2026 Infosys Test-2

Test Summary

* No. of Sections: 3
* No. of Questions: 42
* Total Duration: 90 min

Section 1 - VERBAL

Section Summary

* No. of Questions: 20
* Duration: 20 min

Additional Instructions:

None

Q1.

**Directions:** For each question in this section, select the best of the answer choices given.

In a London hospital, the trial of a new drug almost killed six men. The six men who were all young and healthy just months ago now suffer from serious medical problems. Ironically, the drug companies involved in the trial have refused to cover their medical expenses or provide any compensation.

It can be inferred from the passage that

The six men received a one-time payment of under $20,000 each.

Life threatening drugs can cause fatigue.

The drug-testing system seems better devised to bring drugs to the market than to ensure human safety

Drug - testing on human beings must be banned.

Q2.

**Questions: Identify the correct sentence.**

1. The City Rehabilitation Center trains the mentally challenged to take care on their own.

2. The City Rehabilitation Center trains the mentally challenged to take care of their own selves.

3. The City Rehabilitation Center trains the mentally challenged to take care of himself.

4. The City Rehabilitation Center trains the mentally challenged to take care of themselves.

4

2

3

1

Q3.

**Directions:** In each of the following sentences, some part of the sentence or the entire sentence is underlined. Beneath each sentence, you will find four ways of phrasing the underlined part is a test of correctness and effectiveness of expression. In choosing answers, follow the requirements of standard written English, that is, pay attention to grammar, choice of words, and sentence construction. Choose the answer that expresses most effectively what is presented in the original sentence, this answer should be clear and exact, without awkwardness, ambiguity or redundancy.

He has hoped that he could graduate this semester, but he couldn't finish his thesis on time.

hoped that he can graduate this semester, but he didn't

had hoped that he would graduate this semester, but he couldn't

had hoped that he graduate this semester, but he couldn't

had hoped that he will graduate this semester, but he couldn't

Q4.

**Directions: Fill in the blank with the correct option that fits in grammatically and logically.**

Since Priya has no time she has to \_\_\_\_\_\_\_\_\_ on her way.

grab a bite

take a bite

take bites

grab bites

Q5.

**Directions: For each question in this section, select the best of the answer choices given.**

﻿

Much has been made of the benefits of the oil derived from fish. It is claimed that people with a diet rich in fish oil have a greatly reduced chance of heart disease and arteriosclerosis. In addition, it has been shown that people suffering from elevated blood lipids react positively to treatment using fish oil.

Which of the following assumptions will be correct according to the paragraph above?

People who live in coastal areas never suffer from heart diseases.

Fish oil when consumed in large quantities will reduce cholesterol levels.

The benefits of fish oil have not been fully understood.

Higher level of lipids among people can, to some extent, be brought under control by addition of fish oil in their diets.

Q6.

**Directions:** In each of the following sentences, some part of the sentence or the entire sentence is underlined. Beneath each sentence, you will find four ways of phrasing the underlined part is a test of correctness and effectiveness of expression. In choosing answers, follow the requirements of standard written English, that is, pay attention to grammar, choice of words, and sentence construction. Choose the answer that expresses most effectively what is presented in the original sentence, this answer should be clear and exact, without awkwardness, ambiguity or redundancy.

Some teachers argue that students who used to use calculator may forget how to do mental calculations.

who used to use a calculator can

who are used to using a calculator may

are using a calculator will

are use to use a calculator will

Q7.

**Directions: For each question in this section, select the best of the answer choices given.**

Most of the family-owned businesses face a sobering reality. Almost 90% of family-run businesses do not survive as single entities beyond the third generation worldwide. Ambition, greed and inspiration of the new generation lead to family feuds, resulting in disintegration.

Which of the following statements weakens the argument?

The risk to the business comes from within the family generally when it migrates to the second or third generation

As in the case of Tata sons, where Ratan Tata is the chairman of the holding company while all other businesses are run by professional managers. It is possible to hold the family together

Issues run smoothly in the family and the business prospers till the patriarch is alive and is running the business.

If the ladies of the house are living together and the seed of discontentment is sown, the family environment gets spoilt.

Q8.

**Directions:** Fill in the blank with the correct option that fits in grammatically and logically.

At a given point in time, academic achievements may appear rather \_\_\_\_\_, not long afterwards, however they may take on greater practical importance.

Enticing

Enlightening

Esotenic

Exotic

Q9.

**Questions: Identify the correct sentence.**

1. If the company's productivity do not improve, lay-offs and retrenchment can be expected soon.

2. If the company's productivity is not improving, lay-offs and retrenchment can be expected soon.

3. If the company's productivity does not improve, lay-offs and retrenchment can be expected soon.

4. If the company's productivity should not improve, lay-offs and retrenchment can be expected soon.

1

2

3

4

Q10.

**Questions: Identify the correct sentence:**

1. Beside the taxi service, there isn't any public transport in town.

2. Beside the taxi service, there aren't any public transport in town.

3. Besides taxi service, there isn't any public transport in town.

4. Besides taxi service, there isn't much public transport in the town.

3

2

4

1

Q11.

**Directions:** For the question, select the best of the answer choices given.

The future of **NMVs** (non-motorized vehicles) in many Asian countries is threatened by growing motorization, loss of street space for safe **NMV** use, and changes in urban form, prompted by motorization.

Which one of the following is NOT an appropriate measure to increase the use of **NMVs**?

Restricting parts of the roads from motorized traffic

The government may levy more taxes on motorized vehicles to discourage their use.

The governments should try to implement strict pollution control measures

Bicycles must be encouraged as a safe and efficient form of transport

Q12.

**Directions:** In each of the following sentences, some part of the sentence or the entire sentence is underlined. Beneath each sentence, you will find four ways of phrasing the underlined part is a test of correctness and effectiveness of expression. In choosing answers, follow the requirements of standard written English, that is, pay attention to grammar, choice of words, and sentence construction. Choose the answer that expresses most effectively what is presented in the original sentence, this answer should be clear and exact, without awkwardness, ambiguity or redundancy.

If the cerebellum of a pigeon had destroyed, the bird would not be able to fly.

were destroyed, the bird would not be able to fly

would be destroyed, the bird could not be able to fly

was destroyed, the bird would not be able to fly

is destroyed, the bird cannot able to fly

Q13.

**Directions: Fill in the blank with the correct option that fits in grammatically and logically.**

﻿

Although it hit the sharp peak of the mountain, \_\_\_\_\_\_\_\_\_\_\_

the helicopter did not damage badly.

the helicopter was not very badly damaged.

the helicopter not very badly damaged.

the helicopter has not badly damaged.

Q14.

**Directions:** Fill in the blank with the correct option that fits in grammatically and logically.

Ozone depletion, warming up of the global atmosphere, clogging the atmosphere with all kinds of gases emitted from burning fossil fuel and \_\_\_\_\_\_\_\_ would eventually destroy every natural resource.

Depleting the top soil

To deplete the top soil

Depleting the top of the soil

Depletion of soil top

Q15.

**Directions: Fill in the blank with the correct option that fits in grammatically and logically.**

His vision is so multifaceted and so rich in meanings that to try to \_\_\_\_\_ it in a few sentences would be presumptuous.

Embellish

Encapsulate

Envisage

Integrate

Q16.

**Questions: Identify the correct sentence.**

1. Helen Keller's nurse taught her to read, write, and use a typewriter.

2. Helen Keller's nurse taught her to read, write, and typing.

3. Helen Keller's nurse taught her reading, writing, and to use a typewriter.

4. Helen Keller's nurse taught her to read, to write, and using a typewriter.

1

2

3

4

Q17.

**Directions:** Fill in the blank with the correct option that fits in grammatically and logically.

Information obtains from the internet \_\_\_\_\_\_\_\_\_\_\_\_\_ to make sure of its authenticity.

are worth being checked

were to be checked

should be checked

have been undergoing checks

Q18.

**Directions:** Fill in the blank with the correct option that fits in grammatically and logically.

The meaning of the word mysticism is \_\_\_\_\_\_\_\_

mysterious relations with god

a belief that knowledge of God can be gained by contemplation

the method of dealing in black magic and necromancy

secret communication with the spirits of the dead

Q19.

**Directions:** Fill in the blank with the correct option that fits in grammatically and logically.

\_\_\_\_\_\_\_\_\_\_\_\_\_ will be at the concert this weekend, so don't miss it.

Anybody who is somebody

Somebody who is anybody

Nobody who is somebody

Anybody who is anybody

Q20.

**Directions: Choose the correct answer for the question given below.**

Copywriting isn't easy. There are certain rules to follow, words to use and it's a talent you have to develop over time. There are books that will help you hone your copywriting skills and move toward a successful copywriting career.

As understood from the above,

To have a successful copywriting career, one must have good reading habits.

Copywriting demands certain exclusive talents not required in other professions.

Following rules of the profession is crucial in the copywriting career.

Copywriting skill is acquired by perusing certain types of reading.

Section 2 - QUANT & REASONING

Section Summary

* No. of Questions: 15
* Duration: 20 min

Additional Instructions:

None

Q1.

**Direction:** Consider the below question followed by two statements.

The circumference of circle Y is twice the circumference of circle X. What is the area of circle X?

I. The area of circle Y is 100 π r2

II. The circumference of circle Y is 20 π r

The question cannot be answered with the help of information provided

The question can be answered with the help of either of the statements

The question can be answered with the help of both the statements together

The question can be answered with the help of any one statement but not both

Q2.

Find the ratio of milk to water in a mixture that give 15 percent profit when sold at the cost price of pure milk?

3:2

20:3

23:20

20:23

Q3.

How many 1-inch square tiles would it take to cover the floor of a closet that has dimensions of 5 Feet by 4 Feet?

**(1 foot = 12inches)**

20

240

2168

2160

2880

Q4.

One litre of water is evaporated from 6 liters of a solution containing 5 percent salt. Find the percentage of salt in the remaining solution.

4 percent

6 percent

10 percent

8 percent

Q5.

Find the missing number in the given figure.

81,18

729,18

141,81

18,81

Q6.

In a family tree, B is the daughter of C, F is the son of B, A is the mother of D, E is husband of B, J is mother of H and I, H is grandson of A and C, G is brother of F. Identify the statements which are true:

B is sister of J

C is father of G

A is wife of C

D is father of I

Q7.

Find the missing number in the figure. Assume that all figures work in the same way.

32

8

40

16

Q8.

Find the missing number in the third figure. Assume that the third figure works in the same way as the other two.

145

217

277

115

Q9.

If in a code **ALTERED is written as ZOGVIVW, then in the same code, SIMULTANEOUS** would be written as

MRNFOGXLVHFM

HRNFOGZMVLFH

MFHVLXGOFNRM

HRNFIGZEVMFH

Q10.

There are some cows, hens, and goats in Baburam's farm. His 8-year old son, Vishnu, is fond of counting. One day, he counts the legs of all the animals and tells his father that the sum is 210. Next day, Baburam adds more hens and goats to his farm. The number of animals added Baburam is half the number of animals that were earlier there in the farm. With this addition, the number of cows is the same as the number of goats in the far, Now, Vishnu tells that the sum of all the animals legs is 300.

Next day, Baburam's neighbor Bhola, who has same number of cows as Baburam, sends his cows to Baburam's farm. Now, Vishnu counts and tells his father that the total number of animals in their farm is 135.

How many goats were newly added by Baburam in the farm?

15

10

5

7

Q11.

An item is sold at a certain price. The sell price (S.P) printed on this item is 40% more than its cost price (C>P). Since the customer who purchased the product was a premium category customer, he got 10% discount on the S.P. If the shopkeeper gained a profit of ₹65 after the sale of this item, what is the S.P printed on the item?

₹300/-

₹315/-

₹350/-

₹250/-

Q12.

**Direction:** In each of the question below, there are two/three statements followed by two conclusions numbered I and II. You have to take the two/three statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusion logically follows from the given statements disregarding commonly known facts.

(Choose multiple answers)

Directions for selection:

A. If conclusion I follows

B. If conclusion II follows

C. If both the conclusion do not follow

D. If both the conclusion follow

**Statements:**

No sheet is a paper

All papers are books

**Conclusions:**

I. Some papers are books

II. Some papers are not sheets

B

D

A

C

Q13.

There are 2 groups A and B in a class. A consists of six boys and five girls whereas B consists of five boys and six girls. They plan a social activity team of five boys and five girls such that five persons are selected from each of the two groups with at least two boys and two girls from each group. In how many ways can this be done?

67600.0

40000.0

22500.0

62500.0

Q14.

In a certain code language, “SONG” is coded as 110. What is “MOVIE” coded as?

128.0

252.0

360.0

126.0

Q15.

Joe's car can travel 36 miles per gallon of fuel. Approximately how many kilometers can a car travel on 10lts of fuel?

**(1 gallon = approximately 4 liters)**

135 km

140 km

144 km

150 km

Section 3 - TECHNICAL

Section Summary

* No. of Questions: 7
* Duration: 50 min

Additional Instructions:

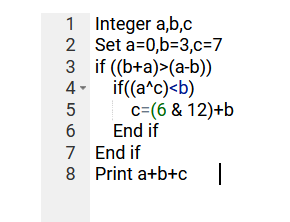
None

Q1.

What will be the output of the following pseudocode:

Note:-

* &: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.
* ^ is the bitwise exclusive OR operator that compares each bits of its first operand to the corresponding bits of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise , the corresponding result bit is set to 0.



10

18

5

17

Q2.

What will be the output of the following pseudocode:

Note:- && : Logical AND - The logical AND (&&) operator returns the Boolean value true (or 1) if both operands are true and return false (or 0) otherwise.

&: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

A screenshot of a computer

AI-generated content may be incorrect.

39

19

25

5

Q3.

What will be the output of the following pseudocode:

Note:- Continue: When a continue statement is encountered inside a loop, control jumps to the beginning of the loop for skipping the execution of statements inside the body of the loop for the current iteration.

A screenshot of a math test

AI-generated content may be incorrect.

21

9

13

24

Q4.

What will be the output of the following pseudocode:

A screenshot of a math problem

AI-generated content may be incorrect.

1 1 1 1 1

5 9 13 17 21

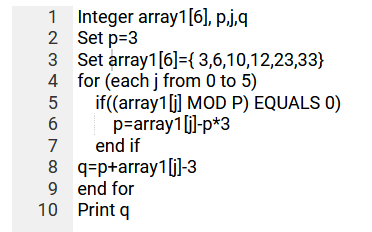
None of the mentioned options

6 8 14 18 22

Q5.

What will be the output of the following pseudocode:

[Note:- MOD finds the remainder after the division of one number by another. For example, the expression "5 MOD 2" would evaluate to 1 because 5 divided by 2 leaves a quotient of 2 and remainder of 1.]



34

44

54

64

Q6.

Take a number from the user, reverse it and add it to itself. If the sum is not a palindrome then repeat the procedure until you get a palindrome.

For example, If ***7325*** is input number, then

7325 (Input Number) + 5237 (Reverse Of Input Number) = 12562

12562 + 26521 = 39083

39083 + 38093 = 77176

77176 + 67177 = 144353

144353 + 353441 = 497794 (Palindrome)

In this particular case, we got a palindrome (497794) after the 5th addition. This method gives palindrome in few steps for almost all of the integers.

Sample Input

1221

Sample Output

Given Number is already a palindrome

1221 is a palindrome

Sample Input

1421

Sample Output

1421 + 1241 = 2662

2662 is a palindrome

Sample Input

7325

Sample Output

7325 + 5237 = 12562

12562 + 26521 = 39083

39083 + 38093 = 77176

77176 + 67177 = 144353

144353 + 353441 = 497794

497794 is a palindrome

Q7.

Consider a long alley with an N number of doors on one side. All the doors are closed initially. You move to and fro in the alley changing the states of the doors as follows:

you open a door that is already closed and you close a door that is already opened. You start at one end go on altering the state of

the doors till you reach the other end and then you come back and start altering the states of the doors again.

In the first go, you alter the states of doors numbered 1, 2, 3, ..., n.

In the second go, you alter the states of doors numbered 2, 4, 6 ...

In the third go, you alter the states of doors numbered 3, 6, 9 ...

You continue this till the Nth go in which you alter the state of the door

numbered N.

You have to find the number of open doors at the end of the procedure

Example for 7 as input here is the way the open doors are calculated

Answer is 2

A table with numbers and symbols

AI-generated content may be incorrect.

Input Format

The first line of input contains a single integer T denoting the number of test

cases. Then T test cases follow. Each test case consists of one line. The line

consists of a positive integer N.

Output Format

Corresponding to each test case, in a new line, print the number of doors

that will be open at the end of the procedure mentioned above.

Constraints

1 ≤ T ≤ 100

1 ≤ N ≤ 1012

Sample Input

5

372

2

100

235

567

Sample Output

19

1

10

15

23

Sample Input

1

-5

Sample Output

Invalid

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Answer Key & Solution

Section 1 - VERBAL

Q1

The drug-testing system seems better devised to bring drugs to the market than to ensure human safety

Solution

No Solution

Q2

3

Solution

No Solution

Q3

had hoped that he would graduate this semester, but he couldn't

Solution

No Solution

Q4

grab a bite

Solution

"A bite" refers to food. 'grab a bite means' to get something to eat. This is pretty literal so it is simply saying to get something to eat.

Q5

The benefits of fish oil have not been fully understood.

Solution

No Solution

Q6

who are used to using a calculator may

Solution

No Solution

Q7

As in the case of Tata sons, where Ratan Tata is the chairman of the holding company while all other businesses are run by professional managers. It is possible to hold the family together

Solution

The passage supports the fact that family-owned business is getting spoiled by various factors. Whereas in case of Tata group, the case is different.

Hence the answer is "As in the case of Tata sons, where Ratan Tata is the chairman of the holding company while all other businesses are run by professional managers. It is possible to hold the family together"

Q8

Esotenic

Solution

Enticing and Exotic are irrelevant. Hence, eliminated.

Enlightening means to give somebody information so that he/she understands something better.

Esotenic means intended for or likely to be understood by only a small number of people with specialized knowledge or interest.

Hence, the answer is "esotenic"

Q9

3

Solution

Answer - If the company's productivity does not improve, lay-offs and retrenchment can be expected soon.

Q10

3

Solution

Besides means **in addition to**. Hence, sentences 1 and 2 are eliminated.

'in town' is the correct usage.

Hence, sentence 3 is the right answer.

Q11

The governments should try to implement strict pollution control measures

Solution

No Solution

Q12

was destroyed, the bird would not be able to fly

Solution

No Solution

Q13

the helicopter was not very badly damaged.

Solution

No Solution

Q14

Depleting the top soil

Solution

Answer - Depleting the top soil

To maintain parallelism, gerund form of the verb is used. Hence, depleting should be used.

Q15

Encapsulate

Solution

No Solution

Q16

1

Solution

Answer - 1. Helen Keller's nurse taught her to read, write, and use a typewriter.

Reason - Parallelism

Q17

should be checked

Solution

No Solution

Q18

a belief that knowledge of God can be gained by contemplation

Solution

Answer - a belief that knowledge of God can be gained by contemplation

Q19

Anybody who is anybody

Solution

*anybody who is anybody* to refer to people who are important or influential.

Answer - Anybody who is anybody

Q20

To have a successful copywriting career, one must have good reading habits.

Solution

No Solution

Section 2 - QUANT & REASONING

Q1

The question cannot be answered with the help of information provided

Solution

WKT, Perimeter of Circle X = 2 (Perimeter of Circle Y)

Using statement I alone: We can find the value of the radius of x in terms of r. i.e., rx = 200r2

Using statement II alone : Similar to Ist statement, here, the radius of x in terms of r can be found. i.e., rx = 20r

Hence, combining both, we can find the value of r

Q2

20:23

Solution

Let say milk = M Ltr

& water = W Ltr

Mixture = M + W ltr

Assuming cost of Water = 0 Rs.

Cost per Liter of Milk = C Rs

Selling Price of Mixture per litre = C Rs

Cost Price = MC + W\*0 = MC Rs

Selling Price = (M + W) C = MC + WC Rs

Profit = MC + WC - MC = WC Rs

15% profit = (15/100)MC

=> (15/100)MC = WC

=> (3/20)M = W

=> M/W = 20/3

**ratio of milk to water in a mixture = 20 : 3**

Q3

2880

Solution

WKT, area of the floor = area of square

Also, 1 ft = 12 inches, hence by converting ft to inches we have,

Area of square tile = 5ft \* 4 ft = 60 inch \* 48 inch = 2880 sq inch

2880 sq inch/1 sq inch = 2880 tiles

Q4

6 percent

Solution

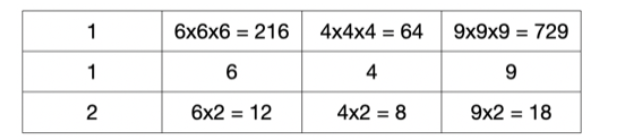
Salt in 6 litres = 5% of 6 litre = (5/100) \* 6 = 0.3 litres.

Salt in new solution = (0.3 / 5) \* 100 = 6%

Q5

729,18

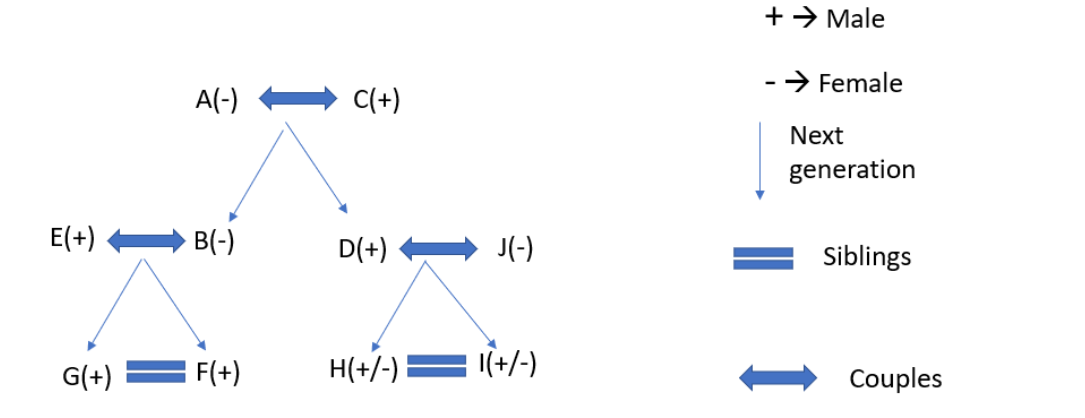
Solution



Q6

D is father of I

Solution



Hence, D is the father of I follows.

Q7

8

Solution

A white rectangular object with black numbers

AI-generated content may be incorrect.

Q8

277

Solution

A white rectangular box with black numbers

AI-generated content may be incorrect.

Q9

MRNFOGXLVHFM

Solution

The pattern for the given code is :

Each of the letters of the word ALTERED is replaced by the letter which occupies the same position in the reverse alphabetical order to obtain the code ZOGVIVW.

Hence, SIMULTANEOUS is coded as :

S ---> H (19th letter from reverse order)

I ---> R (9th letter from reverse order)

M ---> N (13th letter from reverse order)

U ---> F (21st letter from reverse order)

L ---> O (12th letter from reverse order)

.

.

.

S ---> H (19th letter from reverse order)

Hence, HRNFOGZMVLFH is the answer.

Q10

15

Solution

Let us assume that, initially their were **C**cows, **H**hens and **G**goats in Baburam's farm.

we know that, a cow and a goat has total **4**legs and a hen as **2**legs.

**So,**

→ First day total legs = 4C + 4G + 2H = 210 ---- (1)

**Now,**baburam adds more hens and goats equals to half the number of animals earlier .

**So,**

**→**G1 + H1 = (C + H + G)/2

→ 2G1 + 2H1 = C + H + G ------- (2)

**Also**,

→ Number of cows = Number of goats now,

→ C = G + G1 . -------- (3)

Then,

→ sum of all legs now = 300

→ 4C + 4(G + G1) + 2(H + H1) = 300

→ 4C + 4G + 2H + 4G1 + 2H1 = 300

→ (4C + 4G + 2H) + 2G1 + (2G1 + 2H1) = 300

Putting value of **(1) and (2)**

**→**210 + C + H + G + 2G1 = 300

→ C + H + G + 2G1 = 300 - 210

→ C + H + G + 2G1 = 90

Putting value of **G1**from **(3) now,**

**→**C + H + G + 2(C - G) = 90

→ C + H + G + 2C - 2G = 90

→ 3C + H - G = **90** ------- (4)

**Now,**his neighbour send equal number of cows and now their are total 135 animals.

**So,**

**→**2C + (G + G1) + (H + H1) = 135

→ 2C + G + H + (G1 + H1) = 135

→ 2C + G + H + (C + G + H/2) = 135

→ 4C + 2G + 2H + C + G + H = 135\*2

→ 6C + 3G + 3H = 270

**→**3C + (3C + 3G + 3H) = 270

→ 3C + 3(C + G + H) = 270

→ 3(C + G + H) = 270 - 3C

→ 3(C + G + H) = 3(90 - C)

→ (C + G + H) = (90 - C)-------- (5)

Adding **(1) and (4)**

→ 4C + 3C + 4G - G + 2H + H = 210 + 90

→ 7C + 3G + 3H = 300

→ 4C + (3C + 3G + 3H) = 300

→ 4C + 3(C + G + H) = 300

**Putting value of (5)**

**→**4C + 3(90 - C) = 300

→ 4C - 3C + 270 = 300

→ C = 300 - 270

→ **C = 30 .**

**Putting value of C in Eqn.(5) now,**

**→**C + G + H = 90 - C

→ 30 + G + H = 90 - 30

→ G + H = **30.**

**Also, when we put value of C in Eqn.(4),**

**→**3C + H - G = 90

→ H - G = 90 - 90

→ **H = G .**

**Therefore,**

**→**G + H = 30

→ H = G

**we can conclude that,**

**→ H = G = 15.**

**Hence, Putting value of C and G in Eqn.(3) now, we get,**

**→**C = G + G1

→ G1 = 30 - 15

→ **G1 = 15.**

Q11

₹250/-

Solution

The shopkeeper has increased 40% from the original cost price and then gave a discount of 10% from the marked price.

Here, successive percentage change has happened.

So, net % change = [(+40) + (-10)] + (40 \* (-10) / 100) = 26%

The profit gained in terms of % is 26 and in terms of rupees is 65

---> 26% of C.P = Rs. 65

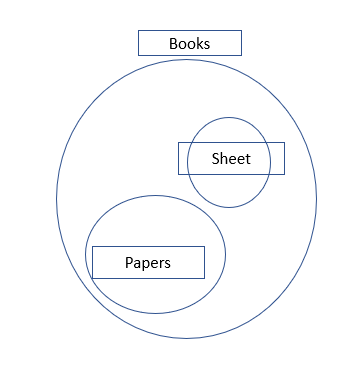
---> 100% of C.P = Rs. 250

Q12

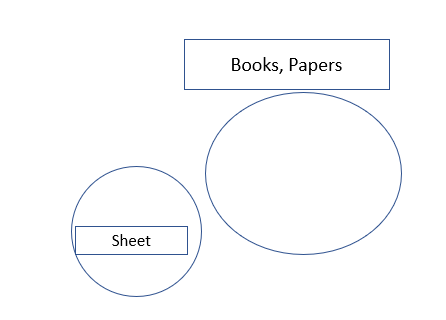
D

Solution

Min possibility :



Maximum possibility :



Hence, as per the venn diagram, both the conclusion follows.

Q13

62500.0

Solution

As per question, we have

GA - 6 Boys , 5 Girls

GB - 5 Boys , 6 Girls

5 Boys & 5 Girls to be selected

5 persons are selected from each of the two groups with atleast 2 boys and 2 Girls from each group

There are two possibilities

3 boys and 2 Girls from GA & 2 boys and 3 Girls from GB

or

2 boys and 3 Girls from GA & 3 boys and 3 Girls from GB

3 boys and 2 Girls from  GA = ⁶C₃.⁵C₂ = 200

2 boys and 3 Girls from  GB = ⁵C₂.⁶C₃ = 200

200 x 200 = 40000

2 boys and 3 Girls from  GA = ⁶C₂.⁵C₃ = 150

3 boys and 2 Girls from  GB = ⁵C₃.⁶C₂ = 150

150 x 150 = 22500

Total Ways = 40000 + 22500 = 62500

Q14

128.0

Solution

The pattern for the question is :

Adding the respective alphanumeric number of the letters of the word SONG and multiplying the result by 2.

i.e., 19 + 15 + 14 + 7 = 55 \* 2 = 110

Hence, MOVIE is coded as :

13 + 15 + 22 + 9 + 5 = 64 \* 2 = 128

Q15

144 km

Solution

Converting the mileage from mpg to km/L, we have:

36 mi/gal x (8 km / 5 mi) x (1 gal / 4 L) = (36 x 2) km / 5 L = 72 km / 5 L = 14.4 km/L

Therefore, the number of kilometers the car can travel on 10 liters of fuel is 14.4 km/L x 10 L = 144 km.

Section 3 - TECHNICAL

Q1

10

Solution

If condition is not met, so there will be no change in the value (i.e) 0+3+7 => 10.

Q2

19

Solution

Initially a=2,b=2,c=15, if condition gets failed so no changes in the values. 2+2+15 =>19.

Q3

13

Solution

Initially a=0,b=3,c=5. Inside for loop b value updated as b=11 when c=4, b=12 when c=5 and b=13 when c=6. Then a+b=0+13=>13.

Q4

5 9 13 17 21

Solution

Given code added two array values and store in c. Value in array a and b (same index values) are added and stored in array c.

So output is 5 9 13 17 21.

Q5

54

Solution

When j=0, p value updated to -6 and when j=1, p value updated to 24. Then after execution of for loop array1[j] is updated with last value(33).

So, q= 24+33-3 => 54.

Q6.

import java.util.Scanner;

class ReverseAddPalindrome

{

//Method To Reverse A Number

static int reverseNumber(int number)

{

int reverse = 0;

int rem = 0;

while (number != 0)

{

rem = number % 10;

reverse = (reverse\*10) + rem;

number = number/10;

}

return reverse;

}

//Method To Check For Palindrome

static boolean checkPalindrome(int number)

{

int reverse = reverseNumber(number);

if(reverse == number)

{

return true;

}

else

{

return false;

}

}

//Method To Reverse And Add Given Number Until You Get A Palindrome

static void reverseAndAdd(int number)

{

if(checkPalindrome(number))

{

System.out.println("Given Number is already a palindrome");

}

else

{

while (!checkPalindrome(number))

{

int reverse = reverseNumber(number);

int sum = number + reverse;

System.out.println(number+" + "+reverse+" = "+sum);

number = sum;

}

}

System.out.println(number+" is a palindrome");

}

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

int inputNumber = sc.nextInt();

reverseAndAdd(inputNumber);

}

}

Q7.

import java.util.\*;

import java.lang.Math;

class Main

{

public static void main(String[] args) {

Scanner in=new Scanner(System.in);

int t=Integer.parseInt(in.nextLine());

while(t!=0){

int n=Integer.parseInt(in.nextLine());

if(n<0)

System.out.println("Invalid");

else

System.out.println((int)Math.sqrt(n));

t--;

}

}

}

OR

from math import sqrt

T=int(input())

for t in range(T):

doors=int(input())

moves=sqrt(doors)

print(int(moves))