

Exam. Centre

#  

## GENERAL INSTRUCTIONS

1. Candidates will make sure that the seat number, test centre, candidate name on top of this question booklet; on answer sheet and on the sticker on the chair are the same as in admit card issued to them.
2. Use of calculator is not allowed.
3. Candidates must carefully follow the instructions given in this booklet and by the instructor/announcer.
4. The test is divided into three parts (total duration of the test is two hours \& 45 minutes):

- 45 Multiple Choice Questions of English (from page 1 to 8 ) - Time allowed 45 minutes.
- 45 Multiple Choice Questions of Mathematics (starting from page 9) - Time allowed 80 minutes.
- One essay question - Time allowed 40 minutes. Separate instructions for essay question will be given later on.
Note: While working on an allowed part, candidates are not allowed to go forward or backward to other parts.

5. Each question has only one correct answer. All answers must be given in CROSS SIGN on the answer sheet.
6. During the test if candidates want to change any of their answers, they should erase their previous answer clearly and completely and re-cross. It is very important that if they want to change the answer they should clearly and completely erase the previous answer. In case candidates cross more than one option for the same question, the answer will be treated as wrong. Overwriting is not accepted. Such answers will also be treated as wrong.
7. If a candidate does not want to answer any question he / she MUST cross the option E on the answer sheet.
8. There will be NEGATIVE MARKING in all parts of the test. Each correct question carries four points. For each wrong answer, one point shall be deducted.
9. When the instructor/announcer says STOP, candidates must stop writing and cover their test booklets with the answer sheets.
10. Any behavior leading to cheating or non-compliance with instructions, tearing pages or taking away the booklet is prohibited. It will lead to disqualification from the test and legal action against the candidate.
The candidates should not mark answers on the question booklet, however they may do the rough work on the question hooklet, all answers must be given in CROSS SIGN on the answer sheet with the pencil that has been provided to them. Candidates must ensure that they do not write anything other than their signature and Cross signing of their answers on the answer sheet.

## WAIT Do not turn over this page until you are told to do so

## Wish you the very best of luck

# ALL ANSWERS MUST BE GIVEN ON THE COMPUTERIZED ANSWER SHEET BY CROSSING THE CORRESPONDING LETTER 

## English M.C.Q's

| No. of Questions: 45 (from 1 to 45 ) | Time: 45Minutes |
| :--- | ---: |
| Questions on Page Numbers: 1 To 8 | Negative markings: Yes |

## For questions $1 \mathbf{- 1 4}$, select the best option (A, B, C or D).

If the habits of all known basal birds including Archaeopteryx, Jeholornis, Sapeornis, and Confuciusornis are already too specialized to allow 1. $\qquad$ regarding the habit of their 2. $\qquad$ , then within the currently popular dinosaurian ancestry context we will have to 3 . $\qquad$ with Witmer's (2002) comment that 'The question 4. $\qquad$ comes down to the actual theropod ancestor of birds: what it looked like and how it lived its life'.

Traditionally, dromaeosaurids have been depicted as being fast runners and dangerous $\mathbf{5}$. $\qquad$ , as popularized in the film Jurassic Park. The evidence usually 6, $\qquad$ includes the long and stiffened tail and the 7. $\qquad$ curved claws. Following the recognition of several
8. $\qquad$ theropods and the arboreal nature of most basal birds, the large, curved and sharp pedal claws of small sized dromaeosaurids are probably better explained as arboreal, rather than predatory, 9 . $\qquad$
The elongated 10. $\qquad$ phalanges of the manus of many theropods such as Deinonychus may also 11. $\qquad$ a climbing habit. Unfortunately little attention has been paid to his analysis, probably because of the lack of modern 12. $\qquad$ and because of the then predominant
13. $\qquad$ that dinosaurs were 14. $\qquad$ .

1. A. confirmation
B. inferences
C. ludicrous
D. conjecture
2. A. ancestor
B. descended
C. ascended
D. descended
3. A. cite
B. concur
C. refer
D. correspond
4. A. unswervingly
B. circuitously
C. ultimately
D. reliably
5. A. predators
B. assailant
C. iconoclast
D. assaulter
6. A. sighted
B. refer
C. refuted
D. cited

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7. A. smoothly
B. strongly
C. ruggedly
D. terribly
8. A. arboresque
B. arboreal
C. dendriform
D. arborescent
9. A. adaptations
B. domestication
C. habituation
D. accommodation
10. A. dactyl
B. antepenult
C. phalarope
D. penultimate
11. A. reveal
B. denote
C. indicate
D. specify
12. A. Xerox
B. archetype
C. analogues
D. quantitative
13. A. review
B. exception
C. dogma
D. quiz
14. A. mortal
B. terrestrial
C. heavenly
D. global

For questions 15-17 (comprising a set of two sentences each), select the best answer (A, B, C, or D).
15. Depression is neither a choice nor a bad mood you can snap out of. No matter how much other people try to help, only the victims can help themselves get better.

What does the second sentence do?
A. It gives an example.
B. It reinforces the opinion.
C. It proposes a solution.
D. It states an effect.
16. The glitz and glamour of new shops and restaurant can't mask the poverty peeping out of every corner, shiny cars aren't enough to hide the over-crowded, broken-down buses; and the almoststurdy looking bridges can't hide the dozens of slums in the city. For all its claims of being a "world-class city," advanced, metropolitan, and comparable to Dubai, Karachi remains where it was a couple of decades ago.

## 4

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What does the second sentence do?
A. The second sentence draws a conclusion about what is stated in the first.
B. It provides an example of the first sentence.
C. It adds more detail to the first sentence.
D. It offers an exception to the information given in the first sentence.
17. One of the first steps to accomplishing great things in your life is to cease dwelling on the negative things in your past. Carefully assess your present strengths, successes, and achievements. Dwell on those positive events in your life, and quit limiting your potential by constantly thinking about what you have done poorly.

What does the second and third sentence do?
A. state the cause of the first.
B. give solutions
C. draw conclusion.
D. emphasize what is stated in the first.

## For questions 18-29, select the best option (A, B, C or D) .

In the privacy of our minds, we all talk to ourselves - 18. $\qquad$ inner monologue that might seem rather pointless. 19. $\qquad$ one scientific paper on self-talk asks: "What can we tell ourselves that we don't already know?" 20. $\qquad$ as that study and others go on to show, the act of giving ourselves mental messages 21. $\qquad$ help us learn and perform at our best. Researchers have identified 22. $\qquad$ most effective forms of self-talk, collected here - so that the next time you talk to yourself, you know exactly what you 23. $\qquad$ say.

Over time, of course, giving yourself instructions becomes unnecessary - but 24. you're learning, it does three important things. First, 25. $\qquad$ enhances our attention,
26. $\qquad$ us on the important elements of the task and 27. $\qquad$ distractions. Second, it helps us regulate our effort and make decisions 28. $\qquad$ what to do, how to do it, and when. 29. $\qquad$ third, self-talk allows us to control our cognitive and emotional reactions, steadying us so we stay on task.
18. A. the
B. an
C. a
D. none of the above
19. A. As
B. Likewise
C. Similarly
D. Likely
20. A. Nevertheless
B. Contrary
C. But
D. So
21. A. must
B. should
C. shall
D. can

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22. A. the
B. a
C. from
D. of
23. A. can
B. could
C. should
D. must
24. A. when
B. while
C. during
D. simultaneously
25. A. it
B. these
C. that
D. this
26. A. focused
B. focusing
C. focuses
D. focus
27. A. screens out
B. screening in
C. screened out
D. screened in
28. A. around
B. as
C. on
D. about
29. A. Finally
B. Eventually
C. Therefore
D. And

For questions 30-33, first read the text, and then select the best option (A, B, C, or D).

Maps made by non-Native Americans to depict Native American land tenure, resources and population distributions appeared almost as early as Europeans' first encounters with Native Americans and took many forms: missionaries' field sketches, explorers' drawings, and surveyors' maps, as well as maps rendered in connection with treaties involving land transfers. Most existing maps of Native American lands are reconstructions that are based largely on archaeology, oral reports, and evidence gathered from observers' accounts in letter, diaries, and official reports; accordingly, the accuracy of these maps is especially dependent on the mapmakers' own interpretive abilities.

Many existing maps also reflect the 150 -year role of the Bureau of Indian Affairs (BIA) in administering tribal lands. Though these maps incorporate some information gleaned directly from Native Americans, rarely has Native American cartography contributed to this official record, which has been compiled, surveyed, and authenticated by non-Native American tribes and

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their migrations and cultural features, as well as territoriality and contemporary trust lands, reflects the origins of the data, the mixed purposes for which the maps have been prepared, and changes both United States government policy and in non-Native Americans' attitudes towards an understanding of Native Americans.
30. Which of the following best describes the content of the passage?
A. A chronology of the development of different methods for mapping Native Americans
B. A discussion of how the mapmaking techniques of Native Americans differed from those of Europeans
C. An argument concerning the present-day uses to which historical maps of Native American lands are put
D. An argument concerning the nature of information contained in maps of Native American lands
31. The passage mentions each of the following as a factor affecting current maps of Native American lands EXCEPT
A. United States government policy
B. non-Native Americans' perspective on Native Americans
C. origins of the information utilized to produce the maps
D. changes in ways that tribal lands are used
32. The passage suggests which of the following about most existing maps of Native American lands?
A. They do not record the migrations of Native American tribes.
B. They have been preserved primarily because of their connection with treaties involving land transfers.
C. They tend to reflect archaeological evidence that has become outdated.
D. They are not based primarily on the mapmakers' firsthand observations of Native American lands.
33. All of the following are examples of the type of evidence used in creating "Most existing maps" (line 7-8) EXCEPT
A. a nineteenth-century government report on population distribution of a particular tribe
B. taped conversations with people who lived on Native American tribal lands in the early twentieth century
C. aerial photographs of geological features of lands inhabited by Native Americans
D. findings from a recently excavated site once inhabited by a certain Native American people

For questions 34-35, read the text, and then choose the best answer (A, B, C, or D) to the question.
Regular tune-ups of your heating system will cut heating costs and will most likely increase the lifetime and safety of the system. When a service technician performs a tune-up, he or she should test the efficiency of your heating system.

The technician should measure the efficiency of your system both before and after servicing it and provide you with a copy of the results. Combustion efficiency is determined indirectly, based on some of the following tests: 1) temperature of the flue (or chimney); 2) percent carbon dioxide or percent oxygen in the atmosphere; 3) presence of carbon monoxide in the atmosphere; and 4) draft. Incomplete combustion of fuel is the main contributor to low efficiency. If the technician cannot raise the combustion efficiency up to at least $75 \%$ after tuning your heating system, you should consider installing a new system or at least modifying your present system to increase its efficiency. (Adapted from Alex Wilson and John Morrill, Consumer Guide to Home Energy Savings. ©1993 by the American Council for an Energy-Efficient Economy.

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34. The passage suggests that the presence of carbon monoxide in the atmosphere:
A. can provide information regarding combustion efficiency.
B. is found in $75 \%$ of heating systems tested.
C. can be reduced by decreasing heating system draft.
D. is the main cause of low efficiency in heating systems.
35. According to the passage, when performing a tune-up of a heating system, the service technician should:
A. ensure that the combustion efficiency is at least $25 \%$.
B. modify the heating system before initially measuring efficiency.
C. measure combustion efficiency both before and after servicing the system.
D. provide his or her supervisor with a written report of the system's efficiency.

For question 36-40, rearrange the sentence order by choosing the most appropriate sentence sequence from the answer choices.
36. a. After giving away 45 runs off his seven-over spell in the second ODI against Ireland, and coming into bat at 133 for seven, Wahab was probably hoping he had sat that one out too.
b. Wahab was then a last-minute inclusion for the Champions Trophy and did not feature against Scotland and the first tie against Ireland.
c. He defended apprehensively and slashed unconvincingly in what seemed a lost cause then. Until that late cameo that shocked all those watching.
d. Up until Thursday night, Wahab Riaz was not aware that he'd be taking the field against the West Indies the following morning.
A. $b, c, d, a$
B. $d, b, a, c$
C. $a, b, d, c$
D. $\quad b, a, c, d$
37. a. One summer weekend when I was a boy, my father took my brother and me camping.
b. I vividly remember the odor of cooking bass mixed with wood smoke, the splash of the Milky Way in the heavens, and the burning ember of Dad's unfiltered Lucky Strike against the night.
c. Even then, I knew how hard Dad was trying at this enormous thing, to be a father.
d. But I also recall the innumerable times he'd erupt in screaming fits after one of us kids did something as innocuous as spilling water at dinner; sudden noises also triggered outbursts.
A. $\quad \mathrm{a}, \mathrm{c}, \mathrm{b}, \mathrm{d}$
B. $b, a, c, d$
C. $\mathrm{d}, \mathrm{c}, \mathrm{b}, \mathrm{a}$
D. $a, b, c, d$

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38. a. In a new study, German researchers found that they could find substantial amounts of personal information about people who weren't Facebook members just by seeing what their friends who were on Facebook posted about them.
b. Even if you are away from social-networking sites your personal information is not.
c. Think staying off social-networking sites will help you preserve your privacy?
d. Think again.
A. $\quad b, a, c, d$
B. $\mathrm{c}, \mathrm{d}, \mathrm{a}, \mathrm{b}$
C. $\mathrm{d}, \mathrm{c}, \mathrm{b}, \mathrm{a}$
D. $\mathrm{a}, \mathrm{c}, \mathrm{d}, \mathrm{b}$
39. a. Those who find spelling difficult, and who do not naturally do much remembering and thinking with mental 'photographs,' can try to develop that ability.
b. Some people seem to have no trouble with spelling; others have to work hard at it.
c. But there are other ways of overcoming the difficulties.
d. Those who find it easy generally have a natural ability to picture words mentally: they can see the 'look' of a word in the mind's eye.
A. $\mathrm{d}, \mathrm{c}, \mathrm{b}, \mathrm{a}$
B. $b, d, a, c$
C. $d, b, a, c$
D. $b, a, d, c$
40. a. Some people may excel in these areas and yet perform poorly in tests that are language based. Similarly, some people who are poor at languages are excellent at computer sciences.
b. IQ tests only measure things that can be measured!
c. Many areas of human excellence, however, cannot easily be measured, such as artistic and musical creativity, emotional maturity, keeping a cool head in emergencies, being able to impersonate other people, and inventiveness.
d. Students who have failed in language or number based GCSEs often do very well on university courses in the arts.
A. $\quad b, c, d, a$
B. $\mathrm{c}, \mathrm{b}, \mathrm{a}, \mathrm{d}$
C. $d, a, b, c$
D. $a, b, c, d$

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## For questions 41-45, select the best option (A, B, C or D).

41. In the snowy wastes of Siachen, where Pakistani and Indian soldiers face off in a high-altitude battle zone $\qquad$ —.
A. man the fight is against the mountain ringed by Himalayan peaks, not the man.
B. Himalayan peaks ringed and, not the man, the fight is against the mountain .
C. ringed by Himalayan peaks, the fight is against the mountain, not the man.
D. the fight ringed by Himalyan peaks is against the mountain, not the man.
42. When Facebook was $\qquad$ .
A. first launched and for a few years after it was truly a unique experience.
B. first launched (and for a few years after) it was truly a unique experience.
C. first launched, and after a few years, it was truly a unique experience.
D. first launched, and for a few years after, it was truly a unique experience.
43. Social networks $\qquad$ everything from users'
entertainment preferences to locations.
A. have a vast trove of data encompassing in general, and Facebook in particular,
B. In particular have vast trove of data encompassing and Facebook in general has
C. in particular, and Facebook in general, have a vast trove of data encompassing
D. in general, and Facebook in particular, have a vast trove of data encompassing
44. It is important that discussion of the issues relating to avian influenza should differentiate between the real problems $\qquad$ of a human pandemic which might not occur.
A. caused by the spread of the disease within the bird population and the theoretical risk
B. the spread of the disease caused by, within the bird population and the theoretical risk
C. within the bird population ,caused by the spread of the disease, and the theoretical risk
D. and the theoretical risk caused by the spread of the disease- within the bird population
45. In Robin Hood's $\qquad$ about the exploits of our hero.
A. time, little was written down; consequently, few people could read or write
B. time, few people could read or write, and little was written down
C. time, few people could read or write and consequently little was written down
D. time, reading and writing was done by few people; consequently little was written down

## ALL ANSWERS MUST BE GIVEN ON THE COMPUTERIZED ANSWER SHEET BY CROSSING THE CORRESPONDING LETTER <br> Mathematics M.C.Q's

No. of Questions: 45 (from 46 to 90)
Time: 80 Minutes
Questions start from this page (page 9)
Negative markings: Yes
Q46 If $|2 x-3|=7$, which of the following could be the value of $x$ ?
A) 5 only
B) -2 only
C) both A) and B)
D) None of these

Q47 If $\left(81^{-4}\right)^{\mathrm{k}}=9^{-16}$, what is the value of k
A) 8
B) 4
C) 2
D) 1

Q48 In the sequence $7,-9, \frac{81}{7}, \ldots$, the first term is 7 and each term after the first is equal to $m$ times the previous term. Which of the following is true about m ?
A) $m>-1$
B) $\mathrm{m}<-2$
C) $m>0$
D) None of these

Q49 If $1+\sqrt{7}=z-3$, what is the value of $(z+3)^{2}$ ?
A) $8+2 \sqrt{7}$
B) $14(4+\sqrt{7})$
C) $(2+\sqrt{7})^{2}$
D) None of these

Q50 A number $c$ is called a fixed point of the function $f(x)$ if and only if $f(c)=c$. A set of all fixed points is called a fixed set. The fixed set of $f(x)=x^{3}+x^{2}-x$ is
A) $\{-2,0\}$
B) $\{0,1\}$
C) $\{-2,0\} \cap\{0,1\}$
D) $\{-2,0\} \cup\{0,1\}$

Q51 If $|2 x+5|=7$ and $|5 y-3|=6$, which of the following is not a possible value of $2 x+5 y$ ?
A) 11
B) -15
C) 15
D) -3

## 11

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Q52 If $f(x)=x^{2}-45$, and $f(2 a)=-20$, then what could be the value of $a$ ?
A) 2.5 only
B) -2.5 only
C) both A) and B)
D) None of these

Q53 If an identical coin is flipped under identical circumstances, what is the probability of flipping heads five times in a row?
A) $\frac{5}{2}$
B) $\frac{1}{8}$
C) $\frac{1}{16}$
D) $\frac{1}{32}$

Q54 If $x, y$ and $z$ are three consecutive prime integers such that $10<x<y<z<20$, what is the lowest possible value of $z-y$ ?
A) 2
B) 4
C) 6
D) 8

Q55 An integer is subtracted from its square. The result could be which of the following?
I. An even integer.
II. The product of two consecutive integers.
A) I only
B) II only
C) I and II
D) None of these

Q56 If $15 \%$ of x is equal to $25 \%$ of y , what $\%$ is y of x ?
A) $40 \%$
B) $50 \%$
C) $60 \%$
D) $70 \%$

Q57 For some constant $\alpha$, the graph of the quadratic function $f(x)=-x^{2}+2 \alpha x$ is a parabola with $x$-intercepts at $A$ and $B$ and vertex C. If the area of the triangle whose vertices are $A, B$, and C equals 125 , what is the value of $\alpha$ ?
A) $3 \sqrt{3}$
B) $5 \sqrt{5}$
C) 3
D) 5

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Q58 The average of 20 numbers is 46 . The average of eight of those numbers is 40 . What is the average of the remaining numbers?
A) 30
B) 40
C) 50
D) 60

Q59 Find the x-coordinate of $(30,-20)$ when reflected over Y-axis.
A) 30
B) 20
C) -30
D) -20

Q60 If $0<x<y<10$, which of the following is lowest in value?
A) $\frac{x}{y}$
B) $\frac{y}{x}$
C) $\frac{y-x}{x}$
D) $\frac{x-y}{x}$

Q61 If the equation of a line is given by $x=2 y+3$, then which of the following equations represents the equation of a line parallel to the given line?
A) $y=2 x+3$
B) $y=2 x$
C) $2 y=x+3$
D) $x+2 y=0$

Q62 When the positive integer m is divided by 7, the remainder is 4 . What is the remainder when 3 m is divided by 7 ?
A) 2
B) 3
C) 4
D) 5

Q63 We are arranging 4 digits from the set $\{0,1,2, \ldots, 9\}$ and not allowing repetition. The two restrictions we must honor are that the digit 0 cannot appear in the thousands' position and that the units' digit be odd. Number of ways to achieve this is
A) 9000
B) 4500
C) 7759
D) 2240

## 13

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Q64 Find the equation of the straight line whose x intercept is $\frac{3}{2}$ and y intercept is $-\frac{2}{3}$.
A) $4 x+9 y+6=0$
B) $-4 x+9 y+6=0$
C) $4 x-9 y+6=0$
D) $-4 x-9 y+6=0$

| $x$ | -1 | 1 | 2 |
| :--- | :--- | :--- | :--- |
| $\mathrm{f}(\mathrm{x})$ | 729 | 9 | 1 |

Q65 The table above shows some values for the function $f(x)$. If $f(x)=g\left(3^{-k x}\right)$ for some constants g and k , what is the value of g ?
A) 1
B) 9
C) 81
D) 729

Q66 Which of the following is equivalent to $6 x^{2}+5 x-6$ ?
A) $(2 x-3)(3 x+2)$
B) $(2 x-3)(3 x-2)$
C) $(2 x+3)(3 x-4)$
D) $(3 x-2)(2 x+3)$

Q67 The value of the $\mathrm{n}^{\text {th }}$ term of a sequence is given by the expression $b^{2 \mathrm{n}}-5$. If the second term of the sequence is 76 , which of the following could be the value of $b$ ?

| I. | -3 |
| :--- | ---: |
| II. | 3 |
| III. | 9 |

A) I only
B) II only
C) III only
D) I and II only

Q68 Find the perimeter of the square in which a circle of area $144 \pi$ is inscribed.
A) 12
B) 24
C) 48
D) 96

Q69 Suppose p is chosen at random from the set $\{1,2,11,17,19,21,27,29,31,33\}$. What is the probability that p is an odd prime?
A) 0.4
B) 0.5
C) 0.6
D) 0.7

Q70 Solve for $x:\left|\frac{1-2 x}{3}\right|<9$
A) $13<x<14$
B) $-14<x<-13$
C) $-14<x<13$
D) $-13<x<14$

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Q71 Which of the following number is between $-\frac{1}{13}$ and $-\frac{1}{15}$ ?
A) -0.06
B) -0.07
C) -0.08
D) None of these

Q72 An operation is defined as follows: For any two integers x and $\mathrm{y}, \mathrm{x}$. $\mathrm{y}=\sqrt{x-\sqrt{y}}$, which of the following is not an integer (note $\sqrt{z}$ means positive square root of z )?
A) 25 独 81
B) 11
C) 67
D) 36

Q73 Which point doesn't lie in the interior of the triangle whose vertices are $(-10,0),(10,0)$ and $(0,10)$
A) $(5,4)$
B) $(-5,4)$
C) $(0,4)$
D) $(-5,6)$

Q74 If $f(x)=\frac{x-1}{x}$ (the domain of $f(x)$ is the set of all real numbers except 0 and 1 ), then $f(x)+\frac{1}{f(x)}=$
A) $\frac{x-1}{x}$
B) $1+\frac{1}{x}$
C) $1+\frac{1}{x(x-1)}$
D) $2+\frac{1}{x(x-1)}$

Q75 If $a$ and $b$ are integers such that $a b<0$ and $a^{2}=81$ and $5 b^{3}=-625$. Find the value of $|b-a|$.
A) 14
B) 4
C) -14
D) -4

Q76 A bag contains mangoes that are either green or yellow. The ratio of green mangoes to yellow mangoes in the bag is 3 to 5 . When two green mangoes are removed and ten yellow mangoes are added, the ratio becomes 2 to 5 . How many green mangoes were originally in the bag?
A) 32
B) 26
C) 18
D) 30

## 15

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Q77 In the figure above, two line segments in the $x-y$ plane form a right triangle with the $x$-axis. What is the area of the triangle?
A) $25 \sqrt{2}$
B) 20
C) 25
D) $20 \sqrt{2}$

Q78 The average of a particular set of nine numbers is 10 . When one of the numbers is doubled, the average of the set increases to 12 . What is the number that was doubled?
A) 20
B) 18
C) 16
D) 14

Q79 In a certain committee, the ratio of women to men is $2: 3$. What percent of the members in the committee are men?
A) 40
B) 50
C) 60
D) 70

Q80 How many integers between 199 and 599 are multiple of 3 ?
A) 130
B) 131
C) 132
D) 133

Q81 What is the average of the first 50 positive odd integers?
A) 50
B) 51
C) 52
D) 53

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Q82 If $y=f(x)=9-x^{2}$, and if the domain of $x$ is all real numbers, which of the following sets indicates the range of the function?
A) $\{y \mid y \geq 9\}$
B) $\{y \mid y \geq 3\}$
C) $\{y \mid y \leq 9\}$
D) $\{y \mid y \leq 3\}$

Q83 The base of triangle T is half of the length of rectangle R . The height of triangle T is twice the width of rectangle $R$. Then,
A) the area of triangle $T$ is same as the area of rectangle $R$
B) the area of triangle $T$ is twice as large as the area of rectangle $R$
C) the area of triangle $T$ is half of the area of rectangle $R$
D) None of these

Q84 What is the intersection of the set of all positive integers divisible by 8 and the set of all positive integers divisible by 12 ?
A) All positive multiples of 8
B) All positive multiples of 12
C) All positive multiples of 24
D) All positive multiples of 48

Q85 Let $f(x)=a x+b$, where $a$ and $b$ are given constants. If $f(-10)=-f(10)$ and the slope of the graph of the $f$ is -8 , then
A) $f(-8)=-8$
B) $\mathrm{f}(6)=0$
C) $f(4)<0$
D) None of these

Q86 Which term of the A.P. $2,8,14,20 \ldots$ will be 210 more than its $60^{\text {th }}$ term?
A) 93
B) 94
C) 95
D) 96

Q87 Laiba's average score after 4 tests is 86 . What score on the $5^{\text {th }}$ test would bring Laiba's average up to exactly 88 ?
A) 94
B) 95
C) 96
D) 97

Q88 A jar contains a number of jellybeans of which 27 are red, 87 are green, and the rest are blue. If the probability of choosing a blue jellybean from this jar at random is $\frac{2}{5}$, how many blue jellybeans are in the jar?
A) 36
B) 54
C) 76
D) 98

## 17

## ALL ANSWERS MUST BE GIVEN ON THE COMPUTERIZED ANSWER SHEET BY CROSSING THE CORRESPONDING LETTER

Q89 If the positive integer $x$ leaves a remainder of 3 when divided by 7, what will the remainder be when $x+11$ is divided by 7 ?
A) 0
B) 1
C) 2
D) 3

Q90 The area of a triangle with vertices $(0,0),(8,0)$ and $(12,6)$ is
A) 12
B) 24
C) 36
D) 48

This is the end of Part 1 and Part 2. Please, wait for the Part 3 (an essay question).

