PCS Test 1

1

Pointing to a photograph Anjali said, "He is the son of the only son of my grandfather." How is the man in the photograph related to Anjali?

( ) Brother
( ) Son
( ) Uncle
( ) Data is inadequate

Explanation: The man in the photograph is son of Anjali's grandfather's son i.e., the son of Anjali's father. Hence, the boy is the brother of Anjali

2

Pointing to a person, Deepak said, "His only brother is the father of my daughter's father". How is the person related to Deepak?

( ) Father
( ) Grandfather
( ) Uncle
( ) Brother-in-law

Explanation: Father of Deepak's   daughter's   father → Deepak's father.

Hence, the person   In the brother of Deepak's father. Therefore, the person is the uncle of Deepak.

3

P is the mother of K; K is the sister of D; who is the father of J. How is P related to J?

( ) Mother
( ) Grandmother
( ) Data inadequate
( ) Aunt

Explanation: P is the mother of K

K is the sister of D D is the father of J. Therefore, J is the nephew or niece of K and P is the grandmother of J.

4

If P $ Q means P is the father of Q; P # Q means P is the mother of Q and P * Q means P is the sister of Q, then N # L $ P * Q shows which of the relation of Q to N?

( ) Grand son
( ) Grand daughter
( ) Nephew
( ) Data is inadequate

Explanation: As the sex of Q is not known, hence, data is inadequate

5

If A $ B means A is the brother of B; A @ B means A is the wife of B; A # B means A is the daughter of B and A * B means A is the father of B, which of the following indicates that U is the father-in-law of P?

( ) P @ Q $ T # U * W
( ) P @ W $ Q * T # U
( ) P @ Q $ W * T # U
( ) P @ Q $ T # W * U

Explanation: P @ Q → P is the wife of Q ...(1)

Q $ T → Q is the brother of T ...(2) T # U → T is the daughter of U Hence, → Q is the son of U ...(3) U * W → U is the father of W. From (1) and (3), U is the father-in-law of P.

6

Pointing to a boy in the photograph Reena said, "He is the only son of the only child of my grandfather." How Reena is related to that boy?

( ) Mother
( ) Sister
( ) Aunt
( ) Cannot be determined

Explanation: The boy in the photograph is the only son of Reena's grandfather's only son; i.e., the boy is the only son of Reena's father.

Hence, the boy is the brother of Reena or Reena is the sister of the boy.

7

A $ B means A is the father of B; A # B means A is the sister of B; A * B means A is the daughter of B and A @ B means A is the brother of B. Which of the following indicates that M is the wife of Q?

( ) Q $ R # T @ M

( ) Q $ R @ T # M

( ) Q $ R * T # M

( ) Q $ R @ T * M

Explanation: Q $ R → Q is the father of R

R @ T → R is the brother of T Hence, → Q is the father of T T * M → T is the daughter of M Hence, → M is the mother of T Hence, M is the wife of Q.

8

The following table gives the percentage of marks obtained by seven students in six different subjects in an examination.
The Numbers in the Brackets give the Maximum Marks in Each

Student	Maths (150)	Chemistry (130)	Physics (120)	Geography (100)	History (60)	Computer Science (40)
Ayush	90	50	90	60	70	80
Aman	100	80	80	40	80	70
Sajal	90	60	70	70	90	70
Rohit	80	65	80	80	60	60
Muskan	80	65	85	95	50	90
Tanvi	70	75	65	85	40	60
Tarun	65	35	50	77	80	80

Subject.

What are the average marks obtained by all the seven students in Physics? (rounded off to two digit after decimal)

( ) A. 77.26

( ) B. 89.14

( ) C, 91.37

( ) D. 96.11

Explanation: Average marks obtained in Physics by all the seven students

$= \frac{1}{7} \times [(90\% \text{ of } 120) + (80\% \text{ of } 120) + (70\% \text{ of } 120)$

+ (80% of 120) + (85% of 120) + (65% of 120) + (50% of 120)]
=(1/7)x [(90 + 80 + 70 + 80 + 85 + 65 + 50)% of 120]
=(1/7)*[520%Of 120]
=624/7
= 89.14.

9

What was the aggregate of marks obtained by Sajal in all the six subjects?

( ) A. 409
( ) B. 419
( ) C. 429
( ) D. 449

Explanation: Aggregate marks obtained by Sajal

= [(90% of 150) + (60% of 130) + (70% of 120)   + (70% of 100) + (90% of 60) + (70% of 40)]   = [135 + 78 + 84 + 70 + 54 + 28]   = 449.

10

In which subject is the overall percentage the best?

( ) A. Maths
( ) B. Chemistry
( ) C. Physics
( ) D. History

Explanation: The overall percentage for any subject is equal to the average of percentages obtained by all the seven students since the maximum marks for any subject is the same for all the students.

Therefore, overall percentage for:

(i) Maths $=[\frac{1}{7}$x (90 + 100 + 90 + 80 + 80 + 70 + 65)]%

                $=[\frac{1}{7}$x (575)]   %

                = 82.14%.

(ii) Chemistry $=[\frac{1}{7}$x (50 + 80 + 60 + 65 + 65 + 75 + 35)]%

                $=[\frac{1}{7}$x (430)]%

                = 61.43%.

(iii) Physics $=[\frac{1}{7}$x (90 + 80 + 70 + 80 + 85 + 65 + 50)]%

                $=[1$x (520)]%

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$= 74.29\%$.

(iv) Geography $=[\frac{1}{7}\text{x} (60 + 40 + 70 + 80 + 95 + 85 + 77)]\%$

$=[\frac{1}{7}\text{x} (507)]\%$

$= 72.43\%$.

(v) History $=[\frac{1}{7}\text{x} (70 + 80 + 90 + 60 + 50 + 40 + 80)]\%$

$=[\frac{1}{7}\text{x} (470)]\%$

$= 67.14\%$.

(vi) Comp. Science$=[\frac{1}{7}\text{x} (80 + 70 + 70 + 60 + 90 + 60 + 80)]\%$

$=[\frac{1}{7}\text{x} (510)]\%$

$= 72.86\%$.

Clearly, this percentage is highest for Maths.

11

What is the overall percentage of Tarum?

( ) A. 52.5%

( ) B. 55%

( ) C. 60%

( ) D. 63%

Explanation:

Aggregate marks obtained by Tarun

= [(65% of 150) + (35% of 130) + (50% of 120) + ((77% of 100) + (80% of 60) + (80% of 40)] = [97.5 + 45.5 + 60 + 77 + 48 + 32] = 360. The maximum marks (of all the six subjects) = (150 + 130 + 120 + 100 + 60 + 40) = 600.

Overall percentage of Tarun = $[\frac{360}{600}\text{x} 100]\% = 60\%$.

12

Read the question carefully and choose the correct answer Four defensive football players are chasing the opposing wide receiver, who has the ball. Calvin is directly behind the ball carrier. Jenkins and Burton are side by side behind Calvin. Zeller is behind Jenkins and Burton. Calvin tries for the tackle but misses and falls. Burton trips. Which defensive player tackles the receiver?

( )A. Burton
( )B. Zeller
( )C. Jenkins
( )D. Calvin

Explanation:

After all the switching was done, Jenkins was directly behind the receiver. Calvin and Burton had fallen. Zeller remained in the rear.

13

A four-person crew from Classic Colors is painting Mr. Field's house. Michael is painting the front of the house. Ross is in the alley behind the house painting the back. Jed is painting the window frames on the north side, Shawn is on the south. If Michael switches places with Jed, and Jed then switches places with Shawn, where is Shawn?

( )A. in the alley behind the house
( )B. on the north side of the house
( )C. in front of the house
( )D. on the south side of the house

Explanation:

After all the switches were made, Shawn is in front of the house. Ross is in the alley behind the house,Michael is on the north side, and Jed is on the south.

14

In a four-day period Monday through Thursday each of the following temporary office workers worked only one day, each a different day. Ms. Johnson was scheduled to work on Monday, but she traded with Mr. Carter, who was originally scheduled to work on Wednesday. Ms. Falk traded with Mr. Kirk, who was originally scheduled to work on Thursday. After all the switching was done, who worked on Tuesday?

( )A. Mr. Carter
( )B. Ms. Falk
( )C. Ms. Johnson
( )D. Mr. Kirk

Explanation:
After all the switches were made, Mr. Kirk worked on Tuesday. Mr. Carter worked on Monday,Ms. Johnson on Wednesday, and Ms. Falk on Thursday.

15

Four people witnessed a mugging. Each gave a different description of the mugger. Which description is probably right?

( ) A. He was average height, thin, and middle-aged.

( ) B. He was tall, thin, and middle-aged.

( ) B. He was tall, middle-aged.

( ) D. He was tall, of average weight, and middle-aged.

Explanation: Tall, thin, and middle-aged are the elements of the description repeated most often and are therefore the most likely to be accurate.

16

Ms. Forest likes to let her students choose who their partners will be; however, no pair of students may work together more than seven class periods in a row. Adam and Baxter have studied together seven class periods in a row. Carter and Dennis have worked together three class periods in a row. Carter does not want to work with Adam. Who should be assigned to work with Baxter?

( ) A. Carter

( ) B. Adam

( ) C. Dennis

( ) D. Forest

Explanation:

Baxter should be assigned to study with Carter. Baxter cannot be assigned with Adam, because they have already been together for seven class periods. If Baxter is assigned to work with Dennis, that would leave Adam with Carter, but Carter does not want to work with Adam.

17

Read the information given below and answer the questions that follow:

(1) There is a group of five girls. (2) Kamini is second in height but younger than Rupa. (3) Pooja is taller than Monika but younger in age. (4) Rupa and Monika are of the same age but Rupa is tallest between them. (5) Neelam is taller than Pooja and elder to Rupa.
If they are arranged in the ascending order of heights, who will be in the third position?

( ) A. Monika

( ) B. Rupa

( ) C. Monika or Rupa

( ) D. Date Inadequate

( ) E. None of these

Explanation: We first find the sequence of heights
by (3) we have : M < P by (5) we have : P < N Now, Rupa is tallest and kamini is second in height. So the sequence of heights is : M < P < N < K < R. Now, we determine the age sequence by (2) we have : K < R. by (3) we have : P < M. by (4) we have : R = M. by (5) we have : R < N. So the sequence of ages is:N < R = M < K < P or N < R = M < P < K.   in the increasing order of heights, Neelam is in third position.

18

If they are arranged in a the descending order of their ages, who will be in the fourth position?

( ) A. Monika or Rupa
( ) B. Kamini or Monika
( ) C. Pooja
( ) D. Data Inadequate
( ) E.None of these

Explanation: in the descending order of ages,   Neelam will be in fourth position (because Monika and Rupa both lie at third position

19

To answer the question "who is the youngest person in the group", which of the given statements is superfluous?

( ) A. Only (1)
( ) B.Only (2)
( ) C.Only (5)
( ) D. either (1) or (4)
( ) E.None

Explanation:
Only statement (1) is not necessary

20

Read the following information carefully and answer the questions given below it:

(A)Gopal is shorter than Ashok but taller than Kunal.
(B)Navin is shorter than Kunal.
(C)Jayesh is taller than Navin.
(D)Ashok is taller than Jayesh.

Who among them is the tallest?

( ) A. Gopal
( ) B. Ashok
( ) C. Kunal
( ) D. Navin
( ) E.Jayesh

Explanation:
In terms of height we have : Gopal < Ashok, Kunal < Gopal, Navin <

Kunal,Navin < Jayesh, Jayesh < Ashok. So, the sequence becomes: Navin < Kunal < Gopal < Jayesh < Ashok. Clearly, Ashok is tallest.

21

Which of the given information is not necessary to answer the above question?

( ) A. A
( ) B. B
( ) C. C
( ) D. D
( ) E. None of these

Explanation: Clearly, statement C is notnecessary.

22

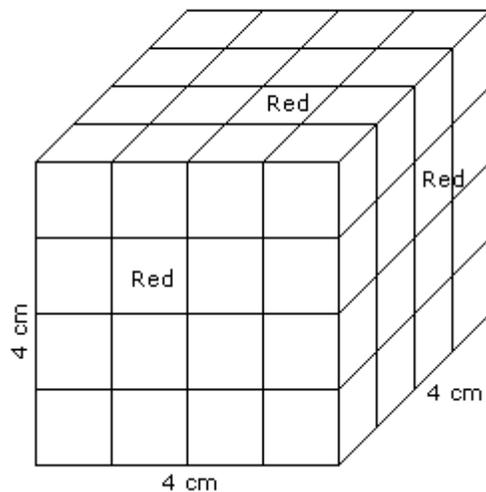The following questions are based on the information given below:

1.All the faces of cubes are painted with red colour. 2.The cubes is cut into 64 equal small cubes.

How many small cubes have only one face coloured ?
( ) 4
( ) 8
( ) 16
( ) 24

There are 64 small cubes.

Hence one side of the big cube $= \sqrt[3]{64} = 4\,cm.$

Explanation:

Number of small cubes having only one face coloured = $(x - 2)^2$ x No. of faces

= $(4 - 2)^2$ x 6 = 24

23

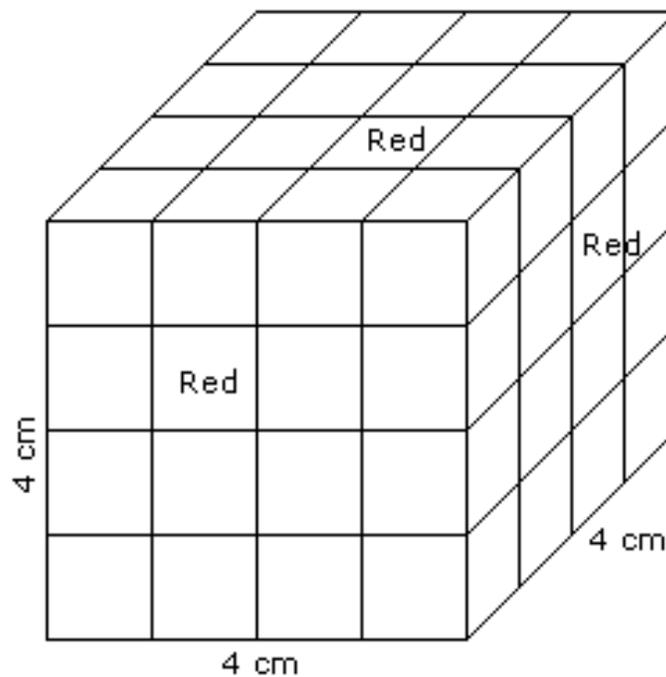How many small cubes have no faces coloured ?

( ) 24

( ) 8

( ) 16

( ) 0

There are 64 small cubes.

Hence one side of the big cube $= \sqrt[3]{64} = 4\,cm$.

Explanation:

Number of small cubes having only one faces coloured = $(x - 2)^3$

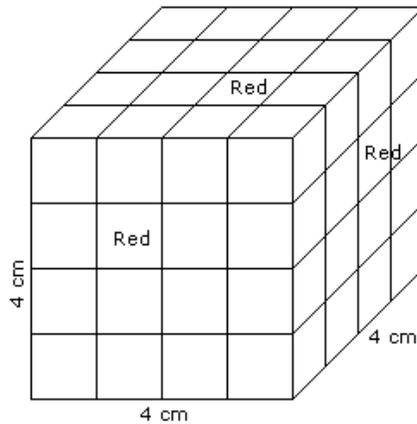Here, x = side of big cube / side of small cube x = 4 /1 x = 4 Required number = $(4 - 2)^3 = 8$

24

How many small cubes are there whose three faces are coloured ?

( ) 4
( ) 8
( ) 16
( ) 24

There are 64 small cubes.

Hence one side of the big cube $= \sqrt[3]{64} = 4\,cm.$

Explanation:

Number of small cubes having three faces coloured = No. of corners = 8

25

CMM, EOO, GQQ, _____, KUU

( ) A. GRR
( ) B. GSS
( ) C. ISS
( ) D. ITT

Explanation: The first letters are in alphabetical order with a letter skipped in between each segment: C, E, G, I, K. The second and third letters are repeated; they are also in order with a skipped letter: M, O, Q, S, U.

26

Look carefully at the sequence of symbols to find the pattern. Select correct pattern.

$$\uparrow \nearrow \rightarrow \searrow \downarrow \swarrow \ ?$$

$$\nwarrow \qquad \leftarrow \qquad \uparrow \qquad \leftrightarrow$$

(1)　　　(2)　　　(3)　　　(4)
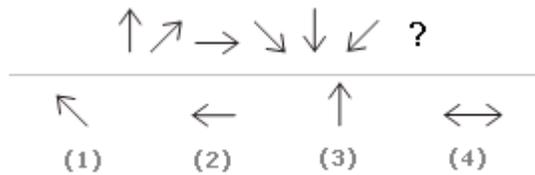
( ) A. 1
( ) B. 2
( ) C. 3
( ) D. 4

Explanation:
Each arrow in this continuing series moves a few degrees in a clockwise direction. Think of these arrows as the big hand on a clock. The first arrow is at noon. The last arrow before the blank would be 12:40. Choice b, the correct answer, is at 12:45.

27

B_2CD, _____, BCD_4, B_5CD, BC_6D

( ) A. B2C2D
( ) B. BC3D
( ) C. B2C3D
( ) D. BCD7

Explanation:
Because the letters are the same, concentrate on the number series, which is a simple 2, 3, 4, 5, 6 series, and follows each letter in order.

28

Look carefully for the pattern, and then choose which pair of numbers comes next.

8 11 21 15 18 21 22

( ) A. 25 18
( ) B. 25 21
( ) C. 25 29
( ) D. 24 21

Explanation:
This is an alternating addition series, with a random number, 21, interpolated as every third number. The addition series alternates between adding 3 and adding 4. The number 21 appears after each number arrived at by adding 3.

29

Look carefully for the pattern, and then choose which pair of numbers comes next.

16 26 56 36 46 68 56

( ) A. 80 66
( ) B. 64 82
( ) C. 66 80
( ) D. 78 68

Explanation:
Here, every third number follows a different pattern from the main series. In the main series, beginning with 16, 10 is added to each number to arrive at the next. In the alternating series, beginning with 56, 12 is added to each number to arrive at the next.

30

The tea-estate administration is <u>in such mess there </u>is no leader to set the things right.

( ) A. in such a mess here
( ) B. in a such mess that here
( ) C. in such a mess that there
( ) D. with such a mess that there

31

They examined both the samples very carefully but failed to detect <u>any difference in</u>

them.

( ) A. some difference in
( ) B. some difference between
( ) C. any difference between
( ) D. any difference among

32

"Friends and comrades, the light has gone <u>away from </u>our lives and there is darkness everywhere"

( ) A. off
( ) B. out of
( ) C. out from
( ) D. out off

33

Because of his ill health, the doctor has advised him <u>not to refrain from</u> smoking.

( ) A. to not refrain from
( ) B. to resort to
( ) C. to refrain from
( ) D. to be refrained from

34

They have a scheme of rewarding <u>the best of the performers</u> every year.

( ) A. a best performer
( ) B. the best among the performer
( ) C. a best among performer
( ) D. No correction required

35

Read the following passage and answer the questions given below:

A stout old lady was walking with her basket down the middle of a street in Petrograd to the great confusion of the traffic and with no   small peril to herself. It was pointed out to her that the   pavement was the place for pedestrians, but she replied: 'I'm going   to walk where I like. We've got liberty now.' It did not occur   to the dear old lady that if liberty entitled the pedestrian to   walk down the middle of the road, then the end of such liberty would be universal chaos. Everybody would be getting in everybody else's way and nobody would get anywhere. Individual liberty would have become social anarchy .There is a danger of the world getting liberty-drunk in these days like the old lady with the basket, and it is just as well to remind ourselves of what the rule of the road means. It means that in order that the liberties of all may be preserved, the liberties of everybody must be curtailed. When the policeman, say, at Piccadilly Circus steps into the middle of the road and puts out his hand, he is the symbol not of tyranny, but of liberty. You may not think so. You may, being in a hurry, and seeing your car pulled up by this insolence of office, feel that your liberty has been outraged. How dare this fellow interfere with your free use of the public highway? Then, if you are a reasonable person, you will reflect that if he did not interfere with you, he would interfere with no one, and the result would be that Piccadilly Circus would be a maelstrom that you would never cross at all. You have submitted to a curtailment of private liberty   in order that you may enjoy a social order which makes your liberty a reality. Liberty is not a personal affair only, but a social contract. It is an accommodation of interests. In matters which do not touch anybody else's liberty, of course, I may be as free as I like. If I choose to go down the road in a dressing-gown who shall say me nay? You have liberty to laugh at me, but I have liberty to be indifferent to you. And if I have a fancy for dyeing my hair, or waxing my moustache (which heaven forbid), or wearing an overcoat and sandals, or going to bed late or getting up early, I shall follow my fancy and ask no man's permission. I shall not inquire of you whether I may eat mustard with my mutton. And you will not ask me whether you may follow this religion or that, whether you may prefer Ella Wheeler Wilcox to   Wordsworth, or champagne to shandy. In all these and a thousand other details you and I please ourselves and ask no one's leave. We have a whole kingdom in which we rule alone, can do what we choose, be wise or ridiculous, harsh or easy, conventional or odd. But directly we step out of that kingdom, our personal liberty of action becomes qualified by other people's liberty. I might like to practice on the   trombone from midnight till three in the morning. If I went on to the top of Everest to do it, I could please myself, but if I do it in my bedroom my family will object, and if I do it out in the streets the neighbors will remind me that my liberty to blow the trombone must not interfere with their liberty to sleep in quiet. There are a lot of people in the world, and I have to accommodate my liberty to their liberties .We are all liable to forget this, and unfortunately we are much more conscious of the imperfections of others in this respect than of our own. A reasonable consideration for the rights or feelings of others is the foundation of social conduct. It is in the small matters of conduct, in the observance of the rule of the road, that we pass judgment upon ourselves, and   declare that we are civilized or uncivilized. The great moments of heroism and sacrifice are rare. It is the little habits of commonplace intercourse that make up the great sum of life and sweeten or make bitter the journey.

The author might have stated his 'rule of the road' as

( ) A. do not walk in the middle of the road
( ) B. follow the orders of policemen

( ) C. do not behave inconsiderately in public

( ) D. do what you like in private

36

The author's attitude to the old lady in paragraph one is

( ) A. condescending

( ) B. intoleran

( ) C. objective

( ) D. sardonic

37

The sentence 'It means....curtailed' is an example of

( ) A. hyperbole

( ) B. cliché

( ) C. simile

( ) D. paradox

38

The author assumes that he may be as free as he likes in

( ) A. all matters of dress and food

( ) B. any situation which does not interfere with the liberty

( ) C. anything that is not against the law

( ) D. his own home

39

situation analogous to the 'insolence of office' described in paragraph 2 would be

( ) A. a teacher correcting grammar errors

( ) B. an editor shortening the text of an article

( ) C. a tax inspector demanding to see someone's accounts

( ) D. an army office giving orders to a soldier

40

DEF, DEF_2, DE_2F_2, _____, $D_2E_2F_3$

( ) A. DEF3

( ) B. D3EF3

( ) C. D2E3F

( ) D. D2E2F2

Explanation: In this series, the letters remain the same: DEF.

The subscript numbers follow this series: 111, 112, 122, 222, 223, 233, 333, ...