they realized that the two digits in Shruti's age are the same as the digits in Monika's age, but in reverse order. In 5 years, Shruti will be twice as old as Monika will be then. Find sum of their ages. (in numerical value)

A) 44    B)    C)    D)

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

**Question No. : 75**

A digital watch displays hours and minutes with A.M. & P.M. What is the largest possible sum of all the digits in display? (in numerical value)

A) 23    B)    C)    D)

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

**Question No. : 76**

Mr. & Mrs. Harinder have 2 kids. When they get into car for a picnic, 2 persons sit in the front seats, and the other two sit in the back seats. Either Mr. Harinder or Mrs. Harinder must drive the car. How many seating arrangements are possible? (in numerical value)

A) 12    B)    C)    D)

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

**Question No. : 77**

For real numbers x & y, define x $\Delta$ y = (x + y) (x − y). Find 3 $\Delta$ (4 $\Delta$ 5) + (3 $\Delta$ 4) $\Delta$ 5

A) -144    B) 48    C) -9    D) - 48

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

**Question No. : 78**

The cost of 40 hens, 44 dogs and 50 goats is Rs. 392. The cost of 46 hens, 54 dogs and 60 goats is Rs. 466. If the cost of 109 hens, 140 goats and 125 dogs is Rs N, find N.

A) 545.5    B) 2182    C) 1091    D) Cannot be determined

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

**Question No. : 79**

Rohit has a bag full of red and green balls. If 50% of the red balls were green, then there would be 50% more green balls than red balls. What percentage of the total balls is green?

A) 20%    B) 25%    C) 60%    D) 33.33%

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

**Question No. : 80**

Riya borrows Rs. 45000 from Siya at 10% Compound Interest for 3 years. Later she settled the committed amount in three annual installments which form an A.P. She ends up paying Rs. 54000 totally. How much does she pay in 1$^{st}$ year (in Rs.)?

A) 18000    B) 19500    C) 16500    D) None of these

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

**Question No. : 81**

$\dfrac{1}{\log_x{}^2} + \dfrac{1}{\log_x{}^4} = \dfrac{1}{\log_{\sqrt{6}}{}^{0.25}}$ where x > 0, then x is

A) $6^{\frac{1}{6}}$    B) $6^{-\frac{1}{6}}$    C) $6^{\frac{1}{3}}$    D) $6^{-\frac{1}{3}}$

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

**Question No. : 82**

P and Q work together and finish a work in 12 days. If P worked half as efficiently as he usually does and Q works thrice as efficiently as he usually does, the work gets completed in 9 days. In how many days P can complete the same work independently?

A) 27    B) 24    C) 18    D) 12

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

**Question No. : 83**

The sum of 3 natural numbers is 16. Find their maximum product. (in numerical value)

A) 150    B)    C)    D)

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

**Question No. : 84**

Aman buys 20 bananas and sells 16 of them at the cost price of 20 bananas. What is his loss/profit%?

A) Profit, 25%    B) Loss, 25%    C) Profit 20%    D) Loss, 20%

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

**Question No. : 85**

Vandana is going to be four years on 29$^{th}$ February 2016. When she was born, it was a Sunday. If she lives up to 101 years, how many birthdays would she celebrate on Sunday (Ignoring the day, she was born)? (in numerical value)

A) 4    B)    C)    D)

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

**Question No. : 86**

Find the number of ways of choosing 4 cards from pack of 52 playing cards at random, such that all four cards belong to same suits and none of the cards is a diamond card. (in numerical value)

A) 2145    B)    C)    D)

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

**Question No. : 87**

For a series $t_1$, $t_2$, $t_3$ ------ ; $t_n$ = n (n + 3). Find $S_n$

A) $\dfrac{n(n+1)(n+5)}{3}$    B) $\dfrac{n(n+1)(2n+1)}{6}$    C) $\dfrac{n(n+2)(n+5)}{6}$    D) $\dfrac{n(n+1)(n+5)}{6}$

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

**Question No. : 88**

Line through the points (-2, 6) & (4, 8) is perpendicular to the line through the points (8, 12) and (x, 24). Find the value of x. (in numerical value)

A) 4    B)     C)     D)

**Question No. : 89**

x is a perfect square and is a factor of 1! × 2! × 3! ------8! × 9!. Find number of possible values of x. (in numerical value)

A) 672    B)     C)     D)

**Question No. : 90**

If $x = 27 \sqrt[4]{9}\sqrt[3]{9}$, find $\log_3 x$.

A) $8\dfrac{1}{2}$    B) $4\dfrac{1}{6}$    C) 1    D) 0

**Question No. : 91**

At what time between 7 & 8'o clock, minute and hour hand of a clock will form an angle of 84°?

A) 7 : 20 & 7 : 50    B) 7 : 23 & 7 : 53    C) 7 : 21 & 7 : 49    D) 7 : 20 & 7 : 53

**Question No. : 92**

Deepak has Rs. 10, 000 to invest. He invests Rs. 4000 at 5% and Rs. 3500 at 4%. In order to have Rs. 500 per annum as income, he must invest the remainder at

A) 6%    B) 6.1%    C) 6.2%    D) 6.4%

**Question No. : 93**

Find x + y + z, where x, y, z are positive integers which satisfies the following equations. (in numerical value)
xy + zy – 81 = 0
xz + yz – 17 = 0

A) 18    B)     C)     D)

**Question No. : 94**

Dilwale and Prem are at opposite ends of a 90 meter long road. They start to run the length of the road; one at the rate of 3 mts per second, the other at 2 mts per second. They run back and forth for 12 minutes. If we neglect the time in turning, find the number of times they pass each other. (in numerical value)

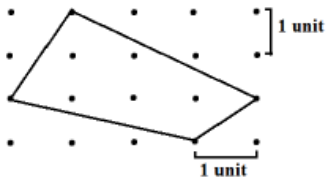A) 20    B)     C)     D)

**Question No. : 95**

Preet covered a distance of 100 kms on her first journey. On a later journey she travelled 600 kms while going 3 times as fast. If her new time is equal to x times the old time, find x. (in numerical value)

A) 2    B)    C)    D)

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

**Question No. : 96**

Suraj is playing a game. He has placed 20 nails on a rectangular board as shown in figure. Now he has taken a thread and stretched it over 4 pegs as shown forming a quadrilateral. Find its area.



A) 5 sq. units    B) 5.5 sq. units    C) 6 sq. units    D) 4.5 sq. units

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

**Question No. : 97**

ab is a two digit positive number such that ab is divisible by a as well as b. Find sum of all possible values of ab. (in numerical value)

A) 630    B)    C)    D)

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

**Question No. : 98**

Monika walked a certain distance at a constant speed. If she had gone 1/2 km/hr faster, she would have walked the distance in 4/5 of usual time. If she had gone 1/2 km/hr slower, she would have been $2^{1}/_{2}$ hours longer on the road. Find the distance in km. (in numerical value)

A) 15    B)    C)    D)

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

**Question No. : 99**

Aaliya plans a profit of 10% on the selling price of an article and her expenses are 15% of sales. The rate of markup on an article is:

A) 20%    B) 25%    C) 30%    D) 33.33%

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

**Question No. : 100**

Aman rolled 11 fair distinguishable dice. What is the probability that the product of the numbers on the top face is composite?

A) $\frac{11}{2}\left(\frac{1}{6}\right)^{10}$    B) $\left(\frac{1}{12}\right)^{11}$    C) $1-\frac{1}{2}\left(\frac{1}{6}\right)^{10}$    D) None of these