IBS Software Services Placement Paper Questions

Q1. A horse is tied with a rope of length 7 m at one corner of a square field having side equal to 10 m. Find the minimum possible area of the square field that is left ungrazed.

  (A) 77/2
  (B) 61.5
  (C) 58
  (D) 77
  (E) None of these

Q2. Ankita purchased a certain number of articles at a rate of 5 for 50 paise. If she has purchased them at a rate of 11 for one rupee, she would have spent 50 paise less. How many articles did Ankita purchase?

  (A) 15
  (B) 25
  (C) 55
  (D) 45
  (E) None of these

Q3. Two cities P and Q are 110km apart. Person A started fro, city P at 7a.m at 20 km/hr and B started from city Q at 8 a.m at 25km/hr. At what time will they meet?

  (A)10 a.m
  (B) 11 a.m
  (C) 1 p.m
  (D) 12 noon
  (E) 9 a.m

Q4. A clock shows the time as 6 a.m. If the minute hand gains 2 minutes every hour, how many minutes will the clock gain by 9 p.m.?

  (A) 30 minutes
  (B) 25 minutes

(C) 28 minutes
(D) 34 minutes
(E) None of these

Q5. If the length of the rectangle is increased by 100% and the width is increased by 200%, what is the percentage change in the area of the rectangle?

(A) 250%
(B) 500%
(C) 100%
(D) 750%
(E) No change

Q6. Equal sums of money are invested for 2 years at 10% compound interest - one payable annually and the other payable half-yearly. Find the approximate difference between the amounts at the end of 2 years if the sum invested was Rs. 5,000.

(A) Rs. 26.50
(B) Rs. 27.50
(C) Rs. 25.50
(D) Rs. 24.50
(E) None of these

Q7. If 15th July 1976 is a Monday, what day is Dec 20, 2018?

(A) Monday
(B) Wednesday
(C) Sunday
(D) Thursday
(E) None of these

Q8. Tinas sister is younger to her by 3 years and her brother is elder to her by 4 years. The sum of the ages of Tina, her sister and her brother is 73 years. What is Tinas age?

(A) 22 years
(B) 24 years
(C) 20 years
(D) 25 years
(E) None of these

Q9. What will be the reminder when 13 raised to 36 is divided by 2196?

(A) 0
(B) 1
(C) 12
(D) 2195
(E) None of these

Q10. If a cube is cut into identical pieces by giving 8 cuts, each parallel to the same pair of faces, then maximum number of identical pieces that can be obtained by making two more cuts is _____

(A) 27
(B) 36
(C) 40
(D) 45
(E) None of these

Q11. A purse contains Rs.130 in equal denominations of 50 paise and 5 paise. How many coins of each type are there?

(A) 100
(B) 200
(C) 150
(D) 250
(E) None of these

Q12. If p and r are prime numbers, which of the following must also be prime?

(A) pr
(B) p + r
(C) pr + 1
(D) p2 + r2
(E) None of the above

Q13. How many of the smaller cubes have exactly one face painted?

(A) 0
(B) 2
(C) 1
(D) 3
(E) None of these

Q14. In a mixture of 120 L, the ratio of milk and water is 2 : 3. If 30 L of mixture is replaced by 18 L of milk and 12 L of water, then new ratio of milk and water is

(A) 7:9
(B) 9:11
(C) 2:3
(D) 3:4
(E) 11:9

Q15. The average age of a group of 12 students is 20years. If 4 more students join the group, the average age increases by 1 year. The average age of the new students is

(A) 24
(B) 26
(C) 23
(D) 22
(E) 21

Q16. Seven bells ring at intervals of 2,3,4,6,8,9 and 12 min respectively. They started ringing simultaneously at 6 a.m. How many more times would all seven bells ring simultaneously till 5 pm on the same day?

    (A) 8
    (B) 9
    (C) 10
    (D) 12
    (E) 7

Q17. 2! + 4! + 6! + 8! + 10! + 100! When divided by 5, would leave reminder....

    (A) 0
    (B) 1
    (C) 2
    (D) 3
    (E) 2 or 4

Q18. A and B can do a piece of work in 10 days and 20 days respectively. Both starts the work together but A leaves the work 5 days before its competition time. Find the time in which work is finished?

    (A) 20 days
    (B) 15 days
    (C) 25 days
    (D) 10 days
    (E) 5 days

Q19. If m is an integer, for what value of m is 3m < 100 < 3m+1?

    (A) 0
    (B) 1
    (C) 2
    (D) 3
    (E) 4

Q20. In a group, there are 32 people. All of them know at least one of the three languages - Hindi, English and Marathi. 25 people know Hindi, 20 know English and 15 know Marathi. 15 people know Hindi and English. 5 people know English and Marathi. If 3 people know all the three languages, then how many people know Hindi and Marathi?

(A) 9
(B) 8
(C) 13
(D) 10
(E) 11

Q21. The solution to $x^2 + 6x + 9 = 0$ is .....

(A) $x_1 = +3, x_2 = -3$
(B) $x_1 = 3, x_2 = 3$
(C) $x_1 = -3, x_2 = -3$
(D) No solution
(E) None of these

Q22. $112,500 are divided among three bands Eagles, Doors and UB40 such that Eagles receives half as much as Doors and UB40 together received, and Doors receives ¼ th of what Eagles and UB40 receive together. The share of Eagles is more than that of Doors by

(A) $15,000
(B) $30,000
(C) $32,000
(D) $15,500
(E) $20,000

Q23. There are 24 students in a class whose average marks in a subject is 89 out of 100. If 3 students leave the class, then what is the maximum by which the average could go up?

(A) 10.7
(B) 10.5
(C) 11.2
(D) 11
(E) 11.1

Q24. There are 2 spherical balls, each having a radius of 4cm. By melting both balls a bigger spherical ball is made. The radius of the new ball is:

(A) 4 cube root of 2
(B) 4
(C) 5
(D) 6 cube root of 5
(E) None of these

Q25. The angle between the minute hand and the hour hand of a clock, when the time is 8.30

(A) 800
(B) 600
(C) 1050
(D) 750
(E) None of these

Q26. If two-third of a bucket is filled in one minute then the time taken to fill the bucket completely will be

(A) 90 seconds
(B) 70 seconds
(C) 60 seconds
(D) 100 seconds
(E) None of these

Q27. By selling 6 dozen oranges, a person is losing selling price of 1 dozen oranges. Find his loss percentage?

(A) 14.2% loss
(B) 12.2% loss
(C) 16.66% loss
(D) 14.66% loss
(E) Cannot be determined

Q28. Three mixtures containing water and alcohol in the ratio of 5:2, 6:1 and 4:3 are mixed in equal quantities. The ratio of water to alcohol in the resulting mixture is:

(A) 5:2
(B) 7:3
(C) 6:4
(D) 7:4
(E) 7:6

Q29. The height of Santosh is proportional to the square root of his age. What will be the height of Santosh at 16 years, if he is 4 ft tall at the age of 9 years?

(A) 5 ft 4 inches
(B) 5 ft 2 inches
(C) 5 ft
(D) 5 ft 3 inches
(E) 5 ft 5 inches

Q30. If 10 cats can kill 10 rats in 10 minutes, how long will it take 100 cats to kill 100 rats?

(A) 1 minutes
(B) 10 minute
(C) 100 minutes
(D) 10000 minutes
(E) None of these

Directions for question 31 - 34:
Read the following information and answer the questions given below.

There are 8 friends: J, K, L, M, N, O, P and Q, who are sitting in a circle.
i. Q is sitting to the immediate right of N.
ii. O is sitting opposite to K, who has 2 people sitting between himself and J.
iii. L is sitting opposite to N and 2 seats to the left of O.
iv. O and M are neighbours.

Q31. Who is sitting 2 seats to the left of L?

   (A) K
   (B) O
   (C) M
   (D) Q
   (E) J

Q32. Who is sitting to the immediate right of K?

   (A) Q
   (B) P
   (C) L
   (D) J
   (E) M

Q33. If J switches his place with the person opposite to him, then who of the following cannot be neighbour of J?

   (A) Q
   (B) P
   (C) O
   (D) M
   (E) All of these

Q34. Who is sitting opposite to Q?

(A) P
(B) J
(C) M
(D) J or M
(E) P or M

Q35. If all the letters in the word MERCIFUL are rearranged in alphabetical order and substituted by the alphabet preceding them in the English alphabet what will be the new arrangement of letters?

(A) BDHEKLQT
(B) BDEHKLQT
(C) BDEHLKQT
(D) BDEJMLQT
(E) None of these

Directions (Q.36 - 38): In each of the following sentences there are two blank spaces. Below each sentence there are five pairs of words. Find out which pair of words can be filled up in the blanks in the sentence in the same sequence to make it meaningfully complete.

Q36. It is not _____ for ministers to resign on health or moral grounds or due to difference of _____ with the Prime Minister.

(A) striking, interest
(B) uncommon, opinion
(C) novel, ideal
(D) unfit, issues
(E) concerning, words

Q37. The teachings of Vedas are _____ even today, as they are a(n) _____ to living a better life.

(A) necessary, stepping
(B) equivalent, alternate
(C) ritualistic, advocate
(D) relevant, guide
(E) symbolic, counsel

Q38. _____ movements of the sensex as well as some of the major scripts during the past few weeks have led to _____ on the bourses.

(A) Upward, erosion
(B) Doldrum, chaos
(C) Chaotic, disapproval
(D) Volatile, confusion,
(E) Surprising, flutter

Q39. In a certain code COIMBATORE is written as DPJNCBUPSF. How is INDORE written in that code?

(A) JOENQF
(B) JMCPQD
(C) JOEPSF
(D) HMCNQD
(E) None of these

Q40. Statements:
(i) Some scientists are democrats.
(ii) All democrats are players.
(iii) Some republicans are players.

Conclusions:
(i) Some republicans are democrats.
(ii) Some republicans are scientists.
(iii) Some scientists are players.

(A) Only (i) follows

(B) Only (ii) follows
(C) Only (iii) follows
(D) Both (i) and (ii) follow
(E) Both (ii) and (iii) follow

Q41. Statements:
(i) Some softwares are files.
(ii) All files are folders.
(iii) Some folders are executable.

Conclusions:
(i) Some softwares are executable.
(ii) All executables are files.
(iii) Some softwares are folders.

(A) Either(i) or (ii) follows
(B) Only (ii) follows
(C) Only (iii) follows
(D) Both (ii) and (iii) follow
(E) None follows

Directions for question 42 - 46:
Read the given information and answer the following questions based on it. The following figure represents a set of attributes for the participants of Miss X and the alphabets in these figures represent a particular participant having that particular attribute. The circle represents Smartness, the rectangle represents Quick witted, the square represents Appearance, the triangle represents Education and the octagon represents Presentation. The candidate fulfilling all of the given attributes is selected for the final round.

Q42. Who among the following participants has all the attributes except one of the attributes?

(A) y
(B) f
(C) e
(D) q

(E) w

Q43. How many participants fullfil exactly two out of the given five attributes?

(A) 5
(B) 6
(C) 7
(D) 8
(E) 4

Q44. How many participants are selected for final round?

(A) 1
(B) 2
(C) 3
(D) 4
(E) 0

Q45. How many participants fullfil at least three out of the given five attributes?

(A) 9
(B) 10
(C) 11
(D) 12
(E) None of these

Q46. If no other participant is allowed besides those shown in the figure, then how many participants are there?

(A) 24
(B) 25
(C) 26
(D) 23
(E) Cannot be determined

Q47. If 1 is coded as ?, 5 is coded as %, 6 is coded as <<, **3 is coded as +, 7 is coded as # and 4 is coded as ? What will be the correct form of the number 435671?**

    (A) ? + % << # ?
    (B) ? + % ? # <<
    (C) ? + << % # ?
    (D) ? # << % + ?
    (E) None of these

Directions (Q48 - 50):
Choose the word that is opposite in meaning to the word:

Q48. Abrasive

    (A) coarse
    (B) rasping
    (C) provoking
    (D) smooth
    (E) None of these

Q49. Uncouth

    (A) plebeian
    (B) vulgar
    (C) civil
    (D) restless
    (E) None of these

Q50. Plead

    (A) demand
    (B) entreat

(C) beseech
(D) sue
(E) None of these

Directions (Q. 51- 52):

Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the questions. Read both the statements and

Give answer (1): if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
Give answer (2): if the data in statement II alone are sufficient to answer the question, while the data in statements I alone are not sufficient to answer the question.
Give answer (3): if the data either in statement I alone or in statement II alone are sufficient to answer the question.
Give answer (4): if the data even in both statements I and II together are not sufficient to answer the question.
Give answer (5): if the data in both statements I and II together are necessary to answer the question.

Q51. How many sons does P have?
Statements: I. T and S are brothers of R.
II. The mother of S is the wife of Rs father.

Q52. On which day of week did Mohan reach Delhi?
Statements: I. Mohan left Mumbai by train on Tuesday.
II. Mohan stayed for one day in Jaipur and completed his journey to Delhi in two days.

Read the following information and attempt the questions 53 - 56:

Six executive Aman, Bindu, Deepa, Jitu, Kamal and Priyanka have to advertise four products i.e. soap, watches, computers and chocolates on 3 different channels, i.e. Go, Come and Fun either alone or in pairs. An executive can visit

only one channel and advertise only one product. No more than two executives can advertise on a channel.

(i) Bindu and Jitu both visit the same channel but advertise different products.
(ii) Aman who visits Go advertises neither soap nor computers.
(iii) Kamal does not advertise chocolates.
(iv) No girl advertises soap.
(v) The two executives who advertise chocolates visit Spice

Q53. Which of the following Channel-product pairs in definitely incorrect?

    (A) Go-watch
    (B) Come-computer
    (C) Go-soap
    (D) Come-soap
    (E) Come-watch

Q54. What will Jitu advertise?

    (A) Chocolates
    (B) Watches
    (C) Computers or watches
    (D) Cannot be determined
    (E) None of these

Q55. Who advertises watches?

    (A) Deepa
    (B) Kamal
    (C) Aman
    (D) Priyanka
    (E) None of these

Q56. Which channel does Kamal visit?

    (A) Go

(B) Fun
(C) Come
(D) Cannot be determined
(E) None of these

Directions (Q. 57 & 58): Read each sentence to find out where there is any error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is no error, the answer is E). (Ignore the errors of punctuation, if any.)

Q57. (A) Since over a year now
(B) the government has been
(C) talking big about the
(D) second phase of forms.
(E) No error

Q58. (A) The place of consolidation of the
(B) Indian auto industry depends over a
(C) great deal on the vision and
(D) corporate policies of the parent companies overseas. (E) No error

Directions (Q. 59 & 60): Study the following information carefully and answer the questions given below:
A word arrangement machine when given an input line of words rearranges it in every step following a certain rule. Following is an illustration of an input line of words and various steps of rearrangement:

Input: gone are take enough brought station
Steps I: take gone are enough brought station
Steps II: take are gone enough brought station
Steps III: take are station gone enough brought
Steps IV: take are station brought gone enough And,
Step IV is the last for this input.
Now find out appropriate step in each of the following question following the above rule.

Q59. If step III is ultra barrack save enough party lying, which of the following would be the Input?

(A) ultra enough party save barrack lying
(B) ultra barrack enough party save lying
(C) ultra enough barrack save party lying
(D) enough ultra barrack save party lying
(E) Cannot be determined

Q60. Input: car on star quick demand fat. What will be the third step for this input?

(A) star car quick demand on fat
(B) star quick car demand on fat
(C) star car demand quick on fat
(D) star car quick on demand fat
(E) None of these