

Directions of Test

Test Name	2016 Bull CAT 12	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

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The general objective of the author of the passage is:

- A) To inform us about the existence of certain paradoxes and how these are important.
- B) To illustrate the faulty logic used to explicate certain paradoxes and how these dictate reasoning.
- C) To highlight the historical importance of certain paradoxes and their role in reasoning
- D) To point out the utility of certain paradoxes that may not necessarily be flawless in themselves

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In the paradox 'Achilles and the Tortoise', if Achilles give the tortoise a head start and tries to catch him, then according to Zeno, then:

- I. Achilles is acting with unwanted optimism.
- II. Achilles is living in a fool's paradise.
- III. Achilles is trying something unfeasible.

How many of the above statements are true?

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

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In the paradox 'the arrow', according to Zeno, the arrow is essentially:

- A) Permanently in transition B) Temporarily in transition C) Perceptually at rest D) Deceivingly at rest

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How many of the following words can be used to describe Parmenides' conception of reality

- I. Static
- II. Inseparable
- III. Eternal
- IV. Immutable
- V. Immortal

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

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Which of the following inferences can be drawn about the phrase 'reductio ad absurdum'?

- A) it is form of reasoning which arrives at a proof by showing that the consequences of the proposition are logical
- B) it is form of reasoning which arrives at a disproof by showing that the consequences of the proposition are absurd
- C) it is form of reasoning which arrives at a disproof by showing that the consequences of the proposition are logical
- D) it is form of reasoning which arrives at a proof by showing that the consequences of the proposition are reasonable

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The approach of the author towards Zeno of Elea can be labelled as:

A) Lackadaisical B) Reverential C) Deprecatory D) Interpretative

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Question No. : 7

Many politicians are quick to cite a statistic that, on average, women earn 77 cents for every dollar that a man earns. This figure is usually used as part of a call to action for "equal pay for equal work," but the 77-cents number on its own says surprisingly little about whether women are discriminated against with regard to earnings in the workplace.

There are two important factors that this comparison doesn't take into account. First, the number doesn't account for the fact that different occupations have widely differing levels of compensation, and men and women tend to sort into different occupations. Second, the number doesn't account for the number of hours worked in salaried positions— in other words, if salaried men work more hours than salaried women, then it would not be discriminatory to pay salaried men more than salaried women. As a result, some influential people assert that the earnings difference is mainly attributable to occupational choices. This explanation, however, is also very incomplete, especially for younger cohorts of workers. (For example, young unmarried women earn almost as much on average as men of equivalent age.) What the data shows instead is that, while today's men and women tend to start in the same place with regard to earnings, the gap widens as workers get older.

Why does this happen? Economist Claudia Goldin, who has looked extensively at data on earnings and workplace characteristics, asserts that women get penalized in the workplace, even on a per-hour basis, for working fewer hours. For example, many occupations are such that a worker who works 80 hours per week gets paid more than twice as much as a worker who works 40 hours a week. Given that women are disproportionately responsible for child-care and home duties, they tend to work fewer hours outside the home than men do, meaning in many cases that they not only earn less because they work less but also because there tends to be a per hour "working less" penalty. In addition, many occupations impose a stiff earnings penalty for any time spent out of the workforce. Again, women are more likely to take time off from work, and this plus the working less penalty explain a lot of the observed gender earnings gap (or at least the "unfair" part that can't be explained directly by women working

less). Therefore, effective public policy to fairly address the gender earnings gap would focus on how to make workplaces more flexible so that time out of a job doesn't have a big effect on productivity and workers working fewer hours per week or working nontraditional hours can be just as productive (per hour) as workers who are always "on call."

Goldin cites recent logistical developments in the pharmacy profession as well as the field of obstetrics that have enabled women to achieve earnings parity with men. In obstetrics, once patients started accepting that anyone from a team of qualified doctors could deliver a baby under most circumstances, having their particular obstetrician on call and available at all times was not absolutely crucial. Similarly, technology and electronic record-keeping have made pharmacists more substitutable for one other, giving any one pharmacist a more flexible schedule and work environment. Granted, the changes described have come about without any sort of government intervention, but whether other occupations will follow suit depends on whether the decision makers in those occupations have the proper incentives to make institutional changes.

According to the passage, which of the following can help reduce the 'gender earnings gap'?

- I. Women start to work longer hours and compete with men on equal footing.
- II. Women are given the option of working at times other than the conventional office hours.
- III. Women start to work in traditionally male-dominated occupations.

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

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Each of the following could be an apt title for the passage except:

- A) The Economics of the Gender Earnings Gap B) The Statistics of the Gender Earnings Gap
C) The Sociology that operates behind the Gender Earnings Gap D) The Business of the Gender Earnings Gap
-

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

Question No. : 9

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The relationship between the 2nd and the 3rd paragraph of the passage can be outlined as:

- A) The former presents an argument and the latter represents a refutation of the same argument.
B) The former presents a line of reasoning and the latter provides a substantiation for the same argument.
C) The former provides a partial explanation for an occurrence and the latter provides a substantive completion for the same.
D) The former focuses on some elements that constitute an occurrence and the latter provides an insight into remaining bits for the same occurrence.

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

Question No. : 10

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It can be inferred from the passage that:

- A) In the coming time, other professions may follow the trend set up by obstetrics and pharmacy in enabling flexible working hours.
- B) In the future, there is no guarantee that other professions will follow the same approach followed by obstetrics and pharmacy in enabling flexible working hours.
- C) If government had wished to intervene, then professions other than obstetrics and pharmacy could have enabled flexible working hours sooner.
- D) If government intervention is there, then changes that help develop flexible work environments can be brought about.

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

Question No. : 11

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

A) Perplexed B) Analytical C) Unprejudiced D) Factual

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

Question No. : 12

Many politicians are quick to cite a statistic that, on average, women earn 77 cents for every dollar that a man earns. This figure is usually used as part of a call to action for "equal pay for equal work," but the 77-cents number on its own says surprisingly little about whether women are discriminated against with regard to earnings in the workplace.

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Which of the following is incorrect as per the passage?

I. In current times, young unmarried women earn almost the same as their male counterparts.

- II. Income disparity between men and women goes down as we move up the age spectrum for working professionals.
III. The difference between the earning of men and women is caused mainly by occupational choices of two genders.

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

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

Question No. : 13

Let us consider for a moment the discovery of the cause of malaria. This discovery, due to the Englishman, Ross consists in having found out that the plasmodium of malaria is inoculated in man by a special kind of mosquito. Let us inquire what was the state of science prior to this discovery. In 1880 Laveran had described an animal micro-organism, which preyed upon the red corpuscles of the blood, producing an attack of fever with the cycle of its existence. Subsequent studies confirmed and elucidated this fact, and the *plasmodium malariae* became a matter of common knowledge. It was known that animal micro-organisms, unlike vegetable micro-organisms, after a cycle of life in which reproduction takes place by scission, that is, by subdivision of a single body into several other bodies equal to the first, give place to *sexual forms*, masculine and feminine, which are separate, and incapable of scission, but are designed for *fusion into one another*, after which the organism recommences its cycle of scissions until it again reaches the sexual forms.

Laveran had found that in the blood of sufferers who recover spontaneously from malarial fever there are a great number of corpuscles which have no longer the rounded forms of the plasmodia, but are crescent-shaped and rayed. He took these to be transformations of the plasmodia, "modified in form" and "incapable of producing disease," and pronounced them to be "degenerate" organisms, almost as if they had been deformed and exhausted by the "excess of work" they had previously performed. After the discovery of the transmission of malaria in 1900, Laveran's "degenerative forms" were recognized as the sexual individuals of the reproductive cycle: individuals which were incapable of conjugation in the blood of man, and could only produce new organisms in the body of the mosquito. We may well wonder: Why did not Laveran simply recognize those sexual forms, and why did he not seek for the period of conjugation in the plasmodia, which were animal micro-organisms?

Another biological acquisition was the assurance that the circulatory system of the blood is a closed system of vessels, and that the enclosing epithelium is not permeable by non-incisive solid bodies such as vegetable microbes, and still less by rounded protozoa, which are much larger than microbes and soft in substance. This well-known and clearly demonstrated fact ought to have suggested a problem to the minds of students: How do the protozoa of malaria enter the circulatory current of the blood? But ever since the days of Hippocrates, Pliny, Celsius and Galen it had been held that this fever was caused by the "poisonous atmosphere" of marsh lands, the bad air of the morning and the evening, so much so that even a few years before the discovery of the real cause of malaria, eucalyptus trees were planted in the belief that they would filter and disinfect the air.

Until Ross discovered that birds are inoculated with malaria by a particular kind of mosquito.

Excerpted from Pg 103-104 'Spontaneous Activity in Education' by Maria Montessori

Why did Laveran call the sexual form of the *plasmodium malariae* a 'degenerative' form?

- A) Laveran believed that this form had lost the potency to produce disease.
B) Because of the change of shape from a regular round one to a crescent shaped rayed one.
C) Reason was the incapability of conjugation of these forms in human blood.
D) Laveran's believed that the organism entering the blood stream form the 'poisonous atmosphere' of marsh lands.

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

Question No. : 14

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Excerpted from Pg 103-104 'Spontaneous Activity in Education' by Maria Montessori

What is the main lesson that this passage strives to give to its reader?

- A) Science's role in the containment of disease can never be underestimated.
- B) The best way to discover truth is by building on previous discoveries
- C) Progress can only be achieved when we start questioning our handed-down beliefs.
- D) If only mosquito nets had been put to use earlier, a lot of deaths could have been prevented.

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

Question No. : 15

Let us consider for a moment the discovery of the cause of malaria. This discovery, due to the Englishman, Ross consists in having found out that the plasmodium of malaria is inoculated in man by a special kind of mosquito. Let us inquire what was the state of science prior to this discovery. In 1880 Laveran had described an animal micro-organism, which preyed upon the red corpuscles of the blood, producing an attack of fever with the cycle of its existence. Subsequent studies confirmed and elucidated this fact, and the *plasmodium malariae* became a matter of common knowledge. It was known that animal micro-organisms, unlike vegetable micro-organisms, after a cycle of life in which reproduction takes place by scission; that is, by subdivision of a single body into several other bodies equal to the first, give place to *sexual forms*, masculine and feminine, which are separate, and incapable of scission, but are designed for *fusion into one another*, after which the organism recommences its cycle of scissions until it again reaches the sexual forms.

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Excerpted from Pg 103-104 'Spontaneous Activity in Education' by Maria Montessori

Which of the following, if true, would give some credence to the hypothesis of 'bad air' of mornings and evenings, as discussed in the last paragraph?

- A) Human activity is at its peak in mornings and evenings.
- B) The specific mosquitoes which are vectors for malaria are most active in twilight periods.
- C) Plants produce Carbon Dioxide at night – and mosquitoes use carbon dioxide to detect the presence of humans.
- D) Marshes are known to give out methane, inhaling which can lead to pneumonia.

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

Question No. : 16

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What would be an appropriate title for the passage?

- A) Laveran's Loss, Ross' Gain
- B) The evolution of our understanding of malaria
- C) The reproductive cycle of *plasmodium malariae*
- D) The disease of fallacies

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

Question No. : 17

Lacan said that there was surely something ironic about Christ's injunction to love thy neighbour as thyself – because actually, of course, people hate themselves. Or you could say that, given the way people treat one another, perhaps they had always loved

their neighbours in the way they loved themselves: that is, with a good deal of cruelty and disregard. 'After all,' Lacan writes, 'the people who followed Christ were not so brilliant.' Lacan is here implicitly comparing Christ with Freud, many of whose followers in Lacan's view had betrayed Freud's vision by reading him in the wrong way. Lacan could be understood to be saying that, from a Freudian point of view, Christ's story about love was a cover story, a repression of and a self-cure for ambivalence. In Freud's vision we are, above all, ambivalent animals: wherever we hate we love, wherever we love we hate. If someone can satisfy us, they can frustrate us; and if someone can frustrate us we always believe they can satisfy us. And who frustrates us more than ourselves?

Ambivalence does not, in the Freudian story, mean mixed feelings, it means opposing feelings. 'Ambivalence has to be distinguished from having mixed feelings about someone,' Charles Rycroft writes in his appropriately entitled *A Critical Dictionary of Psychoanalysis*: 'It refers to an underlying emotional attitude in which the contradictory attitudes derive from a common source and are interdependent, whereas mixed feelings may be based on a realistic assessment of the imperfect nature of the object.' Love and hate – a too simple vocabulary, and so never quite the right names – are the common source, the elemental feelings with which we apprehend the world; they are interdependent in the sense that you can't have one without the other, and that they mutually inform each other. The way we hate people depends on the way we love them and vice versa. According to psychoanalysis these contradictory feelings enter into everything we do. We are ambivalent, in Freud's view, about anything and everything that matters to us; indeed, ambivalence is the way we recognise that someone or something has become significant to us. This means that we are ambivalent about ambivalence, about love and hate and sex and pleasure and each other and ourselves, and so on; wherever there is an object of desire there must be ambivalence. But Freud's insistence about our ambivalence, about people as fundamentally ambivalent animals, is also a way of saying that we're never quite as obedient as we seem to be: that where there is devotion there is always protest, where there is trust there is suspicion, where there is self-hatred or guilt there is also self-love. We may not be able to imagine a life in which we don't spend a large amount of our time criticising ourselves and others; but we should keep in mind the self-love that is always in play. Self-criticism can be our most unpleasant – our most sadomasochistic – way of loving ourselves.

Which one of the following fits the bill for the sentiment of irony mentioned in the first paragraph:

- A) You love your wife as much as you love someone else's wife B) Your wife loves you as much as she loves someone else
C) Your wife loves you much like the way she loves her most hated sister D) Both A and C

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

Question No. : 18

Lacan said that there was surely something ironic about Christ's injunction to love thy neighbour as thyself – because actually, of course, people hate themselves. Or you could say that, given the way people treat one another, perhaps they had always loved their neighbours in the way they loved themselves: that is, with a good deal of cruelty and disregard. 'After all,' Lacan writes, 'the people who followed Christ were not so brilliant.' Lacan is here implicitly comparing Christ with Freud, many of whose followers in Lacan's view had betrayed Freud's vision by reading him in the wrong way. Lacan could be understood to be saying that, from a Freudian point of view, Christ's story about love was a cover story, a repression of and a self-cure for ambivalence. In Freud's vision we are, above all, ambivalent animals: wherever we hate we love, wherever we love we hate. If someone can satisfy us, they can frustrate us; and if someone can frustrate us we always believe they can satisfy us. And who frustrates us more than ourselves?

Ambivalence does not, in the Freudian story, mean mixed feelings, it means opposing feelings. 'Ambivalence has to be distinguished from having mixed feelings about someone,' Charles Rycroft writes in his appropriately entitled *A Critical Dictionary of Psychoanalysis*: 'It refers to an underlying emotional attitude in which the contradictory attitudes derive from a common source and are interdependent, whereas mixed feelings may be based on a realistic assessment of the imperfect nature of the object.' Love and hate – a too simple vocabulary, and so never quite the right names – are the common source, the elemental feelings with which we apprehend the world; they are interdependent in the sense that you can't have one without the other, and that they mutually inform each other. The way we hate people depends on the way we love them and vice versa. According to psychoanalysis these contradictory feelings enter into everything we do. We are ambivalent, in Freud's view, about anything and everything that matters to us; indeed, ambivalence is the way we recognise that someone or something has become significant to us. This means that we are ambivalent about ambivalence, about love and hate and sex and pleasure and each other and ourselves, and so on; wherever there is an object of desire there must be ambivalence. But Freud's insistence about our ambivalence, about people as fundamentally ambivalent animals, is also a way of saying that we're never quite as obedient as we seem to be: that where there is devotion there is always protest, where there is trust there is suspicion, where there is self-hatred or guilt there is also self-love. We may not be able to imagine a life in which we don't spend a large amount of our time criticising ourselves and others; but we should keep in mind the self-love that is always in play. Self-criticism can be our most unpleasant –

our most sadomasochistic – way of loving ourselves.

According to Freud:

- A) Ambivalence is indefatigable B) Ambivalence is sadistic and masochistic at the same time
C) Ambivalence is all pervasive D) Ambivalence is incurable

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

Question No. : 19

Lacan said that there was surely something ironic about Christ's injunction to love thy neighbour as thyself – because actually, of course, people hate themselves. Or you could say that, given the way people treat one another, perhaps they had always loved their neighbours in the way they loved themselves: that is, with a good deal of cruelty and disregard. 'After all,' Lacan writes, 'the people who followed Christ were not so brilliant.' Lacan is here implicitly comparing Christ with Freud, many of whose followers in Lacan's view had betrayed Freud's vision by reading him in the wrong way. Lacan could be understood to be saying that, from a Freudian point of view, Christ's story about love was a cover story, a repression of and a self-cure for ambivalence. In Freud's vision we are, above all, ambivalent animals: wherever we hate we love, wherever we love we hate. If someone can satisfy us, they can frustrate us; and if someone can frustrate us we always believe they can satisfy us. And who frustrates us more than ourselves?

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From the information given in the passage, it can be inferred that:

- A) having mixed feelings consists of having two types of feelings
B) having mixed feelings can consist of having two or more types of feelings
C) having mixed feelings consists of having two opposing feelings D) none of the above

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

Question No. : 20

Lacan said that there was surely something ironic about Christ's injunction to love thy neighbour as thyself – because actually, of course, people hate themselves. Or you could say that, given the way people treat one another, perhaps they had always loved their neighbours in the way they loved themselves: that is, with a good deal of cruelty and disregard. 'After all,' Lacan writes, 'the people who followed Christ were not so brilliant.' Lacan is here implicitly comparing Christ with Freud, many of whose followers in Lacan's view had betrayed Freud's vision by reading him in the wrong way. Lacan could be understood to be saying that, from a Freudian point of view, Christ's story about love was a cover story, a repression of and a self-cure for ambivalence. In Freud's vision we are, above all, ambivalent animals: wherever we hate we love, wherever we love we hate. If someone can satisfy us, they can frustrate us; and if someone can frustrate us we always believe they can satisfy us. And who frustrates us more than ourselves?

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In the context of the passage, the word 'sadomasochistic' means:

- A) A way in which sadness and manliness is combined
- B) A way in which sadness and manliness is inflicted as well as combined
- C) A way in which pain and humiliation is inflicted as well as received
- D) A way in which a person derives pleasure by hurting others

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

Question No. : 21

The attempt to conceive imaginatively a better ordering of human society than the destructive and cruel chaos in which mankind has hitherto existed is by no means modern: it is at least as old as Plato, whose "Republic" set the model for the Utopias of subsequent philosophers. Whoever contemplates the world in the light of an ideal—whether what he seeks be intellect, or art, or love, or simple happiness, or all together—must feel a great sorrow in the evils that men needlessly allow to continue, and—if he be a man of force and vital energy—an urgent desire to lead men to the realization of the good which inspires his creative vision. It is this desire which has been the primary force moving the pioneers of Socialism and Anarchism, as it moved the inventors of ideal commonwealths in the past. In this there is nothing new. What is new in Socialism and Anarchism, is that close relation of the ideal to the present sufferings of men, which has enabled powerful political movements to grow out of the hopes of solitary thinkers. It is this that makes Socialism and Anarchism important and it is this that makes them dangerous to those who batten, consciously or unconsciously upon the evils of our present order of society.

The great majority of men and women, in ordinary times, pass through life without ever contemplating or criticising, as a whole, either their own conditions or those of the world at large. They find themselves born into a certain place in society, and they accept what each day brings forth, without any effort of thought beyond what the immediate present requires. Almost as instinctively as the beasts of the field, they seek the satisfaction of the needs of the moment, without much forethought, and without considering that by sufficient effort the whole conditions of their lives could be changed. A certain percentage, guided by personal ambition, make the effort of thought and will which is necessary to place themselves among the more fortunate members of the community; but very few among these are seriously concerned to secure for all the advantages which they seek for themselves. It is only a few rare and exceptional men who have that kind of love toward mankind at large that makes them unable to endure patiently the general mass of evil and suffering, regardless of any relation it may have to their own lives. These few, driven by sympathetic pain, will seek, first in thought and then in action, for some way of escape, some new system of society by which life may become richer, more full of joy and less full of preventable evils than it is at present. But in the past such men have, as a rule, failed to interest the very victims of the injustices which they wished to remedy. The more unfortunate sections of the population have been ignorant, apathetic from excess of toil and weariness, timorous through the imminent danger of immediate punishment by the holders of power, and morally unreliable owing to the loss of self-respect resulting from their degradation. To create among such classes any conscious, deliberate effort after general amelioration might have seemed a hopeless task, and indeed in the past it has generally proved so. But the modern world, by the increase of education and the rise in the standard of comfort among wage-earners, has produced new conditions, more favorable than ever before to the demand for radical reconstruction. It is above all the Socialists, and in a lesser degree the Anarchists, who have become the exponents of this demand.

What is perhaps most remarkable in regard to both Socialism and Anarchism is the association of a widespread popular

movement with ideals for a better world. The ideals have been elaborated, in the first instance, by solitary writers of books, and yet powerful sections of the wage-earning classes have accepted them as their guide in the practical affairs of the world. In regard to Socialism this is evident; but in regard to Anarchism it is only true with some qualification.

excerpted from "proposed road to freedom" by Bertand Russel

According to the information provided in the passage, men can be classified :

- I. as timid followers
- II. as altruistic iconoclasts
- III. as self-interested savants
- IV. as learned self-seekers

A) I, II & III B) II, III & IV C) I, III & IV D) I, II & IV

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

Question No. : 22

The attempt to conceive imaginatively a better ordering of human society than the destructive and cruel chaos in which mankind has hitherto existed is by no means modern: it is at least as old as Plato, whose "Republic" set the model for the Utopias of subsequent philosophers. Whoever contemplates the world in the light of an ideal—whether what he seeks be intellect, or art, or love, or simple happiness, or all together—must feel a great sorrow in the evils that men needlessly allow to continue, and—if he be a man of force and vital energy—an urgent desire to lead men to the realization of the good which inspires his creative vision. It is this desire which has been the primary force moving the pioneers of Socialism and Anarchism, as it moved the inventors of ideal commonwealths in the past. In this there is nothing new. What is new in Socialism and Anarchism, is that close relation of the ideal to the present sufferings of men, which has enabled powerful political movements to grow out of the hopes of solitary thinkers. It is this that makes Socialism and Anarchism important and it is this that makes them dangerous to those who batten, consciously or unconsciously upon the evils of our present order of society.

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excerpted from "proposed road to freedom" by Bertand Russel

It can be inferred that hindrance(s) to the collective improvement of man was/were:

- I. a weary population afraid of challenging established systems and viewpoints.
- II. Basic poverty which made them focused only on their day to day survival.
- III. low levels of education

A) Only I B) II & III C) All of the above D) None of the above

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

Question No. : 23

The attempt to conceive imaginatively a better ordering of human society than the destructive and cruel chaos in which mankind has hitherto existed is by no means modern: it is at least as old as Plato, whose "Republic" set the model for the Utopias of subsequent philosophers. Whoever contemplates the world in the light of an ideal—whether what he seeks be intellect, or art, or love, or simple happiness, or all together—must feel a great sorrow in the evils that men needlessly allow to continue, and—if he be a man of force and vital energy—an urgent desire to lead men to the realization of the good which inspires his creative vision. It is this desire which has been the primary force moving the pioneers of Socialism and Anarchism, as it moved the inventors of ideal commonwealths in the past. In this there is nothing new. What is new in Socialism and Anarchism, is that close relation of the ideal to the present sufferings of men, which has enabled powerful political movements to grow out of the hopes of solitary thinkers. It is this that makes Socialism and Anarchism important and it is this that makes them dangerous to those who batten, consciously or unconsciously upon the evils of our present order of society.

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excerpted from "proposed road to freedom" by Bertand Russel

It can be inferred from the passage that Socialism and Anarchism pose a threat to:

- A) those who wish to work for their own selves
- B) those who are afraid to follow the dictates of life without contemplating any change
- C) those guided by personal ambition who place themselves about others
- D) those who knowingly or unknowingly preserve the current status quo

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

Question No. : 24

The attempt to conceive imaginatively a better ordering of human society than the destructive and cruel chaos in which mankind has hitherto existed is by no means modern: it is at least as old as Plato, whose "Republic" set the model for the Utopias of subsequent philosophers. Whoever contemplates the world in the light of an ideal—whether what he seeks be intellect, or art, or love, or simple happiness, or all together—must feel a great sorrow in the evils that men needlessly allow to continue, and—if he be a man of force and vital energy—an urgent desire to lead men to the realization of the good which inspires his creative vision. It is this desire which has been the primary force moving the pioneers of Socialism and Anarchism, as it moved the inventors of ideal commonwealths in the past. In this there is nothing new. What is new in Socialism and Anarchism, is that close relation of the ideal to the present sufferings of men, which has enabled powerful political movements to grow out of the hopes of solitary thinkers. It is this that makes Socialism and Anarchism important and it is this that makes them dangerous to those who batten, consciously or unconsciously upon the evils of our present order of society.

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excerpted from "proposed road to freedom" by Bertand Russel

If you were to ask one pertinent question to the author of the passage, what would it be?

- A) What is Socialism and Anarchism? B) Who are the men behind Socialism and Anarchism?
C) When would the ideals of a better world be adopted readily in human life? D) Are Socialism and Anarchism a myth?

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. Chemistry gave us medicine and more fresh food.
2. Psychology is still taking baby steps, designing empirical tests of unsurprising observations.
3. Physics gave us electricity, skyscrapers, and the Internet.
4. It may be too much to expect science to reliably save marriages, but how desperately we need the secret to stopping people from burning others alive.

5. Our fascination with the brain seems to come from a longing to make psychology more like a hard science and hence, we assume, more useful.

A) 53124 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. : 26

1. Typically 50 percent of the class expects their performance to be below the median and a quarter of the class expects to perform in one of the top two deciles.
2. Ninety percent of all drivers think they are above average behind the wheel.
3. About 94 percent of professors at a large university were found to believe that they are better than the average professor.
4. Around the time of the wedding ceremony, almost all couples believe that there is approximately a zero percent chance that their marriage will end in divorce.

A) 1 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. The same might be said, with more justice, of the prevalent version of atheism.
2. The racial theories promoted by atheists in the past have been consigned to the memory hole – and today's most influential atheists would no more endorse racist biology than they would be seen following the guidance of an astrologer.
3. It has often been observed that Christianity follows changing moral fashions, all the while believing that it stands apart from the world.
4. But they have not renounced the conviction that human values must be based in science; now it is liberal values which receive that accolade.
5. If an earlier generation of unbelievers shared the racial prejudices of their time and elevated them to the status of scientific truths, evangelical atheists do the same with the liberal values to which western societies subscribe today – while looking with contempt upon "backward" cultures that have not abandoned religion.

A) 31524 B) C) D)

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

Question No. : 28

1. When less was known of animals and plants the discovery of new species was the great object.
2. The discovery of a new species as such does not change a feature in the science of natural history, any more than the discovery of a new asteroid changes the character of the problems to be investigated by astronomers.
3. It is merely adding to the enumeration of objects.
4. We should look rather for the fundamental relations among animals; the number of species we may find is of importance only so far as they explain the distribution and limitation of different genera and families, their relations to each other and to the physical conditions under which they live.
5. This has been carried too far, and is now almost the lowest kind of scientific work.

A) 15234 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. : 29

1. Creating monetizable intellectual property affords a significant incentive to all the stakeholders, thus benefiting all of humanity.
2. Before copyright and patent laws, no one could own songs, stories or ideas.
3. Thus, there needs to be a strong economic incentive sufficient for private investment to develop affordable human transport to the Moon and Mars.
4. The passage of those laws, creating intellectual property, made whole industries possible and added greatly to the world's wealth from things that had previously been valueless.

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. : 30

1. A specific action that will help you to be more accepting is to find and dissolve your core beliefs about how people should be.
2. You may find it more productive if you begin with an inventory of the expectations of other people.
3. What conceptual idea is in your mind about how the world should be and when should it be that way?
4. These artificial standards in the mind become the basis for judgment and emotional reactions.

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. : 31

1. Even while Americans' trust in mass media continues to plummet, journalists enjoy a kind of heroic fame that would baffle their British counterparts.
2. A whole genre of film exists in the US celebrating the heroism of journalists, from All the President's Men to Good Night, and Good Luck.
3. In Britain, probably the most popular depiction of journalists came from Spitting Image, where they were snuffling pigs in pork-pie hats.
4. Whereas in Britain journalists are generally viewed as occupying a place on the food chain somewhere between bottom-feeders and cockroaches, in America there remains, still, a certain idealisation of journalists, protected by a gilded halo hammered out by sentimental memories of Edward R Murrow and Walter Cronkite.
5. Television anchors and commentators, from Rachel Maddow on the left to Sean Hannity on the right, are lionised in a way that, say, Huw Edwards, is, quite frankly, not.

A) 41523 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. : 32

According to the structural strain theory, societies are characterized by both culture and social structure. Culture establishes goals for people in society while social structure provides (or fails to provide) the means for people to achieve those goals. In a well-integrated society, people use accepted and appropriate means to achieve the goals that society establishes. In this case, the goals and the means of the society are in balance. It is when the goals and means are not in balance with each other that deviance is likely to occur. This imbalance between cultural goals and structurally available means can actually lead an individual into deviant behavior.

1. According to the structural strain theory, deviant behavior is an outcome of the incapacity of society to maintain apt balance for itself.

2. According to the structural strain theory, deviant behavior is an outcome of the incapability of society to balance itself.
 3. According to the structural strain theory, deviant behavior is an outcome of the inability of society to maintain apt balance by itself.
 4. According to the structural strain theory, deviant behavior is an outcome of the inability of society to balance itself.
- A) 4 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. : 33

Conflict theory emphasizes the role of coercion and power in producing social order. This perspective is derived from the works of Karl Marx, who saw society as fragmented into groups that compete for social and economic resources. Social order is maintained by domination, with power in the hands of those with the greatest political, economic, and social resources. When consensus exists, it is attributable to people being united around common interests, often in opposition to other groups. Marx theorized that the work of producing consensus was done in the "superstructure" of society--which is composed of social institutions, political structures, and culture--and what it produced consensus for was the "base," the economic relations of production. Following on the heels of Marx, Italian scholar and activist Antonio Gramsci argued that consensus to rule is achieved in large part through cultural hegemony, which refers to the dominant group's ability to attain consent to their rule through ideas, norms, values, and beliefs..

1. Conflict theory, as established by Marx and taken forward by Gramsci, highlights how coercion and power are used by the powerful and dominant groups of society to establish social order.
 2. Conflict theory, a theory with major derivations of Marx and Gramsci, goes on to establish the rules for establishment of social order and how power and force are used to structure society.
 3. Conflict theory, in part driven by the works of Marx and Gramsci, explores the superstructures of society and highlights how those in power take control of social structures and effectively run the world.
 4. Conflict theory, with contributions from scholars such as Marx and Gramsci, highlights how force and common interests brings together powerful elements in societies, which in turn use their dominion to produce social order.
- A) 4 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. : 34

According to a 2006 poll conducted by Newsweek, a whopping 43% of Americans believe that dreams reveal unconscious desires and wishes. Famed psychoanalyst Sigmund Freud described dreams as the royal road to the unconscious and suggested that by studying the obvious content of dreams, we could then bring to light the hidden and unconscious desires that lead to neurosis. Analyzing dream symbols and ascribing meaning has become a popular source of both entertainment and self-reflection in popular culture. Do dreams really have hidden meanings? Can you learn your unconscious wishes and desires by interpreting your dreams? While most modern theories of dreams would suggest that the answer is no, this hasn't stopped interpreters and analysts from publishing a whole host of dream dictionaries that purport to identify what these common dream themes and symbols really mean.

1. The analysis of dream content and its purported link to revealing hidden meanings and the unconscious wishes is something that has fascinated one and all, and there is a long list of commentators and analysts, such as Freud, who have delved in this area.
2. Though the importance of dreams in analyzing the unconscious and revealing hidden desires has been discounted, numerous interpreters and analysts continue to highlight the importance of dreams through their various works, adding to the lineage of work done by the likes of Freud.
3. Even though the futility of analyzing dreams to explore the unconscious and reveal hidden desires has been highlighted, many analysts still continue to harp the old tune of the importance of dreams and use the works of likes of such as Sigmund Freud.
4. As the works of Sigmund Freud and many others in the modern world have suggested, the content of dreams has a co-relation with the unconscious and revealing hidden meanings, though this is still disputed by some modern theories which do not accept the importance of dreams.

- A) 2 B) C) D)
-

Section : DI & Reasoning

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

Question No. : 35

Ram, Shyam, Mohan and Geeta are playing a game of numbers. In each round, a dealer selects a number from 1 to 20 at random. Ram wins if the number selected is between 1 and 15, both inclusive; Shyam wins if the number selected is between 6 and 15, both inclusive; Mohan wins if the number selected is between 3 and 15, both inclusive; Geeta wins if the number selected is between 16 and 20, both inclusive.

If Ram wins, he earns Rs. 1000, and loses Rs. 5000 otherwise; if Shyam wins, he earns Rs. 5000, and loses Rs. 1000 otherwise; if Mohan wins, he earns Rs. 2000, and loses Rs. 2000 otherwise; if Geeta wins, she earns Rs. 10000, and loses Rs. 1000 otherwise.

For 5 rounds, the dealer selected 5 different numbers at random. After these five rounds, Ram had a loss of Rs. 1000, Shyam had a profit of Rs. 1000 and Mohan had a profit of Rs. 2000.

How many rounds did Ram win?

- A) 1 B) 2 C) 3 D) 4

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

Question No. : 36

Ram, Shyam, Mohan and Geeta are playing a game of numbers. In each round, a dealer selects a number from 1 to 20 at random. Ram wins if the number selected is between 1 and 15, both inclusive; Shyam wins if the number selected is between 6 and 15, both inclusive; Mohan wins if the number selected is between 3 and 15, both inclusive; Geeta wins if the number selected is between 16 and 20, both inclusive.

If Ram wins, he earns Rs. 1000, and loses Rs. 5000 otherwise; if Shyam wins, he earns Rs. 5000, and loses Rs. 1000 otherwise; if Mohan wins, he earns Rs. 2000, and loses Rs. 2000 otherwise; if Geeta wins, she earns Rs. 10000, and loses Rs. 1000 otherwise.

For 5 rounds, the dealer selected 5 different numbers at random. After these five rounds, Ram had a loss of Rs. 1000, Shyam had a profit of Rs. 1000 and Mohan had a profit of Rs. 2000.

How much money did the dealer earn or lose?

- A) Rs. 8000 B) Rs. 9000 C) Rs. 6000 D) Rs. 7000

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

Question No. : 37

Ram, Shyam, Mohan and Geeta are playing a game of numbers. In each round, a dealer selects a number from 1 to 20 at random. Ram wins if the number selected is between 1 and 15, both inclusive; Shyam wins if the number selected is between 6 and 15, both inclusive; Mohan wins if the number selected is between 3 and 15, both inclusive; Geeta wins if the number selected is between 16 and 20, both inclusive.

If Ram wins, he earns Rs. 1000, and loses Rs. 5000 otherwise; if Shyam wins, he earns Rs. 5000, and loses Rs. 1000 otherwise; if Mohan wins, he earns Rs. 2000, and loses Rs. 2000 otherwise; if Geeta wins, she earns Rs. 10000, and loses Rs. 1000 otherwise.

For 5 rounds, the dealer selected 5 different numbers at random. After these five rounds, Ram had a loss of Rs. 1000, Shyam had a profit of Rs. 1000 and Mohan had a profit of Rs. 2000.

If Ram, Shyam and Mohan are clubbed in team A and Geeta forms team B, which team won after the 5 rounds and by how much?

- A) Team A, Rs. 6000 B) Team B, Rs. 4000 C) Team A, Rs. 4000 D) Team B, Rs. 6000

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

Question No. : 38

Ram, Shyam, Mohan and Geeta are playing a game of numbers. In each round, a dealer selects a number from 1 to 20 at random. Ram wins if the number selected is between 1 and 15, both inclusive; Shyam wins if the number selected is between 6 and 15, both inclusive; Mohan wins if the number selected is between 3 and 15, both inclusive; Geeta wins if the number selected is between 16 and 20, both inclusive.

If Ram wins, he earns Rs. 1000, and loses Rs. 5000 otherwise; if Shyam wins, he earns Rs. 5000, and loses Rs. 1000 otherwise; if Mohan wins, he earns Rs. 2000, and loses Rs. 2000 otherwise; if Geeta wins, she earns Rs. 10000, and loses Rs. 1000 otherwise.

For 5 rounds, the dealer selected 5 different numbers at random. After these five rounds, Ram had a loss of Rs. 1000, Shyam had a profit of Rs. 1000 and Mohan had a profit of Rs. 2000.

Which of the following statements is true?

- A) Mohan won twice as many rounds as Geeta won and lost thrice as many rounds as Ram lost
B) Shyam won half as many rounds as Geeta lost and lost as many rounds as Ram won
C) Geeta won as many rounds as Ram lost and lost as many rounds as Shyam lost
D) Ram won as many rounds as Geeta lost and lost half as many rounds as Mohan won

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

Question No. : 39

The Principal of a school, Prof. Roy, asked Prof. Gupta to provide him with the analysis of the results of recently completed exams in the school, which was written by 108 students. Prof. Gupta analysed the performance of students in five different subjects-

Physics, Chemistry, Biology, Maths and English. The following are some of his observations.

1. The students who passed in Maths failed in all other subjects except English.
2. The students who did not fail in Physics, passed in Chemistry.
3. The number of students who failed in four subjects is seven less than those who did not pass in Chemistry. The number of students who passed in three subjects is 18.
4. The students who failed in English passed in Chemistry and none passed in both the subjects.
5. The number of students who passed only in Chemistry is 17 and those passed in Maths is 13.
6. The number of students who passed in Biology is 46 and the number of students who passed only in English is 10.
7. None of these students passed only in Biology.

How many students are passed in exactly two subjects? (in numerical value)

- A) 63 B) C) D)

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

Question No. : 40

The Principal of a school, Prof. Roy, asked Prof. Gupta to provide him with the analysis of the results of recently completed exams in the school, which was written by 108 students. Prof. Gupta analysed the performance of students in five different subjects-

Physics, Chemistry, Biology, Maths and English. The following are some of his observations.

1. The students who passed in Maths failed in all other subjects except English.
2. The students who did not fail in Physics, passed in Chemistry.
3. The number of students who failed in four subjects is seven less than those who did not pass in Chemistry. The number of students who passed in three subjects is 18.
4. The students who failed in English passed in Chemistry and none passed in both the subjects.
5. The number of students who passed only in Chemistry is 17 and those passed in Maths is 13.
6. The number of students who passed in Biology is 46 and the number of students who passed only in English is 10.
7. None of these students passed only in Biology.

How many students who passed in Physics also passed in atleast one of the other subjects? (in numerical value)

- A) 40 B) C) D)

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

Question No. : 41

The Principal of a school, Prof. Roy, asked Prof. Gupta to provide him with the analysis of the results of recently completed exams in the school, which was written by 108 students. Prof. Gupta analysed the performance of students in five different subjects-

Physics, Chemistry, Biology, Maths and English. The following are some of his observations.

1. The students who passed in Maths failed in all other subjects except English.
2. The students who did not fail in Physics, passed in Chemistry.
3. The number of students who failed in four subjects is seven less than those who did not pass in Chemistry. The number of students who passed in three subjects is 18.
4. The students who failed in English passed in Chemistry and none passed in both the subjects.
5. The number of students who passed only in Chemistry is 17 and those passed in Maths is 13.
6. The number of students who passed in Biology is 46 and the number of students who passed only in English is 10.
7. None of these students passed only in Biology.

How many students passed in all subjects except Chemistry and Maths? (in numerical value)

- A) 21 B) C) D)

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

Question No. : 42

The Principal of a school, Prof. Roy, asked Prof. Gupta to provide him with the analysis of the results of recently completed exams in the school, which was written by 108 students. Prof. Gupta analysed the performance of students in five different subjects-

Physics, Chemistry, Biology, Maths and English. The following are some of his observations.

1. The students who passed in Maths failed in all other subjects except English.
2. The students who did not fail in Physics, passed in Chemistry.
3. The number of students who failed in four subjects is seven less than those who did not pass in Chemistry. The number of students who passed in three subjects is 18.
4. The students who failed in English passed in Chemistry and none passed in both the subjects.
5. The number of students who passed only in Chemistry is 17 and those passed in Maths is 13.
6. The number of students who passed in Biology is 46 and the number of students who passed only in English is 10.
7. None of these students passed only in Biology.

How many students passed in Biology but not in Physics? (in numerical value)

- A) 28 B) C) D)

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

Question No. : 43

The Principal of a school, Prof. Roy, asked Prof. Gupta to provide him with the analysis of the results of recently completed exams in the school, which was written by 108 students. Prof. Gupta analysed the performance of students in five different subjects-

Physics, Chemistry, Biology, Maths and English. The following are some of his observations.

1. The students who passed in Maths failed in all other subjects except English.
2. The students who did not fail in Physics, passed in Chemistry.
3. The number of students who failed in four subjects is seven less than those who did not pass in Chemistry. The number of students who passed in three subjects is 18.
4. The students who failed in English passed in Chemistry and none passed in both the subjects.
5. The number of students who passed only in Chemistry is 17 and those passed in Maths is 13.
6. The number of students who passed in Biology is 46 and the number of students who passed only in English is 10.
7. None of these students passed only in Biology.

Which of the following statements is/are true?

- I. The number of students who passed in atleast two subjects is 81.
II. The number of students who passed in only Biology and Chemistry is 17.

- A) Only I B) Only II C) Both I and II D) Neither I nor II

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

Question No. : 44

In a factory there are six polishing machines - A, B, C, D, E and F. The factory produces item X. Polishing is the last step of manufacturing process. Each of the machines A, B, C, D, E and F takes 3, 2, 3, 1, 2 and 4 hours respectively to polish one unit of X, which is called one polish time. After polishing each unit the machines need a rest of 3, 1, 1, 2, 2 and 2 hours respectively. Every machine starts polishing at 6.00 a.m. and no machine works after 4.00 p.m. Each unit of item X needs to be polished exactly thrice. These three polishing should be done on three different machines. There should be a time gap of at least two hours between two successive polishings of a unit. The total time taken for an item to be polished is the time taken from the starting of the first polish to the end of the third polish. No polish time has any break in between. No machine takes more or less time than the stipulated rest time between two consecutive polishings in a day.

In how many different ways can an item be polished by any three different machines, within a day? (in numerical value)

- A) 4 B) C) D)

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

Question No. : 45

In a factory there are six polishing machines - A, B, C, D, E and F. The factory produces item X. Polishing is the last step of manufacturing process. Each of the machines A, B, C, D, E and F takes 3, 2, 3, 1, 2 and 4 hours respectively to polish one unit of X, which is called one polish time. After polishing each unit the machines need a rest of 3, 1, 1, 2, 2 and 2 hours respectively. Every machine starts polishing at 6.00 a.m. and no machine works after 4.00 p.m. Each unit of item X needs to be polished exactly thrice. These three polishing should be done on three different machines. There should be a time gap of at least two hours between two successive polishings of a unit. The total time taken for an item to be polished is the time taken from the starting of the first polish to the end of the third polish. No polish time has any break in between. No machine takes more or less time than the stipulated rest time between two consecutive polishings in a day.

If the polishing of an item is started at 9:00 am on a day, then what is the earliest time by which the polishing will be completed?

- A) 7:00 am on the next day B) 8:00 am on the next day C) 4:00 pm on the same day D) 9:00 am on the next day

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

Question No. : 46

In a factory there are six polishing machines - A, B, C, D, E and F. The factory produces item X. Polishing is the last step of manufacturing process. Each of the machines A, B, C, D, E and F takes 3, 2, 3, 1, 2 and 4 hours respectively to polish one unit of X, which is called one polish time. After polishing each unit the machines need a rest of 3, 1, 1, 2, 2 and 2 hours respectively. Every machine starts polishing at 6.00 a.m. and no machine works after 4.00 p.m. Each unit of item X needs to be polished exactly thrice. These three polishing should be done on three different machines. There should be a time gap of at least two hours between two successive polishings of a unit. The total time taken for an item to be polished is the time taken from the starting of the first polish to the end of the third polish. No polish time has any break in between. No machine takes more or less time than the stipulated rest time between two consecutive polishings in a day.

If the total time taken for completion of polishing an item is the minimum possible, then what can be maximum possible value (in hours) of the sum of the time gaps between any two successive polishings? (in numerical value)

- A) 5 B) C) D)

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

Question No. : 47

In a factory there are six polishing machines - A, B, C, D, E and F. The factory produces item X. Polishing is the last step of manufacturing process. Each of the machines A, B, C, D, E and F takes 3, 2, 3, 1, 2 and 4 hours respectively to polish one unit of X, which is called one polish time. After polishing each unit the machines need a rest of 3, 1, 1, 2, 2 and 2 hours respectively. Every machine starts polishing at 6.00 a.m. and no machine works after 4.00 p.m. Each unit of item X needs to be polished exactly thrice. These three polishing should be done on three different machines. There should be a time gap of at least two hours between two successive polishings of a unit. The total time taken for an item to be polished is the time taken from the starting of the first polish to the end of the third polish. No polish time has any break in between. No machine takes more or less time than the stipulated rest time between two consecutive polishings in a day.

If, due to bad weather, a time gap of at least three hours is needed between every two successive polishings of an item, then what is the least total time required for polishing of the item? (in hours)

- A) 22 B) C) D)

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

Question No. : 48

Each of the five friends - A, B, C, D and E has bought one item among Charger, Headset, Earphones, Mouse and Multiplug, not necessarily in the same order, for his laptop through a website, which sells electronic products. The website sells each item at a discounted price. The original price of each item is among Rs. 2500, Rs. 1500, Rs. 900, Rs. 800 and Rs. 600, not necessarily in the same order. The selling price of each item is among Rs. 1250, Rs. 1100, Rs. 600, Rs. 500 and Rs. 300, not necessarily in the same order.

The following information is known about the original prices and selling prices of the products they bought.

- (1) Earphones were sold at 50% discount.
- (2) C bought the product at Rs. 500.
- (3) The difference between the original prices of the products bought by D and C is equal to the selling price of Mouse.
- (4) The difference between the original price and selling price of Multiplug is Rs. 400.
- (5) E bought Mouse and B did not buy Earphones.
- (6) The discounted price of no item is more than 50%.

If C bought Headset, then what is the discount percentage offered on Charger?

- A) 26.67% B) 37.5% C) 44.44% D) 50%

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

Question No. : 49

Each of the five friends - A, B, C, D and E has bought one item among Charger, Headset, Earphones, Mouse and Multiplug, not necessarily in the same order, for his laptop through a website, which sells electronic products. The website sells each item at a discounted price. The original price of each item is among Rs. 2500, Rs. 1500, Rs. 900, Rs. 800 and Rs. 600, not necessarily in the same order. The selling price of each item is among Rs. 1250, Rs. 1100, Rs. 600, Rs. 500 and Rs. 300, not necessarily in the same order.

The following information is known about the original prices and selling prices of the products they bought.

- (1) Earphones were sold at 50% discount.
- (2) C bought the product at Rs. 500.
- (3) The difference between the original prices of the products bought by D and C is equal to the selling price of Mouse.
- (4) The difference between the original price and selling price of Multiplug is Rs. 400.
- (5) E bought Mouse and B did not buy Earphones.
- (6) The discounted price of no item is more than 50%.

Who among them bought the good whose price is third lowest in terms of original price?

- A) B B) E C) C D) Cannot be determined

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

Question No. : 50

Each of the five friends - A, B, C, D and E has bought one item among Charger, Headset, Earphones, Mouse and Multiplug, not necessarily in the same order, for his laptop through a website, which sells electronic products. The website sells each item at a discounted price. The original price of each item is among Rs. 2500, Rs. 1500, Rs. 900, Rs. 800 and Rs. 600, not necessarily in the same order. The selling price of each item is among Rs. 1250, Rs. 1100, Rs. 600, Rs. 500 and Rs. 300, not necessarily in the same order.

The following information is known about the original prices and selling prices of the products they bought.

- (1) Earphones were sold at 50% discount.
- (2) C bought the product at Rs. 500.
- (3) The difference between the original prices of the products bought by D and C is equal to the selling price of Mouse.
- (4) The difference between the original price and selling price of Multiplug is Rs. 400.
- (5) E bought Mouse and B did not buy Earphones.
- (6) The discounted price of no item is more than 50%.

Which good was sold at Rs. 600?

- A) Multiplug B) Charger C) Mouse D) Cannot be determined

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

Question No. : 51

THE PRICES OF GOODS AND SERVICES (IN \$) IN FIVE EUROPEAN COUNTRIES

Goods/Services	Belgium	France	Germany	Italy	Spain
Coca Cola (1-5 litre)	2.05	1.05	1.89	1.65	1.14
Big Mac (Burger)	2.86	3.08	2.67	2.48	2.38

Levis 501 Jeans	71.00	83.00	81.00	69.00	70.00
Compaq Presario 2240 PC	1316.00	1348.00	917.00	1208.00	1267.00
Gasoline (1 litre)	0.93	1.03	0.87	0.94	0.73
Dry Cleaning (Shirt)	3.68	4.67	2.43	2.75	2.92
Mercedes car (1 day rental)	154.00	110.00	103.00	243.00	113.00
Volkswagen Golf GI	13553.00	16317.00	13999.00	17056.00	17356.00

If a German wants to buy all the goods/services listed in the table above and travel between any two countries, it costs \$20. What is the lowest price at which he can procure all the goods?

- A) \$14565.56 B) \$14546.43 C) \$14151.86 D) \$14701.86

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

Question No. : 52

THE PRICES OF GOODS AND SERVICES (IN \$) IN FIVE EUROPEAN COUNTRIES

Goods/Services	Belgium	France	Germany	Italy	Spain
Coca Cola (1-5 litre)	2.05	1.05	1.89	1.65	1.14
Big Mac (Burger)	2.86	3.08	2.67	2.48	2.38
Levis 501 Jeans	71.00	83.00	81.00	69.00	70.00
Compaq Presario 2240 PC	1316.00	1348.00	917.00	1208.00	1267.00
Gasoline (1 litre)	0.93	1.03	0.87	0.94	0.73
Dry Cleaning (Shirt)	3.68	4.67	2.43	2.75	2.92
Mercedes car (1 day rental)	154.00	110.00	103.00	243.00	113.00
Volkswagen Golf GI	13553.00	16317.00	13999.00	17056.00	17356.00

If the Euro were introduced and the cost of a product is decided by averaging out the costs across these countries, how much would a Compaq Presario 2240 PC cost in Euro, if 1 Euro = 2 dollars?

- A) 605.6 B) 1211.2 C) 842.1 D) 607.3

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

Question No. : 53

THE PRICES OF GOODS AND SERVICES (IN \$) IN FIVE EUROPEAN COUNTRIES

Goods/Services	Belgium	France	Germany	Italy	Spain
Coca Cola (1-5 litre)	2.05	1.05	1.89	1.65	1.14
Big Mac (Burger)	2.86	3.08	2.67	2.48	2.38
Levis 501 Jeans	71.00	83.00	81.00	69.00	70.00
Compaq Presario 2240 PC	1316.00	1348.00	917.00	1208.00	1267.00
Gasoline (1 litre)	0.93	1.03	0.87	0.94	0.73
Dry Cleaning (Shirt)	3.68	4.67	2.43	2.75	2.92
Mercedes car (1 day rental)	154.00	110.00	103.00	243.00	113.00
Volkswagen Golf GI	13553.00	16317.00	13999.00	17056.00	17356.00

If a person buys all the goods and uses all the services listed, between which two countries is the absolute difference the most?

- A) Belgium and Spain B) Spain and Germany C) Italy and Belgium D) None of these

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

Question No. : 54

THE PRICES OF GOODS AND SERVICES (IN \$) IN FIVE EUROPEAN COUNTRIES

Goods/Services	Belgium	France	Germany	Italy	Spain
Coca Cola (1-5 litre)	2.05	1.05	1.89	1.65	1.14
Big Mac (Burger)	2.86	3.08	2.67	2.48	2.38
Levis 501 Jeans	71.00	83.00	81.00	69.00	70.00
Compaq Presario 2240 PC	1316.00	1348.00	917.00	1208.00	1267.00
Gasoline (1 litre)	0.93	1.03	0.87	0.94	0.73
Dry Cleaning (Shirt)	3.68	4.67	2.43	2.75	2.92
Mercedes car (1 day rental)	154.00	110.00	103.00	243.00	113.00
Volkswagen Golf GI	13553.00	16317.00	13999.00	17056.00	17356.00

How much, does a person spend if he makes a round trip covering all the 5 countries, using up 84 litres of gasoline in each country? Each country takes 1 day to cover and no country permits another country's car to enter.

(So, everytime a mercedes a used)

- A) \$727.5 B) \$1101 C) \$988 D) \$1255

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

Question No. : 55

Participation in General Elections:
A person of age greater than 18 years is part of the voting age population.

Characteristics	1999		1996	
	Persons of voting age populations (in millions)	Percent voted	Persons of voting age populations (in millions)	Percent voted
Gender:				
Male	348	69	320	72
Female	312		280	71
People of different religions				
Hindus	514.8	57	450	75
Muslims	52.8	51	42	69
Christians	13.2	66	18	57
Others	79.2	56	90	

Approximately what per cent of 'Others' category did not vote during General Elections 1996?

- A) 29% B) 42% C) 53% D) Cannot be determined

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

Question No. : 56

Participation in General Elections:
A person of age greater than 18 years is part of the voting age population.

Characteristics	1999		1996	
	Persons of voting age populations (in millions)	Percent voted	Persons of voting age populations (in millions)	Percent voted
Gender:				
Male	348	69	320	72
Female	312		280	71
People of different religions				
Hindus	514.8	57	450	75
Muslims	52.8	51	42	69
Christians	13.2	66	18	57

Others	79.2	56	90
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If 40% of Hindus who voted during 1996 election were females, then what percentage of females who voted are not Hindus?

- A) 29% B) 32% C) 34% D) 37%

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

Question No. : 57

Participation in General Elections:
A person of age greater than 18 years is part of the voting age population.

Characteristics	1999		1996	
	Persons of voting age populations (in millions)	Percent voted	Persons of voting age populations (in millions)	Percent voted
Gender:				
Male	348	69	320	72
Female	312		280	71
People of different religions				
Hindus	514.8	57	450	75
Muslims	52.8	51	42	69
Christians	13.2	66	18	57
Others	79.2	56	90	

What per cent of females of voting age population voted during General Elections 1999?

- A) 36.1% B) 42.7% C) 49.2% D) 59.2%

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

Question No. : 58

Participation in General Elections:
A person of age greater than 18 years is part of the voting age population.

Characteristics	1999		1996	
	Persons of voting age populations (in millions)	Percent voted	Persons of voting age populations (in millions)	Percent voted
Gender:				
Male	348	69	320	72
Female	312		280	71
People of different religions				
Hindus	514.8	57	450	75

Muslims	52.8	51	42	69
Christians	13.2	66	18	57
Others	79.2	56	90	

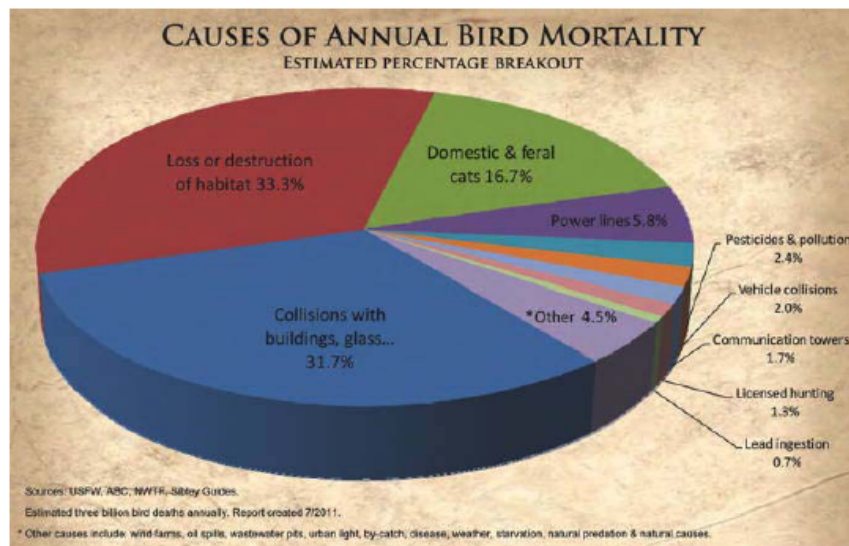
What per cent of the non-voting Muslim population of voting age population is the voting Christian population of voting age population during General Elections 1999?

- A) 20% B) 33% C) 57% D) 80%

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

Question No. : 59

The total number of bird deaths is three billion annually.



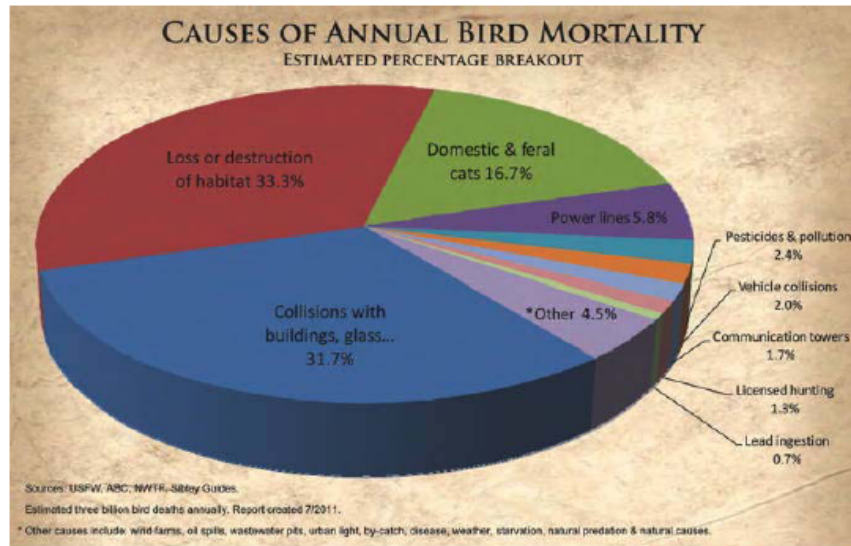
As compared to the leading cause of mortality, how many fewer deaths are caused by domestic and feral cats?

- A) 0.5 billion B) 2500 million C) 50 million D) 0.25 billion

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

Question No. : 60

The total number of bird deaths is three billion annually.



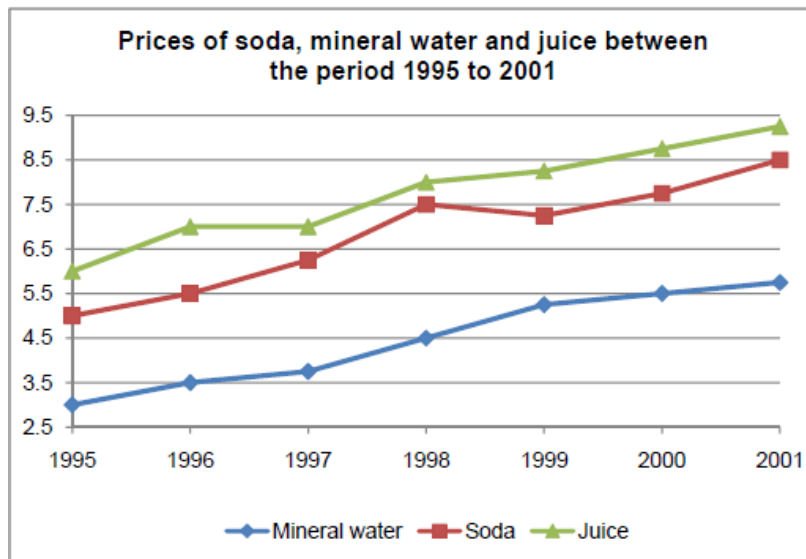
How many birds, in millions, are killed by Licensed hunters every year? (in approximated numerical value)

- A) 39 B) C) D)

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

Question No. : 61

The question are based on the following graph showing the prices per can of mineral water and soda, and per 800 gm pack, price of juice. Assume that the volume of a can is 800 ml and the density of juice, defined as the weight in grams per ml, is 0.8.



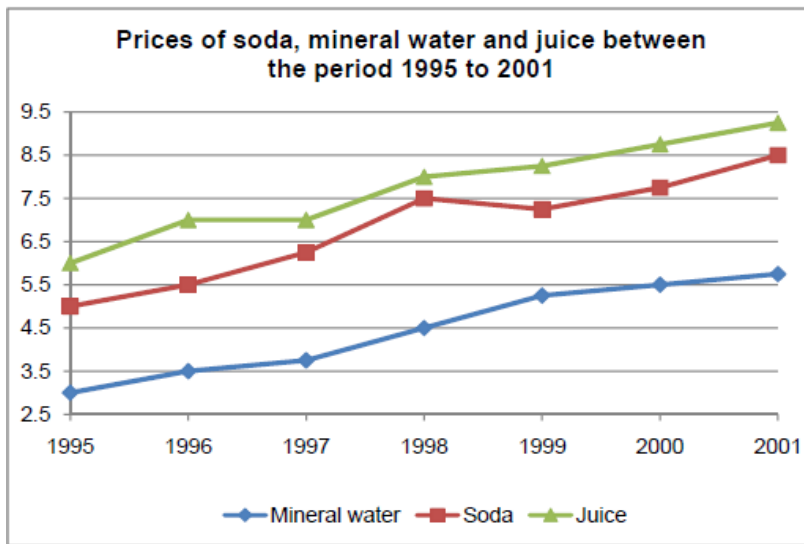
Ignoring constant prices in successive years, the least increase in price per 800 ml of above mentioned drinks over any two successive years is:

- A) 20 paise B) 25 paise C) 40 paise D) 50 paise

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

Question No. : 62

The question are based on the following graph showing the prices per can of mineral water and soda, and per 800 gm pack, price of juice. Assume that the volume of a can is 800 ml and the density of juice, defined as the weight in grams per ml, is 0.8.



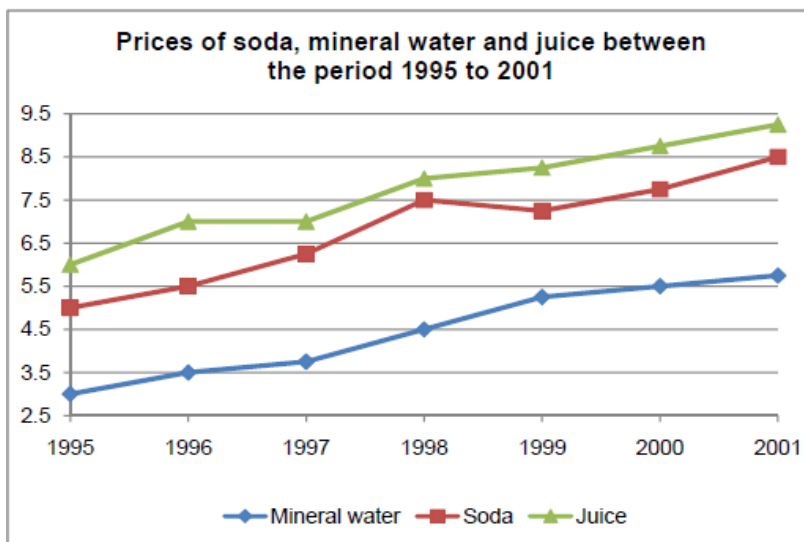
If the density of soda is 1.25 gm per ml, the difference between the prices of 800 gm each of soda and juice is the greatest in:

- A) 1996 B) 1998 C) 2000 D) 2001

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

Question No. : 63

The question are based on the following graph showing the prices per can of mineral water and soda, and per 800 gm pack, price of juice. Assume that the volume of a can is 800 ml and the density of juice, defined as the weight in grams per ml, is 0.8.



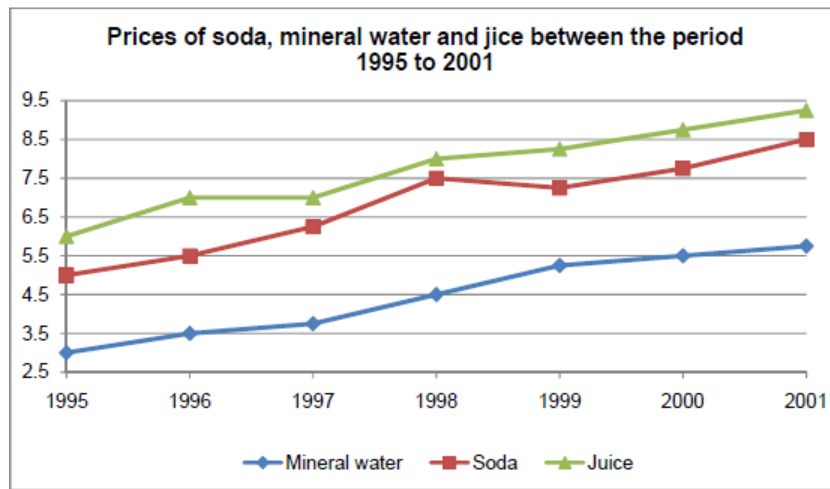
Between 1997 and 2001 which product had the least percentage increase in price per can/pack?

- A) Mineral water B) Soda C) Juice D) More than 1 product

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

Question No. : 64

The questions are based on the following graph showing the prices per can of mineral water and soda, and per 800 gm pack, price of juice. Assume that the volume of a can is 800 ml and the density of juice, defined as the weight in grams per ml, is 0.8.



The difference between the prices of mineral water and juice cans is the least in:

- A) 1996 B) 1998 C) 2000 D) 1995

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

Question No. : 65

"If at least one bird is a peacock, then some animals are tigers". Based on this statement, which of the following is definitely true?

- A) If all birds are peacocks, then all animals are tigers B) If no bird is a peacock, then all animals are tigers
 C) If all animals are tigers, then all birds are peacocks D) If no animal is a tiger, then no bird is a peacock

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

Question No. : 66

Four car manufacturers, Audi, BMW, Mercedes and Volvo, have organized a rally in order to promote their latest car models in a particular city. Avantika was observing this rally in the main square of the city. The first car that she saw was a BMW, and it was followed by a car which was neither a Mercedes nor a Volvo. The third car was a Mercedes while the fourth car was the same as the second car. The fifth car was a Volvo and the sixth car was the same as the third car. Finally the seventh car was an Audi. Avantika found that she had seen x cars of a particular company. If $x = 3$, which of the following must be true?

- A) x is the number of Mercedes cars B) x is the number of BMW cars C) x is the number of both Audi and BMW cars
 D) x is the number of either Audi or BMW cars

Section : Quantitative Ability

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

Question No. : 67

A natural number is written on each face of a cube so that the sum of the numbers on all the faces is S . A small triangular portion is sliced off from each corner of the cube. The product of the numbers on the faces that meet at a particular corner is written on the portion sliced off at that corner. The sum of the numbers written on all the sliced off portions is 2004. How many different values can S take? (in numerical value)

- A) 4 B) C) D)

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

Question No. : 68

Find the remainder when $1! + 2! + 3! + \dots + 95!$ is divided by 15. (in numerical value)

- A) 3 B) C) D)
-

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

Question No. : 69

Ed and Sue bike at equal and constant rates. Similarly, they jog at equal and constant rates, and they swim at equal and constant rates. Ed covers 74 kilometers after biking for 2 hours, jogging for 3 hours, and swimming for 4 hours, while Sue covers 91 kilometers after jogging for 2 hours, swimming for 3 hours, and biking for 4 hours. Their biking, jogging, and swimming rates are all whole numbers of kilometers per hour. What is the sum of the squares of Ed's biking, jogging, and swimming rates? (in numerical value)

- A) 314 B) C) D)

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

Question No. : 70

N is a 2-digit integer such that $N = 11x + 10$, where x takes values 0, 1, 2,, 9. How many values can N take? (in numerical value)

- A) 9 B) C) D)
-

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

Question No. : 71

If α is one of the roots of $\frac{3}{x-3} + \frac{5}{x-5} + \frac{17}{x-17} + \frac{19}{x-19} = x^2 - 11x - 4$, where 'x' is non zero, which of the following best describes the largest possible value of α ?

- A) $11 + \sqrt{252}$ B) $52 + \sqrt{200}$ C) $11 + \sqrt{52 + \sqrt{200}}$ D) $7 + \sqrt{52} + \sqrt{200}$

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

Question No. : 72

All the 7-digit numbers containing each of the digits 1, 2, 3, 4, 5, 6, 7 exactly once, and not divisible by 5, are arranged in the increasing order. Find the 2015th number in this list.

- A) 3657421 B) 4315672 C) 4317562 D) 4325167
-

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

Question No. : 73

The sum of six numbers in arithmetic progression is 3. If the first term is 4 times the third term, what is the value of the fifth term?

- A) $-17/2$ B) -4 C) 0 D) $1/2$

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

Question No. : 74

If x and y are prime numbers such that $x^2 + 7xy + y^2$ is a perfect square, how many different values can (x, y) take?

- A) 1 B) 3 C) 7 D) infinitely many
-

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

Question No. : 75

If a, b and c are different real numbers such that $a + \frac{1}{b} = b + \frac{1}{c} = c + \frac{1}{a}$, which of the following is a possible value of the product abc ?

- A) 0 B) 1 C) 2 D) 8

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

Question No. : 76

If $2100! = (504)^p \times q$, where q is not the multiple of 7, what is the smallest value of p ? (in numerical value)

- A) 348 B) C) D)
-

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

Question No. : 77

If all the roots of $x^4 - 2ax^2 + x + a^2 - a = 0$ are real, which of the following is true of a ? (Write the answer option)

1. $a \leq -4/3$ 2. $a \geq -3$ 3. $a \geq 0$ 4. $a \geq 3/4$

- A) 4 B) C) D)

DIRECTIONS for the question: Answer the question independently of any other question.

Question No. : 78

There are 3 weights in the forms of discs with diameters 3 cm, 4 cm and 5 cm. When placed on one side of a weighing balance, they equally balance a fourth weight on the other side of the weighing balance. If the thicknesses and densities of all discs are the same, then what is the diameter of the fourth disc?

- A) $5\sqrt{2}$ cm B) 6 cm C) $10\sqrt{2}$ cm D) $5\sqrt{3}$ cm
-

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

Question No. : 79

Consider positive integers x and y such that the difference between $x^2 + y$ and $x + y^2$ is a prime number. How many different values can the ordered pair (x, y) take?

- A) 1 B) 2 C) 5 D) infinitely many

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

Question No. : 80

A swimming pool has dimensions 10 m \times 26 m. At the deep end of the pool, the depth is 4.4 m and it uniformly decreases till the shallow end with a depth of 1.6 m. What is volume of the pool (in m^3)? (in numerical value)

A) 780 B) C) D)

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

Question No. : 81

If a is real number such that $(a^2 + a - 2)^3 + (2a^2 - a - 1)^3 = 27(a^2 - 1)^3$, which of the following cannot be the value of $3a^2 + 5a - 10$?

A) $-47/4$ B) -8 C) -2 D) 12

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

Question No. : 82

The area of a rhombus is 30 and the ratio of the lengths of the diagonals is 4 : 5. What is area of square whose side is the same as that of the longer diagonal of the rhombus?

A) 48 B) 75 C) 192 D) 300

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

Question No. : 83

Consider the series $\frac{1}{x^2+1} + \frac{2}{x^2+2} + \frac{3}{x^2+3} + \dots + \frac{x}{x^2+x}$, where x is a natural number greater than 1. Which of the following best describes S ? (Write the correct option)

1. $0 < S < 1$ 2. $0 < S < 1/x$ 3. $\frac{1}{2} < S < \frac{x+1}{2x}$ 4. $\frac{1}{x} < S < \frac{1}{x^2}$

A) 3 B) C) D)

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

Question No. : 84

The greatest integer function, $[x]$, is defined as the greatest integer not exceeding x . For $n > 7$, which of the following will always divide ${}^n C_7 - \left[\frac{n}{7} \right]$? (write the correct option)

1. 5 2. 7 3. 10 4. 13

A) 2 B) C) D)

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

Question No. : 85

Given that a , b , and c are positive integers, solve the equation $a!b! = a! + b! + 2^c$. What is the value of $(a + b + c)^4$?

A) 1296 B) 2401 C) 3164 D) 4096

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

Question No. : 86

In a circle with centre O; A, B and C are points on circumference such that $\angle ABC = 115^\circ$. What is measure of $\angle ACO$ in degree? (in numerical value)

- A) 25 B) C) D)
-

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

Question No. : 87

Consider the set $X = \{1, 2, 3, \dots, 9, 10\}$. A and B are two non-empty disjoint subsets of X such that $A \cup B = X$. The products of all the elements in A and B are represented by $prod(A)$ and $prod(B)$ respectively. If $prod(A)$ is a multiple of $prod(B)$, and quotient is the smallest possible integer, then what is the difference between the sum of all elements in A and the sum of all elements in B? (in numerical value)

- A) 1 B) C) D)

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

Question No. : 88

What is the sum of the reciprocals of triangle numbers? A triangle number is a number which can be represented by an equilateral triangle; e.g., 3 is a triangle number as it can be represented by an equilateral triangle with 2 dots in the bottom row and 1 dot above this row.

- A) 2 B) 3 C) 5 D) 7
-

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

Question No. : 89

Rahul alone can complete a piece of work in 90 days, while Anurag and Ketan can individually complete the same work in 40 days and 12 days respectively. Rahul works alone on the first day, Anurag works alone on the second day, Ketan works alone on the third day and they continue in the same sequence till the work is completed. If they are paid Rs. 100,000 for the job, in what ratio should they share the money respectively?

- A) 4 : 9 : 30 B) 1 : 2 : 7 C) 4 : 9 : 27 D) 45 : 20 : 6

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

Question No. : 90

15th Aug 2014 is Friday. What will be the day on 15th Aug 2010?

- A) Sunday B) Monday C) Thursday D) Saturday
-

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

Question No. : 91

Arnav starts cycling from Pune to Satara at a speed of 8 kmph at the same time as Pranav starts from Pune to Satara at a speed of

13 kmph. After 4 hours, Arnav doubles his speed while Pranav reduces his speed by 1 kmph so that they reach Satara at the same time. What is the distance between Pune and Satara?

- A) 68 km B) 94 km C) 104 km D) 112 km

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

Question No. : 92

A person gives 40% discount and still makes a profit of 20%. If he gives a discount of 25% only, what is his profit percentage? (in numerical value)

- A) 50 B) C) D)

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

Question No. : 93

A jar contains n black and n white balls. Each of n blindfolded people draws two balls at random from the jar without replacement. What is the probability that each of the n people draws two balls of different colours?

- A) $\frac{2(n!)}{(2n)!}$ B) $\frac{2^n(n!)^2}{(2n)!}$ C) $\frac{2^n(n!)}{(2n)!}$ D) $\frac{(n!)^2}{(2n)!}$

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

Question No. : 94

A and B alone can each complete a task in 4 hours and 3 hours respectively. With C's help, they can together complete the task in an hour. How long will C alone take to complete the task?

- A) 2 hrs 40 min B) 2 hrs 36 min C) 2 hrs 24 min D) 2 hrs 30 min

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

Question No. : 95

n is a positive integer such that $x = n^4 + (n + 1)^4$ is composite. What is the smallest possible value of x ? (in numerical value)

- A) 1921 B) C) D)

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

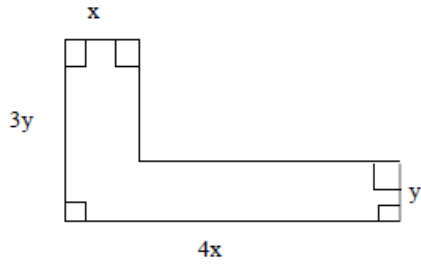
Question No. : 96

Hospital has a staff of 500 made up of nurses and cleaning staff. The average daily wage of these 500 employees is Rs. 300. The average daily wage of the 300 nurses was Rs. 50 more than that of the cleaning staff. What was the average daily wage of the nurses (in Rs.)? (write only the numerical value)

- A) 320 B) C) D)

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

Question No. : 97



What is the area of the figure if the perimeter is 48 units? (write the answer option)

1. $8x - 4x^2$ 2. $4x - 4x^2$ 3. $48x - 8x^2$ 4. $8x - 48x^2$

A) 3 B) C) D)

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

Question No. : 98

If angles of a triangle are in the ratio of 1:2:3 then what is the ratio of its sides?

- A) $1 : \sqrt{2} : 2$ B) $1 : \sqrt{2} : 3$ C) $1 : \sqrt{3} : 2$ D) $2 : \sqrt{3} : 4$

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

Question No. : 99

In how many ways can 4 boys and 2 girls be arranged in a row so that no two girls sit together?

- A) 48 B) 720 C) 240 D) 480

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

Question No. : 100

The population of a bacteria culture increases by 10% per hour for the first two hours and then decreases by 10% per hour for the next one hour. After that, the population increases by 5% per hour for the next two hours. If the initial population of the culture was 400,000, what will be the population at the end of 5 hours?

- A) 576,000 B) 527,076 C) 518,400 D) 480,249