Directions of Test

Test Name	Bull Placement Goldman Sachs 01	Total Questions	37	Total Time	135 Mins

Section Name	No. of Questions	Time limit	Marks per Question	Negative Marking
Aptitude	25	0:45(h:m)	1	0
Technical	10	0:30(h:m)	1	0
Coding	2	1:0(h:m)	1	0

Section : Aptitude

QNo:- 1 ,Correct Answer:- *B*

Explanation:-
Option 2 is correct because the passage states that a votary of truth has to often grope in the dark which means he is not able to get a clear picture of what his duty is.
Option 1 is incorrect because according to the passage one has to incessantly try for freeing oneself from the clutches of himsa, hence complete liberation of himsa is not possible.
Option 3 is incorrect because a votary can participate in war if he has no other option and not because he wants to improve his status.
Option 4 is incorrect as there is no mention of might in the passage.

QNo:- 2 ,Correct Answer:- *C*

Explanation:-
The passage states that duty of a votary of Ahimsa is to stop the war.
However if the votary is not qualified enough to do this or has no power to do resist this, he may take part in the war, but it should be for the greater good - to free himself, his nation and the world from war.

The passage states that Gandhiji had hoped the participation would improve the status and not that it improves the status. Hence option B is incorrect.
Ahimsa means non-violence and hence supporting any party in a war is definitely not customary. Hence option A is incorrect.
Option D is incorrect because Gandhiji does not think this approach is the best but that if no other stand or option is possible, then supporting a combatant in war is acceptable

QNo:- 3 ,Correct Answer:- *C*

Explanation:-
Option 3 is a noble profession – for the doctor has to cure, no matter what the background of the patient.
Option 4 is guilty of dacoity, no matter what the reason for getting into dacoity were.
Option 1 and 2 can be ruled out because in both the cases, there is a willingness and support for the dacoits.

QNo:- 4 ,Correct Answer:- *C*

Explanation:- *'The supercooled environment is necessary to maintain coherent quantum activity of superposition and entanglement.'*

1 – Is not mentioned in the passage. Anyways, it will take a long time to happen..
2 – In fact transaction volumes come down in quantum computers
4 – Not mentioned.

QNo:- 5 ,Correct Answer:- *B*

Explanation:- *Refer to lines "D-Wave's vision, he says, is for a green revolution in computing, in which everyone will have access to much* ***more energy-efficient quantum computers*** *through the cloud."*
1 – is too generic
3 – does not tell you why this would make it green
4 – a far fetched connection.

QNo:- 6 ,Correct Answer:- *C*

Explanation:- *The key advantage of a quantum computer is computing power.*
1 – Whose priority? Which problems? Option is vague.
2 – not talked about in psg
4 – low hanging fruit refers typically to easier problems, not tougher

QNo:- 7 ,Correct Answer:- *B*

Explanation:- *Refer to lines "He believes that while social media successes like Facebook are* ***clever utilisations of existing technology****, the fact that Silicon Valley is constantly chasing profitable variations on the same theme means that it is no longer doing the really tough mental work"Brownell being CEO of D-wave will think from point of view of computing.*
*1- is extreme "****No innovation****...."*
3 – is not talking about technical skills at all.
4 – is actually opposite

QNo:- 8 ,Correct Answer:- *A*

Explanation:- ***Two qubits*** *can perform four(2^2) equations.*
And ***three qubits*** *can perform eight(2^3), and so on in an exponential expansion and*
"D-Wave's first demonstration in 2007 of its ***16-qubi****t device,"*

QNo:- 9 ,Correct Answer:- *B*

Explanation:-
Option 2. We can rule out C as the first sentence because of the word "this", which tells us that there are to be something mentioned earlier which we are referring to.
D states that devaluing the Greek currency will lead to harming the country. This would be followed by B which states that that devaluation will be costly for Europe too.
How is this so is mentioned in E.

QNo:- 10 ,Correct Answer:- *B*

Explanation:-
Turbulence is disturbance.Disgruntled is dissatisfied.Affinity is association.

QNo:- 11 ,Correct Answer:- *A*

Explanation:-
There are 18 files before Sunil's and 11 after. So there are a total of 18 + 1 + 11 = 30 files in the queue. The number of files the DBA checked the second time would be 30/2 = 15. Since initially there were 18 files before Sunil's and 15 files have been printed, there are now 18 – 15 = 3 files before Sunil's. Hence 1.

QNo:- 12 ,Correct Answer:- *C*

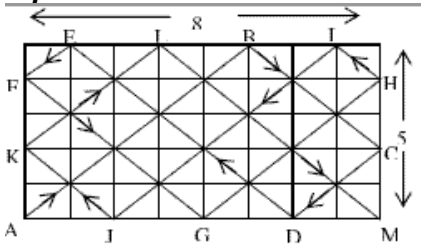
Explanation:-
The six-digit number on the coupon will look like

x	y	z	$9-z$	$9-y$	$9-x$

Once we select the first, second and third digits of the number, the remaining three digits get fixed. The first digit can be chosen out of 1, 2, 3, ...9 in 9 ways. Then, the second digit can be selected in (10 – 2) = 8 ways and the third digit in (10 – 4) = 6 ways. Hence, the maximum possible number of such six digit number is 9 × 8 × 6 = 432.

QNo:- 13 ,Correct Answer:- *C*

Explanation:-



The base of the box can be divided into squares of dimensions 1 × 1.
The path of the ball is as shown from point A to point M. Path followed is A – B – C – D – E – F – G – H – I – J – K – L – M.
Thus, after counting, we have 11 bounces.

Hence the answer is option C

QNo:- 14 ,Correct Answer:- *C*

Explanation:-

Total travel time = 5 hours – 48 minutes = 5h - $\frac{4}{5}$h = $\frac{21}{5}$h

Average speed of whole journey = $\frac{2\times30\times12}{30+12}$

Total Distance = $\frac{2\times30\times12}{42}\times\frac{21}{5}$ = 72 km

So, distance on one side = 72/6 = 36 km

QNo:- 15 ,Correct Answer:- *D*

Explanation:-

Suppose the sums with Amol, Nupur and Rohit in the beginning are A, N and R respectively.
After Amol doubles the sums of the other two, the sums of money with the three of them are (A – N – R), 2N and 2R respectively.
After Nupur doubles the sums of the other two, the sums of money with them are 2(A – N – R), (3N – A – R) and 4R respectively.
After Rohit doubles the sums of the other two, the sums of money with them are 4(A – N – R), (6N – 2A – 2R) and (7R – A – N) respectively.
In the end, since Amol has 128 more than what he started out with, 4(A – N – R) – A = 128.
Since Rohit ended up with 24 less than what he started out with, R – (7R – A – N) = 24.
Since Nupur ended up with Rs. 12 less than Rohit, (7R – A – N) – (6N – 2A – 2R) = 12.
Solving these equations yields A = 336, N = 144 and R = 76.
Thus the required ratio is 84 : 36 : 19.

QNo:- 16 ,Correct Answer:- *D*

Explanation:-

After the first cycle, 84 students will remain and 97^{th} student will be the last. After the second cycle, 72 students will remain and 96^{th} student will be the last and so on. But remember that if the counting is always started from the first person, then first six students will never become multiple of 7 and hence these will be the last 6 persons to remain in the queue. All the remaining students will be eliminated. Hence, 6th student will be the last person when only 6 students remain in the queue.

QNo:- 17 ,Correct Answer:- *B*

Explanation:-

Prob (P late) = $\frac{7}{9}$ $\Rightarrow$ Prob (Q late) = $\frac{11}{27}$

Prob (Q late given P late) = $\frac{8}{9}$ $\Rightarrow$ Prob (P $\cap$ Q) both P & Q late) = $\frac{7}{9}\times\frac{8}{9}=\frac{56}{81}$

Prob (either P or Q or both late) = $\frac{7}{9}+\frac{11}{27}-\frac{56}{81}=\frac{63+33-56}{81}=\frac{40}{81}$, Prob (Neither is late) = $1-\frac{40}{81}=\frac{41}{81}$

QNo:- 18 ,Correct Answer:- *D*

Explanation:-

For a triangle, if perimeter is given, area will be maximum if triangle is equilateral. But in the given case, triangle cannot be equilateral, so we can try to make it isoceles. The idea is to make all lengths as close as possible. So two triangles are possible. (60, 60, 40); (60, 50, 50) but in second case we are gettting maximum possible area.

Area = $[s(s-a)(s-b)(s-c)]^{1/2}$, where s = (50+50+60)/2 , and a, b and c are sides of Triangle

Area = $[80(80-50)(80-50)(80-60)]^{1/2}$ = 1200

The sides of triangle must be as shown in figure, which gives area as 1200 m^2 on solving.

QNo:- 19 ,Correct Answer:- *A*

Explanation:-

Distance covered by A = $2\pi r_1 = 2\times \pi \times 100$

Distance covered by B = $2\pi r_2 = 2 \times \pi \times 102$

Speed of A = $\frac{2\times\pi\times100}{90} = 2.22\pi$m/sec and speed of B = $\frac{2\times\pi\times102}{92} = 2.21\pi\, m/sec$.

So A is faster.

QNo:- 20 ,Correct Answer:- *C*

Explanation:-

6/2(2a+(6-1)d) = 144, 2a + 5d = 48 Possible positive integral values of a and d in that order are (19, 2). (14, 4), (9, 6), (4, 8). So, there are 4 sequences possible where order is increasing. In addition there are 4 sequences possible which would have terms in a decreasing order. (All above d values would be negative in that case).There will be one more case when the difference will be 0, in that case all the terms will be 24. The 2nd term of these APs can be 21, 18, 15, 12, 27, 30, 33, 36, 24. Hence option 3

QNo:- 21 ,Correct Answer:- *A*

Explanation:-

16, 25, 36, 49, 64 and 81 are the only 2-digit perfect squares. So, the total number of integers that can be formed by using 2 of these will be 6 × 5 = 30. If these numbers are written in the form abcd, then each of the 6 numbers will appear 5 times as ab and 5 times as cd. So, the sum of all these will be 5× 100 (16 + 25 + 36 + 49 + 64 + 81) + 5 × (16 + 25 + 36 + 49 + 64 + 81) = 505 × 271 = 136,855.

QNo:- 22 ,Correct Answer:- *A*

Explanation:-

x	*y*	*No*
0	1,2,3,4,5	5
1	0,2,3,4,5,6	6
2	0,1,3,4,5,6,7	7
3	0,1,2,4,5,6,7,8	8
4	0,1,2,3,5,6,7,8,9	9
5	0,1,2,3,4,6,7,8,9,10	10
6	1,2,3,4,5,7,8,9,10	9
7	2,3,4,5,6,8,9,10	8
8	3,4,5,6,7,9,10	7
9	4,5,6,7,8,10	6
10	5,6,7,8,9	5

*Therefore probability = 80/(11*10) = 8/11*

QNo:- 23 ,Correct Answer:- *B*

Explanation:- *Suppose the quantitites of besan, ghee and sugar in Bundi Laddu are 2x, x and 2x respectively, in Besan Laddu are y, 2y and 2y respectively and in Maisoor Pak are 2z, 4z and z respectively. From the given information, we know that 2x + y + 2z = x + 2y + 4z = 2x + 2y + z. Solving this, we get x = 3z, y = z. Substituting all values in terms of z, we get the quantity of each ingredient as 9z. In other words, the minimum quantity of each ingredient will be 9 kg.*

QNo:- 24 ,Correct Answer:- *D*

Explanation:-
The three prices add to 1.50 + 3.00 + 4.00 = 8.50.
The three prices multiply to 1.50 × 3.00 × 4.00 = 18.00.
You might be able to see that adding another 0.50 will take the total to 9.00, and multiplying by another 0.50 will take the product to 9.00 also.
Alternately,
1.50 + 3.00 + 4.00 + P = 1.50 × 3.00 × 4.00 × P
8.50 + P = 18.00 × P
8.50 = 18.00 × P – P
8.50 = 17.00 × P
8.50/17.00 = P
P = 0.50.
Hence he had to pay Rs. 9 – and got back Rs. 41.
If the shopkeeper used the minimum number of notes, then he paid Jasneet back 2 notes of Rs. 20 and one coin of Rs. 1.
Hence, the correct answer is option D.

QNo:- 25 ,Correct Answer:- *C*

Explanation:-

Section : Technical

QNo:- 26 ,Correct Answer:- *B*

Explanation:-

QNo:- 27 ,Correct Answer:- *C*

Explanation:-

QNo:- 28 ,Correct Answer:- *D*

Explanation:-

QNo:- 29 ,Correct Answer:- *B*

Explanation:-

QNo:- 30 ,Correct Answer:- *C*

Explanation:-

QNo:- 31 ,Correct Answer:- *C*

Explanation:-

QNo:- 32 ,Correct Answer:- *C*

Explanation:-

QNo:- 33 ,Correct Answer:- *C*

Explanation:-

QNo:- 34 ,Correct Answer:- *C*

Explanation:-

QNo:- 35 ,Correct Answer:- *A*

Explanation:-

Section : Coding

QNo:- 36 ,Correct Answer:-

Explanation:-

QNo:- 37 ,Correct Answer:-

Explanation:-