

## CAPGEMINI PAPER ON 14th MAY

Time:60 mins      Set 2

### Section A

1. Find min value of fn:

$$|-5-x| + |2-x| + |6-x| + |10-x|; \text{ where } x \text{ is an integer}$$

0/17/23/19

2. units digit in expansion of 2 raised to 51 is:

2/4/6/8

3. 2 men at same time start walking towards each other from A and B 72 kms apart. sp of A is 4kmph. Sp of B is 2 kmph in 1st hr, 2.5 in 2nd, 3 in rd. and so on... when will they meet

i in 7 hrs

ii at 35 kms from A

iii in 10 hrs

iv midway

$$4. (8*76+19*?-60) / (?*7*12+3-52)=1$$

5/2/1/3

5. 45 grinders brought @ 2215/-. transport expense 2190/- .2760/- on octroi . Find SP/piece to make profit of 20%

2585/2225/2670/3325

6. in a 2 digit no unit's place is halved and tens place is doubled. diff bet the nos is 37. digit in unit's place is 2 more than tens place.

24/46/42/none

7. if  $x-y + z = 19$  ,  $y + z = 20$  ,  $x-z=3$  , find the value of  $x+4y-5z$

22/38/17/none

8. Find approx value of  $39.987/0.8102+1.987*18.02$

72/56/86/44

9. If the ratio of prod of 3 diff comp's A B & C is 4:7:5 and of overall prod last yr was 4lac tones and if each comp had an increase of 20% in prod level this yr what is the prod of Comp B this yr?

2.1L/22.1L/4.1L/none

10. If 70% of a no. is subtracted from itself it reduces to 81.what is two fifth of that no.?

108/54/210/none

11. If a certain sum of money at SI doubles itself in 5 yrs then what is d rate?

5%/20%/25%/14.8%

12. If radius of cylinder and sphere r same and vol of sphere and cylinder r same what is d ratio betn the radius and height of the cylinder

i.  $R=H$

ii.  $R=(3/4)H$

iii.  $R=(4/3)H$

iv.  $R=2/3H$

13. Which one of the foll fractions is arranged in ascending order

i.  $9/11, 7/9, 11/13, 13/14$

ii  $7/8, 9/11, 11/13, 13/14$

iii  $9/11, 11/13, 7/8, 13/14$

iv none

14. A is 4 yrs old and B is thrice A>when A is 12 yrs, how old will B be?

16/20/24/28

15. Boat goes downstream from P to Q in 2hrs, upstream in 6hrs and if speed of stream was  $\frac{1}{2}$  of boat in still water. Find dist PQ

6/4/10/none

16. Fresh Grapes contain 90% water by wt. Dried grapes contain 20% water by %age. What will b wt of dried grapes when we begin with 20 kg fresh grapes?

2kg / 2.4kg / 2.5kg / none

17. How many 5 digit no. can be formed with digits 1, 2, 3, 4, 5, 6 which are divisible by 4 and digits not repeated

144 / 168 / 192 / none

18. Asish was given Rs. 158 in denominations of Rs 1 each. He distributes these in different bags, such that the sum of money of denomination between 1 and 158 can be given in bags. The minimum number of such bags required

10 / 17 / 15 / none

19. There is a rectangular Garden whose length and width are 60m X 20m. There is a walkway of uniform width around garden. Area of walkway is  $516\text{m}^2$ . Find width of walkway

1/2/3/4

20. In a race from point X to point Y and back, Jack averages 0 miles/hr to point Y and 10 miles/hr back to point X. Sandy averages 20 miles/hr in both directions. If Jack and Sandy start race at the same time, who will finish first

Jack/Sandy/they tie/Impossible to tell

21. A man engaged a servant on a condition that he will pay Rs 90 and also give him a bag at the end of the year. He served for 9 months and was given a turban and Rs 65. So the price of turban is

i. Rs 10 / 19 / 0 / 55

22. Three wheels make 36, 24, 60 rev/min. Each has a black mark on it. It is aligned at the start of the quarter. When does it align again for the first time?

14/20/22/5 sec

23. If  $1 = \frac{3}{4}(1 + \frac{y}{x})$  then

i.  $x = 3y$

ii.  $x = \frac{y}{3}$

iii.  $x = \frac{2}{3}y$

iv. none

24. The sum of six consecutive odd numbers is 888. What is the average of the numbers?

i. 147

ii. 148

iii. 149

iv. 146

25.  $10^{10}/10^4 \times 10^2 = 10^?$

- i. 8
- ii. 6
- iii. 4
- iv. none

### Section B

Direction for Qn 1-8

Ans A using I only

Ans B using II only

Ans C using both I and II

Ans D not solvable

1. Raman and Gaurav Brought eggs from a vendor. How many eggs were bought by each of them
  - i. Raman bought half as many as Gaurav
  - ii. The dealer had a stock of 500 eggs at the beginning of day
2. What is the age of Ramprakash?
  - i. Ramprakash was born when his father was 26 yrs old
  - ii. Ramprakash's mothers age is 3yrs less than his father's
3. How much time is reqd for downloading the software?
  - i. The Data transfer rate is 6 kbps
  - ii. The size of the software is 4.5 megabytes
4. Sanjay and Vijay started their journey from Mumbai to Pune. Who reached Pune first?
  - i. Sanjay overtakes two times Vijay and Vijay overtakes Sanjay two times
  - ii. Sanjay started first
5. Is the GDP of country X higher than Country Y?
  - i. GDP's of X and Y has been increasing at a compounded annual growth rate of 5% and 6% over the past 5 yrs
  - ii. 5 yrs ago GDP of X was 1.2 times Y
6. A boat can ferry 1500 passengers across a river in 12 hrs. How many round trips does it make during the journey?
  - i. The boat can carry 400 passengers at a time
  - ii. During its journey, the boat takes 40 mins time each way and 20 mins waiting time at each end.

7. What are the values of m and n?

- i. n is an even integer, m is odd integer and m is greater than n.
- ii. The product of m and n is 30

8. How much is the weight of 20 mangoes and 30 oranges?

- i. 1 orange weighs twice that of 1 mango
- ii. 2 mangoes and 3 oranges weigh 2 kg

Direction for Qn 9-12

Five teams participated in Pepsi Cup. Each team played against each other. The top teams played finals. A win fetched 2 pts and a tie 1 point

- 1) South Africa were in the finals
- 2) India defeated SA but failed to reach the finals
- 3) Australia lost only one match in the tournament
- 4) The match between India and Sri Lanka was a tie
- 5) The undefeated team in the league matches lost in the finals
- 6) England was one of the best teams that did not qualify

9. Who were the finalists?

- i. SA & India
- ii. Aus & SL
- iii. SA & SL
- iv. none

10. Who won the finals?

- i. Aus
- ii. SL
- iii. SA
- iv. Can't be determined

11. How many matches did India Win?

- i. 0
- ii. 1
- iii. 2
- iv. can't be determined

12. What was the outcome of the India England Match

- i. India won
- ii. England won
- iii. It was a tie
- iv. Can't be determined

Direction for Qn 13-14

These qns are based on situations given below:

7 Uni crick players are to be honored at a special luncheon. The players will be seated on a dais along one side of a single rectangular table.

A and G have to leave the luncheon early and must be seated at the extreme right end of table, which is closest to exit.

B will receive Man of the Match and must be in the centre chair

C and D who are bitter rivals for the position of Wicket keeper dislike one another and should be seated as far apart as possible

E and F are best friends and want to seat together.

13. Which of the foll may not be seated at either end of the table?

- i. C
- ii. D
- iii. G
- iv. F

14. Which of the foll pairs may not be seated together?

- i. E & A
- ii. B & D
- iii. C & F
- iv. G & D

Direction for Qn 15-18

An employee has to allocate offices to 6 staff members. The offices are no. 1-6. the offices are arranged in a row and they are separated from each other by dividers>hence voices, sounds and cigarette smoke flow easily from one office to another

Miss R needs to use the telephone quite often throughout the day. Mr. M and Mr. B need adjacent offices as they need to consult each other often while working. Miss H is a senior employee and his to be allotted the office no. 5, having the biggest window.

Mr D requires silence in office next to his. Mr. T, Mr M and Mr. D are all smokers. Miss H finds tobacco smoke allergic and consecutively the offices next to hers are occupied by non-smokers. Unless specifically stated all the employees maintain an atmosphere of silence during office hrs.

15. The ideal candidate to occupy office farthest from Mr. B will be

- i. Miss H
- ii. Mr. M
- iii. Mr. T
- iv. Mr. D

16. The three employees who are smokers should be seated in the offices

- i. 1 2 4
- ii. 2 3 6
- iii. 1 2 3
- iv. 1 2 3

17. The ideal office for Mr. M would be

- i. 2
- ii. 6
- iii. 1
- iv. 3

18. In the event of what occurrence within a period of one month since the assignment of the offices would a request for a change in office be put forth by one or more employees?

- i. Mr D quitting smoking
- ii. Mr. T taking over duties formally taken care of by Miss R
- iii. The installation of a water cooler in Miss H's office
- iv. Mr. B suffering from anemia

Direction for Qn 19-20

A robot moves on a graph sheet with x-y axes. The robot is moved by feeding it with a sequence of instructions. The different instructions that can be used in moving it, and their meanings are:

Instruction      Meaning

GOTO(x,y)      move to pt with co-ord (x,y) no matter where u are currently

WALKX(P)      move parallel to x-axis through a distance of p, in the +ve direction if p is +ve and in –ve if p is –ve

WALKY(P)      move parallel to y-axis through a distance of p, in the +ve direction if p is +ve and in –ve if p is –ve

19. The robot reaches point (5,6) when a sequence of 3 instr. Is executed, the first of which is GOTO(x,y) , WALKY(2), WALKY(4). What are the values of x and y??

- i. 2,4

- ii. 0,0
- iii. 3,2
- iv. 2,3

20. The robot is initially at  $(x,y)$ ,  $x > 0$  and  $y < 0$ . The min no. of Instructions needed to be executed to bring it to origin  $(0,0)$  if you are prohibited from using GOTO instr. Is:

- i. 2
- ii. 1
- iii.  $x + y$
- iv. 0

Direction for Qn 21-23

Ten coins are distr. Among 4 people P, Q, R, S such that one of them gets a coin, another gets 2 coins, 3rd gets 3 coins, and 4th gets 4 coins. It is known that Q gets more coins than P, and S gets fewer coins than R

21. If the no. of coins distr. To Q is twice the no. distr. to P then which one of the foll. is necessarily true?

- i. R gets even no. of coins
- ii. R gets odd no. of coins
- iii. S gets even no. of coins
- iv. S gets odd no. of coins

22. If R gets at least two more coins than S which one of the foll is necessarily true?

- i. Q gets at least 2 more coins than S
- ii. Q gets more coins than P
- iii. P gets more coins than S
- iv. P and Q together get at least five coins

23. If Q gets fewer coins than R, then which one of the foll. is not necessarily true?

- i. P and Q together get at least 4 coins
- ii. Q and S together get at least 4 coins
- iii. R and S together get at least 5 coins
- iv. P and R together get at least 5 coins

Direction for Qn 24-25

Elle is 3 times older than Zaheer. Zaheer is  $\frac{1}{2}$  as old as Waheeda. Yogesh is elder than Zaheer.



24. What is sufficient to estimate Elle's age?

- i. Zaheer is 10 yrs old
- ii. Yogesh and Waheeda are both older than Zaheer by the same no of yrs.
- iii. Both of the above
- iv. None of the above

25. Which one of the foll. statements can be inferred from the info above

- i. Yogesh is elder than Waheeda
- ii. Elle is older than Waheeda
- iii. Elle's age may be less than that of Waheeda
- iv. None of the above