

Aptitude Practice Questions

1 Mark Questions

1. The question below consists of a pair of related words followed by four pairs of words. Select the pair that best expresses the relation in the original pair.

INTIMATE : CLOSE

- (a) evanescent : permanency
(b) articulate : speech
(c) enclose : parentheses
(d) obsessed : attracted

2. In the following question, a word is given in bold which precedes four more words. Pick the word from the four options which most nearly opposite in meaning to the bold word.

POLEMICAL

- (a) lavish (b) imitative (c) conciliatory (d) attractive

3. Which of the following options is the closest in meaning to the word below:

DELETERIOUS

- (a) delaying (b) glorious (c) harmful (d) graduating

4. In the following question one word-part is given with example, followed by four options. Choose the most appropriate word which best describes the usage of the given word-part in a word.

dis- (Ex. disperse)

- (a) free, book (b) not, apart (c) before (d) obsession

5. Find the unit's digit in the product 24647^{117} and 45631^{24647}

- (a) 9 (b) 7 (c) 3 (d) 1

2 Mark Questions:

6. The recent news that local hospitals have had to reroute seriously ill patients because the community's critical-care beds are full is worrisome. Earlier this week, four of the six local hospitals ran out of space for the critically ill and had to turn people away. Federal law requires hospitals to treat anyone who walks in. As a result of having to treat large numbers of uninsured patients, the emergency rooms often become an economic drain on their hospitals. Doctors now want to set up their own free standing ambulatory surgical facilities and diagnostic centers. Critics contend this would leave hospitals with less revenue and the same number of indigents to treat.

A bill was recently introduced to phase out the need for a "certificate of public

Aptitude Practice Questions

need" for non-hospital based facilities, provided those facilities met stringent regulations and requirements. This would have made it easier to set up alternative facilities to help indigent patients. The finance committee balked at the hefty price and killed the bill, another casualty of a failed legislative session.

Unfortunately, the problem of access to medical care for those of limited means is not going to go away anytime soon and, despite the well-intended regulations, too-full hospitals compromise everyone's welfare. Healthy competition with small neighborhood surgical and diagnostic centers may be what is necessary to help dampen rising medical costs. But under no circumstances should the hospitals be forced to care for everybody without health insurance while competitors operate free of the burden of caring for those unable to pay.

According to the passage, which of the following is cited as a factor which has contributed to the overburdening of hospitals?

- I. Failure to pass legislation which would have mitigated the problem
- II. Limited access to medical care for the poor
- III. Federal law

- (a) I only
- (b) III only
- (c) I and II
- (d) I, II, and III

7. Ram and Hari started from A and B, towards B and A at 6.00 am and 7.00 am respectively. They meet each other at 9.00 am and continued towards their respective destinations. Ram reaching B turns back and catches up with Hari before Hari reaches A at 11.00 am. At what time will Hari reach A.

- (a) 7.00 pm
- (b) 4.00 pm
- (c) 5.00 pm
- (d) 6.00 pm

8. A person has the capability of thinking 100 lines of code in five minutes and can type 100 lines of code in 10 minutes. He takes a break for five minutes after every ten minutes. How many lines of codes will he complete typing after an hour?

- (a) 100
- (b) 250
- (c) 350
- (d) 600

9. A solid, four-inch cube of wood is coated with blue paint on all six sides. Then the cube is cut into smaller one-inch cubes. These new one-inch cubes will have either three blue sides, two blue sides, one blue side, or no blue sides. How many of two side colored will there be?

- (a) 24
- (b) 8
- (c) 16
- (d) 12

10. One of twelve pool balls is a bit lighter or heavier (you do not know) than the others. At least how many times do you have to use an old balance-type pair of scales to identify this ball?

- (a) 1
- (b) 3
- (c) 7
- (d) 12

Aptitude Practice Solutions

1. **(d) obsessed: attracted**

Intimate: close (nearly same use)

Evanescent (vanish): permanency (opposite meaning)

Articulate (clear and distinct /capable of speech): speech

Enclose: parenthesis (parenthesis encloses)

Obsessed: attracted (nearly same use)

2. **(c) conciliatory**

Polemical means controversial argument or against some opinion.

Lavish- expended or limitless

Imitative-derivative, not original

Conciliatory-compromising

Attractive- adorable

Hence most opposite meaning word is conciliatory

3. **(c) harmful**

Deleterious means harmful.

4. **(b) not, apart**

Disperse means scatter or not together. Hence the answer is apart.

5. **(b) 7**

Unit's digit in the product = unit's digit of $7^{117} \times 1^{24641} = 7^{117} \times 1 = 7^{117}$

7^{4n} gives unit digit 1 as $117 = 116 + 1 = 29 \times 4 + 1$

Thus 7^{116} gives unit digit 1 and 7^{117} gives unit digit $1 \times 7 = 7$

Thus the required unit digit is 7

6. **(d) I, II and III**

Federal law requires hospitals to treat anyone who walks in.

The finance committee balked at the hefty price and killed the bill, another casualty of a failed legislative session.

Unfortunately, the problem of access to medical care for those of limited means is not going to go away anytime soon and, despite the well-intended regulations, too-full hospitals compromise everyone's welfare

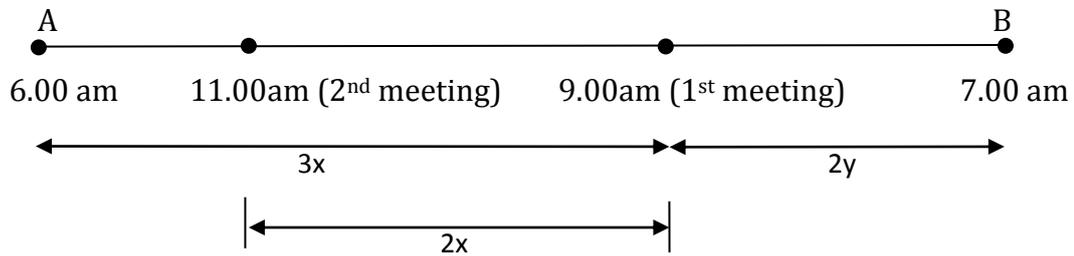
The above three statements from the passage clearly indicate that, all the three options are one of the factors which has contributed to the overburdening of hospitals.

7. **(d) 6.00pm**

Let speed of Ram is "x" and that of Hari is "y". After 3hrs of Ram started from A (6.00 am) and after 2hrs Hari started from B (7.00 am), both meet at 9.00 am. So during their meet distance travelled by Ram is 3x and by Hari is 2y. Again they

Aptitude Practice Solutions

meet at 11.00 am, 2hrs from 9.00 am. During this 2 hr distance travelled by Ram is $2x$.



And distance travelled by Hari is $2y$. As Ram has reached B and again turns back towards A and then they both meet at 11.00am, the distance covered in terms of y is $2y$ (from 1st meeting to B) + $2y$ (from B to 1st meeting point) + $2y$ (from 1st meeting point to 2nd meeting point) = $6y$.

Thus $2x = 6y \Rightarrow x = 3y$

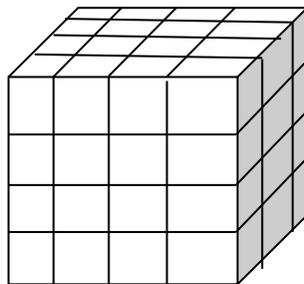
Thus total distance between A and B is $3x + 2y = 11y$

Hari has already covered $4y$ distance. For covering remaining $7y$ distance, he needs 7 hrs. So the time is 11.00 am + 7hrs = 6pm.

8. (b) 250

Starting from zero time (time=0min.), the person thinks for first 5min. (time=5min.) then types 50 lines of code in next 5 min.(time=10min.), then take brake for 5 min.(time=15min.), then again types the remaining 50 lines (of 10 min. typing) for next 5min.(time=20min.). The procedure goes. In first 20 min. he writes 100 lines. Then he thinks for 5 min. (time=25 min.). Again takes break for next 5 min. (as its already 10 min. to take break) (time=30min.), then types for 10 min. (time=40min.). Now he has completed 200 lines of codes in 40 min.. We have 20 min. remaining. Then he takes break for 5 min. (time=45min.) thinks for 5 min. (time=50min.) and got time to type for next 5 min.(time=55min.) as last 5min. is for break time(time=60min.). Thus he can write maximum 250 lines.

9. (a) 24



There are 8 corners cubes are of three sided coloured. Central 4 cubes in all the six faces are 1 sided coloured cubes. Remaining visible border cubes are two side

Aptitude Practice Solutions

coloured cubes. Hence, 8 cubes from front side + 8 cubes from back side + 4 from left side + 4 cubes from right side = 24 cubes (all two side colored cubes are covered in these 24 cubes including top and bottom faces)

10. (b) 3

Let's mark the balls using numbers from 1 to 12 and these special symbols:
x? means I know nothing about ball number x;
xL means that this ball is maybe lighter than the others;
xH means that this ball is maybe heavier than the others;
x. means this ball is "normal".

At first, lay on the left pan balls 1? 2? 3? 4? and on the right pan balls 5? 6? 7? 8?. If there is equilibrium, then the wrong ball is among balls 9-12. Put 1. 2. 3. on the left and 9? 10? 11? on the right pan. If there is equilibrium, then the wrong ball is number 12 and comparing it with another ball it can find out if it is heavier or lighter. If the left pan is heavier, 12 is normal and 9L 10L 11L. weigh 9L and 10L. If they are the same weight, then ball 11 is lighter than all other balls. If they are not the same weight, then the lighter ball is the one up. If the right pan is heavier, then 9H 10H and 11H and the procedure is similar to the former text.

If the left pan is heavier, then 1H 2H 3H 4H, 5L 6L 7L 8L and 9. 10. 11. 12. Now lay on the left pan 1H 2H 3H 5L and on the right pan 4H 9. 10. 11. If there is equilibrium, then the suspicious balls are 6L 7L and 8L. Identifying the wrong one is similar to the former case of 9L 10L 11L. If the left pan is lighter, then the wrong ball can be 5L or 4H. Compare for instance 1. and 4H. If they weigh the same, then ball 5 is lighter than all the others. Otherwise ball 4 is heavier. If the left pan is heavier, then all balls are normal except for 1H 2H and 3H. Identifying the wrong ball among 3 balls was described earlier.

In all possible way at least 3 times we have to weigh to find out which one is odd one.

Aptitude Practice Questions

1 Mark Questions

1. In the following question, a word is given in bold which precedes four more words. Pick the word from the four options which most nearly opposite in meaning to the bold word.

DISTEND

(A) diminish (B) prevent (C) begin (D) swell

2. Which of the following options is the closest in meaning to the word below:

FRUGALITY

(A) foolishness (B) extremity (C) enthusiasm (D) economy

3. The question below consists of a pair of related words followed by four pairs of words. Select the pair that best expresses the relation in the original pair.

BUOYANT : SUBMERGED

(A) obloquy : discredit (C) stoic : perturbed
(B) stealth : furtive (D) disaffected : rebel

4. Choose the most appropriate word from the options given below to complete the following sentence:

Female sparrows and immatures are _____, while the typical adult male sparrow is _____ by its markings: a black bib, a gray cap, and white lines trailing down from the mouth.

(A) somewhat nondescript, easily recognized
(B) difficult to spot, better camouflaged
(C) considered to be endangered, characterized
(D) comparatively small, made more conspicuous

5. In a family 7 children don't eat spinach, 6 don't eat carrot, 5 don't eat beans, 4 don't eat spinach & carrots, 3 don't eat carrot & beans, 2 don't eat beans & spinach. One doesn't eat all 3. Find the no. of children.

(A) 19 (B) 9 (C) 10 (D) 11

Aptitude Practice Solutions

1. **(A) diminish**

distend means to expand or stretch or swell. Hence the opposite meaning is diminish.

2. **(D) economy**

frugal means saving, not wasteful.

3. **(C) stoic: perturbed**

Buoyant: submerged (two different form of presence of body in water)

Obloquy: discredit (same meaning)

Stoic (unaffected by pleasure or pain or impassive): perturbed (to disturb greatly, make uneasy or anxious (both are two types of negative emotion)

Stealth: furtive (same meaning, stolen)

Disaffected: rebel (same meaning, disloyal)

4. **(A) somewhat nondescript, easily recognized**

Common sense tells you that the markings described in the sentence — black bib, gray cap, and white lines trailing down from the mouth — would make a bird distinctive and readily identifiable. In the sentence, the connecting word *while* neatly sets up contrasting ideas as between what precedes it and what follows it. The word *nondescript* and the phrase *easily recognized* make for just the sort of contrast that lends coherence to the sentence as a whole.

5. **(C) 10**

If S is set of children who eat spinach, B is set of children who eat bean and C is the set of children, who eat carrot then,

$$n(S') = 7, n(C') = 6, n(B') = 5$$

$$\text{Again } n(S' \cap C') = 4, n(C' \cap B') = 3, n(B' \cap S') = 2 \text{ and } n(S' \cap C' \cap B') = 1,$$

Thus, Total number of children =

$$n(S' \cup C' \cup B') = n(S') + n(C') + n(B') - \{n(S' \cap C') + n(C' \cap B') + n(B' \cap S')\} + n(S' \cap C' \cap B')$$

$$= 7 + 6 + 5 - (4 + 3 + 2) + 1 = 10$$

6. **(A) Honeybees, unlike many other varieties of bees, are able to live through the winter by clustering together in a dense ball for body warmth.**

Main ideas are, unlike other bees, honey bees form cluster in winter to gain body warmth for survival. The numbers, how they eat, how they move are secondary ideas according to the passage.

Aptitude Practice Solutions

7. **(A) 46**

Escalator is moving with its usual speed, addition to which the person steps down. Now let us calculate the speed of escalator in terms of number of steps elapsed at bottom. Let in 1 sec number of steps elapsed is x . In 30 sec, number of steps elapsed is $30x$ and in 18 sec is $18x$. Addition to this the man has stepped down in order to reach earlier compared to normal case. Thus total number of steps elapsed in both the case is same as speed of escalator is constant. Hence according to question, $26 + 30x = 34 + 18x \Rightarrow x = 2/3$ steps

Thus required number of steps = $26 + 30x = 46$ steps.

8. **(D) 5:8**

In 1 lt of mixture, amount of milk in vessel A = $2/5$ and in vessel B = $9/16$

To make $1/2$ lt milk in vessel C, we need from vessel A, $1/2 - 2/5 = 1/10$ lt

And from vessel B, $9/16 - 1/2 = 1/16$ lt.

Thus the ratio = $1/16 : 1/10 = 5:8$

9. **(C) 15 hours**

Let 1st pipe fills the tank in x hrs, 2nd pipe in y hrs and 3rd in z hrs.

Then in 1 hr 1st pipe fills $(1/x)$ th of tank, 2nd pipe fills $(1/y)$ th of tank and 3rd pipe fills $(1/z)$ th of the tank.

As time taken by 1st and 2nd pipe simultaneously to fill the tank = time taken by 3rd pipe to fill the tank. Hence in 1 hr the portion of tank filled by 1st and 2nd pipe simultaneously is equal that by 3rd pipe.

Thus $1/x + 1/y = 1/z$.

Again, $x = y + 5$ and $z = y - 4$.

From above 3 equations, we get $y^2 - 8y - 20 = 0$. Solving this, $y = 10$ or -2 .

Hence $y = 10$ hrs, $x = 15$ hrs

10. **(C) 6**

unit's digit in the product of $37562^{156!}$ and $67847^{675!}$ = unit's digit in the product of $2^{156!}$ and $7^{675!}$

The unit digit for any power of 2 is one of the numbers, 2, 4, 8, 6. If n is a positive number then unit digit of $2^{4n} = 6$, $2^{4n+1} = 2$, $2^{4n+2} = 4$, $2^{4n+3} = 8$.

$156! = 4 \times (1 \times 2 \times 3 \times 5 \times \dots \times 156)$. Hence unit digit of $2^{156!} = 6$.

Similarly $675! = 4 \times (1 \times 2 \times 3 \times 5 \times \dots \times 675)$. 7^{4n} gives unit digit 1. Try it.

Thus the the unit's digit in the product of $37562^{156!}$ and $67847^{675!}$ is $6 \times 1 = 6$

Aptitude Practice Questions

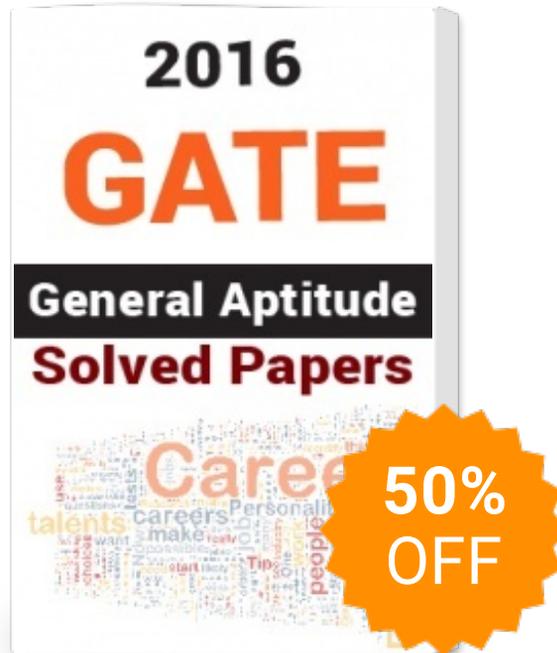
2 Mark Question

6. Honeybees, unlike many other varieties of bees (such as bumblebees and wasps), are able to live through the winter. The 30,000 to 40,000 bees within a honeybee hive could not, individually, move about in cold winter temperatures. But when “clustering together in a dense ball,” the bees generate heat by constantly moving their body parts. The cluster also moves slowly about the hive, eating honey stored in the combs. This nutrition, in addition to the heat generated by the cluster, enables the honeybee to survive the cold winter months.

From the four options find the statement which best describes the above passage.

- (A) Honeybees, unlike many other varieties of bees, are able to live through the winter by clustering together in a dense ball for body warmth.
- (B) Honeybees survive cold winter months by eating honey stored in the combs and generating heat.
- (C) 30,000 to 40,000 honeybees with in a hive survive by forming cluster together.
- (D) Honeybees unlike other bees, form clusters containing 30,000 to 40,000 bees in winter for survival which moves slowly and eat stored honey.
7. Mr. Das decided to walk down the escalator of a mall. He found that if he walks down 26 steps, he requires 30seconds to reach the bottom. However, if he steps down 34 stair she would only require 18 seconds to get to the bottom. If the time is measured from the moment the top step begins to descend to the time he steps off the last step at the bottom, find out the height of the stair way insteps?
- (A) 46 (B) 35 (C) 56 (D) 55
8. Milk and water in two vessels A and B are in ratio 2:5 and 9:7 respectively. In what ratio the liquids in both the vessels are mixed to obtain a new mixture in vessel C containing half milk and half water?
- (A) 3:10 (B) 7:10 (C) 7:8 (D) 5:8
9. A tank is filled by three pipes with uniform flow. The first two pipes operating simultaneously fill the tank in the same time during which the tank is filled by the third pipe alone. The second pipe fills the tank 5 hour faster than the first pipe and 4 hour slower than the third pipe. The time required by the first pipe is
- (A) 6 hours (C) 15 hours
- (B) 10 hours (D) 30 hours

GATE 2016 General Aptitude Solved Papers



Publisher : Faculty Notes

Author : Panel of Experts

Type the URL : <http://www.kopykitab.com/product/5181>



Get this eBook