**Cat 2011 Sample Papers**

**Directions for next three questions:** The passage given below is followed by a set of three questions. Choose the most appropriate answer to each question.  
  
“We are our narratives” has become a popular slogan. “We” refers to our selves, in the full-blooded personconstituting sense. “Narratives” refers to the stories we tell about our -selves and our exploits in settings as trivial as cocktail parties and as serious as intimate discussions with loved ones. We express some in speech. Others we tell silently to ourselves, in that constant little inner voice. The full collection of one’s internal and external narratives generates the self we are intimately acquainted with. Our narrative selves continually unfold.  
  
State-of-the-art neuro-imaging and cognitive neuropsychology both upholds the idea that we create our “selves” through narrative. Based on a half-century’s research on “split-brain” patients, neuroscientist Michael Gazzaniga argues that the human brain’s left hemisphere is specialised for intelligent behaviour and hypothesis formation. It also possesses the unique capacity to interpret – that is, narrate – behaviours and emotional states initiated by either hemisphere. Not surprisingly, the left hemisphere is also the language hemisphere, with specialised cortical regions for producing, interpreting and understanding speech. It is also the hemisphere that produces narratives.  
  
Gazzaniga also thinks that this left-hemisphere “interpreter” creates the unified feeling of an autobiographical, personal, unique self. “The interpreter sustains a running narrative of our actions, emotions, thoughts, and dreams. The interpreter is the glue that keeps our story unified, and creates our sense of being a coherent, rational agent. To our bag of individual instincts it brings theories about our lives. These narratives of our past behaviour seep into our awareness and give us an autobiography,” he writes. The language areas of the left hemisphere are well placed to carry out these tasks. They draw on information in memory (amygdalohippocampal circuits, dorsolateral prefrontal cortices) and planning regions (orbitofrontal cortices). As neurologist Jeffrey Saver has shown, damage to these regions disrupts narration in a variety of ways, ranging from unbounded narration, in which a person generates narratives unconstrained by reality, to denarration, the inability to generate any narratives, external or internal.  
  
How does Gazzaniga’s interpreter produce a narrative self? In 2003, one of us (Bickle) suggested that our “little inner voice” is the key. The inner voice may be produced by ongoing activity in language regions of the left hemisphere, both when the products of that activity are broadcast via external speech and when they are silently expressed through inner speech.  
  
One compelling study used PET imaging to watch what is going on in the brain during inner speech. As expected, this showed activity in the classic speech production area known as Broca’s area. But also active was Wernicke’s area, the brain region for language comprehension, suggesting that not only do the brain’s speech areas produce silent inner speech, but that our inner voice is understood and interpreted by the comprehension areas. The result of all this activity, I suggested, is the narrative self.  
  
What does the phrase “we are our narratives” mean?

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|  | Our inner voice keeps us well informed about ourselves. |
|  | We construct an idea of ourselves through stories which we communicate in certain ways. |
|  | Our narratives are the true reflections of our identities. |
|  | We are known by the stories we tell others. |

What does the author mean by the term “narrative self”?

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|  | The narrative self is our inner voice that is generated and interpreted by certain areas of the brain. |
|  | The ‘narrative self’ is a collection of the narratives about our past behaviour, which seep into our awareness and give us an autobiography. |
|  | The narrative self is the inner voice broadcast via external speech and actions. |
|  | It is the interpreter that sustains a running narrative of our actions, emotions, thoughts, and dreams. |

From the views presented in the passage we can infer that

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|  | the ‘narrative self’ is the glue that keeps our stories unified and makes us rational beings. |
|  | our narrative selves are like alter egos, which are heard and comprehended by us. |
|  | our narratives of the past help create a sense of who we are. |
|  | narratives are mostly in first person because of the strong ‘inner voice”. |

**Directions for next three questions:** The passage given below is followed by a set of three questions. Choose the most appropriate answer to each question.  
  
Adam Smith, who is mainly known to economists for defending the virtues of self-love, describes human nature in the Theory of Moral Sentiments [1776] as possessing moral dispositions opposed to selfish behaviour. In the Smithian model, the moral sense operates via the figure of the impartial spectator, who allows us to define what actions are proper or appropriate (from propriety in the work of Smith) and thus meritorious (worthy of reward) and which actions are not and, thus, are demeritorious (worthy of punishment). Morality, in this scheme, can be described at two different levels, i) at the level of rules of behaviour against which a social response is observed; and ii) at the level of effective behaviour, i.e., the actual degree of compliance to the set of prevalent norms in the community.   
  
The evolutionary, or biological, interest in the human sense of morality, can be traced back to Darwin himself. In his The Descent of Man [1871] he concludes that:  
  
“[P]rimeval man, at a very remote period, was influenced by the praise and blame of his fellows. It is obvious, that the members of the same tribe would approve of conduct which appeared to them to be for the general good, and would reprobate that which appeared evil.”  
  
Since then, most of the work in evolutionary approaches to morality deal only with the evolution of moral behaviour (generally understood as apparent or genuine self-sacrifice) and not with the evolution of rules of behaviour. In his The Biology of Moral Systems, Alexander (1987) argues that beyond Hamilton (1964)’s world of kin-selection, moral systems are sustained by what he calls indirect reciprocity. Specifically, selection could favor strategies that involve self-sacrifice due to returned benefits in the future –associated with the individual’s reputation and status in his community. In his framework, there is no space for altruistic behaviour when interaction is non-repeated. Sober and Wilson (1994), among others have pointed to multilevel selection arguments to understand how genuine altruism could have evolved in our species.  
  
The evolution of the rules themselves is not only important in itself to the extent that it defines one community’s culture, but also in its impact on behaviour. Experimental economists have shown that altruistic punishment (sanctioning free-riders) plays a crucial role in the achievement of social cooperation in collective action problems.  
  
Which of the following statements is in line with Adam Smith’s formulation of morality?

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|  | Defending the virtues of selfishness is meritorious (worthy of reward) in any society and has been so through the ages. |
|  | Humans possess moral dispositions and this moral sense helps them decide which actions are meritorious. |
|  | Each of us has the figure of an impartial spectator inside us which allows us to come up with rational solutions to moral problems. |
|  | It is the actual degree of compliance to the set of prevalent norms in a community that ultimately defines morality. |

Which of the following can be inferred from the passage?

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|  | Morality at the level of social rules is largely sustained through a focus on rewards and punishments. |
|  | Altruism arises from the tendency of humans to select strategies that ensure the survival of their species. |
|  | The definition of human morality changes with time and morality as such is subject to natural selection on several levels. |
|  | An individual’s altruistic behaviour may lead to an improvement in his/her status within his/her community. |

he author is most likely to agree with which of the following statements?

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|  | Altruism as a concept seems to be at odds with the concept of evolution. |
|  | Evolutionary approaches have largely concentrated on understanding how moral behaviour came about. |
|  | Darwin’s views cannot be reconciled with the Smithian model of the moral sense. |
|  | Moral behaviour is a prerequisite for the survival of any species. |

**Directions for next three questions:** The passage given below is followed by a set of three questions. Choose the most appropriate answer to each question.  
  
So just what Dante scorns as unworthy alike of heaven and hell, Botticelli accepts, that middle world in which men take no side in great conflicts, and decide no great causes, and make great refusals. He thus sets for himself the limits within which art, undisturbed by any moral ambition, does its most sincere and surest work. His interest is neither in the untempered goodness of Angelico’s saints, nor the untempered evil of Orcagna’s Inferno; but with men and women in their mixed and uncertain condition, always attractive, clothed sometimes by passion with a character of loveliness and energy, but saddened perpetually by the shadow upon them of the great things from which they shrink. His morality is all sympathy; and it is this sympathy, conveying into his work somewhat more than is usual of the true complexion of humanity, which makes him, visionary as he is, so forcible a realist.  
  
It is this which gives to his Madonnas their unique expression and charm. He has worked out in them a distinct and peculiar type, definite enough in his own mind, for he has painted it over and over again, sometimes one might think almost mechanically, as a pastime during that dark period when his thoughts were so heavy upon him. Hardly any collection of note is without one of these circular pictures, into which the attendant angels depress their heads so naïvely. Perhaps you have sometimes wondered why those peevish-looking Madonnas, conformed to no acknowledged or obvious type of beauty, attract you more and more, and often come back to you when the Sistine Madonna and the virgins of Fra Angelico are forgotten. At first, contrasting them with those, you may have thought that there was even something in them mean or abject, for the abstract lines of the face have little nobleness and the colour is wan. For with Botticelli she too, though she holds in her hands the “Desire of all nations,” is one of those who are neither for God nor for his enemies; and her choice is on her face. The white light on it is cast up hard and cheerless from below, as when snow lies upon the ground, and the children look up with surprise at the strange whiteness of the ceiling. Her trouble is in the very caress of the mysterious child, whose gaze is always far from her, and who has already that sweet look of devotion which men have never been able altogether to love, and which still makes the born saint an object almost of suspicion to his earthly brethren.  
  
What is the essential difference between Boticelli’s Madonna and other artists’ Madonnas?

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|  | Boticelli’s Madonna is more beautiful than the Madonnas painted by other artists. |
|  | Boticelli’s Madonna is not as beautiful as the Madonnas painted by other artists. |
|  | Boticelli’s Madonna inspires more reverence than the ones painted by other artists. |
|  | Boticelli’s Madonna is not larger than life but belongs to the middle world. |

The author calls Boticelli both a visionary and a realist

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|  | because Boticelli belonged to the middle world of ordinary men. |
|  | because he depicted neither saints nor evil men in his paintings. |
|  | because his work conveyed the real complexion of humanity. |
|  | because his Madonna chose the common man over Gods and saints. |

What is the primary purpose of the author?

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|  | To discuss the religious underpinnings of Botticelli’s art. |
|  | To explain how Botticelli’s Madonna is integrated with the artist’s reverential approach to art and life. |
|  | To describe how Botticelli’s art is a reflection of his realism. |
|  | To reflect on the techniques in Botticelli’s paintings that make them invaluabl |

The word given below has been used in sentences in four different ways. Choose the option corresponding to the sentence in which the usage of the word is incorrect or inappropriate.

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|  | The facts and evidence bear out the truth of his statements. |
|  | Your explanation does not bear upon the crux of the matter. |
|  | It is upon the common man that the changes will bear the hardest. |
|  | I have to bear up with all his caprice because he is my brother. |

The word given below has been used in sentences in four different ways. Choose the option corresponding to the sentence in which the usage of the word is incorrect or inappropriate.

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|  | The bus almost ran off the road during the storm. |
|  | Clearly hostilities ran deep under the surface, despite the fact that they were supposed to be allies. |
|  | It is important for her to gain self-confidence; just give her the job and let her run with it. |
|  | Please run on now and leave me alone; I am a bit busy today.  A paragraph is given below from which the last sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate way.  Art historians often view the Renaissance as beginning as early as the 13th century, with the art of Giotto and Cimabue, and ending in the late 16th century with the work of Michelangelo and Venetian painters like Titian. Literary scholars in the Anglo-American world take a very different perspective, focusing on the rise of vernacular English literature in the 16th and 17th centuries in the poetry and drama of Spenser, Shakespeare, and Milton. Historians take a different approach again, labelling the period c.1500–1700 as ‘early modern’, rather than ‘Renaissance’. These differences in dating and even naming the Renaissance have become so intense that the validity of the term is now in doubt. Does it have any meaning any more?   |  | | --- | |  | |  | Does it underpin a belief in European cultural superiority? | |  | Today, there is a popular consensus that the term ‘Renaissance’ refers to a profound and enduring upheaval and transformation in culture, politics, art, and society in Europe between the years 1400 and 1600. | |  | Is it possible to separate the Renaissance from the Middle Ages that preceded it, and the modern world that came after it? | |  | The word describes both a period in history and a more general ideal of cultural renewal. |   A paragraph is given below from which the last sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate way.  When it comes to partners, men often find women’s taste fickle and unfathomable. But ladies may not be entirely to blame. A growing body of research suggests that their preference for certain types of male physiognomy may be swayed by things beyond their conscious control—like prevalence of disease or crime—and in predictable ways.  Masculine features—a big jaw, say, or a prominent brow—tend to reflect physical and behavioural traits, such as strength and aggression. They are also closely linked to physiological ones, like virility and a sturdy immune system.   |  | | --- | |  | |  | Aggression is fine when directed at external threats, less so when it spills over onto the hearth. | |  | The obverse of these desirable characteristics looks less appealing. | |  | The results of the research are still tentative. | |  | Lisa DeBruine, of the University of Aberdeen, believes that today’s women still face a dilemma. |   A paragraph is given below from which the last sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate way.  Ludwig Wittgenstein was a philosopher. Philosophy in the twentieth century has become a pursuit for specialists, and accordingly most philosophers who have recently acquired reputations are famous only among their fellows. Wittgenstein, however, is famous far beyond the boundaries of philosophy. Among non-philosophers his name is mentioned surprisingly often and in a surprising variety of connections. It seems that by many he is regarded as quintessentially representative of twentieth-century philosophy, as if he exemplifies, not just in his work but in his personality, what philosophy itself is like: difficult and profound.   |  | | --- | |  | |  | It lends itself to that treatment because of its style and structure, and because it seems to distil something of wisdom. | |  | The layman’s estimation of Wittgenstein differs from that of many contemporary philosophers. | |  | Perhaps for this reason his writings are plundered for aphorisms. | |  | However, it will not alter the fact that Wittgenstein’s life and thought were, at the very least, extraordinary. |   Given below are four sentences. Each sentence has a pair of words that are italicised. From the italicised words, select the most appropriate words (A or B) to form correct sentences. The sentences are followed by options that indicate the words, which may be selected to correctly complete the set of sentences. From the options given, choose the most appropriate one.  The committee was apprised (A)/appraised (B) of the problem and is deliberating it behind closed doors. Everyone loved his childlike (A)/childish (B) enthusiasm for the project. He is a self-deprecating (A)/self-depreciating (B) person- self-critical and modest to a fault. Our progress was slow as the guide had to hew (A)/hue (B) a path through the dense undergrowth.   |  | | --- | |  | |  | AAAA | |  | AAAB | |  | AABA | |  | ABBA |   Given below are four sentences. Each sentence has a pair of words that are italicised. From the italicised words, select the most appropriate words (A or B) to form correct sentences. The sentences are followed by options that indicate the words, which may be selected to correctly complete the set of sentences. From the options given, choose the most appropriate one.  Is altruism imminent (A)/ immanent (B) in all individuals or is it acquired from without? I can empathize (A)/sympathize (B) with the teachers because of my own experience as a teacher. He is the splitting (A)/spitting (B) image of his father. The police conducting an exhausting (A)/exhaustive (B) investigation covering all possibilities.   |  | | --- | |  | |  | ABAB | |  | BABA | |  | BABB | |  | ABBB |   There are two gaps in the sentence given below. From the pairs of words given, choose the one that fills the gaps most appropriately.  Many children with ADHD have ….......... relationships with parents and are generally well behaved– their condition manifests itself only through a/an …......... to concentrate and focus on specific tasks.   |  | | --- | |  | |  | abiding, failure | |  | immutable, determination | |  | stable, inability | |  | weak, attempt |   There are two gaps in the sentence/paragraph given below. From the pairs of words given, choose the one that fills the gaps most appropriately.  The House of Representatives unanimously approved a bill on Friday that would ….......... restaurants, stores and roadside stands to an injunction if they ….......... the New Mexico Chile Advertising Act.   |  | | --- | |  | |  | subject, violate | |  | hold, disrespect | |  | obligate, misuse | |  | submit, desecrate |   Five sentences are given below, labeled A, B, C, D and E. They need to be arranged in a logical order to form a coherent paragraph. From the given options, choose the most appropriate one.  A. To house this event a huge temporary exhibition hall (Joseph Paxton’s steel and glass ‘Crystal Palace’) was built on Hyde Park in central London.  B. Although the birth of dinosaurs was relatively inauspicious (first appearing as an afterthought in the published report of the 11th meeting of the British Association for the Advancement of Science), they were soon to become the centre of worldwide attention.  C. At the time of Owen’s review, he was working on a surprisingly meagre collection of fossil bones and teeth that had been discovered up to that time and were scattered around the British Isles.  D. To celebrate such influence and achievement, the Great Exhibition of 1851 was devised.  E. The reason for this was simple. Owen worked in London, at the Museum of the Royal College of Surgeons, at a time when the British Empire was probably at its greatest extent.   |  | | --- | |  | |  | CBEDA | |  | BDACE | |  | BDAEC | |  | ECBDA |   Five sentences are given below, labeled A, B, C, D and E. They need to be arranged in a logical order to form a coherent paragraph. From the given options, choose the most appropriate one.  A. Like other ephemera of past times, bestsellers (even Orwell’s despised Deeping) offer the charm of antiquarian quaintness.  B. Any study of bestsellers confronts the same question as does the decaf, no-fat latte drinker in Starbucks: ‘Why bother?’  C. And, so short is their lifespan, that today’s bestsellers become yesterday’s fiction almost as soon as one has read them.  D. One justification, and the easiest demonstrated, is their (that is, bestsellers’) interesting peculiarity.  E. Where else would one encounter a line such as: ‘I say, you are a sport, pater’ [‘Son’ addressing ‘Sorrell’, on having been given a tenner ‘tip’ in Deeping’s Sorrell and Son].   |  | | --- | |  | |  | ACBDE | |  | BDAEC | |  | BEADC | |  | BDEAC |   A right circular cylindrical can of base radius 24 cm and height 100 cm is used to carry sand to a construction site. How many such cans will be required to completely fill a circular field of radius 20 m with 18 cm thick layer of sand?   |  | | --- | |  | |  | 1250 | |  | 1000 | |  | 2000 | |  | 500 |   P =  b^2c^2 – ac – bd, where a, b, c and d, in that order, are four consecutive natural numbers (a < b). Which of the following statements is correct?   |  | | --- | |  | |  | \sqrt{P} is always a prime number. | |  | \sqrt{P} is always a rational number, though not necessarily prime. | |  | \sqrt{P} can be rational or irrational depending on the numbers. | |  | \sqrt{P} is always an irrational number. |   A solid cube, with edge of length 16 cm, is divided into two parts by passing a plane from one face of the cube to the opposite face (see the figure given below). If EI = HJ = BK = CL = 2 cm, then by what percentage is the sum of the surface areas of the two parts more than the surface area of the cube?  http://s3.amazonaws.com/jumbotests.com/assets/3637/image.JPG?1316670412   |  | | --- | |  | |  | 16.67% | |  | 20.83% | |  | 41.67% | |  | 50.00% |   http://s3.amazonaws.com/jumbotests.com/assets/3638/image.JPG?1316670592   |  | | --- | |  | |  | A\ \Phi \ B | |  | A $ B | |  | A × B | |  | \bigg[\cfrac{A}{B} \bigg] |   Ten workers started a job and worked on it for 10 days. Eleventh day onwards, a new worker joined them every day till the job was finished. It took exactly 20 days to finish the entire job. The same job has to be done starting with the minimum possible number of workers when it is known that a worker will quit the job every day after the first day. How many days will it take to finish the job in such a manner?   |  | | --- | |  | |  | 23 | |  | 22 | |  | 19 | |  | 17 |   A man, while driving to his office, finds three traffic signals on his way. The probability that the traffic light is red when he reaches the first, second and third traffic signal is  \cfrac{5}{8}, \cfrac{5}{6} and  \cfrac{3}{5} respectively. What is the probability that he finds at least one traffic light on his way which is not red?   |  | | --- | |  | |  | \cfrac{3}{8} | |  | \cfrac{11}{16} | |  | \cfrac{5}{16} | |  | \cfrac{5}{8} |   a, b, c and d are four positive real numbers such that  a^2 + b^2 + c^2 + d^2 = 100. What is the maximum possible value of the sum of a, b, c and d?   |  | | --- | |  | |  | 30 | |  | 10 | |  | 20 | |  | None of these |   What digit does “a” represent, if 35! = 10333147966386144929a66651337523200000000?   |  | | --- | |  | |  | 4 | |  | 6 | |  | 2 | |  | 1 |   Sameer and Sumer started running from the same point in opposite directions on a circular track of length 120 m. Their speeds are 20 m/s and 40 m/s respectively. After every second, Sameer increases his speed by 2 m/s whereas Sumer decreases his speed by 2 m/s. How many times would they have met on the track by the time Sumer comes to rest?   |  | | --- | |  | |  | 2 | |  | 5 | |  | 10 | |  | None of these |   P is a point outside a circle with center O and radius 6 units, such that OP = 10 units. Tangents are drawn from P to the circle touching it at M and N (see the figure given below). The line segment OP cuts the circle at point C and the tangent drawn to the circle at C meets PM and PN at points A and B respectively. What is the length (in units) of the inradius of triangle ABP?  http://s3.amazonaws.com/jumbotests.com/assets/3639/image.JPG?1316671617   |  | | --- | |  | |  | 1.50 | |  | 1.67 | |  | 1.73 | |  | 2.00 |   In a ballot process, 900 votes more were polled in favour of a resolution than were polled against it. It was also noticed that the number of votes polled against the resolution was 30 percent of the total number of votes polled. If all the votes polled were valid and each vote was either in favour of the resolution or against it, find the total number of votes polled.   |  | | --- | |  | |  | 1150 | |  | 3400 | |  | 2000 | |  | 2250 |   A group of students is to be divided into some rows such that all the rows have an equal number of students. When 7 students are put in each row, 3 students are left; when 8 students are put in each row, 5 students are left; and when 9 students are put in each row, 7 students are left. If 12 students are put in each row, then how many students will be left?   |  | | --- | |  | |  | 1 | |  | 3 | |  | 5 | |  | 7 |   Five hundred students appeared in an examination which comprises three subjects – Physics, Chemistry and Mathematics. The Venn diagram given below shows the number of students who failed in one or more subjects. What percentage of students passed in at least two of the three subjects?  http://s3.amazonaws.com/jumbotests.com/assets/3640/image.JPG?1316672173   |  | | --- | |  | |  | 70.6% | |  | 55.4% | |  | 60.2% | |  | 92.2% |   The letters of the English alphabet, in the order A to Z, are made to represent 26 numbers which are in Arithmetic Progression. The sum of the numbers representing A, C and E is 36 while that of A, C, E and G is 60. What is the sum of the numbers representing B, D, F and H?   |  | | --- | |  | |  | 96 | |  | 66 | |  | 72 | |  | 84 |   There are three water-alcohol solutions A, B and C whose alcohol concentrations are 50%, 60% and 70% respectively. x ml of A, (x + 2) ml of B and (x + 3) ml of C are mixed. If the alcohol concentration of the resultant mixture is 65%, then x lies in the range   |  | | --- | |  | |  | 0.1 to 0.5 | |  | 0.5 to 0.9 | |  | 0.9 to 1.4 | |  | 1.4 to 1.9 |   The pages of a book are numbered 1 to n, where n is a natural number. The total number of times the digit 3 is used while printing all the page numbers is 184. What is the value of n?   |  | | --- | |  | |  | 432 | |  | 430 | |  | 431 | |  | Cannot be determined |   A function f(x) is defined for all real values of x as f(x) =  ax^2 + bx + 1. It is also known that f(5) = f(k) = 0, where k is not equal to 5. If a < 0, then which of the following is definitely correct?   |  | | --- | |  | |  | b < 0 | |  | b > 0 | |  | k < 0 | |  | k > 0 |   p, q, r and s are positive real numbers such that q =  \cfrac{p + r}{2} , s = p – q and  r^2 = s^2 . Which of the following is definitely true?   |  | | --- | |  | |  | p = \cfrac{3q}{2} | |  | p = \cfrac{-3q}{2} | |  | q = \cfrac{-3p}{2} | |  | q = \cfrac{3p}{2} |   If p is a prime number and w, x, y, z are four natural numbers whose sum is less than p, then  (w + x + y + z)^p –  (w^p + x^p + y^p + z^p) is always divisible by   |  | | --- | |  | |  | p – 1 | |  | p^2 | |  | p | |  | p + 1 |   If x, y and z are whole numbers such that x  \ge y, then how many solutions are possible for the equation x + y + z = 36?   |  | | --- | |  | |  | 361 | |  | 323 | |  | 382 | |  | 342 |   **Directions for next two questions:** Answer the questions on the basis of the information given below.  Anju, Bimla, Charu and Dimple stay in the same colony and study in different schools. Their schools are in North, South, East and West direction w.r.t. the colony in no particular order. Anju’s school and Bimla’s school are located in opposite directions while Dimple’s school is located 90° clockwise w.r.t. Bimla’s school. The distance of the four schools from the colony is 100 units, 150 units, 200 units and 250 units in no particular order. Dimple’s school is located in West. Anju’s school is not the one closest to the colony while Charu’s school is closer to the colony than Dimple’s school. The school located in South is farthest from the colony.  If the school located in North is closer to the colony than the school located in West, then who studies in the school located at a distance of 150 units from the colony?   |  | | --- | |  | |  | Dimple | |  | Bimla | |  | Anju | |  | Charu |   If Anju’s school is the one located at a distance of 200 units from the colony, then how far from the colony is the school located in West?   |  | | --- | |  | |  | 150 units | |  | 250 units | |  | 200 units | |  | 100 units |   Three friends – Sanjay, Harish and Gautam – are standing in a row, from left to right in the same order, facing North. Each of them likes a distinct sweet among Peda, Laddu and Gulabjamun. Also, each of them is wearing a shirt of distinct colour among yellow, blue and green. The one who is wearing green shirt doesn’t like Peda. The one who likes Laddu is standing to the immediate left of the one who likes Peda. If Sanjay is wearing yellow shirt, then what is colour of the shirt of the person who likes Laddu?   |  | | --- | |  | |  | Either yellow or green | |  | Either yellow or blue | |  | Either green or blue | |  | Cannot be determined |   **Directions for next three questions:** Answer the questions on the basis of the information given below. The break-up of the financial budget of a country called Chaupatland for FY 2010-11 is represented by the pie charts given below. Pie chart A represents Budgeted Revenue and pie chart B represents Budgeted Expenditure.  http://s3.amazonaws.com/jumbotests.com/assets/3641/image.JPG?1316673967  Budgeted Revenue was less than Budgeted Expenditure by Rs. 625 thousand crores. Interest Payment exceeded Non-Planned Capital Account by 12% of Budgeted Expenditure. Non-Tax Revenue was Rs. 285 thousand crores less than Tax Revenue.  The difference between Budgeted Expenditure and Budgeted Revenue was what percentage of Budgeted Revenue?   |  | | --- | |  | |  | 120% | |  | 125% | |  | 25% | |  | 20% |   By how much did the sum of Planned Revenue Account and Planned Capital Account exceed Non-Tax Revenue?   |  | | --- | |  | |  | Rs. 281.25 thousand crores | |  | Rs. 236.25 thousand crores | |  | Rs. 186.25 thousand crores | |  | Rs. 88.25 thousand crores |   In FY 2011-12, if Budgeted Revenue is increased by 52% over that of the previous year, then what will be the new percentage share of Tax Revenue in Budgeted Revenue?   |  | | --- | |  | |  | 50% | |  | 76% | |  | 56% | |  | Cannot be determined |   The question given below is followed by two statements, A and B. Mark the answer using the following instructions:  Q. What is the remainder when the number N = xxxxx……xxxx (each digit of N is the same i.e. x) is divided by 13? A. N has 18n + 6 digits, where n is a natural number. B. The value of x is 7.   |  | | --- | |  | |  | if the question can be answered by using one of the statements alone, but cannot be answered by using the other statement alone. | |  | if the question can be answered by using either statement alone. | |  | if the question can be answered by using both the statements together, but cannot be answered by using either statement alone. | |  | if the question cannot be answered even by using both the statements togethe |   Each of the four friends – Raja, Ram, Mohan and Roy – owns a distinct car among Matiz, Optra, Palio and Santro. It is known that there is exactly one among the four friends who never speaks the truth. The rest three always speak the truth. Each of the four friends made two statements as given below.  Raja: Ram owns Matiz. Mohan doesn’t own Palio. Ram: Roy owns Santro. Mohan doesn’t own Optra. Mohan: Roy owns Palio. Raja doesn’t own Optra. Roy: Raja owns Santro. Mohan owns Optra.  Who among the four friends owns Santro?   |  | | --- | |  | |  | Raja | |  | Ram | |  | Mohan | |  | Ro |   **Directions for next two questions:** Answer the questions on the basis of the table given below.  http://s3.amazonaws.com/jumbotests.com/assets/3642/image.JPG?1316675022  In Census data based estimates (0-14 Yrs.), which year saw the maximum percentage change in Full Time Child Workers as compared to the previous Census?   |  | | --- | |  | |  | 1961 | |  | 1971 | |  | 1981 | |  | 1991 |   In Non-workers & Non-students (5-14 Yrs.) category, the two estimates are based on Census and MHRD & NSS respectively. For which year is the absolute difference between the two estimates the highest?   |  | | --- | |  | |  | 1951 | |  | 1961 | |  | 1971 | |  | 1981 | | The question given below is followed by two statements, A and B. Mark the answer using the following instructions:  Q. Four people – Ram, Shyam, Gopal and Sameer – are sitting at a circular table not necessarily in the given order. Who is sitting opposite Sameer? A. Ram is sitting to the immediate left of Sameer. B. Gopal is sitting to the immediate right of Shyam.   |  | | --- | |  | |  | if the question can be answered by using one of the statements alone, but cannot be answered by using the other statement alone. | |  | if the question can be answered by using either statement alone. | |  | if the question can be answered by using both the statements together, but cannot be answered by using either statement alone. | |  | if the question cannot be answered even by using both the statements together. | |  | |  |  | |

**Directions for next three questions:** Answer the questions on the basis of the information given below.   
  
An ATM needs exactly two guards on each day of a week from Monday to Saturday. Puneet, Vikrant, Vikram, Jasneet and Saurabh are the people responsible for guarding the ATM. None of them works for three consecutive days during the week. Puneet does not work on Monday, Tuesday and Wednesday. Jasneet and Vikrant never work on the same day. Vikrant works on alternate days and he works with Puneet on Friday. Saurabh works for the maximum number of days during the week among the five guards. Both Jasneet and Vikrant work for an odd number of days during the week. Two particular guards work for the same number of days during the week; each of the rest three works for a distinct number of days.  
  
If Saurabh works with one particular guard twice during the week, then which guard works on the same day as Jasneet?

|  |
| --- |
|  |
|  | Vikram |
|  | Saurabh |
|  | Puneet |
|  | Cannot be determined |

If Saurabh works with a different guard every time during the week, then which two guards work on Thursday?

|  |
| --- |
|  |
|  | Saurabh and Puneet |
|  | Saurabh and Jasneet |
|  | Saurabh and Vikram |
|  | Cannot be determined |

Which of the following statements cannot be true?

|  |
| --- |
|  |
|  | Saurabh and Puneet work together on Thursday. |
|  | Vikram and Jasneet work together on Thursday. |
|  | Puneet and Saurabh work together on Saturday. |
|  | Saurabh and Vikram work together on Thursday. |

**Directions for next three questions:** Answer the questions on the basis of the information given below.   
  
There are five different machines in a factory – Lathe, Drill, Boring, Milling and Welding. Each of the four products – A, B, C and D – is manufactured by using a distinct combination of exactly three out of these five machines. Drill machine is never used in conjunction with Lathe machine. If either Lathe machine or Drill machine is used, then Milling machine is also used.  
  
The individual processing time of these machines are 15, 20, 25, 30 and 40 minutes in no particular order. The processing time of Drill machine is more than that of Milling machine which in turn is more than that of Boring machine. The sum of the processing times of Drill machine and Welding machine is 10 minutes more than the processing time of Lathe machine.  
  
The time taken for manufacturing a product is the sum of the processing times of the three machines which are used for manufacturing it. The manufacturing time of A is not the highest while D has the lowest manufacturing time among the four products. The manufacturing time of B is more than that of C.  
  
Which of the following can be the manufacturing time of product B?

|  |
| --- |
|  |
|  | 75 minutes |
|  | 85 minutes |
|  | 70 minutes |
|  | 90 minutes |

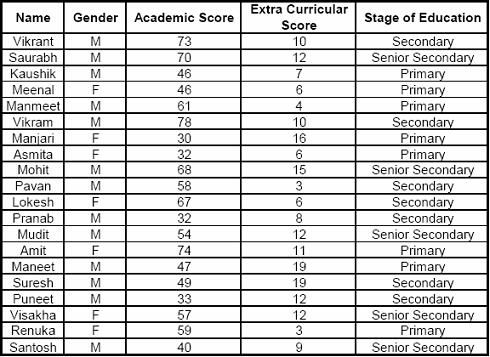
It is known that Boring machine is used in manufacturing product A. If Lathe machine’s processing time increases by 5 minutes due to the wear and tear of its tool, then which of the following can be the manufacturing time of product A?

|  |
| --- |
|  |
|  | 75 minutes |
|  | 80 minutes |
|  | 85 minutes |
|  | 90 minutes |

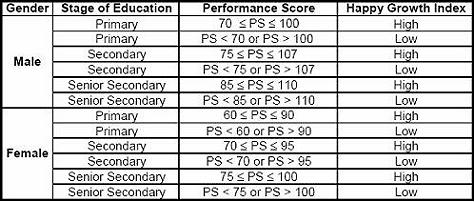
Assume that Welding machine is not available and any combination of three machines out of the remaining four can be used for manufacturing the products. Find the manufacturing time of product B.

|  |
| --- |
|  |
|  | 75 minutes |
|  | 85 minutes |
|  | 80 minutes |
|  | 95 minute |

**Directions for next three questions:** Answer the questions on the basis of the information given below.  
  
The table given below shows the marks obtained by 20 students of a school in their annual exam. The Performance Score of a student is calculated as:  
Performance Score = Academic Score + 3 × Extra Curricular Score



The school calculates ‘Happy Growth Index’ for every student to determine the relative happiness of its students. Students are classified as either High or Low on Happy Growth Index based on the criteria shown in the table given below.



How many students are Low on Happy Growth Index at Primary Stage of Education?

|  |
| --- |
|  |
|  | 2 |
|  | 3 |
|  | 4 |
|  | 5 |

What is the ratio of the number of male students at Senior Secondary Stage who are High on Happy Growth Index to the number of female students at Primary Stage who are High on Happy Growth Index?

|  |
| --- |
|  |
|  | 1 : 1 |
|  | 2 : 3 |
|  | 1 : 3 |
|  | 4 : 3 |

How many female students whose Academic Score is less than 50 have the same Happy Growth Index as that of Renuka?

|  |
| --- |
|  |
|  | 1 |
|  | 4 |
|  | 3 |
|  | 2 |