

Directions of Test

Test Name	2016 Bull CAT 07	Total Questions	100	Total Time	180 Mins
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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

Financial historians disagree as to how far the growth of banking after the seventeenth century can be credited with the acceleration of economic growth that began in Britain in the late eighteenth century and then spread to Western Europe and Europe's offshoots of large-scale settlement in North America and Australasia. It may in fact be futile to seek a simplistic causal relationship. It seems perfectly plausible that the two processes were interdependent and self-reinforcing. Both processes also exhibited a distinctly evolutionary character, with recurrent mutation, speciation and punctuated equilibrium.

A decisive difference between natural evolution and financial evolution is the role of what might be called 'intelligent design' – though in this case the regulators are invariably human, rather than divine. Gradually, by a protracted process of trial and error, the Bank of England developed public functions, in return for the reaffirmation of its monopoly on note issue in 1826, establishing branches in the provinces and gradually taking over the country banks' note-issuing business. Increasingly, the Bank also came to play a pivotal role in inter-bank transactions.

In the 1840's the position of the Governor, J. Horsley Palmer, was that the reserve should essentially be regulated by the volume of discounting business, so long as one third of it consisted of gold coin or bullion. The Prime Minister, Sir Robert Peel, was suspicious of this arrangement, believing that it ran the risk of excessive banknote creation and inflation. Peel's 1844 Bank Charter Act divided the Bank in two: a banking department, which would carry on the Bank's own commercial business, and an issue department, endowed with £ 14 million of securities and an unspecified amount of coin and bullion which would fluctuate according to the balance of trade between Britain and the rest of the world.

Economic theorists of the nineteenth century were not able to challenge the sacred principle that a pound sterling should be convertible into a fixed and immutable quantity of gold according to the rate of £ 3 17s 2d per ounce of gold. Had that principle been adhered to, and had the money supply of the British economy genuinely hinged on the quantity of gold coin and bullion in the Bank of England's reserve, the growth of the UK economy would have been altogether choked off, even allowing for the expansionary effects of new gold discoveries in the nineteenth century.

Although there was variation, most advanced economies essentially followed the British lead when it came to regulation through a monopolistic central bank operating the gold standard, and concentration of deposit-taking in a relatively few large institutions. In Britain, as on the Continent, there were marked tendencies towards concentration, exemplified by the decline in the number of country banks from a peak of 755 in 1809 to just seventeen in 1913.

Excerpted from 'The Ascent of Money' by Niall Ferguson.

Why does the author consider it futile to seek a causal relationship between the industrial revolution and establishment of banking?

- A) They were two independent happenings, which coincidentally happened around the same time and place.
- B) Banking and industry were both daughters of innovation, which can be viewed to be the common cause
- C) There is no certainty about which of the two, banking or industry, was the cause, and which was the effect.
- D) None of these.

Question No. : 2

In the simile that the author uses between industrialization and evolution, all of the following can be the analogues of evolutionary behaviors by companies, except

- A) Technical innovation. B) The creation of new kinds of firms.
- C) The changing legal and political environment of the countries in the nineteenth century.
- D) Crisis which would determine which firms would survive and which would die out.

Question No. : 3

Which of the following would represent a statement made by a typical Victorian era nineteenth century economist about the gold standard?

- A) 'Practical men, who believe themselves to be quite exempt from any intellectual influences are usually the slaves of the gold standard.'
- B) 'Paper notes are money because they are representations of Metallic Money. Unless so, they are false and spurious pretenders.'
- C) 'Precious metal and deposits are interchangeable forms of money. Why worry about which is worth how much.'
- D) 'The problem with the gold standard is that it pretends to know the price of everything, but knows the value of nothing.'

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

Question No. : 4

The caste was and still is wider than the family, the village and the city. It had religious, functional, administrative and social moorings. Status put the individual in proper perspective with regard to the traditions which were handed down from generation to generation and interpreted either by the Brahmins whose disinterestedness was sought to be secured by their unusually high position or by the caste-panchayat which was often the guild-assembly. The importance of the social Meme was very much appreciated, rather over-valued. Caste was an insurance against unemployment, etc., where lack of skill did not arise, in which case the joint family and the village assembly came to the rescue. It tended to equalize wages. Such an artificial equalization was all the more necessary then, when the laws of demand and supply could not take advantage of an institution like the State, when their free play was interfered with by a lack of geographical mobility.

Status did not interfere with a vertical mobility of labor so much; the Vaisyas were not afraid of any competition from the upper or the lower classes. So, when value in exchange could not develop, the value of the commodities was determined by their social worth, and social worth was determined in the light of good life. The Brahmins without being economic producers remained at the top of the society, for they created new ideals and interpreted old ones in the light of new facts. The functional tie of the caste-system was not exclusive. The economics of the caste-system was primarily a Social Economy. Function, as has been already suggested, primarily depended upon capacity which was cultivated by a system of pupillary succession within the caste guild. In the normal individual, when capacity and individual gifts, are in direct line with needs and opportunities kept free from competition of other groups by status, the instinct of workmanship can grow. This is the secret of success in all ancient works of art in which we always miss the name of the Master-architect.

But occupations have always a bad habit of narrowing the vision. To cure this narrowness, an individual craftsman in ancient and mediaeval India had other groups to belong to. His family was there and his village community was there too. Without raising the problem of divided allegiance, the craftsman belonged to other associations which contributed to his complete development. By giving religious injunctions to preserve the social classifications, the caste-system secured society against what Aristotle called 'Stasis' to which every society must succumb if there is an improper understanding of the appropriate duties by a certain ambitious section of the society.

Excerpted from 'Personality and the Social Science' by DP Mukherjee

Apart from caste, which of the below can be cited as an example of a human grouping that has stood the test of time?

- A) Marriage B) Autocracy C) Class D) Family
-

Question No. : 5

What is implied about the reason for the formation of the caste system?

- A) To give an individual an opportunity to imbibe useful traditions from an early age.
- B) To create a religious order to ensure that society does not generate into chaos.
- C) To create a system of slavery so that a certain set of persons could concentrate solely on intellectual tasks.
- D) It started off as an interest group, which then got converted into a social group divided by wealth.

Question No. : 6

Why does the author consider the function of the caste system analogous to that of trade unions?

- A) One uses religion and the other ideology in order to hard-sell their respective messages.
 - B) The caste-panchayats helped in wage negotiation by setting minimum wages which is also a function performed by trade unions in the modern day world.
 - C) Both of them have their origins in guilds.
 - D) They helped organize their members to fight against the exploitation by the vaisyas, in the same way that trade unions organize strikes and tool-downs in their fights against the capitalist class.
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DIRECTIONS for the question: Read the passage and answer the question based on it.

Question No. : 7

Small beginnings can have great endings—sometimes. As a case in point, note what came of the small, original effort of a self-trained back-country Quaker youth named John Dalton, who along towards the close of the eighteenth century became interested in the weather, and was led to construct and use a crude water-gauge to test the amount of the rainfall. The simple experiments thus inaugurated led to no fewer than two hundred thousand recorded observations regarding the weather, which formed the basis for some of the most epochal discoveries in meteorology, as we have seen. But this was only a beginning. The simple rain-gauge pointed the way to the most important generalization of the nineteenth century in a field of science with which, to the casual observer, it might seem to have no alliance whatever. The wonderful theory of atoms, on which the whole gigantic structure of modern chemistry is founded, was the logical outgrowth, in the mind of John Dalton, of those early studies in meteorology.

The way it happened was this: From studying the rainfall, Dalton turned naturally to the complementary process of evaporation. He was soon led to believe that vapor exists, in the atmosphere as an independent gas. But since two bodies cannot occupy the same space at the same time, this implies that the various atmospheric gases are really composed of discrete particles. These ultimate particles are so small that we cannot see them—cannot, indeed, more than vaguely imagine them—yet each particle of vapor, for example, is just as much a portion of water as if it were a drop out of the ocean, or, for that matter, the ocean itself. But, again, water is a compound substance, for it may be separated, as Cavendish has shown, into the two elementary substances hydrogen and oxygen. Hence the atom of water must be composed of two lesser atoms joined together. Imagine an atom of hydrogen and one of oxygen. Unite them, and we have an atom of water; sever them, and the water no longer exists; but whether united or separate the atoms of hydrogen and of oxygen remain hydrogen and oxygen and nothing else. Differently mixed together or united, atoms produce different gross substances; but the elementary atoms never change their chemical nature—their distinct personality.

It was about the year 1803 that Dalton first gained a full grasp of the conception of the chemical atom. At once he saw that the hypothesis, if true, furnished a marvellous key to secrets of matter hitherto insoluble - questions relating to the relative proportions of the atoms themselves. It is known, for example, that a certain bulk of hydrogen gas unites with a certain bulk of oxygen gas to form water. If it be true that this combination consists essentially of the union of atoms one with another (each single atom of hydrogen united to a single atom of oxygen), then the relative weights of the original masses of hydrogen and of oxygen must be also the relative weights of each of their respective atoms. If one pound of hydrogen unites with five and one-half pounds of oxygen (as, according to Dalton's experiments, it did), then the weight of the oxygen atom must be five and one-half times that of the hydrogen atom. Other compounds may plainly be tested in the same way. Dalton made numerous tests before he published his theory. He found that hydrogen enters into compounds in smaller proportions than any other element known to him, and so, for convenience, determined to take the weight of the hydrogen atom as unity. The atomic weight of oxygen then becomes (as given in Dalton's first table of 1803) 5.5; that of water (hydrogen plus oxygen) being of course 6.5. The atomic weights of about a score of substances are given in Dalton's first paper, which was read before the Literary and Philosophical Society of Manchester, October 21, 1803. I wonder if Dalton himself, great and acute intellect though he had, suspected, when he

read that paper, that he was inaugurating one of the most fertile movements ever entered on in the whole history of science?

The organisation of the passage can be identified as:

- A) the origin of modern chemistry is highlighted B) the bedrock of chemistry is extrapolated
C) the core of chemistry is explained D) the role of a scientist and his place in the context of important findings.

Question No. : 8

Identify the statements that are correct as per the information given in the passage:

- I. Atoms have their unique identity.
II. Dalton's theories have been proven to be incorrect over time.
III. Dalton used reverse analysis to form some of his early observations.

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

Question No. : 9

Identify the incorrect statements:

- I. The core of Dalton's work is based on the assumption that atmospheric gases are made of discrete particles.
II. Dalton was meteorologist who discovered atoms accidentally.
III. When atoms are mixed in different ratios, different substances, gases, etc. are produced.

- A) I & II B) II & III C) I & III D) All of the above
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Question No. : 10

It can be inferred from the passage that:

- A) Dalton realized about the importance of his discoveries
B) Dalton may not have realized about the importance of his discoveries
C) Dalton did not realize about the importance of his discoveries
D) Dalton was told by others about the importance of his discoveries
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Question No. : 11

An analogous situation that matches Dalton's discovery of theory of atoms is:

- A) A cook accidentally discovering a new recipe by virtue of dropping some spices in a dish
B) A writer by chance meets an interesting personality while travelling and uses him to write his bestseller
C) An environmentalist discovers new behaviour patterns in a certain type of monkeys and then extends his discovery to the whole species.
D) An attorney invokes a clause that most other lawyers don't use in order to win a case.
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Question No. : 12

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

- A) mind-boggling B) enigmatic C) momentous D) fitful
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DIRECTIONS for the question : Read the passage and answer the question based on it.

Question No. : 13

Last fall, Toby Young did something ironic. Toby is the son of Michael Young, the British sociologist and Labour life peer whose 1958 satire *The Rise of the Meritocracy* has been credited with coining the term. In September, he published an 8,000-word reconsideration of his father's signature concept in an Australian monthly. The old man was right that meritocracy would gradually create a stratified and immobile society, he wrote, but wrong that abolishing selective education was the cure. "Unlike

my father, I'm not an egalitarian," Young wrote. If meritocracy creates a new caste system, "the answer is more meritocracy." To restore equality of opportunity, he suggested subsidies for intelligence-maximizing embryo selection for poor parents "with below-average IQs." The irony lay in the implication that Young, because of who his father was, has special insight into the ideology that holds that it shouldn't matter who your father is.

His outlandish resort to eugenics suggests that Toby Young found himself at a loss for solutions, as all modern critics of meritocracy seem to do. The problems they describe are fundamental, but none of their remedies are more than tweaks to make the system more efficient or less prejudicial to the poor. For instance, in *Excellent Sheep*, William Deresiewicz accuses the Ivy League of imposing a malignant ruling class on the country, then meekly suggests that elite universities might solve the problem by giving greater weight in admissions to socioeconomic disadvantage and less to "résumé-stuffing." In *The Tyranny of the Meritocracy*, Lani Guinier belies the harsh terms of her title by advising that we simply learn to reward "democratic rather than testocratic merit." Christopher Hayes subtitled his debut book *Twilight of the Elites "America after Meritocracy,"* but the remedies he prescribes are all meant to preserve meritocracy by making it more effective. In his latest book, *Our Kids*, Robert Putnam proves that American social mobility is in crisis, then reposes his hopes in such predictable nostrums as housing vouchers and universal pre-kindergarten.

When an author caps two hundred pages of rhetorical fire with fifteen pages of platitudes or utopian fantasy, that is called "the last chapter problem." When every author who takes up a question finds himself equally at a loss, that is something else. In this case, our authors fail as critics of meritocracy because they cannot get their heads outside of it. They are incapable of imagining what it would be like not to believe in it. They assume the validity of the very thing they should be questioning.

Meritocracy began by destroying an aristocracy; it has ended in creating a new one. Nearly every book in the American anti-meritocracy literature makes this charge, in what is usually its most empirically reinforced chapter. But the solutions on offer never rise to the scale of the problem. Authors attack the meritocratic machine with screwdrivers, not sledgehammers, and differ only in which valve they want to adjust. Some think the solution is to tip more disadvantaged kids over the lip of the intake funnel, which would probably make things worse. If more people start competing for a finite number of slots, slim advantages like those that come from having grown up with two meritocrats for parents will only loom larger. Others favor the slightly more radical solution of redefining our idea of merit, usually in a way that downplays what Guinier calls "pseudoscientific measures of excellence." She even has a replacement in mind, the Bial-Dale College Adaptability Index, the testing of which involves Legos. (Why are you laughing? It is backed by a study.)

My solution is quite different. The meritocracy is hardening into an aristocracy—so let it. Every society in history has had an elite, and what is an aristocracy but an elite that has put some care into making itself presentable? Allow the social forces that created this aristocracy to continue their work, and embrace the label. By all means this caste should admit as many worthy newcomers as is compatible with their sense of continuity. New brains, like new money, have been necessary to every ruling class, meritocratic or not. If ethnic balance is important to meritocrats, they should engineer it into the system. If geographic diversity strikes them as important, they should ensure that it exists, ideally while keeping an eye on the danger of hoovering up all of the native talent from regional America. But they must give up any illusion that such tinkering will make them representative of the country over which they preside. They are separate, parochial in their values, unique in their responsibilities. That is what makes them aristocratic.

From the context of the passage, the meaning of the word 'meritocracy' can be derived to be:

- A) a society governed by people with well-established links and pedigree
- B) a society governed by people selected according to certain performance based attributes.
- C) a society owned by those in power and whose functions are selectively determined by these same individuals.
- D) a society driven by individual motivations that are a function of individual human potential and calibre.

Question No. : 14

What is ironic in Toby Young's solution for meritocracy?

- A) he is countering the views of his own father.
- B) his suggestion counters the very system his family devised.
- C) his insight is assumed significant irrespective its lack of logic.
- D) he is speaking out against a position from the vantage point that was granted to him by the same system.

Question No. : 15

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

- A) prejudiced as well as thoughtful
- B) unbiased as well as insightful
- C) objective as well as subjective

D) critical as well as analytical

Question No. : 16

According to the author of the passage, "the last chapter problem" implies:

- A) that the author has probably suggested a solution that is practically not feasible.
- B) that the author has probably indulged in bromides that actually don't account for much.
- C) both (1) and (2)
- D) neither (1) nor (2)

Question No. : 17

According to the author of the passage:

- I. the solutions posed the problems of meritocracy primarily suggest with tinkering with the system rather than abolishing it.
 - II. the solutions for the problems posed by meritocracy are not just not strong enough to question the very validity of the system and break its very foundations.
 - III. solutions for meritocracy, such as the one that involve re-defining merit, miss the mark by making suggestions that are laughable in themselves.
- A) I & II B) II & III C) I & III D) All of the above

Question No. : 18

The author of the passage seems to suggest:

- A) we should replace meritocracy with aristocracy.
- B) we accept meritocracy as a form of aristocracy and learn to live with it.
- C) we should replace meritocracy with aristocracy and stop tinkering with it.
- D) All of the above

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

Question No. : 19

Where is your mind? Where does your thinking occur? Where are your beliefs? René Descartes thought that the mind was an immaterial soul, housed in the pineal gland near the centre of the brain. Nowadays, by contrast, we tend to identify the mind with the brain. We know that mental processes depend on brain processes, and that different brain regions are responsible for different functions. However, we still agree with Descartes on one thing: we still think of the mind as brainbound, locked away in the head, communicating with the body and wider world but separate from them. And this might be quite wrong. I'm not suggesting that the mind is non-physical or doubting that the brain is central to it; but it could be that the mind extends beyond the brain.

To begin with, there is a strong case for thinking that many mental processes are essentially embodied. The brainbound view pictures the brain as a powerful executive, planning every aspect of behaviour and sending detailed instructions to the muscles. But, as work in robotics has illustrated, there are more efficient ways of doing things, which nature almost certainly employs. The more biologically realistic robots perform basic patterns of movement naturally, in virtue of their passive dynamics, without the use of motors and controllers. Intelligent, powered control is then achieved by continuously monitoring and tweaking these bodily processes, sharing the control task between brain and body. Similarly, rather than passively gathering information to construct a detailed internal model of the external world, it is more efficient for the control system to keep actively probing the world, gathering just enough information at each step to advance the task at hand. Such a strategy relies essentially on body activity.

As well as being embodied, mental processes can also be extended to incorporate external artefacts. Clark proposes what's since been called the Parity Principle, which says that if an external artefact performs a function that we would regard as mental if it occurred within the head, then the artefact is genuinely part of the user's mind. To illustrate this, Clark and Chalmers describe two people each trying to work out where various shapes fit in a puzzle. One does it in his head, forming and rotating mental images of the shapes, the other by pressing a button to rotate shapes on a screen. Since the first process counts as mental, the second should too, Clark and Chalmers argue. What matters is what the object does, not where it is located. The rationale is the same as that for identifying the mind with the brain rather than the soul; the mind is whatever performs mental functions.

The Parity Principle doesn't apply only to processes we can in fact perform in our heads. Think about doing a long division with pen and paper. Few of us can do this in our heads, holding all the stages in memory, but if we could, we would certainly regard it as a mental process, so – applying the Parity Principle – we should regard the pen-and-paper process as a mental one, too. An

extension can also be an enhancement.

Language is a particularly powerful means of extension and enhancement, serving, in Clark's phrase, as scaffolding that allows the biological brain to achieve things it could not do on its own. Linguistic symbols provide new focuses of attention, enabling us to track features of the world we would otherwise have missed, and structured sentences highlight logical and semantic relations, allowing us to develop new, more abstract reasoning procedures. With pen or laptop, we can construct extended patterns of thought and reasoning that we could never formulate with our bare brains. In writing, we are not simply recording our thinking but doing the thinking. (As the physicist Richard Feynman once observed: 'I actually did the work on the paper.')

According to the author of the passage:

- A) while writing, it is the process of writing which enables thinking in the brain.
- B) during the process of writing, the act of writing itself contributes to the thinking of the mind.
- C) during the process of writing, the act of writing is inconsequential as the mind is the one responsible for the complete process.
- D) none of the above

Question No. : 20

Which, out of the following, is an example of the Parity Principle?

- A) Solving a Sudoku puzzle.
- B) Solving a Rubik's cube.
- C) Both (1) and (2)
- D) Neither (1) nor (2)

Question No. : 21

Identify the statements that are not incorrect as per the views exhibited by the author of the passage.

- I. Conventional wisdom regards the mind and the brain as the same.
- II. The chances of the mind extending beyond the brain are next to nothing.
- III. The brain is a powerful executive that plans every aspect of behaviour.

- A) Only I
- B) Only II
- C) Only III
- D) Both II & III

Question No. : 22

Identify the statements that are incorrect as per the information given in the passage.

- I. The brain employs the most efficient way of doing things and bodily functions cannot be of assistance in the same.
- II. The role of external artefacts in mental processes is limited.
- III. Language is a powerful means of extending the functions of the brain.

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

Question No. : 23

The approach of the author can be identified as:

- A) one where he is explaining a pitfall to a certain line of thought
- B) one where he is elucidating a particularly significant debate within the scientific community.
- C) one where he highlights an alternate way of understanding a certain human process.
- D) both (2) and (3)

Question No. : 24

An apt title for the passage is:

- A) The mind transcends the body to encompass all
- B) The mind and the body are nothing but one
- C) The mind is a device locked in the brain but acting through the body
- D) The mind isn't locked in the brain but extends far beyond it

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. : 25

1. For most, it was taken to be what nowadays would be called a "lifestyle", as exemplified by the habitués of two famous Saint-Germain cafes, which are still going strong, though with fantastically inflated prices: the Flore and the nearby Deux Magots.
2. Much was made, for instance, of the singer Juliette Gréco, who, with her black polo-neck sweaters and long straight black hair, established the "existentialist look".
3. And what a right royal time they had of it.
4. The popular fascination with existentialism in the two decades or so after the second World War was extremely peculiar, given that very few people, especially in the English-speaking world, knew what existentialism was.
5. But the reigning king and queen of the era were Jean-Paul Sartre and his lover and lifelong companion, Simone de Beauvoir.

A) 41253 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. : 26

1. When an American general arrived to confer with the papal nuncio, the U.S. Army blared music from loudspeakers to prevent journalists from eavesdropping.
2. Although the media delighted in the spectacle, President George H. W. Bush and General Colin Powell, then the chairman of the Joint Chiefs of Staff, took a dim view of it.
3. To escape capture, he took refuge in the Papal Nunciatura in Panama City.
4. In December, 1989, the Panamanian dictator Manuel Noriega was expelled from power by American forces.
5. Members of a psychological-operations unit then decided that non-stop music might aggravate Noriega into surrendering.

A) 2 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. Weeds around the world are developing resistance to glyphosate—one of the most common herbicides on the market—and like bacteria and tumor cells, many plants can also withstand multiple other toxins, each with unique molecular targets.
2. Introduce a toxin to a system, and you inevitably select for resistant survivors.
3. For years, this general plot line made headlines in the fields of antibiotic resistance and cancer research.
4. These few individuals gain a reproductive advantage and multiply; sometimes they can't be stopped with even the most potent chemicals.
5. It's a story suited for a Hollywood horror film, yet it's also a tenet of evolutionary biology.

A) 52431 B) C) D)

DIRECTION for the question: The six sentences (labelled 1,2,3,4,5 and 6) 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 six numbers as your answer.

Question No. : 28

1. The difference might arise because more members of a home group would be willing to protect their core territory and resources, but would be less inclined to risk a full-on scrap if the danger was not immediate.
2. Every seasoned punter knows to bear home-field advantage in mind when placing a bet.
3. However, regardless of size, the home team was always more likely to win a battle if it took place close to the centre of its home range.
4. It also turns out that monkeys also appreciate its value when they tangle over territory.
5. However the advantage evaporated if the home side strayed off their turf.
6. In a fair fight between troops one would expect the losing troop to be the smallest.

A) 246351 B) C) D)

DIRECTIONS for the question: The five sentences (labelled 1,2,3,4, and 5) given in this question, when properly sequenced, form a

coherent paragraph. Decide on the proper order for the sentence and key in this sequence of five numbers as your answer.

Question No. : 29

1. The result of our system is that there is a great waste of ability: a boy or girl of wage-earning parents may be of first-rate capacity in mathematics, or music, or science, but it is very unlikely that he or she will have a chance to exercise this talent.
2. Higher education, at present, is mainly, though not entirely, confined to the children of the well-to do.
3. And since education is, in the main, controlled by the State, it has to defend the status quo, and therefore must, as far as possible, blunt the critical faculties of young people and preserve them from "dangerous thoughts"
4. Moreover, education, at least in England is still infected through and through with snobbery; in private and elementary schools consciousness of class is imbibed by the pupils at every moment of their life.
5. It sometimes happens, it is true, that working-class boys or girls reach the university by means of scholarships, but as a rule they have had to work so hard in the process that they are worn out and do not fulfill their early promise.

A) 25143 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. : 30

Thomas More's Utopia, a book that will be 500 years old next year, is astonishingly radical stuff. Not many lord chancellors of England have denounced private property, advocated a form of communism and described the current social order as a "conspiracy of the rich". Such men, the book announces, are "greedy, unscrupulous and useless". There are a great number of noblemen, More complains, who live like drones on the labour of others. Tenants are evicted so that "one insatiable glutton and accursed plague of his native land" may consolidate his fields. Monarchs, he argues, would do well to swear at their inauguration never to have more than 1,000lbs of gold in their coffers.

1. Thomas More's Utopia is driven by the appalling conditions in society and More is pained to see the state of society
2. Thomas More's Utopia is an uncommon work from a person of privilege who challenges society's way of working and protecting privilege
3. Thomas More's Utopia is rare as a work that takes up the cudgels against its own and leads the crusade for reform
4. Thomas More's Utopia is a rare work that advocates for the rights of the poor and is decidedly left-centric in its approach

A) 2 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. : 31

Primary school children participating in National Theatre (NT) drama schemes enjoy school more and have improved their speaking and listening skills, a three-year study has found. Through studying Shakespeare and Marlowe and acting out their plays using puppets and music, NT children have also experienced a marked increase in self-confidence in class, said the report, published today by the Social Science Research Unit at the Institute of Education. Jenny Harris, the NT's head of education, urged schools throughout the country to emulate the programme. "The key findings of this rigorous study raise critical considerations that we hope will inform the current debate about the role, and more importantly, the value of the arts," she said.

1. Drama and art are the solutions for improving the skills of students
2. Drama and art drive the performance of the student in school
3. Drama and art can be significant contributors for the skill development of students
4. Drama and art are the most valuable of art subjects and their value is exhibited by the role in student skill development

A) 3 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. From stage settings to media management, everything was choreographed to perfection by the IAC.
2. The day for launching the anti-corruption agitation was carefully chosen to fall between the end of the cricket world cup and the beginning of the Indian Premier League.
3. What made the IAC particularly farcical was its deliberate theatrics and public relations stunts.
4. The IAC did not emerge as a natural coalition of different movements which had grown out of local struggles over months and years of mobilisations.

A) 4 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. The anti-corruption agenda and the sledge-hammer solutions demanded by the "India against Corruption" (IAC) movement spoke to the daily tyranny of corruption in every Indian citizen's life, and kept the movement open for people with different agendas to come together.
2. Corruption, as a public rallying point, has few parallels, at least in the Indian mindscape.
3. One may argue with the specific ways adopted by the IAC to put across its point, but it is an undeniable achievement of the movement that it was successful in bringing ordinary folk onto the streets.
4. Such single-point movements have hardly any parallels elsewhere but logic and experience suggest that it may have to go beyond its *raison de'tre* to stay relevant.

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. : 34

1. For instance, while SHOT has drifted towards a predominance of contextualist approaches, this drift seems to be linked to the most recent generation of historians of technology, many of whom were trained as historians, not as technologists.
2. In view of the importance that technology education places on understanding technology in society, a contextualist history might appear to be the most appropriate approach.
3. Yet there are potential problems as can be learned from historians of technology.
4. These historians have benefited from many of the fine and extensive internalist histories of technology.

A) 4 B) C) D)

Section : DI & Reasoning

DIRECTIONS for the question: The question below is followed by two statements marked A and B. Mark as your answer.

Question No. : 35

A cistern is filled by three types of pipes F, G and H. All the three pipes are opened at 10 am. At what time will the tank be filled?

- A. Pipe 'F' supplies water at the rate of 12 liters per second which is double the rate of G.
 - B. Pipe 'H' supplies water at the rate of 9 liters per second which is more than that of G. 'G' alone can fill the tank in 3 hrs.
- A) If the question can be answered by using the statement A alone or B alone, but not both
 - B) If the question can be answered by using either of the statements alone
 - C) If the question cannot be answered on the basis of the two statements
 - D) If the question can be answered by using both the statements together but not by either of the statements alone.

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

Question No. : 36

It is placement season. The hopes are high in all the B-Schools across the country. The best students from 5 of the colleges were asked to rate their B-Schools. After much deliberation, these 5 students came up with some significant results. 5 Colleges were rated as 1 being the least favored and 5 being the most favored.

The particulars are provided as follows:-

1. NMI (B-School) was rated one less than the B-School where person whose last name was Kapur studied.
2. Only one B-school was rated 2 while two B-schools were rated 3 and two were rated 4 in the study.
3. Ms. Goyal(Surname) and Mr. Ajay(First Name) both studied at colleges that were rated 3 in the study.
4. Ms. Pathak(Surname) studied in IMT(B-School). IMT was not rated 4.
5. GIM(B-School) was rated 4 in the study. Swati's last name was not Jindal.
6. Anirudh's last name was Gupta but he didn't study in GIM. Neha whose last name was not Kapur, studied at ISB.
7. ISB (B-school) was rated higher than Ms. Ishita's (First Name) college, the college rated 3 was not IIS(B-School).

Which of the following statements is true?

- A) Gupta studied in IIS B) Ajay studied in GIM C) Swati studied in IMT D) ISB was rated 4 in the study

Question No. : 37

Which college was rated 2 in the study?

- A) ISB B) GIM C) IMT D) IIS or GIM

Question No. : 38

Who studied in ISB?

- A) Swati B) Ishita C) Ajay D) Neha

Question No. : 39

What is Pathak's first name?

- A) Ishita B) Anirudh C) Ajay D) Swati

Question No. : 40

What is Neha's last name?

- A) Jindal B) Pathak C) Gupta D) Goyal

DIRECTIONS for the question: Go through the graph and the information given below and answer the question that follows.

Question No. : 41

Mr. Mukherjee and his assistant were making a data table of GDP (simple average of the rate of all the sectors) of some years and plans given below. But due to a virus attack in the computer, some data was lost. His assistant remembers some data and tries to create the table:

Rate of Growth of GDP at Factor Cost at 2000-2001 Prices						
X	2003-	2004-	2005-	2006-	2007-	XI
Plan	04	05	06	07	08	Plan
						2008-09 (Revised)

	Estimates)							
Agriculture & Allied	7.2	10		5.9	3.8	2.5	4.5	
Mining	4		3.1	7.2	4.9	5.7	7.1	4.7
Manufacturing	3.3	6.2	6.6	8.7		12	8.6	8.8
Electricity	4.8	4.7		8.9	4.7	6	7.6	6.3
Construction	7.1	7.9	12	16.5	16.5	12	12.9	9.8
Trade and hotels		6.9	10.1	7.7	9.4	8.5	8.5	12
Transport & Communication	8.9	14.1	15.3	15.6	14.6	16.6	12.3	0
Financing, Real Est, Housing	8		5.6	7.7	11.4	13.9	9.5	11.8
Community	7.7	3.9		7.9		6.9	6.8	7.3
GDP	5.97	7.52	8.1	8.96		9.48		7.24

C1: Rate of growth of Trade & Hotels is 3 times more than the rate of growth of Agriculture in the X plan. Also, the rate of growth of mining in 2003-04 is 20 % more than the rate of growth of Financing, Real Est., and Housing in 2003-04.

C2: Ratio of the Rate of growth of Electricity to the rate of growth of Community in 2004-05 is 8 : 9. The ratio of the rate of growth of Community in 2004-05 to rate of growth of Community in 2006-07 is 3: 4. Value of rate of growth of Manufacturing in 2006-07 is 9%. GDP rate is always calculated up to 2 decimal points, but rate of growth of all sectors is calculated up to only 1 decimal point.

What is the ratio of rate of growth of Agriculture in X Plan to the rate of growth of Agriculture in 2005-06?

- A) 1 : 2 B) 4 : 1 C) 5 : 1 D) None of these

Question No. : 42

If the rate of growth of Manufacturing in 2006 – 07 were equal to the simple average of the rates of growth of Manufacturing from 2003 – 04 to 2007 – 08 and the rate of growth of Community in 2004 – 05 and 2006 – 07 were both equal to the simple average of the rates of growth of Community from 2003 – 04 to 2007 – 08, what would be the GDP in 2006 – 07?

- A) 8.66 B) 9.04 C) 8.82 D) 9.11

Question No. : 43

What is the ratio of the rate of growth of Community in 2006-07 to the rate of growth of Trade & Hotel in X plan?

- A) 9/10 B) 24/25 C) 19/18 D) 19/23

Question No. : 44

If the values of the rates of growth of sectors which are missing from the table are increased by 10%, then the total would be approximately what percentage of the total GDP of 2008-09 (revised estimate)? (in percent, rounded to nearest integer)

- A) 90 B) C) D)

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

Question No. : 45

The Medical Association conducted a research on the nutrient retention and utilization in the people. The research indicates that out of a total body weight gain in a week for a particular person, the contribution of fats is 12%, proteins contribute 6% and minerals contribute 2% to body weight gain. Based on this, a quick diet plan was created, the result of which was the Diet Chart. It

had all the protein, mineral and fat requirement of the body for a week. (Exactly 70% of body weight gain was due to carbohydrates but it wasn't included in the making of the Diet Chart)

For the next week, the research was continued; except for the change that Diet Chart was introduced in the diet plan of the patients. The five patients (M, N, O, P and R) on which the new study was conducted now show the follow result:

"P has the highest body weight gain. N gained 15000 units of body weight more than M did, who scored least. The contribution of minerals in the body weight gain of O was second highest. The contribution of fats to body weight gains of the 5 patients were 3000, 4800, 7200, 4200 and 6000 units (in some order)."

Who gained the lowest total weight?

- A) M B) N C) R D) O

Question No. : 46

The Medical Association conducted a research on the nutrient retention and utilization in the people. The research indicates that out of a total body weight gain in a week for a particular person, the contribution of fats is 12%, proteins contribute 6% and minerals contribute 2% to body weight gain. Based on this, a quick diet plan was created, the result of which was the Diet Chart. It had all the protein, mineral and fat requirement of the body for a week. (Exactly 70% of body weight gain was due to carbohydrates but it wasn't included in the making of the Diet Chart)

For the next week, the research was continued; except for the change that Diet Chart was introduced in the diet plan of the patients. The five patients (M, N, O, P and R) on which the new study was conducted now show the follow result:

"P has the highest body weight gain. N gained 15000 units of body weight more than M did, who scored least. The contribution of minerals in the body weight gain of O was second highest. The contribution of fats to body weight gains of the 5 patients were 3000, 4800, 7200, 4200 and 6000 units (in some order)."

What was the contribution of fats to body weight growth in R? (in units)

- A) 4200 B) C) D)

Question No. : 47

The Medical Association conducted a research on the nutrient retention and utilization in the people. The research indicates that out of a total body weight gain in a week for a particular person, the contribution of fats is 12%, proteins contribute 6% and minerals contribute 2% to body weight gain. Based on this, a quick diet plan was created, the result of which was the Diet Chart. It had all the protein, mineral and fat requirement of the body for a week. (Exactly 70% of body weight gain was due to carbohydrates but it wasn't included in the making of the Diet Chart)

For the next week, the research was continued; except for the change that Diet Chart was introduced in the diet plan of the patients. The five patients (M, N, O, P and R) on which the new study was conducted now show the follow result:

P has the highest body weight gain. N gained 15000 units of body weight more than M did, who scored least. The contribution of minerals in the body weight gain of O was second highest. The contribution of fats to body weight gains of the 5 patients were 3000, 4800, 7200, 4200 and 6000 units (in some order).

How many percent more did O gain over N in the Minerals contribution in total body weight gain? (in percentage)

- A) 25 B) C) D)

Question No. : 48

The medical Association conducted a research on the nutrient retention and utilization in the people. The research indicates that out of a total body weight gain in a week for a particular person, the contribution of fats is 12%, proteins contribute 6% and minerals contribute 2% to body weight gain. Based on this, a quick diet plan was created, the result of which was the Diet Chart. It had all the protein, mineral and fat requirement of the body for a week. (Exactly 70% of body weight gain was due to carbohydrates but it wasn't included in the making of the Diet Chart)

For the next week, the research was continued; except for the change that Diet Chart was introduced in the diet plan of the patients. The five patients (M, N, O, P and R) on which the new study was conducted now show the follow result:

"P has the highest body weight gain. N gained 15000 units of body weight more than M did, who scored least. The contribution of minerals in the body weight gain of O was second highest. The contribution of fats to body weight gains of the 5 patients were 3000, 4800, 7200, 4200 and 6000 units (in some order)."

What was the total contribution of Diet Chart to the body weight growth of the five patients? (in units)

- A) 42000 B) C) D)

Question No. : 49

The Medical Association conducted a research on the nutrient retention and utilization in the people. The research indicates that out of a total body weight gain in a week for a particular person, the contribution of fats is 12%, proteins contribute 6% and minerals contribute 2% to body weight gain. Based on this, a quick diet plan was created, the result of which was the Diet Chart. It had all the protein, mineral and fat requirement of the body for a week. (Exactly 70% of body weight gain was due to carbohydrates but it wasn't included in the making of the Diet Chart)

For the next week, the research was continued; except for the change that Diet Chart was introduced in the diet plan of the patients. The five patients (M, N, O, P and R) on which the new study was conducted now show the follow result:

"P has the highest body weight gain. N gained 15000 units of body weight more than M did, who scored least. The contribution of minerals in the body weight gain of O was second highest. The contribution of fats to body weight gains of the 5 patients were 3000, 4800, 7200, 4200 and 6000 units (in some order)."

If the remaining body weight gain was from a combination of elements like roughage, vitamins, acids, etc collectively referred to as "others" then what was the contribution of this segment to the total body weight growth? (in units)

- A) 21000 B) C) D)

DIRECTIONS for the question: Go through the graph and the information given below and answer the question that follows.

Question No. : 50

The Marketing head of XYZ company decided to change the price of 6 particular items to increase its sales. The price of all six items will change for the following months: November, December and January. They follow some rules to change the price of all these six items.

1. The price of an item in the month of December will decrease with respect to the marked price of the particular item in previous month.
2. The price of an item in the month of November will increase according to the marked price given in the table.
3. The price of the item in January changes with respect to the price of the item in the previous month.

The table below provides the information about the maximum and minimum possible selling price of each of the six items during each of the mentioned 3 months.

Items	Marked Price (in Rs.)	Percentage change in Any month			Minimum selling price in any month (In Rs.)	Maximum Selling Price any month (In Rs.)
		November	December	January		
Shirt	380	20	5	23	310	440
Sherwani	490	10	10	9	410	530

Trouser	400	5	10	8	350	415
T-Shirt	510	15	10	10	425	570
Shoes	620	20	4	10	585	670
Skirt	320	15	20	15	265	345

What could be the minimum selling price of Sherwani in month of January? (in Rs., rounded to nearest integer)

- A) 434 B) C) D)

Question No. : 51

What could be the maximum selling price of a T-shirt in January?

- A) Rs. 570 B) Rs. 580 C) Rs. 544 D) None of these

Question No. : 52

What is the ratio of price of Trouser in the month of December to the price of Skirt in the month of November?

- A) 230: 249 B) 189: 184 C) 249: 230 D) None of these

DIRECTIONS for the question: The question below is followed by two statements marked I and II. Mark as your answer.

Question No. : 53

P and R are two distinct non-negative integers. If $S = P \times R$, is 2 the unit's digit of S?

- I. $R = P + 2$.
 II. P is an odd prime number.

- A) if the question can be answered by using one of the statements alone, but cannot be answered by using the other statement alone,
 B) if the question can be answered by using either statement alone,
 C) if the question can be answered by using both the statements together, but cannot be answered by using either statement alone, and,
 D) if the question cannot be answered even by using both the statements together

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

Question No. : 54

Karishma, Leela, Madhuri, Nandini and Punita recently changed their agencies in a book – market where they have worked for years. There are ten agencies in the market, five on each side of the road. Karishma, Leela, Madhuri, Nandini and Punita are the salesgirls of different book agencies. These book agencies are: R&W, JK, Veena, Himanshu and Twin – brothers – in that order, on the same side of the road. R & W is on the extreme left. All the sales girls left their agencies and joined new agencies on the other side of the road. Note that all the sales girls joined different agencies on the other side of the road.

- Ramesh, Royal, Gaurav, Khushboo and Rajkamal are the five agencies - in that order – on the opposite side of the road, in which all the girls are working now.
- Ramesh agency is opposite R & W agency.
- Leela now works in the Khushboo agency. The sales girl who used to work in Veena agency moved to Rajkamal agency.
- The agency in which Karishma used to work was immediately between the agencies in which Madhuri and Nandini used to work.
- Punita used to work in the agency directly opposite to the agency in which Nandini now works. Neither of these two used to work in the JK agency.
- Madhuri works in the Gaurav agency. The sales girl who now works in the Royal agency, changed from R & W agency.

7. Karishma now works in the agency directly opposite to the agency in which Leela used to work.

Punita was not satisfied with the working environment in the newly joined agency. She decided to return to her old agency from where she had come here. In which agency will she go now?

- A) Veena agency B) Twin – Brothers C) JK agency D) R & W agency
-

Question No. : 55

Madhuri changed fromto

- A) Veena agency, Rajkamal agency B) R & W agency, Gaurav agency C) JK agency, Gaurav agency
D) JK agency, Khushboo agency

Question No. : 56

Karishma joined Rajkamal from

- A) Veena agency B) JK agency C) Himanshu agency D) R & W agency
-

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

Question No. : 57

The sugarcane arriving at a sugar factory is crushed to extract the juice. The crushed cane, which forms 25% of the weight of sugarcane, is termed as bagasse and is sold at Rs.2200 per quintal for use as a fuel. The juice is then processed to yield molasses and sugar. The molasses is sold at Rs.7000 per quintal for use in the liquor industry and sugar is sold at Rs.33 per kg. On an average, one tonne of sugarcane yields 150 kg of molasses and 120 kg of sugar.

Other than the cost of sugarcane, which is Rs.240 per quintal, the total expenses of the factory are made up of overheads, which are 30% of the revenue generated from the sale of bagasse, molasses and sugar. Profit is arrived at as the difference between revenue and expenses. The factory pays a tax of 40% on its profit to arrive at its net income.

On account of high demand, the factory is able to sell everything that it can process.

The factory processes x tonnes of sugar cane and earns net income of approximately Rs.437,500 from the sale of bagasse, molasses and sugar. Which of the following defines x ?

- A) $20 \leq x \leq 25$ B) $40 \leq x \leq 50$ C) $60 \leq x \leq 70$ D) $80 \leq x \leq 85$

Question No. : 58

The sugarcane arriving at a sugar factory is crushed to extract the juice. The crushed cane, which forms 25% of the weight of sugarcane, is termed as bagasse and is sold at Rs.2200 per quintal for use as a fuel. The juice is then processed to yield molasses and sugar. The molasses is sold at Rs.7000 per quintal for use in the liquor industry and sugar is sold at Rs.33 per kg. On an average, one tonne of sugarcane yields 150 kg of molasses and 120 kg of sugar.

Other than the cost of sugarcane, which is Rs.240 per quintal, the total expenses of the factory are made up of overheads, which are 30% of the revenue generated from the sale of bagasse, molasses and sugar. Profit is arrived at as the difference between revenue and expenses. The factory pays a tax of 40% on its profit to arrive at its net income.

On account of high demand, the factory is able to sell everything that it can process.

The factory is planning to implement a new method for processing the juice extracted from sugarcane. The advantage of this method is that it increases the yield of molasses by 20% without affecting the yield of any of the other products. What would be the change in the factory's net income from the sale of bagasse, molasses and sugar if they implement the new method for processing 100 tonnes of sugarcane? (in Rs.)

- A) 88200 B) C) D)
-

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

Question No. : 59

A fortune teller has a unique way of predicting his customer's prognosis. He has three parrots kept in three different cages. Each cage also has three cards with a single digit non-zero number inscribed on every card. No two cards have the same number and no cage contains two cards with digits totalling ten. Further, the total of three cards in the first cage is greater by two than the second and by four than the third. When a customer asks for his prognosis, the fortune teller lets out the three parrots which randomly pick one card out of their respective cages. Before the prognosis is made, the fortune teller totals the digits on the three cards picked out and charges the customer the same number of rupees as the total of the cards. One day a customer paid Rs.7 for his prognosis.

If 8 and 3 are the numbers on two cards in the same cage, which of the following numbers is printed on a card in the cage with the least total?

- A) 7 B) 4 C) 9 D) 6

Question No. : 60

A fortune teller has a unique way of predicting his customer's prognosis. He has three parrots kept in three different cages. Each cage also has three cards with a single digit non-zero number inscribed on every card. No two cards have the same number and no cage contains two cards with digits totalling ten. Further, the total of three cards in the first cage is greater by two than the second and by four than the third. When a customer asks for his prognosis, the fortune teller lets out the three parrots which randomly pick one card out of their respective cages. Before the prognosis is made, the fortune teller totals the digits on the three cards picked out and charges the customer the same number of rupees as the total of the cards. One day a customer paid Rs.7 for his prognosis.

If one of the parrots selects the card with the number 9 printed on it, what is the difference between the maximum and the minimum amount that a customer would have to pay for a prognosis? (in Rs.)

- A) 11 B) C) D)

Question No. : 61

A fortune teller has a unique way of predicting his customer's prognosis. He has three parrots kept in three different cages. Each cage also has three cards with a single digit non-zero number inscribed on every card. No two cards have the same number and no cage contains two cards with digits totalling ten. Further, the total of three cards in the first cage is greater by two than the second and by four than the third. When a customer asks for his prognosis, the fortune teller lets out the three parrots which randomly pick one card out of their respective cages. Before the prognosis is made, the fortune teller totals the digits on the three cards picked out and charges the customer the same number of rupees as the total of the cards. One day a customer paid Rs.7 for his prognosis.

Which of the following amounts can the fortune teller not charge for a prognosis?

- A) Rs.10 B) Rs.16 C) Rs.15 D) Rs.8

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

Question No. : 62

Data given in one question can be used as additional information in all subsequent questions.

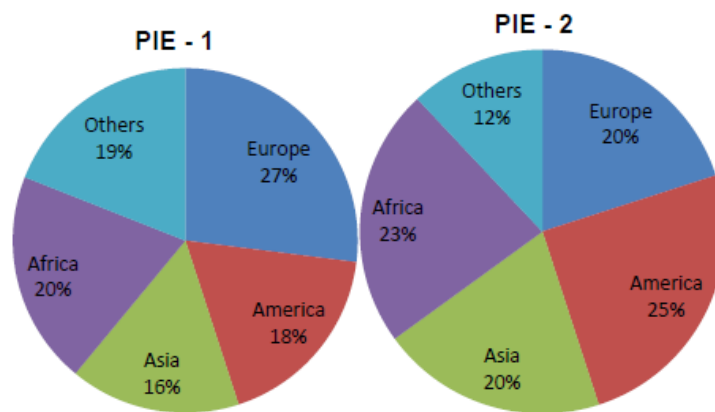
Colt Arms is a leading provider of advanced weapons and defense systems with an active interest in selling cutting-edge aggressive and defensive weaponry to countries. They are not Rightist or Leftist when it comes to selling their weapons; they call themselves the Opportunists. They sell their weapons to the Leftists, Rightists and the Pacifists, though Pacifists are not their regular customers.

In the 1990s, this company had offices in many countries and sold their latest technologies in continents like Europe, America, Asia, Africa and Others. They also have development centers in most technologically rich countries.

Below is a table that shows the percentage share of their various development centers located in different countries for the sale of defensive and aggressive Weaponry and Technology (Tech) to some major continents:

	Europe		America		Asia		Africa		Others	
	Weaponry	Tech	Weaponry	Tech	Weaponry	Tech	Weaponry	Tech	Weaponry	Tech
India	16	21	11	30	7	17	13	19	17	8
China	12	25	18	14	13	23	8	26	18	7
Russia	20	6	14	16	18	10	16	15	16	25
Iraq	14	13	13	8	32	20	11	12	17	20
Pakistan	18	19	20	10	15	12	23	13	21	23
Japan	20	16	24	22	15	18	29	15	11	17

Given below is the percentage distribution of the total sales of Weapons (PIE – 1) and Technology (PIE – 2) to different continents by Colt Arms:



The total sale of Weaponry by Colt Arms is 30 lakh units and that of Technology is 40 lakh units

Which of the following development centres sells the highest number of Weaponry units all across the continents shown above?

- A) Russia B) India C) Japan D) Pakistan

Question No. : 63

Which of the following statements is true?

- A) If Canada is one of the countries in the 'Others' category, then Russia's contribution in weaponry units to Canada is definitely more than Russia's contribution in Weaponry units to Asia
- B) India's sale of Weaponry units is more than that of its Technology units
- C) China sells lesser units of Weaponry than that of Technology to America
- D) Pakistan's sales of Weaponry units to Europe and Asia together are more than the sales of Technology units to America and Africa together

Question No. : 64

How many more units of Weaponry than that of Technology were sold by India, Russia and Pakistan together to Europe?

- A) 69400 units B) 37400 units C) 74200 units D) 45600 units

Question No. : 65

Sri Lanka is one of the major trading regions in the 'Others' category and 3% of the total sales of Weaponry units to the 'Others' category is sold to Sri Lanka. If only India and Russia are able to sell to Sri Lanka in the ratio of 7 : 8 for Weaponry, then the number of Weaponry units India selling to Sri Lanka as a percentage of India's total sales of weaponry units is? (approx).

- A) 4.25% B) 3.5% C) 2% D) 2.75%

Question No. : 66

According to the UN's decree Colt Arms has to stop selling its Weaponry units produced in development center of Iraq to Asia. What is the percentage loss to Colt Arms (with respect to total weaponry units sold), if all the unsold stock gets caught by a UN team, rendering it unavailable to the organization?

- A) 2.7% B) 3.6% C) 4.5% D) 5.12%

Section : Quantitative Ability

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

Question No. : 67

Rs. 7500 is borrowed at compound interest at the rate of 2% for the first year, 4% for the second year and 5% for the third year. The amount paid after 3 years will be

- A) Rs. 8353.80 B) Rs. 8432 C) Rs. 8235 D) Rs. 8520.20

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

Question No. : 68

There are two drums of petrol of different prices, their volumes being 220 litres and 180 litres. Equal quantities are drawn from the two drums, and the petrol drawn from the first drum is poured into the second, and the petrol drawn from the second is poured into the first. Now the price of petrol per litre in both drums becomes the same. How much is drawn from each drum?

- A) 109 litres B) 99 litres C) 89 litres D) None of these

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

Question No. : 69

In a race of 500 meters, R beats S by 20 m and N by 50 m. If S and N are running a race of 1200 m with S running exactly at the same speed as before and N increases his speed by 20 %, then who wins the race and by how many meters? (write the answer key)

1. N, 233.34 m 2. S, 116.64 m 3. N, 133.34 m 4. The race ends in a dead heat.

- A) 3 B) C) D)

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

Question No. : 70

Atul travelled to his office at 25 kmph and reached 20 minutes late. When he travelled at 40 kmph, he reached 20 minutes early. Find the approx. speed at which he travelled if he reached his office 10 minutes early. (in kmph, rounded to nearest integer)

- A) 35 B) C) D)

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

Question No. : 71

Given that j is a positive number such that $[j - 3/4] [j + 3/4] = \text{prime}$; $[j]$ denotes the greatest integer function.

The solution to this equation belongs to the range -

- A) $1.75 \leq j < 2.75$ B) $0.25 \leq j < 1.25$ C) $1.75 \leq j < 2.25$ D) Both options 2 and 3

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

Question No. : 72

If the cost of 1 pen, 2 erasers and 8 copies is 780 and cost of 6 pens, 12 erasers and 11 copies is Rs. 980, then what is the cost of 6 copies? (in Rs.)

- A) 600 B) C) D)

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

Question No. : 73

What is the percentage profit on the sale of a tablet at Rs.11000, after discount?

- (i) The margin percentage on sales price is 10%.
(ii) A discount of 20% was offered on the market price.
(iii) Mark-up percentage was 50% over the cost price.

Question can be answered by

- A) Statement (i) only B) Combining statements (ii) and (iii) C) Statement (ii) only
D) Statement (i) or by combining statements (ii) and (iii)

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

Question No. : 74

A beaker has capacity of 150 liters. It is filled to the brim with milk and water in the ratio 1: 4. Marbles of the volume 0.25 dm^3 each are dropped into the beaker. As a result, some of the solution overflows. Now, the marbles are removed and milk is added to replace the solution that had over flown. On analysis, the new solution is found to have 50 % milk. Then what was the number of marbles dropped (1litre = 1dm^3)? (in numerical value)

- A) 225 B) C) D)

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

Question No. : 75

From Bulls Eye Panchkula center, a number of students appear for one of the papers of the Online Cat test series. The paper consists of 100 questions. For each correct answer the candidate is awarded 1 mark and for each wrong answer $1/5^{\text{th}}$ of the marks are deducted. No marks are deducted for not attempting a question. Exactly 20% of the students scored exactly 50 marks but no two attempted the same number of questions. Find the total number of students who appeared for the test?

- A) 65 B) 45 C) 55 D) Cannot be determined

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

Question No. : 76

There are an infinite number of pipes attached to a very big tank. Performance of a pipe is the amount of water filled in the tank in equal time. The pipes are numbered P_1, P_2, P_3, \dots and so on. The performance of every subsequent pipe is 90% that of the earlier

pipe, i.e. the performance of P_2 is 90% the performance of P_1 , and so on. When all the pipes are working together, the tank gets filled in 4 hours. Working alone, how many pipes can fill the tank within 50 hours (in numerical value)?

- A) 3 B) C) D)

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

Question No. : 77

A vertical pole of height $5\sqrt{6}$ meters, standing at the center of a square park, subtends an angle of 60° at one of the corners of the park. What is the area of the path on the outside of this park which is 2m wide uniformly in all sides of the square park?

- A) 96 m^2 B) 192 m^2 C) 100 m^2 D) None of these

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

Question No. : 78

Let $p(x) = \max(1 + 9x, 67 - 13x)$, where x is a real number. Find the maximum possible value of $p(x)$.

- A) 5 B) 20 C) 28 D) Cannot be determined

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

Question No. : 79

Three friends, Ranjeet, Sahil and Tarun, have different sums of money with them. If Ranjeet gives away half of his sum to the other two equally then Sahil and Tarun together would have 8 times as much money as Ranjeet. If Sahil gives away a third of his sum to the other two equally then the Ranjeet and Tarun together would have $3\frac{1}{2}$ times as much money as Sahil. If Tarun gives away a fourth of his sum to the other two equally then the Ranjeet and Sahil together would have twice as much money as Tarun. If all the sums involved are an integral number of rupees, which of the following cannot be the sums with Ranjeet, Sahil and Tarun respectively?

- A) 638, 957, 1276 B) 200, 300, 400 C) 426, 636, 848 D) 346, 519, 692

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

Question No. : 80

A total of 625 people visit a camp. There are several tents having different capacity. It is observed that people can sleep in the group of not less than 4 and not more than 7 in a tent according to the space available in the tent. Also, the number of tents having a capacity of exactly 4 people is less than the number of tents having capacity of exactly 5 people and so on. It is also given that the number of tents in which 5 people sleep is 21. There is at least one tent of each type. What is the maximum number of people living in the tents with the capacity for exactly 6 people? (in numerical value)

- A) 38 B) C) D)

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

Question No. : 81

Manoj and Akhilesh are two non-identical twins. Both of them own plots of square shape in the *Peer Moshalla* Colony. Manoj's house has a land area double in size to that of Akhilesh's house. Manoj's house is designed as a cubical house with the roof in the shape of a square Pyramid having slant height 9 m. Akhilesh built his house in the shape of a cylinder of height 8 m topped up by a right circular conical roof of diameter 10 m. What is the height of Manoj's house (Given each person covers the maximum possible land area while building house)?

- A) $\sqrt{31}$ m B) $8 + 2\sqrt{14}$ m C) $10\sqrt{2} + \sqrt{31}$ m D) Cannot be determined

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

Question No. : 82

Find the number of ordered pairs (x, y) , where both x and y are integers such that, $x + 1/y = x/y - 1$ (in numerical value)

- A) 3 B) C) D)
-

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

Question No. : 83

A group of 4 workers can make a wall in 25 days. This group starts the work and after every two days, one additional worker joins the group. Assume that the capacity of each worker is the same. On which day will the work get completed?

- A) 14th day B) 13th day C) 18th day D) None of these

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

Question No. : 84

A flask had some milk in it. One third of the milk was taken out and replaced with water. Then one-third of the resultant mixture was again taken out and replaced with water. This procedure was repeated 6 times. The volume of mixture in the flask after 2nd time was 81 liters. Find the milk left in the flask after 6th time?

- A) 7.11 liters B) 8.5 liters C) 11.11 liters D) Cannot be determined
-

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

Question No. : 85

An insurance company earns Rs. 250 per person as annual premium for MEDICLAIM insurance that covers hospitalization bill up to Rs. 18,900 at the rate of 80% of actual bills. It is estimated that only 1 out of every 100 insured persons would incur the hospitalization bill of Rs.15, 000. This scheme costs the insurance company 10% of the revenue as administrative cost. How much would the company earn as profit per person? (in Rs.)

- A) 105 B) C) D)

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

Question No. : 86

Nidhi has a rectangular piece of paper measuring 2 m × 3 m. She cut the paper to get the largest square piece. She then cut that square to get the largest rectangle similar to the original one. Every time she cuts a square or a rectangle, she measures the perimeter of the left-out piece of paper. Had the process been repeated infinitely, what would have been the sum of the perimeters she measured each time? (Note that each time Nidhi cut the paper, the cut was parallel to one of the sides of the paper.)

- A) 17m B) 34m C) 24m D) 10m
-

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

Question No. : 87

Find the number of isosceles triangles with perimeter 17 m, such that the length of each of the sides is an integral value (in m)(in numerical value).

A) 4 B) C) D)

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

Question No. : 88

A student was asked to find the average of the first n natural numbers. By mistake he forgot to add one number somewhere in between. He found the average of the remaining numbers as $30\frac{5}{29}$. Find the number he forgot to add.

A) 14 B) 16 C) 18 D) None of these

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

Question No. : 89

What is the highest power of 5 in $10! \times 100! \times 1000! \times 10000!$? (in numerical value)

A) 2774 B) C) D)

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

Question No. : 90

In a race A finished 12 m ahead of B and 18 m ahead of C. After that B finished 8 m ahead of C. What was the length of the race track?

A) 960 m B) 1000 m C) 100 m D) None of these

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

Question No. : 91

How many numbers greater than 3456 can be formed by using the digits 2, 3, 4, 5 and 6, such that the digits are not repeated?

A) 192 B) 84 C) 204 D) None of these

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

Question No. : 92

How many factors of 1800 are divisible by 10? (in numerical value)

A) 18 B) C) D)

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

Question No. : 93

Aman has 9 friends (4 boys and 5 girls). In how many ways can he invite them, if there have to be exactly 3 girls in the invitees? (in numerical value)

A) 160 B) C) D)

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

Question No. : 94

The ratio of the ages of a husband and his wife when they got married was 6 : 5. 4 years and 6 years after their marriage they had their 1st and 2nd children. The sum of the present ages of the husband and wife is 6.4 times the sum of the present ages of their children. The average age of the family at present is 18.5 years. Find the ratio of the ages of the husband and wife when their second child was born.

- A) 7 : 6 B) 15 : 13 C) 6 : 7 D) None of these
-

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

Question No. : 95

121 is a palindrome. Find the number of palindromes between 1,000,000 and 9,999,999 which when divided by 4 leave 1 as the remainder. (in numerical value)

- A) 2500 B) C) D)

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

Question No. : 96

A page is torn from a booklet. After this is done, the sum of the page numbers on the remaining pages is 1000. What are the page numbers on the page which was torn?

- A) 17 and 18 B) 18 and 19 C) 41 and 42 D) 42 and 43
-

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

Question No. : 97

$\log_3 [\log_9 (x^{3/2} - 7271)] = 1$. What is the value of x? (in numerical value)

- A) 400 B) C) D)

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

Question No. : 98

Find the number of digits in 1001^{101} . (in numerical value)

- A) 304 B) C) D)
-

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

Question No. : 99

P, Q, R, S are four stations in order on a railway; the single fare, third class, is Rs. 10 a km., but the company issues week-end return tickets between any two of these stations at the single fare and a third; the week-end tickets, third class, between P and R, Q and S, P and S, cost Rs. 3,600, Rs. 3,200 and Rs. 4,800 respectively; how many kms is R distant from Q?

- A) 250 km B) 200 km C) 100 km D) 150 km

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

Question No. : 100

An ice cream company makes a popular brand of ice cream in a rectangular shaped bar 6 cm long, 5 cm wide and 2 cm thick. To cut costs, the company has decided to reduce the volume of the bar by 20 %. The thickness will remain the same, but the length

and width will be decreased by the same proportion. The new length L will satisfy which of the following relationships?

- A) $5.5 < L < 6$ B) $5 < L < 5.4$ C) $4.5 < L < 5$ D) $4 < L < 4.5$
-