GATE – Mining Engineering

(Topic Wise Questions 2010-2017)

Topic: General Aptitude (GA)

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2010

General Aptitude (GA) Questions

Q.56 – Q.60 carry one mark each.

Q.56 *Which of the following options is the closest in meaning to the word below:*
Exhort

(A) urge
(B) condemn
(C) restrain
(D) scold

Q.57 *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.*
Preamble : Constitution

(A) amendment : law
(B) prologue : play
(C) episode : serial
(D) plot : story

Q.58 *Choose the most appropriate word from the options given below to complete the following sentence:*
The committee wrote a _____ report, extolling only the strengths of the proposal.

(A) reasonable
(B) supportive
(C) biased
(D) fragmented

Q.59 *Choose the most appropriate word from the options given below to complete the following sentence:*

If the country has to achieve real prosperity, it is _____ that the fruits of progress reach all, and in equal measure.

(A) inevitable
(B) contingent
(C) oblivious
(D) imperative

Q.60 A person invests Rs.1000 at 10% annual compound interest for 2 years. At the end of two years the whole amount is invested at an annual simple interest of 12% for 5 years. The total value of the investment finally is:

(A) 1776 (B) 1760 (C) 1920 (D) 1936

Q.61 – Q.65 carry two marks each.

Q.61 **The ban on smoking in designated public places can save a large number of people from the well known effects of environmental tobacco smoke. Passive smoking seriously impairs respiratory health. The ban rightly seeks to protect non-smokers from its ill effects.**

Which of the following statements best sums up the meaning of the above passage:

(A) Effects of environmental tobacco are well known.
(B) The ban on smoking in public places protects the non smokers.
(C) Passive smoking is bad for health.
(D) The ban on smoking in public places excludes passive smoking.

Q.62 Given the sequence A, B, B, C, C, C, D, D, D, D, ... etc., that is one A, two Bs, three Cs, four Ds, five Es and so on, the 240th letter in the sequence will be:

(A) V (B) U (C) T (D) W

Q.63 Consider the set of integers {1, 2, 3, ..., 5000}. The number of integers that is divisible by neither 3 nor 4 is:

(A) 1668 (B) 2084 (C) 2500 (D) 2916

Q.64 A positive integer m in base 10 when represented in base 2 has the representation p and in base 3 has the representation q. We get $p - q = 990$ where the subtraction is done in base 10. Which of the following is necessarily true:

(A) $m \geq 14$ (B) $9 \leq m \leq 13$ (C) $6 \leq m \leq 8$ (D) $m < 6$

Q.65 Given the following four functions $f_1(n) = n^{100}$, $f_2(n) = (1.2)^n$, $f_3(n) = 2^{n/2}$, $f_4(n) = 3^{n/3}$ which function will have the largest value for sufficiently large values of n (i.e. $n \to \infty$)?

(A) f_4 (B) f_3 (C) f_2 (D) f_1

2011

General Aptitude (GA) Questions

Q. 56 – Q. 60 carry one mark each.

Q.56 Choose the word from the options given below that is most nearly opposite in meaning to the given word:
Deference

(A) aversion
(B) resignation
(C) suspicion
(D) contempt

Q.57 Choose the most appropriate word(s) from the options given below to complete the following sentence.
We lost confidence in him because he never _____ the grandiose promises he had made.

(A) delivered
(B) delivered on
(C) forgot
(D) reneged on

Q.58 Choose the word or phrase that best completes the sentence below.
_____ in the frozen wastes of Arctic takes special equipment.

(A) To survive
(B) Surviving
(C) Survival
(D) That survival

Q.59 In how many ways 3 scholarships can be awarded to 4 applicants, when each applicant can receive any number of scholarships?

(A) 4 (B) 12 (C) 64 (D) 81

Q.60 Choose the most appropriate word from the options given below to complete the following sentence.
The _____ of eviden ce was on the side of the plaintiff since all but one witness testified that his story was correct.

(A) paucity
(B) propensity
(C) preponderance
(D) accuracy

Q. 61 to Q. 65 carry two marks each.

Q.61 If $(2y+1)/(y+2) < 1$, then which of the following alternatives gives the **CORRECT** range of y?

(A) $-2 < y < 2$ (B) $-2 < y < 1$ (C) $-3 < y < 1$ (D) $-4 < y < 1$

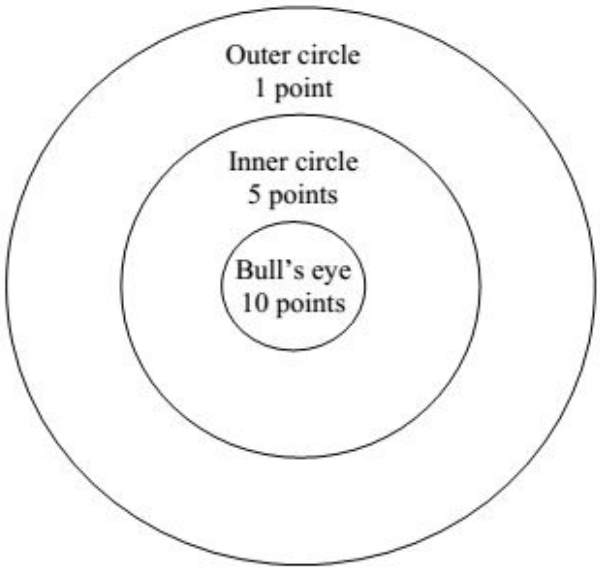
Q.62 A student attempted to solve a quadratic equation in x twice. However, in the first attempt, he incorrectly wrote the constant term and ended up with the roots as (4, 3). In the second attempt, he incorrectly wrote down the coefficient of x and got the roots as (3, 2). Based on the above information, the roots of the correct quadratic equation are

(A) (-3, 4) (B) (3, -4) (C) (6, 1) (D) (4, 2)

Q.63 L, M and N are waiting in a queue meant for children to enter the zoo. There are 5 children between L and M, and 8 children between M and N. If there are 3 children ahead of N and 21 children behind L, then what is the minimum number of children in the queue?

(A) 28 (B) 27 (C) 41 (D) 40

Q.64 Four archers P, Q, R and S try to hit a bull's eye during a tournament consisting of seven rounds. As illustrated in the figure below, a player receives 10 points for hitting the bulls' eye, 5 points for hitting within the inner circle and 1 point for hitting within the outer circle.



The final scores received by the players during the tournament are listed in the table below.

Round	P	Q	R	S
1	1	5	1	10
2	5	10	10	1
3	1	1	1	5
4	10	10	1	1
5	1	5	5	10
6	10	5	1	1
7	5	10	1	1

The most accurate and the most consistent players during the tournament are respectively

(A) P and S (B) Q and R (C) Q and Q (D) R and Q

Q.65 **Nimbus clouds are dark and ragged, stratus clouds appear dull in colour and cover the entire sky. Cirrus clouds are thin and delicate, whereas cumulus clouds look like cotton balls.**

It can be inferred from the passage that

(A) A cumulus cloud on the ground is called fog
(B) It is easy to predict the weather by studying clouds
(C) Clouds are generally of very different shapes, sizes and mass
(D) There are four basic cloud types: stratus, nimbus, cumulus and cirrus

2012

General Aptitude (GA) Questions

Q. 56 – Q. 60 carry one mark each.

Q.56 Choose the most appropriate alternative from the options given below to complete the following sentence:

I ___ to have bought a diamond ring.

(A) have a liking
(B) should have liked
(C) would like
(D) may like

Q.57 Choose the most appropriate alternative from the options given below to complete the following sentence:

Food prices ___ again this month.

(A) have raised
(B) have been raising
(C) have been rising
(D) have arose

Q.58 Choose the most appropriate alternative from the options given below to complete the following sentence:

The administrators went on to implement yet another unreasonable measure, arguing that the measures were already ___ and one more would hardly make a difference.

(A) reflective (B) utopian (C) luxuriant (D) unpopular

Q.59 Choose the most appropriate alternative from the options given below to complete the following sentence:

To those of us who had always thought him timid, his ___ came as a surprise.

(A) intrepidity (B) inevitability (C) inability (D) inertness

Q.60 The arithmetic mean of five different natural numbers is 12. The largest possible value among the numbers is

(A) 12 (B) 40 (C) 50 (D) 60

Q. 61 - Q. 65 carry two marks each.

Q.61 Two policemen, A and B, fire once each at the same time at an escaping convict. The probability that A hits the convict is three times the probability that B hits the convict. If the probability of the convict not getting injured is 0.5, the probability that B hits the convict is

(A) 0.14 (B) 0.22 (C) 0.33 (D) 0.40

Q.62 The total runs scored by four cricketers P, Q, R, and S in years 2009 and 2010 are given in the following table:

Player	**2009**	**2010**
P	802	1008
Q	765	912
R	429	619
S	501	701

The player with the lowest percentage increase in total runs is

(A) P (B) Q (C) R (D) S

Q.63 If a prime number on division by 4 gives a remainder of 1, then that number can be expressed as

(A) sum of squares of two natural numbers
(B) sum of cubes of two natural numbers
(C) sum of square roots of two natural numbers
(D) sum of cube roots of two natural numbers

Q.64 Two points $(4, p)$ and $(0, q)$ lie on a straight line having a slope of 3/4. The value of $(p - q)$ is

(A) -3 (B) 0 (C) 3 (D) 4

Q.65 **In the early nineteenth century, theories of social evolution were inspired less by Biology than by the conviction of social scientists that there was a growing improvement in social institutions. Progress was taken for granted and social scientists attempted to discover its laws and phases.**

Which one of the following inferences may be drawn with the greatest accuracy from the above passage?

Social scientists

(A) did not question that progress was a fact.
(B) did not approve of Biology.
(C) framed the laws of progress.
(D) emphasized Biology over Social Sciences.

2013

General Aptitude (GA) Questions

Q. 56 – Q. 60 carry one mark each.

Q.56 If $3 \leq X \leq 5$ and $8 \leq Y \leq 11$ then which of the following options is TRUE?

(A) $\frac{3}{5} \leq \frac{X}{Y} \leq \frac{8}{5}$

(B) $\frac{3}{11} \leq \frac{X}{Y} \leq \frac{5}{8}$

(C) $\frac{3}{11} \leq \frac{X}{Y} \leq \frac{8}{5}$

(D) $\frac{3}{5} \leq \frac{X}{Y} \leq \frac{8}{11}$

Q.57 The Headmaster _____ to speak to you.

Which of the following options is incorrect to complete the above sentence?

(A) is wanting

(B) wants

(C) want

(D) was wanting

Q.58 Mahatama Gandhi was known for his humility as

(A) he played an important role in humiliating exit of British from India.

(B) he worked for humanitarian causes.

(C) he displayed modesty in his interactions.

(D) he was a fine human being.

Q.59 All engineering students (I) should learn mechanics, (II) mathematics and (III) how to do computation. (IV)

Which of the above underlined parts of the sentence is not appropriate?

(A) I (B) II (C) III (D) IV

Q.60 Select the pair that best expresses a relationship similar to that expressed in the pair:
water: pipe::

(A) cart: road
(B) electricity: wire
(C) sea: beach
(D) music: instrument

Q. 61 to Q. 65 carry two marks each.

Q.61 Velocity of an object fired directly in upward direction is given by $V = 80 - 32\,t$, where t (time) is in seconds. When will the velocity be between 32 m/sec and 64 m/sec?

(A) (1, 3/2)
(B) (1/2, 1)
(C) (1/2, 3/2)
(D) (1, 3)

Q.62 In a factory, two machines M1 and M2 manufacture 60% and 40% of the autocomponents respectively. Out of the total production, 2% of M1 and 3% of M2 are found to be defective. If a randomly drawn autocomponent from the combined lot is found defective, what is the probability that it was manufactured by M2?

(A) 0.35 (B) 0.45 (C) 0.5 (D) 0.4

Q.63 Following table gives data on tourists from different countries visiting India in the year 2011.

Country	Number of Tourists
USA	2000
England	3500
Germany	1200
Italy	1100
Japan	2400
Australia	2300
France	1000

Which two countries contributed to the one third of the total number of tourists who visited India in 2011?

(A) USA and Japan

(B) USA and Australia

(C) England and France

(D) Japan and Australia

Q.64 If $|-2X + 9| = 3$ then the possible value of $|-X| - X^2$ would be:

(A) 30 (B) -30 (C) -42 (D) 42

Q.65 All professors are researchers
Some scientists are professors

Which of the given conclusions is logically valid and is inferred from the above arguments:

(A) All scientists are researchers

(B) All professors are scientists

(C) Some researchers are scientists

(D) No conclusion follows

2014

Q. 1 – Q. 5 carry one mark each.

Q.1 Choose the most appropriate word from the options given below to complete the following sentence.

A person suffering from Alzheimer's disease _____ short-term memory loss.

(A) experienced (B) has experienced
(C) is experiencing (D) experiences

Q.2 Choose the most appropriate word from the options given below to complete the following sentence.

_____ is the key to their happiness; they are satisfied with what they have.

(A) Contentment (B) Ambition (C) Perseverance (D) Hunger

Q.3 Which of the following options is the closest in meaning to the sentence below?

"As a woman, I have no country."

(A) Women have no country.
(B) Women are not citizens of any country.
(C) Women's solidarity knows no national boundaries.
(D) Women of all countries have equal legal rights.

Q.4 In any given year, the probability of an earthquake greater than Magnitude 6 occurring in the Garhwal Himalayas is 0.04. The average time between successive occurrences of such earthquakes is ____ years.

Q.5 The population of a new city is 5 million and is growing at 20% annually. How many years would it take to double at this growth rate?

(A) 3-4 years (B) 4-5 years (C) 5-6 years (D) 6-7 years

Q. 6 – Q. 10 carry two marks each.

Q.6 In a group of four children, Som is younger to Riaz. Shiv is elder to Ansu. Ansu is youngest in the group. Which of the following statements is/are required to find the eldest child in the group?

Statements

1. Shiv is younger to Riaz.
2. Shiv is elder to Som.

(A) Statement 1by itself determines the eldest child.
(B) Statement 2 by itself determines the eldest child.
(C) Statements 1 and 2 are both required to determine the eldest child.
(D) Statements 1 and 2 are not sufficient to determine the eldest child.

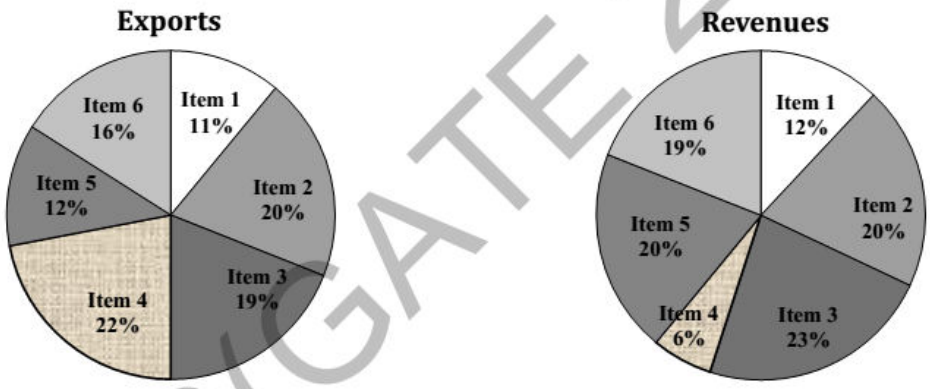
GA 02(GATE 2014)

Q.7 Moving into a world of big data will require us to change our thinking about the merits of exactitude. To apply the conventional mindset of measurement to the digital, connected world of the twenty-first century is to miss a crucial point. As mentioned earlier, the obsession with exactness is an artefact of the information-deprived analog era. When data was sparse, every data point was critical, and thus great care was taken to avoid letting any point bias the analysis.
From "BIG DATA" Viktor Mayer-Schonberger and Kenneth Cukier

The main point of the paragraph is:

(A) The twenty-first century is a digital world
(B) Big data is obsessed with exactness
(C) Exactitude is not critical in dealing with big data
(D) Sparse data leads to a bias in the analysis

Q.8 The total exports and revenues from the exports of a country are given in the two pie charts below. The pie chart for exports shows the quantity of each item as a percentage of the total quantity of exports. The pie chart for the revenues shows the percentage of the total revenue generated through export of each item. The total quantity of exports of all the items is 5 lakh tonnes and the total revenues are 250 crore rupees. What is the ratio of the revenue generated through export of Item 1 per kilogram to the revenue generated through export of Item 4 per kilogram?



(A) 1:2 (B) 2:1 (C) 1:4 (D) 4:1

Q.9 X is 1 km northeast of Y. Y is 1 km southeast of Z. W is 1 km west of Z. P is 1 km south of W. Q is 1 km east of P. What is the distance between X and Q in km?

(A) 1 (B) $\sqrt{2}$ (C) $\sqrt{3}$ (D) 2

Q.10 10% of the population in a town is HIV^+. A new diagnostic kit for HIV detection is available; this kit correctly identifies HIV^+ individuals 95% of the time, and HIV^- individuals 89% of the time. A particular patient is tested using this kit and is found to be positive. The probability that the individual is actually positive is _____

GA 02(GATE 2014)

2015

Q.1 to Q.5 carry 1 mark each & Q.6 to Q.10 carry 2 marks each.

Question Number : 1 Question Type : MCQ

Choose the appropriate word/phrase, out of the four options given below, to complete the following sentence:

Apparent lifelessness _____ dormant life.

(A) harbours (B) leads to (C) supports (D) affects

Options :

1. ✔ A
2. ✖ B
3. ✖ C
4. ✖ D

Question Number : 2 Question Type : MCQ

Fill in the blank with the correct idiom/phrase.

That boy from the town was a _____ in the sleepy village.

(A) dog out of herd (B) sheep from the heap
(C) fish out of water (D) bird from the flock

Options :

1. ✖ A
2. ✖ B
3. ✔ C
4. ✖ D

Question Number : 3 Question Type : MCQ

Choose the statement where underlined word is used correctly.

(A) When the teacher eludes to different authors, he is being elusive.
(B) When the thief keeps eluding the police, he is being elusive.
(C) Matters that are difficult to understand, identify or remember are allusive.
(D) Mirages can be allusive, but a better way to express them is illusory.

Options :

1. ✖ A
2. ✔ B
3. ✖ C
4. ✖ D

Question Number : 4 Question Type : MCQ

Tanya is older than Eric.
Cliff is older than Tanya.
Eric is older than Cliff.

If the first two statements are true, then the third statement is:

(A) True
(B) False
(C) Uncertain
(D) Data insufficient

Options :

1. ✖ A
2. ✔ B
3. ✖ C
4. ✖ D

4. ✖ D

Question Number : 5 Question Type : MCQ

Five teams have to compete in a league, with every team playing every other team exactly once, before going to the next round. How many matches will have to be held to complete the league round of matches?

(A) 20 (B) 10 (C) 8 (D) 5

Options :

1. ✖ A
2. ✔ B
3. ✖ C
4. ✖ D

Question Number : 6 Question Type : MCQ

Question Number : 6 Question Type : MCQ

Select the appropriate option in place of underlined part of the sentence.

Increased productivity necessary reflects greater efforts made by the employees.

(A) Increase in productivity necessary
(B) Increase productivity is necessary
(C) Increase in productivity necessarily
(D) No improvement required

Options :

1. ✖ A
2. ✖ B
3. ✔ C
4. ✖ D

Question Number : 7 Question Type : MCQ

Given below are two statements followed by two conclusions. Assuming these statements to be true, decide which one logically follows.

Statements:

I. No manager is a leader.
II. All leaders are executives.

Conclusions:

I. No manager is an executive.
II. No executive is a manager.

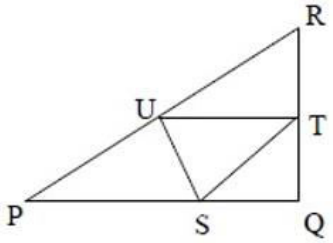
(A) Only conclusion I follows.
(B) Only conclusion II follows.
(C) Neither conclusion I nor II follows.
(D) Both conclusions I and II follow.

Options :

1. ✖ A
2. ✖ B
3. ✔ C
4. ✖ D

Question Number : 8 Question Type : NAT

In the given figure angle Q is a right angle, PS:QS = 3:1, RT:QT = 5:2 and PU:UR = 1:1. If area of triangle QTS is 20 cm^2, then the area of triangle PQR in cm^2 is _____.



Correct Answer :

280

Question Number : 9 Question Type : MCQ

Right triangle PQR is to be constructed in the xy - plane so that the right angle is at P and line PR is parallel to the x-axis. The x and y coordinates of P, Q, and R are to be integers that satisfy the inequalities: $-4 \leq x \leq 5$ and $6 \leq y \leq 16$. How many different triangles could be constructed with these properties?

(A) 110 (B) 1,100 (C) 9,900 (D) 10,000

Options :

1. ✖ A
2. ✖ B
3. ✔ C
4. ✖ D

Question Number : 10 Question Type : MCQ

A coin is tossed thrice. Let X be the event that head occurs in each of the first two tosses. Let Y be the event that a tail occurs on the third toss. Let Z be the event that two tails occur in three tosses. Based on the above information, which one of the following statements is TRUE?

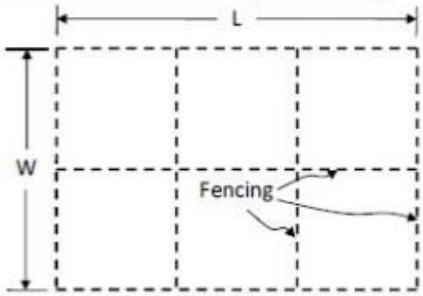
(A) X and Y are not independent
(B) Y and Z are dependent
(C) Y and Z are independent
(D) X and Z are independent

Options :

1. ✖ A
2. ✔ B
3. ✖ C
4. ✖ D

Question Number : 42 Question Type : NAT

A rectangular field of area 20000 m^2 is to be divided into 6 different plots by fencing as shown in the figure. The value of L in m for which the total length of fencing becomes minimum is _____



Correct Answer :

161 to 165

2016

Q. 1 – Q. 5 carry one mark each.

Q.1 The volume of a sphere of diameter 1 unit is _____ than the volume of a cube of side 1 unit.

(A) least (B) less (C) lesser (D) low

Q.2 The unruly crowd demanded that the accused be _____ without trial.

(A) hanged (B) hanging (C) hankering (D) hung

Q.3 Choose the statement(s) where the underlined word is used correctly:

(i) A prone is a dried plum.
(ii) He was lying prone on the floor.
(iii) People who eat a lot of fat are prone to heart disease.

(A) (i) and (iii) only (B) (iii) only (C) (i) and (ii) only (D) (ii) and (iii) only

Q.4 **Fact:** If it rains, then the field is wet.

Read the following statements:
(i) It rains
(ii) The field is not wet
(iii) The field is wet
(iv) It did not rain

Which one of the options given below is **NOT** logically possible, based on the given fact?

(A) If (iii), then (iv). (B) If (i), then (iii).

(C) If (i), then (ii). (D) If (ii), then (iv).

Q.5 A window is made up of a square portion and an equilateral triangle portion above it. The base of the triangular portion coincides with the upper side of the square. If the perimeter of the window is 6 m, the area of the window in m^2 is _____.

(A) 1.43 (B) 2.06 (C) 2.68 (D) 2.88

Q. 6 – Q. 10 carry two marks each.

Q.6 Students taking an exam are divided into two groups, **P** and **Q** such that each group has the same number of students. The performance of each of the students in a test was evaluated out of 200 marks. It was observed that the mean of group **P** was 105, while that of group **Q** was 85. The standard deviation of group **P** was 25, while that of group **Q** was 5. Assuming that the marks were distributed on a normal distribution, which of the following statements will have the highest probability of being **TRUE**?

(A) No student in group **Q** scored less marks than any student in group **P**.

(B) No student in group **P** scored less marks than any student in group **Q**.

(C) Most students of group **Q** scored marks in a narrower range than students in group **P**.

(D) The median of the marks of group **P** is 100.

Q.7 A smart city integrates all modes of transport, uses clean energy and promotes sustainable use of resources. It also uses technology to ensure safety and security of the city, something which critics argue, will lead to a surveillance state.

Which of the following can be logically inferred from the above paragraph?

(i) All smart cities encourage the formation of surveillance states.
(ii) Surveillance is an integral part of a smart city.
(iii) Sustainability and surveillance go hand in hand in a smart city.
(iv) There is a perception that smart cities promote surveillance.

(A) (i) and (iv) only
(B) (ii) and (iii) only
(C) (iv) only
(D) (i) only

Q.8 Find the missing sequence in the letter series.

B, FH, LNP, _ _ _ _.

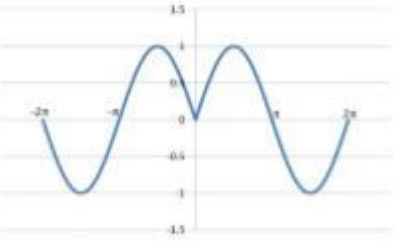
(A) SUWY (B) TUVW (C) TVXZ (D) TWXZ

Q.9 The binary operation □ is defined as $a \square b = ab+(a+b)$, where a and b are any two real numbers. The value of the identity element of this operation, defined as the number x such that $a \square x = a$, for any a, is _____.

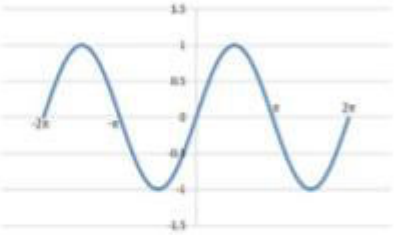
(A) 0 (B) 1 (C) 2 (D) 10

Q.10 Which of the following curves represents the function $y = \ln(|e^{[|\sin(|x|)|]}|)$ for $|x| < 2\pi$? Here, x represents the abscissa and y represents the ordinate.

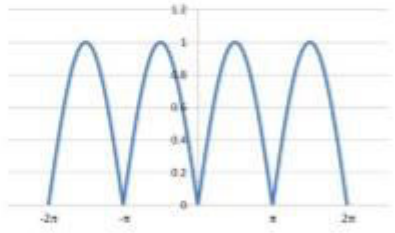
(A)



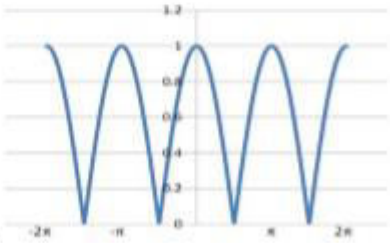
(B)



(C)



(D)



END OF THE QUESTION PAPER

2017

Question Number : 56 **Correct : 1 Wrong : -0.33**

The bacteria in milk are destroyed when it _____ heated to 80 degree Celsius.

(A) would be (B) will be (C) is (D) was

Question Number : 57 **Correct : 1 Wrong : -0.33**

_____ with someone else's email account is now a very serious offence.

(A) Involving (B) Assisting (C) Tampering (D) Incubating

Question Number : 58 **Correct : 1 Wrong : -0.33**

Consider the following sentences:

All benches are beds. No bed is a bulb. Some bulbs are lamps.

Which of the following can be inferred?

i. Some beds are lamps.
ii. Some lamps are beds.

(A) Only i
(B) Only ii
(C) Both i and ii
(D) Neither i nor ii

Question Number : 59 **Correct : 1 Wrong : -0.33**

If the radius of a right circular cone is increased by 50%, its volume increases by

(A) 75% (B) 100% (C) 125% (D) 237.5%

Question Number : 60 **Correct : 1 Wrong : -0.33**

The following sequence of numbers is arranged in increasing order: $1, x, x, x, y, y, 9, 16, 18$. Given that the mean and median are equal, and are also equal to twice the mode, the value of y is

(A) 5 (B) 6 (C) 7 (D) 8

Question Number : 61 **Correct : 2 Wrong : -0.66**

The old concert hall was demolished because of fears that the foundation would be affected by the construction of the new metro line in the area. Modern technology for underground metro construction tried to mitigate the impact of pressurized air pockets created by the excavation of large amounts of soil. But even with these safeguards, it was feared that the soil below the concert hall would not be stable.

From this, one can infer that

(A) the foundations of old buildings create pressurized air pockets underground, which are difficult to handle during metro construction.
(B) metro construction has to be done carefully considering its impact on the foundations of existing buildings.
(C) old buildings in an area form an impossible hurdle to metro construction in that area.
(D) pressurized air can be used to excavate large amounts of soil from underground areas.

Question Number : 62 **Correct : 2 Wrong : -0.66**

Students applying for hostel rooms are allotted rooms in order of seniority. Students already staying in a room will move if they get a room in their preferred list. Preferences of lower ranked applicants are ignored during allocation.

Given the data below, which room will Ajit stay in?

Names	Student seniority	Current room	Room preference list
Amar	1	P	R, S, Q
Akbar	2	None	R, S
Anthony	3	Q	P
Ajit	4	S	Q, P, R

(A) P (B) Q (C) R (D) S

Question Number : 63 **Correct : 2 Wrong : -0.66**

The last digit of $(2171)^7 + (2172)^9 + (2173)^{11} + (2174)^{13}$ is

(A) 2 (B) 4 (C) 6 (D) 8

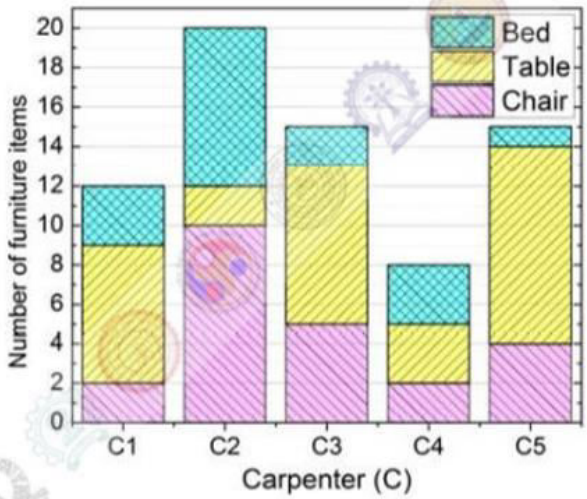
Question Number : 64 **Correct : 2 Wrong : -0.66**

Two machines M1 and M2 are able to execute any of four jobs P, Q, R and S. The machines can perform one job on one object at a time. Jobs P, Q, R and S take 30 minutes, 20 minutes, 60 minutes and 15 minutes each respectively. There are 10 objects each requiring exactly 1 job. Job P is to be performed on 2 objects, Job Q on 3 objects, Job R on 1 object and Job S on 4 objects. What is the minimum time needed to complete all the jobs?

(A) 2 hours (B) 2.5 hours (C) 3 hours (D) 3.5 hours

Question Number : 65 **Correct : 2 Wrong : -0.66**

The bar graph below shows the output of five carpenters over one month, each of whom made different items of furniture: chairs, tables, and beds.



Consider the following statements.

i. The number of beds made by carpenter C2 is exactly the same as the number of tables made by carpenter C3.

ii. The total number of chairs made by all carpenters is less than the total number of tables.

Which one of the following is true?

(A) Only i (B) Only ii (C) Both i and ii (D) Neither i nor ii