

(1)

Complete the sentences by choosing the most appropriate option, from the given lettered choices (A to D/E) below each.

1. There being no evidence against him, he was acquitted \_\_\_\_\_ the charge.

- A. of
- B. off
- C. for
- D. with

2. The counter clerk was very busy and \_\_\_\_\_ not pay any \_\_\_\_\_ to Ahmad's request.

- A. did ... attention
- B. had ... cash
- C. could ... respect
- D. can ... help
- E. certainly ... acceptance

3. Your behaviour is not compatible \_\_\_\_\_ the rules.

- A. with
- B. to
- C. on
- D. about

4. Only in extremely dangerous situations \_\_\_\_\_ stopped.

- A. will be the printing presses
- B. the printing presses will be
- C. that the printing presses will be
- D. will the printing presses be

5. He is so bad-tempered that he has \_\_\_\_\_ friends.

- A. few
- B. a few
- C. lot of
- D. a lot of

6. This paper intends to fearlessly \_\_\_\_\_ all forms of corruption and falsehood in public life.

- A. expose
- B. present
- C. uncover
- D. influence

7. If I were you, I \_\_\_\_\_ be careful with my words.

- A. will
- B. would
- C. shall
- D. can

8. Labour also was very restive, and in some of the big industrial centres, they were becoming aggressive as attempts were made to \_\_\_\_\_ wages.

- A. alter
- B. modify
- C. reduce
- D. determine

9. He used to \_\_\_\_\_ the point that victory in any field needs \_\_\_\_\_ courage.

- A. emphasise ... little
- B. stress ... exemplary
- C. refute ... no
- D. dismiss ... formidable
- E. distract ... enormous

10. \_\_\_\_\_ inclined to push for such a reduction, it would probably not be successful.

- A. The office of management
- B. The office of management was
- C. In the office of management
- D. Were the office of management

11. We knew him at a glance as soon as he came \_\_\_\_\_ sight.

- A. at
- B. on
- C. to
- D. in

original is best, otherwise choose the best phrase from the options.

12. Anyone interested in the use of computers can learn much if you have access to a state of the art microcomputer.

- A. if you have access to
- B. if he has access to
- C. if access is available to
- D. by access to
- E. from access to

13. Although I calculate that he will be here any minute, I cannot wait much longer for him.

- A. Although I calculate that he will be here
- B. Although I reckon that he will be here
- C. Although I think that he will be here
- D. Because I am confident that he will be here

14. The principal asked me that I should not enter his office without permission.

- A. that I should not enter
- B. don't enter
- C. not to enter
- D. not entering

15. Hardcover books usually last longer than paperbacks; of course, paperbacks usually are less expensive to purchase.

- A. than paperbacks; of course,
- B. then paperbacks of course,
- C. then paperbacks. Of course,
- D. than paperbacks, of course,
- E. than paperbacks, of course

16. The computer has the capability for processing all the relevant data within half an hour.

- A. has the capability for processing
- B. has the capacity for processing
- C. has the capability in processing
- D. can process
- E. processes



Four/five lettered pairs (A to D/E) follow a related pair of words given in capitals. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair in capitals.

**17. VERDICT: JUDGMENT::**

- A. jet: helicopter
- B. observation: science
- C. principal: school
- D. infant: baby

**18. ADDICTED: DEDICATED::**

- A. slavish: kindly
- B. fanatical: enthusiastic
- C. acute: chronic
- D. temporary: permanent
- E. habitual: continuous

**19. EXPEND: REPLENISH::**

- A. occupy: re-occupy
- B. encroachment: occupy
- C. resign: rejoin
- D. ferment: rebellion
- E. exhort: encourage

**20. GOOD: EXCELLENT::**

- A. bad: immoral
- B. caution: careless
- C. hill: mountain
- D. jealousy: respect
- E. sickness: medicines

**21. CONVICT: GUILTY::**

- A. clock: digital
- B. rainforest: lush
- C. film: lengthy
- D. parachute: heavy

Choose the lettered word or phrase that is most nearly opposite in meaning to the word in capital letters.

**22. DENY:**

- A. acknowledge
- B. disown
- C. profound
- D. hate

**23. CAPRICIOUS:**

- A. unchanging
- B. concentrated
- C. yielding
- D. heavy

**24. DESPICABLE:**

- A. admirable
- B. contemptible
- C. earn
- D. purity

**25. DISHONESTY:**

- A. blunder
- B. error
- C. abandon
- D. honesty

**26. INSERT:**

- A. introduce
- B. study
- C. delete
- D. solve

**27. LONGING:**

- A. craving
- B. hatred
- C. sadness
- D. analyze

**28. GALLANT:**

- A. bold
- B. fine
- C. frolic
- D. cowardly

## Questions 29-30

Ecologists remind us of the limits of things and many of them ardently urge less growth. Oil is a commodity we are running out of, they say. So is arable land. So are iron, copper, tin, lead. Not to mention fresh water and good fishing grounds. Conserve, they say. Insulate your houses better and use solar energy. Drive smaller cars, drive more slowly. Have fewer children. Eat less. When will someone tell me that production begets production, that poor people do not find small to be beautiful, that there is enough energy in the oceans to last millions of years, and that the consumption I forego is likely to be taken by some less principled denizen of Spaceship Earth?

29. The author probably believes that:

- A. arable land is not in short supply
- B. people should drive big cars
- C. research on how to extract energy from the oceans is important
- D. solar energy is uneconomical
- E. most ecologists are wrong on the issue of growth

30. Which of the following apply (applies) to the passage's final sentence?

- I. It is a rhetorical question, not meant to be answered literally
- II. It does not relate to the previous part of the passage
- III. It is inconsistent in tone with the previous part of the passage

- A. I only
- B. III only
- C. I and II only
- D. II and III only
- E. I, II, and III



### Questions 31-35

The size of each collection route will be determined by the amount of waste per stop, distance between stops, speed of loading, speed of truck, traffic conditions during loading time, etc.

Basically, the route should consist of a proper amount of work for a crew for the daily working period. The crew should service all properties eligible for this service in their area. Routes should, whenever practical, be compact, with a logical progression through the area. Unnecessary travel should be avoided. Traffic conditions on the route should be thoroughly studied to prevent lost time in loading, to reduce hazards to employees, and to minimize tying up of regular traffic movements by collection forces. Natural and physical barriers and arterial streets should be used as route boundaries wherever possible to avoid lost time in travel.

Routes within a district should be laid out so that the crews start at the point farthest from the disposal area and, as the day progresses, move toward that area, thus reducing the length of the haul. When possible, the work of the crews in a district should be parallel as they progress throughout the day, with routes finishing up within a short distance of each other. This enables the supervisor to be present when crews are completing their work and enables him to shift crews to trouble spots to complete the day's work.

31. Based on the above passage, an advantage of having collection routes end near one another is that:

- A. routes can be made more compact
- B. unnecessary travel is avoided, saving manpower
- C. the length of the haul is reduced
- D. the supervisor can exercise better manpower control

32. Of the factors mentioned above which affect the size of a collection route, the two over which the sanitation forces have LEAST control are:

- A. amount of waste; traffic conditions
- B. speed of loading; amount of waste
- C. speed of truck; distance between stops
- D. traffic conditions; speed of truck

33. According to the above passage, the size of a collection route is probably good if:

- A. It is a fair day's work for a normal crew
- B. It is not necessary for the trucks to travel too fast
- C. the amount of waste collected can be handled properly
- D. the distance between stops is approximately equal

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34. Based on the above passage, it is reasonable to assume that a sanitation officer laying out collection routes should NOT try to have:

- A. an arterial street as a route boundary
- B. any routes near the disposal area
- C. the routes overlap a little
- D. the routes run in the same direction

35. The term "logical progression" as used in the second paragraph of the passage refers most nearly to:

- A. collecting from street after street in order
- B. numbering streets one after the other
- C. rotating crew assignments
- D. using logic as a basis for assignment of crews



It takes a good telescope to see the moons of Neptune. I can't see the moons of Neptune with my telescope. Therefore, I do not have a good telescope.

36. Which one of the following most closely parallels the logic of this statement?

- A. It takes two to tango. You are doing the tango. Therefore, you have a partner.
- B. If you have a surfboard, you can surf. You do not have a surfboard. Therefore, you cannot surf.
- C. You need lemon, sugar and water to make lemonade. You do not have any lemon. Therefore, you cannot make lemonade.
- D. If you know the area of a circle, you can find its circumference. You cannot figure out the circumference. Therefore, you do not know the area.
- E. You can write a letter to your friend with a pencil. You do not have a pencil. Therefore, you cannot write the letter.

### Questions 37-38

Professor: Probability is a curiously unstable concept. Semantically speaking, it is an assumption, ~~a pure artifice~~, a concept that may or may not be true, but nevertheless facilitates a logical process. It is not a hypothesis because, by its very nature, it cannot be proved. Suppose we flip a coin that has a distinguishable head and tail. In our ignorance of the coming result we say that the coin has one chance in two of falling heads up, or that the probability of a head turning up is one to two. Here it must be understood that the one to two is not "true" but is merely a species of the genus probability.

37. The professor assumes that:

- A. nothing about our coin influences its fall in favor of either side or that all influences are counterbalanced by equal and opposite influences
- B. probability can be dealt with or without the use of logic
- C. an assumption must be plausible
- D. the probability of the coin's landing on an edge is counterbalanced by the probability of its not landing on an edge
- E. probability can be precisely calculated

38. The last sentence implies that:

- A. probability is not absolute
- B. one to two is merely a guess
- C. one to two is a worthless ratio
- D. truth is not important
- E. genus is a category of species

### Questions 39-44

A fruit seller is deciding which vegetables and fruits will be placed in five consecutive boxes for exhibition, numbered 1 through 5, left to right. Each box will contain one of three species of vegetables carrots, turnips or potatoes and one of three species of fruits apples, mangoes or oranges. The fruit seller must abide by the following conditions:  
If turnips are in a given box, apples must also be placed in that box.  
If oranges are in a given box, carrots cannot be in that same box.  
In at least one box, potatoes and apples are together.  
Potatoes are never in consecutively numbered boxes.  
If carrots and turnips are both exhibited, the carrots must always be in lower-numbered boxes than the turnips.  
The second box contains oranges.

39. Which one of the following must be true?

- A. Carrots are exhibited in the first box.
- B. Potatoes are exhibited in the second box.
- C. Potatoes are exhibited in the third box.
- D. Apples are exhibited in the fourth box.
- E. Apples are exhibited in the fifth box.

40. Each of the following is a possible line-up of fruits in the five boxes EXCEPT:

- A. apples, oranges, apples, mangoes, oranges
- B. apples, oranges, mangoes, apples, apples
- C. apples, oranges, apples, apples, apples
- D. mangoes, oranges, mangoes, mangoes, apples
- E. mangoes, oranges, apples, apples, apples

41. Which one of the following is not possible when both carrots and turnips are exhibited?

- A. Apples are exhibited in two consecutive boxes.
- B. Turnips are exhibited in two consecutive boxes.
- C. Mangoes are not exhibited.
- D. Oranges are exhibited in the third box.
- E. Potatoes are exhibited in two different boxes.



42. If carrots are exhibited in the fifth box, which one of the following must be true?

- A. Apples are exhibited in the third box.
- B. Carrots are exhibited twice.
- C. Turnips are exhibited twice.
- D. Mangoes are not exhibited in consecutively numbered boxes.
- E. If mangoes are exhibited, then they are exhibited in the fifth box.

43. If carrots are exhibited exactly twice, each of the following must be true EXCEPT:

- A. Apples are exhibited in the fourth box.
- B. Apples are exhibited in the fifth box.
- C. Carrots and turnips are exhibited in consecutively numbered boxes.
- D. If apples are exhibited in as many boxes as possible, then they are exhibited four times.
- E. Mangoes cannot be exhibited in consecutively numbered boxes.

44. If turnips are exhibited exactly twice, it is possible to determine the types of fruits and vegetables for how many of the ten slots?

- A. 7
- B. 6
- C. 5
- D. 4
- E. 3

X: Medical research on animals should not be reduced in response to a concern for animals, because results of such research serve to avert human suffering. In such research a trade off between human and animal welfare is always inevitable, but we should give greater weight to human welfare.

Y: With technology that is currently available, much of the research presently performed on animals could instead be done with computer modeling or human subjects without causing any suffering.



45. The relationship of Y's response to X's argument is that Y's response:

- A. contradicts a premise on which X's argument relies
- B. disagrees with X about the weight to be given to animal suffering as opposed to human suffering
- C. presents a logical consequence of the premises of X's argument
- D. strengthens X's argument by presenting evidence not mentioned by X
- E. supplies a premise to X's argument that was not explicitly stated

### Questions 46-52

A certain secure computer lab uses only the letters K, L, M, N and O as their computer codes. Words in the computer lab's code are written from left to right. Computer lab's code words are only those words that conform to the following conditions:

The minimum length for computer lab's code words is two letters, not necessarily different from each other.

K cannot be the first letter in a word.

L must occur more than once in a word, if it occurs at all.

M cannot be the last letter in a word nor the next to the last letter.

N must occur in a word if K occurs in the word.

O cannot be the last letter in a word unless L occurs in the word.

46. Which of the following letters could be placed after O in L O to form a computer lab's code word exactly three letters long?

- A. K
- B. L
- C. M
- D. N
- E. O

47. If the only kinds of letters that are available are K, L and M, then the total number of different computer lab's code words, each exactly two letters long, that it is possible to make is:

- A. 1
- B. 3
- C. 6
- D. 9
- E. 12

48. Which of the following is a computer lab's code word?
- A. K, L, L, N
  - B. L, O, M, L
  - C. M, L, L, O
  - D. N, M, K, O
  - E. O, N, K, M
49. What is the total number of different computer lab's code words exactly three identical letters long that it is possible to make?
- A. 1
  - B. 2
  - C. 3
  - D. 4
  - E. 5
50. The computer lab's code word M, M, L, L, O, K, N can be turned into computer lab's another code word by carrying out any one of the following changes EXCEPT:
- A. replacing every L with an N
  - B. replacing the first M with an O
  - C. replacing the N with an O
  - D. moving the O to the immediate right of the N
  - E. moving the second L to the immediate left of the K
51. Which of the following is not a computer lab's code word but could be turned into one by changing the order of the letters within the word?
- A. K, L, M, N, O
  - B. L, L, L, K, N
  - C. M, K, N, O, N
  - D. N, K, L, M, L
  - E. O, M, M, L, L
52. Which of the following could be turned into a computer lab's code word by replacing the 'X' with a letter used in the computer lab's code?
- A. M, K, X, N, O
  - B. M, X, K, M, N
  - C. X, M, M, K, O
  - D. X, M, O, L, K
  - E. X, O, K, L, L



## Questions 53-57

Two families organized a dinner party together. The seating arrangement of the family members are according to the compulsions based on seniority family members. Qadir, Pervaiz, Imran and Nasir sit around a square table with eight chairs, which are equally distributed.

Kamal, Hina, Tariq and Kiran join them at the table.

Hina and Kiran cannot sit next to each other.

Qadir and Nasir are seated on either side of Imran and are next to him.

Tariq is seated next to Nasir.

Hina is seated next to Qadir but not directly across from Imran.

Qadir is directly across from Kiran.

53. Which male family member could switch positions without contradicting the seating arrangement?

- ☐ A. Imran and Nasir
- ☐ B. Qadir and Imran
- ☐ C. Pervaiz and Tariq
- ☐ D. Kamal and Pervaiz
- ☐ E. Kamal and Imran

54. Which of the following must be false?

- A. Imran is not next to Tariq.
- B. Kiran is not next to Hina.
- C. Nasir is next to Hina.
- D. Imran is across from Pervaiz.
- E. Kamal is not next to Pervaiz.

55. Which of the following could be true?

- A. Nasir sits next to Hina.
- B. Nasir sits next to Qadir.
- C. Tariq sits next to Pervaiz.
- D. Qadir sits next to Pervaiz.
- E. Imran sits next to Kiran.

56. Which of the following must be true?

- A. Tariq sits next to Pervaiz.
- B. Kiran sits next to Pervaiz.
- C. Imran sits next to Hina.
- D. Tariq sits next to Kamal.
- E. Kamal sits next to Qadir.



57. If Ahmed were now to take Tariq's seat, then Ahmed

- A. must now be next to Kamal
- B. must be next to Kiran
- C. must be across from Kamal
- D. is either next to or across from Pervaiz
- E. is either next to or across from Imran

Self confidence is a big factor in success. The person who thinks he can will master most of the things he attempts. The person who thinks he can't may not try.

58. The author of these statements would agree that:

- A. nothing is impossible
- B. no task is too large
- C. success relies on effort
- D. self confidence is of utmost importance
- E. trying is half the battle

For every known physical phenomenon, physicists have posited laws that govern the occurrence of that phenomenon. It can be concluded, therefore, that every known physical phenomenon is governed by the same law.

59. The flawed reasoning in the argument above is most similar to that in which one of the following?

- A. The trunk of every tree is a body of tissue that contains both xylem and phloem. Therefore, any body of tissue that contains both xylem and phloem is the trunk of a tree.
- B. Every house has a unique mailing address. Therefore, because these packages are all marked with the same mailing address, they will all be sent to the same house.
- C. Because every action taken by a person can be explained by unconscious motives, a single motive explains all of the actions taken by any person.
- D. No violin that was made in the twentieth century is remarkably valuable. Because this violin is remarkably valuable, it must not have been made in the twentieth century.
- E. For every known star, astronomers can determine that star's elemental composition. Because a star's elemental composition determines its exact color, no two stars are the same exact color.

## Questions 60-64

In a Camel Race held in Dubai, camels have to reach the winning line in order to win the competition. Six camels, camel 1, camel 2, camel 3, camel 4, camel 5 and camel 6, have to reach a winning line in a given time, such that

Camel 1 finishes race neither first nor last.

Camel 2 finishes race ahead of both camel 3 and camel 4.

Camel 5 finishes race in third place.

60. Which of the following could be the finishing order of the six camels, from first to last?

- A. camel 1, camel 6, camel 5, camel 2, camel 3, camel 4
- B. camel 6, camel 3, camel 5, camel 2, camel 1, camel 4
- C. camel 2, camel 6, camel 5, camel 3, camel 4, camel 1
- D. camel 2, camel 6, camel 5, camel 1, camel 4, camel 3
- E. camel 2, camel 5, camel 3, camel 4, camel 1, camel 6

61. All of the following could be a complete and accurate list of the finishing order of the six camels EXCEPT:

- A. camel 6, camel 1, camel 5, camel 4, camel 3, camel 2
- B. camel 2, camel 4, camel 5, camel 3, camel 1, camel 6
- C. camel 6, camel 2, camel 5, camel 1, camel 3, camel 4
- D. camel 2, camel 6, camel 5, camel 1, camel 4, camel 3
- E. camel 2, camel 1, camel 5, camel 6, camel 3, camel 4

62. Which of the following is a complete and accurate list of all camels which could finish first?

- A. camel 2, camel 3, camel 4 or camel 6
- B. camel 2 or camel 5
- C. camel 2 or camel 6
- D. camel 2, camel 3 or camel 4
- E. camel 2, camel 3 or camel 6

63. Which of the following camels could finish either first or last?

- A. camel 5
- B. camel 6
- C. camel 2
- D. camel 3
- E. camel 4

0 1  
2 3  
5 3



64. If camel 2 does not finish first, then which of the following must be false?

- A. camel 3 and camel 5 finish ahead of camel 4
- B. camel 5 and camel 6 finish ahead of camel 2
- C. camel 3 and camel 4 finish ahead of camel 5
- D. camel 1 finishes first
- E. camel 2 finishes last

Haven't you at some time had a favorite song or book or film that was not well known but later became popular? And didn't you feel somehow betrayed and resentful when what you had thought was unique became commonplace? On a larger scale, the same thing happens to novelists or film makers who have enjoyed critical esteem without popular success. Let them become public sensations, and the critics who praised their work will attack them virulently.

65. This paragraph most likely introduces an article on a film maker who has made a:

- A. series of commercially successful films
- B. series of commercially unsuccessful films
- C. single film, a commercial success
- D. single film, a commercial failure
- E. critical success and a commercial success



66. The first 100 copies of a poster cost 'x' rupee each; after the first 100 copies have been made, extra copies cost  $\frac{x}{4}$  rupee each. How many rupees will it cost to make 300 copies of the poster?

- A.  $100x$
- B.  $150x$
- C.  $200x$
- D.  $300x$
- E.  $400x$

67. If the area of a rectangle is equal to the area of a square, then the perimeter of the rectangle must be:

- A.  $\frac{1}{2}$  the perimeter of the square
- B. equal to the perimeter of the square
- C. equal to twice the perimeter of the square
- D. equal to the square root of the perimeter of the square
- E. none of the above

68. Which of the following numbers is the largest?

- A.  $(2 + 2 + 2)^2$
- B.  $[(2 + 2)^2]^2$
- C.  $(2 \times 2 \times 2)^2$
- D.  $2 + 2^2 + (2^2)^2$
- E.  $4^3$

69. If  $x - 4 = 11$ , what is the value of  $x - 8$ ?

- A. -15
- B. -7
- C. -1
- D. 7
- E. 15

70. If waiter tips more than 15 percent on a meal, and the tip is more than 4 rupees, what is the least possible cost of the meal before tip, rounded to the nearest rupees?

- A. 26
- B. 27
- C. 30
- D. 32
- E. 60

71. In a certain sequence with terms  $x_1, x_2, x_3, \dots, x_n$  the sum of the 'n' terms is 1,458. If the average of the n terms is 6, what is 'n'?

- A. 241
- B. 242
- C. 243
- D. 245
- E. 246

72. If x is an integer between 11 and 21, inclusive, then the median of the list of numbers below must be:

13, 15, 17, 19, x, 14, 16, 18, 20

- A. either 15 or 16
- B. either 16 or 17
- C. either 17 or 18
- D. 16.5
- E. x

73. It takes Ali 5 hours to paint a certain room. It takes Ahmed 4 hours to paint the same room. How many hours would it take Ali and Ahmed working together at their respective rates to paint the room together?

- A.  $\frac{9}{20}$  hours
- B.  $2\frac{2}{9}$  hours
- C.  $2\frac{1}{2}$  hours
- D. 9 hours

78. What is the greatest possible length which can be used to measure exactly the lengths 8 m, 4 m 20 cm and 12 m 20 cm?

- A. 10 m
- B. 20 cm
- C. 25 cm
- D. 30 cm
- E. 20 m

79. An accurate clock shows 8 O'clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 2 O'clock in the afternoon?

- A. 100
- B. 90
- C. 180
- D. 210
- E. 150

80. X and Y invest Rs.21000 and Rs.17500 respectively in a business. At the end of the year, they make a profit of Rs.26400. What is the share of X in the profit?

- A. Rs.14400
- B. Rs.26400
- C. Rs.12000
- D. Rs.12500
- E. Rs.13200

81. 120 Children have provision for 200 days. After 5 days, 30 children die due to an epidemic. The remaining food will now last for:

- A.  $146\frac{1}{4}$  days
- B. 150 days
- C. 245 days
- D.  $266\frac{2}{3}$  days
- E. 260 days

82. The students of a certain class collected Rs.900, each student contributing as many rupees as there were students in the class. How much did each contribute?

- A. Rs. 20
- B. Rs. 30
- C. Rs. 40
- D. Rs 50

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83. A person covers 12 km at 3 km/hr, 18 km at 9 km/hr and 24 km at 4 km/hr. Find the average speed in covering the whole distance.

- A. 4.2 km/hr
- B. 4.4 km/hr
- C. 4.5 km/hr
- ☒ D. 4 km/hr
- E. 3.7 km/h

84.  $(86 - 28 + 39) - (800\% \text{ of } 2) = M^2$ . Find the value of M?

- A. 7
- B. 9
- C. 11
- ☒ D. 101
- E. 1.01

85. A mother tells her daughter, 'I was half your present age when you were born.' If the mother is 18 years older than her daughter, what is the present age of the mother?

- A. 72
- B. 63
- C. 54
- D. 36
- E. 46

86. A two-digit number contains the smaller of two digits in the unit's place. The product of the digits is 24 and the difference between the digits is 5. Find the number.

- A. 46
- B. 38
- C. 83
- D. 72
- E. 64

87. Simplify  $\sqrt[3]{64} = ?$

- A. 4
- B. 64
- C. 8
- D. 32
- E. 2

$\sqrt[3]{64}$

88. The average of 5 consecutive numbers is 16. The highest of these numbers is:

- A. 21
- B. 20
- C. 18
- D. 17
- E. 16

89. If  $4x + 2y - 3 = 0$  and  $3x - 2y = 4$ , then find the value of 'x':

- A. 0
- B. 1
- C.  $1/2$
- D.  $-1/2$
- E. 7

90. If  $x + y = 6$  and  $3x - y = 4$ , then  $x - y$  is equal to:

- A. -1
- B. 0
- C. 2
- D. 4
- E. 6

91. A number,  $x$ , is chosen at random from the set of positive integers less than 10. What is the probability that  $\frac{9}{x} > x$ ?

- A.  $1/5$
- B.  $2/9$
- C.  $1/3$
- D.  $2/3$
- E.  $7/9$

92. What is the value of  $2x^2 - 3x - 7$  when  $x = -5$ ?

- A. 28
- B. 42
- C. 58
- D. 78
- E. 108

$$\begin{array}{r} 2 - 3 - 7 \\ -35 \\ 15 \\ 8 \end{array}$$



93. If a man takes two hours to row 7 km upstream or 15 km downstream, what is the speed of the current?

- A. 4 km/hr
- B. 5 km/hr
- C. 8 km/hr
- D. 2 km/hr
- E. 3 km/hr

94. Ali paid Rs.7, 000 as zakat at the rate of 2.5% at the end of year from his savings. Calculate his savings.

- A. Rs.480,000
- B. Rs.380,000
- ☒ C. Rs.280,000
- D. Rs.28,000

95. The area of the largest circle that can be drawn inside a square of side 14 cm in length is:

- A.  $154 \text{ cm}^2$
- B.  $84 \text{ cm}^2$
- C.  $204 \text{ cm}^2$
- D. None of the above

$$\begin{array}{r} 14 \\ 4 \\ \hline 6 \end{array}$$

96. If  $x + y = 4$ ,  $xy = 3$ , then which of the following is the value of  $x - y$ ?

- A. 2
- B. 4
- C. 6
- D. 8
- E. -4

97. Which of the following formula represents the volume of the sphere?

- A.  $\frac{4}{3} \pi r^2$
- B.  $\frac{4}{3} \pi r^3$
- C.  $\frac{2}{3} \pi r^2$
- D.  $\frac{2}{3} \pi r^3$

$$\frac{4000 \times 100}{2000}$$

98. Let A = total area of five circles of radius 'r', and let B = total area of three circles of radius 's'. If A = B, then r/s = ?

- A.  $3/5$
- B.  $\frac{\sqrt{3}}{\sqrt{5}}$
- C.  $\frac{3\pi}{5}$
- D.  $\frac{\sqrt{3\pi}}{\sqrt{5}}$

99. What is the greatest value of x that is a solution of the following equation?

$$|x-5| + 10 = 15$$

- A. 0
- B. 5
- C. 10
- D. 20
- E. 30

100. What percent of 25 is 5?

- A. 10%
- B. 20%
- C. 30%
- D. 35%
- E. 40%