QID : 601 - Select the related word from the given alternatives.

Rain : Water :: Hail : ?

Options:
1) Vapour
2) Storm
3) Cold
4) Ice
Correct Answer: Ice

QID : 602 - Select the related letters from the given alternatives.

FHJ : CEG :: LNP : ?

Options:
1) IKM
2) HJL
3) NPR
4) RTV
Correct Answer: IKM

QID : 603 - Select the related number from the given alternatives.

1/4 : -1/2 :: -1/10 : ?

Options:
1) -1/5
2) 1/20
3) 1/5
4) -1/20
Correct Answer: 1/5

QID : 604 - Select the odd word from the given alternatives.

Options:
1) Professor
2) Postgraduate
3) Graduate
4) Master
Correct Answer: Professor

QID : 605 - Select the odd letters from the given alternatives.

Options:
1) BFJ
2) KOS
3) TXB
4) GIK
Correct Answer: GIK

QID : 606 - Select the odd number from the given alternatives.

Options:
1) 144
2) 225
3) 157
4) 256
Correct Answer: 157

QID : 607 - A series is given, with one word missing. Choose the correct alternative from the given ones that will complete the series.

Parrot, Other, Eruption, Onset, Etcetera, ?

Options:
1) Suavely
2) Lagging
3) Holding
4) Ransom
Correct Answer: Ransom

QID : 608 - A series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.?

AAAAAAAB, BAAAAAAB, BAAAAABB, BBAAAABB, BBAAABBB, ?

Options:
1) BBABBBB

2) BBBAAABBB

3) BBBBBBBB

4) BBBAABBB
Correct Answer: BBBAABBB

QID : 609 - A series is given, with one number missing. Choose the correct alternative from the given ones that will complete the series.

1.4, 2.2, ? , 3.8, 4.6

Options:
1) 2.8

2) 3.2

3) 3

4) 3.4
Correct Answer: 3

QID : 610 - Parinaaz's birthday is on Saturday 29th April. On what day of the week will be Kiara's Birthday in the same year, if Kiara was born on 5th September?

Options:
1) Wednesday
2) Friday
3) Tuesday
4) Thursday
Correct Answer: Tuesday

QID : 611 - The weights of 4 boxes are 30, 90, 80 and 20 Kg. Which of the following cannot be the total weight, in kilograms, of any combination of these boxes and in a combination a box can be used only once?

Options:
1) 220
2) 200
3) 190
4) 210
Correct Answer: 210

QID : 612 - From the given words, select the word which cannot be formed using the letters of the given word.

COGENTLY

Options:
1) CLONE
2) GENTLY
3) CLUNG
4) CENT
Correct Answer: CLUNG

QID : 613 - If MESTIZO is coded as KCQRGXM, then how will YAK be coded as?

Options:
1) WYI

2) YKS

3) TYL

4) IFG
Correct Answer: WYI

QID : 614 - In a certain code language, '+' represents '×', '-' represents '+', '×' represents '÷' and '÷' represents '-'. What is the answer to the following question?

9 × 3 ÷ 12 + 5 - 24 = ?

Options:
1) -33
2) 3
3) 39
4) 69
Correct Answer: -33

QID : 615 - If 17$5 = 11, 3$21 = 12, 2$4 = 3 then what is the value of 42$6 = ?

Options:
1) 24
2) 22
3) 57
4) 76
Correct Answer: 24

QID : 616 -

Select the missing number from the given responses

दिए गए विकल्पों में से लुप्त संख्या चुनिए।

2	5	6
3	6	8
4	7	9
1	?	5

Options:
1) 6

2) 4

3) 18

4) 10
Correct Answer: 4

QID : 617 - Two motorcyclists P and Q start from the same point. P rides 17 km West, then turns South and rides 11 km, then turns to his right and rides 10 km. Q rides 20 km South, then turns to his right and rides 27 km. Where is Q with respect to P now?

Options:
1) 9 km North
2) 31 km South
3) 31 km North
4) 9 km South
Correct Answer: 9 km South

QID : 618 - In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.

Statement
No two-wheelers are motorcycles.
All motorcycles are bicycles.

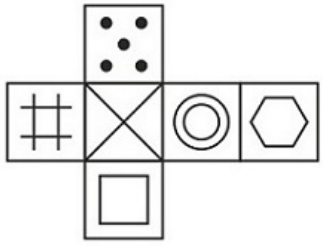
Conclusion
Some two-wheelers are bicycles.
No motorcycles are two-wheelers.

Options:
1) Only conclusion I follows
2) Only conclusion II follows
3) Both I and II follow
4) Neither I nor II follows
Correct Answer: Only conclusion II follows

QID : 619 -

Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure?

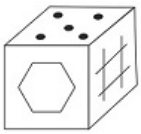
निम्नलिखित उत्तर आकृति में से कौन सा घन दिए गए प्रश्न आकृति में से खुले घन से बनाया नहीं जा सकता?



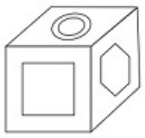
Options:
1)

2)

3)



4)

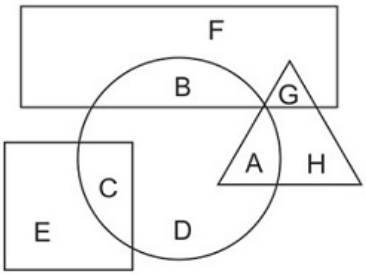


Correct Answer:

QID : 620 -

In the following figure, square represents Translators, triangle represents Exporters, circle represents Professors and rectangle represents Fathers. Which set of letters represents Translators and Exporters who are also Professors?

निम्नलिखित आकृति में, वर्ग अनुवादकों को दर्शाता है, त्रिभुज निर्यातकों को दर्शाता है, वृत्त प्रोफेसरों को दर्शाता है और आयत पिताओं को दर्शाता है। अक्षरों का कौन सा समूह अनुवादकों और निर्यातकों को दर्शाता है जो प्रोफेसर भी हैं?

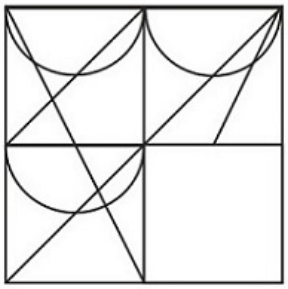


Options:
1) F,G,H
2) E,C,D
3) A,C
4) B,F
Correct Answer: A,C

QID : 621 -

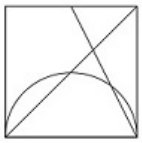
Which answer figure will complete the pattern in the question figure?

निम्नलिखित में से कौन-सी उत्तर आकृति प्रश्न आकृति के प्रतिरूप को पूरा करेगी?

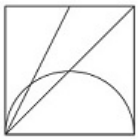


Options:

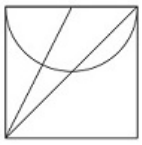
1)



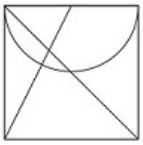
2)



3)



4)

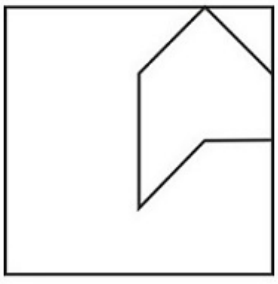


Correct Answer:

QID : 622 -

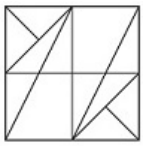
From the given answer figures, select the one in which the question figure is hidden/embedded.

दी गई उत्तर आकृतियों में से उस आकृति को चुनिए जिसमें प्रश्न आकृति निहित है|

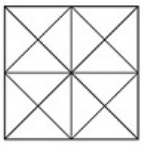


Options:

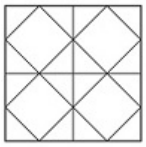
1)



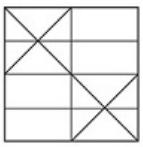
2)



3)



4)

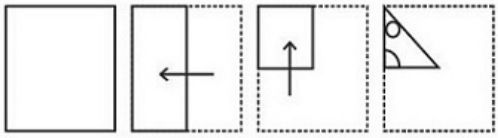


Correct Answer:

QID : 623 -

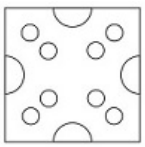
A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened.

प्रश्न आकृतियों में दिखाए अनुसार कागज को मोड़कर उसमें छेद करने तथा खोलने के बाद वह किस उत्तर आकृति जैसा दिखाई देगा?

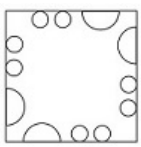


Options:

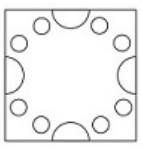
1)



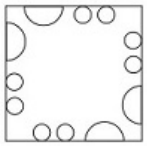
2)



3)



4)

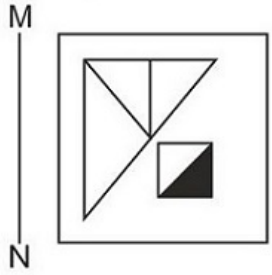


Correct Answer:

QID : 624 -

If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?

यदि एक दर्पण को MN रेखा पर रखा जाए तो दी गई उत्तर आकृतियों में से कौन-सी आकृति प्रश्न आकृति का सही प्रतिबिम्ब होगी?



Options:
1)

2)

3)

4)

Correct Answer:

QID : 625 -

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as shown in the given two matrices. The columns and rows of Matrix-I are numbered from 0 to 4 and that of Matrix-II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, for example 'K' can be represented by 20, 43 etc and 'Z' can be represented by 65, 69 etc. Similarly, you have to identify the set for the word 'TUBE'.

एक शब्द केवल एक संख्या-समूह द्वारा दर्शाया गया है, जैसा कि विकल्पों में से किसी एक में दिया गया है। विकल्पों में दिए गए संख्या-समूह अक्षरों के दो वर्गों द्वारा दर्शाए गए हैं, जैसा कि दिए गए दो आव्यूहों में है। आव्यूह-I के स्तम्भ और पंक्ति की संख्या 0 से 4 और आव्यूह-II की 5 से 9 है। इन आव्यूहों से एक अक्षर को पहले उसकी पंक्ति और बाद में स्तम्भ संख्या द्वारा दर्शाया जा सकता है। उदहारण के लिए 'K' को 20, 43 आदि द्वारा दर्शाया जा सकता है तथा 'Z' को 65, 69 आदि द्वारा दर्शाया जा सकता है। इसी तरह से आपको प्रश्न में दिए शब्द 'TUBE' के लिए समूह को पहचानना है।

Matrix I
आव्यूह - I

	0	1	2	3	4
0	G	B	L	G	E
1	L	E	M	C	K
2	K	D	G	C	M
3	L	H	G	G	C
4	G	M	B	K	A

Matrix II
आव्यूह - II

	5	6	7	8	9
5	P	X	W	P	P
6	Z	N	P	N	Z
7	U	Q	W	U	Z
8	N	P	P	Q	X
9	U	S	T	Y	V

Options:
1) 40,20,56,55

2) 32,00,56,89

3) 11,41,78,67

4) 97,75,01,11
Correct Answer: 97,75,01,11

QID : 626 - What least number must be added to 728, so that the sum is completely divisible by 11?

Options:
1) 9
2) 7
3) 5
4) 3
Correct Answer: 9

QID : 627 - A can do 2/3rd of a job in 18 days and B can do 1/3rd of the job in 18 days. If they work on it together, in how many days can they do half of the job?

Options:
1) 12
2) 15
3) 9
4) 18
Correct Answer: 9

QID : 628 - What is the area (in sq cm) of an equilateral triangle of side 16 cm?

Options:
1) 128√3
2) 64√3
3) 32√3
4) 96√3
Correct Answer: 64√3

QID : 629 - What is the effective discount (in %) of two successive discounts of 10% and 40%?

Options:
1) 50
2) 36
3) 55
4) 46
Correct Answer: 46

QID : 630 - Profit of Rs 49,800 has to be divided between three partners A, B and C in the ratio 4:7:9. How much does B (in Rs) get?

Options:
1) 17430
2) 9960
3) 18450
4) 22410
Correct Answer: 17430

QID : 631 - The average weight of P, Q and R is 84 kg. If the average weight of P and Q be 86 kg and that of Q and R be 75 kg, then what is the weight (in kgs) of Q?

Options:
1) 65
2) 75
3) 70
4) 80
Correct Answer: 70

QID : 632 - A shopkeeper by selling 9 items, earns a profit equal to the selling price of 1 item. What is his profit percentage?

Options:
1) 25
2) 12.5
3) 20
4) 10
Correct Answer: 12.5

QID : 633 - What is the value of 16% of 25% of 400?

Options:
1) 16
2) 8
3) 40
4) 160
Correct Answer: 16

QID : 634 - To cover a distance of 90 km in 1 hour 15 minutes what should be the average speed of the car in meters/second?

Options:
1) 10
2) 15
3) 20
4) 25
Correct Answer: 20

QID : 635 - In 3 years at simple interest the principal increases by 24%. What will be the compound interest (in Rs) earned on Rs. 5,000 in 2 years at the same rate?

Options:
1) 725
2) 840
3) 832
4) 816
Correct Answer: 832

QID : 636 - If 5x/6 - (4/3)(2 - 3x/2) = 1/3 , then what is the value of x?

Options:
1) 17/18
2) -18/17
3) 18/17
4) -17/18
Correct Answer: 18/17

QID : 637 - If a3 + b3 = 28 and ab = 3, then what is the value of a + b?

Options:
1) 2
2) 4
3) 9
4) 3
Correct Answer: 4

QID : 638 - Thrice a fraction is greater than its reciprocal by 46/7. What is the fraction?

Options:
1) 7/3
2) 3/7
3) 5/4
4) 4/5
Correct Answer: 7/3

QID : 639 - What is the sum of the first 13 terms of an arithmetic progression if the 5th term is -2 and the 8th term is 7?

Options:
1) -61
2) 52

3) -15
4) 72
Correct Answer: 52

QID : 640 - What is the reflection of the point (-2, 5) in the line x = 1?

Options:
1) (4 , -5)
2) (4 , 5)
3) (-4 , -5)
4) (-4 , 5)
Correct Answer: (4 , 5)

QID : 641 - Point P is the midpoint of segment AB. Co-ordinates of P are (-5, -2) and A are (-2, 0). What are the co-ordinates of point B?

Options:
1) (-8, -4)
2) (-8, 4)
3) (8, -4)
4) (8, 4)
Correct Answer: (-8, -4)

QID : 642 - What is the slope of the line perpendicular to the line passing through the points (2, -5) and (4, 0)?

Options:
1) -5/2
2) 2/5
3) -2/5
4) 5/2
Correct Answer: -2/5

QID : 643 - ?ABC is similar to ?PQR. If ratio of perimeters of ?ABC : ?PQR is 3:5 and if PQ = 15 cm, then what is the length (in cm) of AB?

Options:
1) 9
2) 10
3) 12
4) 8
Correct Answer: 9

QID : 644 - What is the value of (√2) Sec 30o + (1/√2)Tan 60o =?

Options:
1) 7/6
2) 5/√6
3) 5/6
4) 7/√6
Correct Answer: 7/√6

QID : 645 - ? LMN is right angled at M. If m∠N = 30o, then

Tan L x (1/2) Cosec L =?

Options:
1) 2
2) 1/√2
3) 1
4) 1/2
Correct Answer: 1

QID : 646 - If Sin θ = 12/37 , then,

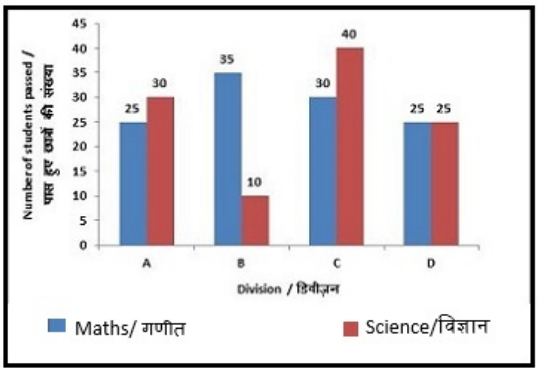
Cot θ = ?

Options:
1) 35/12
2) 12/35
3) 37/12
4) 35/37
Correct Answer: 35/12

QID : 647 -

The bar graph shows number of students of the four divisions (A, B, C, D) of grade X who have passed in exams of Math and Science. Study the diagram and answer the following questions.

बार ग्राफ़ दसवीं कक्षा की चार डिवीज़नों (A, B, C, D) के उन छात्रों की संख्या दर्शाता है जिन्होंने गणित और विज्ञान की परीक्षा में उत्तीर्ण किया। इस आरेख का अध्ययन करें और निम्नलिखित प्रश्नों का उत्तर दें।



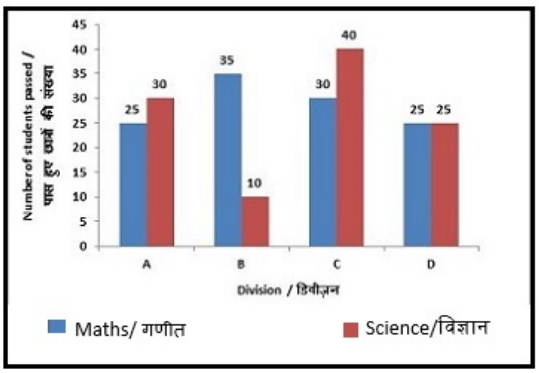
In which division, the number of students who passed in Math was greater than those who passed in Science?

Options:
1) B
2) A
3) C
4) D
Correct Answer: B

QID : 648 -

The bar graph shows number of students of the four divisions (A, B, C, D) of grade X who have passed in exams of Math and Science. Study the diagram and answer the following questions.

बार ग्राफ़ दसवीं कक्षा की चार डिवीज़नों (A, B, C, D) के उन छात्रों की संख्या दर्शाता है जिन्होंने गणित और विज्ञान की परीक्षा में उत्तीर्ण किया। इस आरेख का अध्ययन करें और निम्नलिखित प्रश्नों का उत्तर दें।



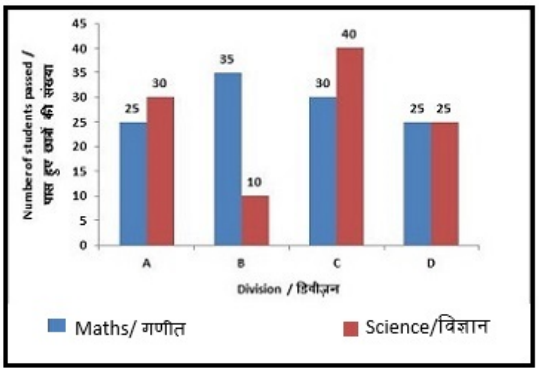
If division B has 50 students, how many students (in %) failed in Science?

Options:
1) 40
2) 15
3) 80
4) 30
Correct Answer: 80

QID : 649 -

The bar graph shows number of students of the four divisions (A, B, C, D) of grade X who have passed in exams of Math and Science. Study the diagram and answer the following questions.

बार ग्राफ़ दसवीं कक्षा की चार डिवीज़नों (A, B, C, D) के उन छात्रों की संख्या दर्शाता है जिन्होंने गणित और विज्ञान की परीक्षा में उत्तीर्ण किया। इस आरेख का अध्ययन करें और निम्नलिखित प्रश्नों का उत्तर दें।



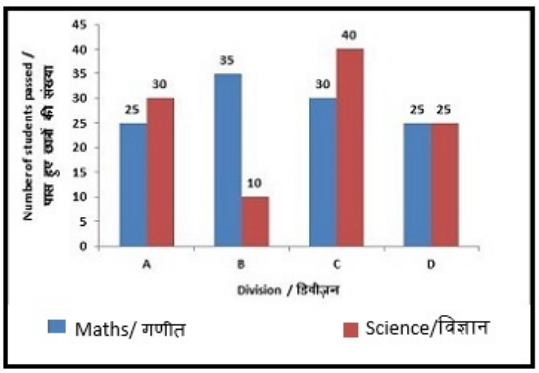
If division C has 40 students how many students (in %) passed in both the subjects?

Options:
1) 75
2) 60
3) 30
4) 40
Correct Answer: 75

QID : 650 -

The bar graph shows number of students of the four divisions (A, B, C, D) of grade X who have passed in exams of Math and Science. Study the diagram and answer the following questions.

बार ग्राफ़ दसवीं कक्षा की चार डिवीज़नों (A, B, C, D) के उन छात्रों की संख्या दर्शाता है जिन्होंने गणित और विज्ञान की परीक्षा में उत्तीर्ण किया। इस आरेख का अध्ययन करें और निम्नलिखित प्रश्नों का उत्तर दें।



If the top 20% of students who passed in Math and top 40% of those who passed in Science are to be awarded certificates, how many certificates need to be printed?

Options:
1) 65
2) 23
3) 42
4) 44
Correct Answer: 65

QID : 651 - In the following question, one part of the sentence may have an error. Find out which part of the sentence has an error and click the button corresponding to it. If the sentence is free from error, click the "No error" option.

I want to show (1)/ people there is as much (2)/ more we can offer. (3)/ No Error (4)
Options:
1) 1
2) 2
3) 3
4) 4
Correct Answer: 2

QID : 652 - In the following question, one part of the sentence may have an error. Find out which part of the sentence has an error and click the button corresponding to it. If the sentence is free from error, click the "No error" option.

The whole family (1)/ would burst into (2)/ peals for laughter. (3)/ No Error (4)
Options:
1) 1
2) 2
3) 3
4) 4
Correct Answer: 3

QID : 653 - The sentences given with blanks are to be filled with an appropriate word(s). Four alternatives are suggested for each question. For each question, select the correct alternative and click the button corresponding to it.Green Acres is a full-service restaurant as well as a _____ club.

Options:
1) happen
2) happenings
3) happening
4) happenstance
Correct Answer: happening

QID : 654 - In the following question, the sentence is given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option.

The tiny deer stood looking at them with _____ eyes.
Options:
1) anxiously
2) anxiousness
3) anxiety
4) anxious
Correct Answer: anxious

QID : 655 - In the following question, out of the four alternatives, select the word similar in meaning to the word given.

Contemptuous
Options:
1) Flattering
2) Derisive
3) Extol
4) Tout
Correct Answer: Derisive

QID : 656 - In the following question, out of the four alternatives, select the word similar in meaning to the word given.

Scramble
Options:
1) Harmonise
2) Melee
3) Tabulate
4) Codify
Correct Answer: Melee

QID : 657 - In the following question, out of the four alternatives, select the word opposite in meaning to the word given.

Contradiction
Options:
1) Concurrence
2) Dispute
3) Conflict
4) Discrepancy
Correct Answer: Concurrence

QID : 658 - In the following question, out of the four alternatives, select the word opposite in meaning to the word given.

Resolute
Options:
1) Complacent
2) Adamant
3) Obstinate
4) Staunch
Correct Answer: Complacent

QID : 659 - In each of the questions, four alternatives are given for the Idiom/Phrase. Select the alternative which best expresses the meaning of the Idiom/Phrase and click the button corresponding to it.

Take something for granted
Options:
1) Receive gifts and favours from others for your venture
2) Assume that something is true without questioning it
3) Borrow money and promptly forget to repay
4) Take something without permission but with knowledge of the person
Correct Answer: Assume that something is true without questioning it

QID : 660 - In each of the questions, four alternatives are given for the Idiom/Phrase. Select the alternative which best expresses the meaning of the Idiom/Phrase and click the button corresponding to it.

Wild goose chase
Options:
1) A bird hunting trip where you hunt with the help of dogs
2) Have a great fun time with friends
3) Pursue something with half hearted interest
4) A frustrating or lengthy undertaking that accomplishes little

Correct Answer: A frustrating or lengthy undertaking that accomplishes little

QID : 661 - A sentence/a part of the sentence is bracketed. Four alternatives are given to the bracketed part which will improve the sentence. Choose the correct alternative and click the button corresponding to it. In case no improvement is needed, click the button corresponding to "No improvement".

He (struggle) to make ends meet.
Options:
1) was struggle
2) was struggling
3) are struggling
4) No improvement
Correct Answer: was struggling

QID : 662 - A sentence/a part of the sentence is bracketed. Four alternatives are given to the bracketed part which will improve the sentence. Choose the correct alternative and click the button corresponding to it. In case no improvement is needed, click the button corresponding to "No improvement".

Every person (have to go) through different stages in life.
Options:
1) has to go
2) to go
3) is going
4) No improvement
Correct Answer: has to go

QID : 663 - Out of the four alternatives, choose the one which can be substituted for the given words/sentences and click the button corresponding to it.

Understand a difficult problem after much thought
Options:
1) Fathom
2) Confound
3) Obscure
4) Perplex
Correct Answer: Fathom

QID : 664 - Out of the four alternatives, choose the one which can be substituted for the given words/sentences and click the button corresponding to it.

Widespread disgust incurred by someone as a result of their actions.
Options:
1) Affection
2) Exaltation
3) Exoneration
4) Odium
Correct Answer: Odium

QID : 665 - Four words are given, out of which only one word is spelt correctly. Choose the correctly spelt word and click the button corresponding to it.
Options:
1) hazzardous
2) hazardouse
3) hazzardouse
4) hazardous
Correct Answer: hazardous

QID : 666 - Four words are given, out of which only one word is spelt correctly. Choose the correctly spelt word and click the button corresponding to it.
Options:
1) impassive
2) impasive
3) impasseve
4) impaseve
Correct Answer: impassive

QID : 667 - The question below consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph.

After being exposed to a
X-diet also spent more time in
Y-rapid-eye-movement (REM) sleep
Z-stressor, the rats on the prebiotic
Options:
1) YZX
2) YXZ
3) XZY
4) ZXY
Correct Answer: ZXY

QID : 668 - The question below consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph.

Art has many uses
X-to beautify and
Y-force viewers to ponder
Z-and sometimes it can be used
Options:
1) ZXY
2) YZX
3) YXZ
4) XZY
Correct Answer: ZXY

QID : 669 - In the following question, a sentence has been given in Active / Passive voice. Out of the four alternatives suggested, select the one which best expresses the same sentence in Passive / Active voice.

The doctor shall have examined ten patients by 10 O'clock.
Options:
1) Ten patients will have being examined by 10 O'clock by the doctor.
2) Examination of ten patients was being done by the doctor by 10 O'clock.
3) Ten patients will have been examined by 10 O'clock by the doctor.
4) Examination of ten patients shall have been done by the doctor by 10 O'clock.
Correct Answer: Ten patients will have been examined by 10 O'clock by the doctor.

QID : 670 - In the following question, a sentence has been given in Direct / Indirect speech. Out of the four alternatives suggested, select the one which best expresses the same sentence in Indirect / Direct speech.

"That is the best part." she told them.
Options:
1) She told them that that is the best part.
2) She tells them that that was the best part.
3) She tells them that that is the best part.
4) She told them that that was the best part.
Correct Answer: She told them that that was the best part.

QID : 671 - In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.

Science is all about details, precision, accuracy, and it is _____ 99 per cent perspiration. The beauty and joy in doing science lies in those rare moments _____ the pieces of a puzzle magically come together. To adapt from Shelley, the shadow indeed becomes _____ important than the substance. I suppose one could put some of this together and disseminate a simplified, sanitised version to the public but in the end, science is a _____ individualistic, personal affair. Most honest scientists will tell you that they are ever so grateful that they are _____ by their governments to do something that they would have done anyhow for free.

Science is all about details, precision, accuracy, and it is _____ 99 percent
Options:
1) in
2) indeed
3) into
4) inside
Correct Answer: indeed

QID : 672 - In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.

Science is all about details, precision, accuracy, and it is _____ 99 per cent perspiration. The beauty and joy in doing science lies in those rare moments _____ the pieces of a puzzle magically come together. To adapt from Shelley, the shadow indeed becomes _____ important than the substance. I suppose one could put some of this together and disseminate a simplified, sanitised version to the public but in the end, science is a _____ individualistic, personal affair. Most honest scientists will tell you that they are ever so grateful that they are _____ by their governments to do something that they would have done anyhow for free.

science lies in those rare moments _____ the pieces of a puzzle
Options:
1) then
2) than
3) when
4) so
Correct Answer: when

QID : 673 - In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.

Science is all about details, precision, accuracy, and it is _____ 99 per cent perspiration. The beauty and joy in doing science lies in those rare moments _____ the pieces of a puzzle magically come together. To adapt from Shelley, the shadow indeed becomes _____ important than the substance. I suppose one could put some of this together and disseminate a simplified, sanitised version to the public but in the end, science is a _____ individualistic, personal affair. Most honest scientists will tell you that they are ever so grateful that they are _____ by their governments to do something that they would have done anyhow for free.

the shadow indeed becomes _____ important than the substance.
Options:
1) to
2) more
3) as
4) so
Correct Answer: more

QID : 674 - In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.

Science is all about details, precision, accuracy, and it is _____ 99 per cent perspiration. The beauty and joy in doing science lies in those rare moments _____ the pieces of a puzzle magically come together. To adapt from Shelley, the shadow indeed becomes _____ important than the substance. I suppose one could put some of this together and disseminate a simplified, sanitised version to the public but in the end, science is a _____ individualistic, personal affair. Most honest scientists will tell you that they are ever so grateful that they are _____ by their governments to do something that they would have done anyhow for free.

science is a _____ individualistic, personal affair.
Options:
1) highly
2) high
3) higher
4) highest
Correct Answer: highly

QID : 675 - In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.

Science is all about details, precision, accuracy, and it is _____ 99 per cent perspiration. The beauty and joy in doing science lies in those rare moments _____ the pieces of a puzzle magically come together. To adapt from Shelley, the shadow indeed becomes _____ important than the substance. I suppose one could put some of this together and disseminate a simplified, sanitised version to the public but in the end, science is a _____ individualistic, personal affair. Most honest scientists will tell you that they are ever so grateful that they are _____ by their governments to do something that they would have done anyhow for free.

they are ever so grateful that they are _____ by their governments
Options:
1) to pay
2) being paid
3) pay up
4) paying
Correct Answer: being paid

QID : 676 - Census in India is generally done after how many years?

Options:
1) 10
2) 2
3) 5
4) 20
Correct Answer: 10

QID : 677 - Which Schedule of Indian Constitution deals with division of powers between the union and the states?

Options:
1) Sixth Schedule
2) Seventh Schedule
3) Eighth Schedule
4) Ninth Schedule
Correct Answer: Seventh Schedule

QID : 678 - In which article of Indian constitution of India there is a provision of a Governor for each state?

Options:
1) Article 153
2) Article148
3) Article 61
4) Article 178
Correct Answer: Article 153

QID : 679 - During the British rule in India Holt Mackenzie was known for _____.

Options:
1) Mahalwari system
2) Ryotwari system
3) Permanent settlement
4) use of English Language in Education
Correct Answer: Mahalwari system

QID : 680 - In which year was the historic Lucknow Pact signed?

Options:
1) 1910
2) 1916
3) 1920
4) 1919
Correct Answer: 1916

QID : 681 - In which book were many of the Chanakya's ideas written down?

Options:
1) Puranas
2) Rajatarangini
3) Arthshastra
4) Mahapravaas
Correct Answer: Arthshastra

QID : 682 - In which hemisphere does India lie?

Options:
1) Southern and Eastern
2) Northern and Eastern
3) Southern and Western
4) Northern and Western
Correct Answer: Northern and Eastern

QID : 683 - Out of which sea the Himalayas were uplifted?

Options:
1) Tethys Sea
2) Coral sea
3) Eural sea
4) No option is correct

Correct Answer: Tethys Sea

QID : 684 - The northern part of the western coast is called _____.

Options:
1) Kannad Plain
2) Malabar coast
3) Konkan
4) Coromandel coast
Correct Answer: Konkan

QID : 685 - A wet, swampy and marshy region in the northern plain is called _____.

Options:
1) Bhabar
2) Khadar
3) Terai
4) Kankar
Correct Answer: Terai

QID : 686 - 'Cape of Good Hope' is located in which country?

Options:
1) India
2) South Africa
3) Australia
4) Brazil
Correct Answer: South Africa

QID : 687 - Which of the following is not among the six major controls of the climate in India?

Options:
1) Latitude
2) Altitude
3) Disturbance from the sea
4) Population
Correct Answer: Population

QID : 688 - In what ratio tea at Rs 240 per kg be mixed with tea at Rs 300 per kg so that on selling the mixture at Rs 336 per kg there is a profit of 20%?

Options:
1) 1 : 2
2) 2 : 3
3) 3 : 4
4) 1 : 1
Correct Answer: 1 : 2

QID : 689 - The force, which takes an angle area towards a page, is called _____.

Options:
1) Gravitation force
2) Magnetic force
3) Friction
4) Pressure
Correct Answer: Pressure

QID : 690 - Whittaker classified organisims into how many kingdoms?

Options:
1) 3
2) 5
3) 7
4) 9
Correct Answer: 5

QID : 691 - What is the chemical formula of chloroform?

Options:
1) CCl_4
2) $CHCl_3$
3) CH_4
4) CH_3 OH
Correct Answer: $CHCl_3$

QID : 692 - The National Institution for Transforming India (NITI Aayog) launched National Nutrition Strategy aimed at _____.

Options:
1) Rog Mukt Bharat
2) Kuposhan Mukt Bharat
3) Pradushan Mukt Bharat
4) Shashakt Bharat
Correct Answer: Kuposhan Mukt Bharat

QID : 693 - What is the name of world's biggest and powerful nuclear powered icebreaker ship launched by Russia?

Options:
1) Arctic
2) Sibir

3) Ural
4) Baltic
Correct Answer: Sibir

QID : 694 - Who won men's single title of 2017 US Open tennis championship?

Options:
1) Rafael Nadal
2) Kevin Anderson
3) HoriaTecau
4) Andy Murray
Correct Answer: Rafael Nadal

QID : 695 - India and its which neighbouring country are counting tiger heads for the first time using same method recognized internationally?

Options:
1) Bangladesh
2) Bhutan
3) Pakistan
4) Nepal
Correct Answer: Nepal

QID : 696 - Carnatic vocalist T. M. Krishna won 30th Indira Gandhi Award for _____ for 2015-2016.

Options:
1) Public Welfare
2) National Integration
3) Economic Development
4) Literature
Correct Answer: National Integration

QID : 697 - What is India's rank in World Bank's Ease of Doing Business Report, 2018?

Options:
1) 130
2) 100
3) 80
4) 60
Correct Answer: 100

QID : 698 - India became the 71st country to ratify which of the following Conventions?

Options:
1) United Nations TIR (Transports Internationaux Routiers)
2) Ramsar
3) The British House of Commons
4) Newfoundland National Committee
Correct Answer: United Nations TIR (Transports Internationaux Routiers)

QID : 699 - The Union Government of India has launched which project to ensure conservation of Himalayan ecosystem?

Options:
1) SECURE Himalaya
2) SAFE Himalaya
3) SOFT Himalaya
4) SUSTAIN Himalaya
Correct Answer: SECURE Himalaya

QID : 700 - Commemorative coins of Rs. 100 and Rs. 10 denomination were released on 101st Birth Centenary of noted _____ Dr. MS Subbulakshmi.

Options:
1) Carnatic Musician
2) Economist
3) Actor
4) Director
Correct Answer: Carnatic Musician

QID : 701 - In the ideal gas equation, PV = μRT, μ is the _____ of the gas.

Options:
1) density
2) viscosity
3) thermal coefficient of volume expansion
4) number of moles
Correct Answer: number of moles

QID : 702 - "To every action, there is always an equal and opposite reaction." This statement is _____.

Options:
1) Newton's 1st Law
2) Newton's 2nd Law
3) Law of conservation of energy
4) Newton's 3rd Law
Correct Answer: Newton's 3rd Law

QID : 703 - $[M^{-1}L^{3}T^{-2}]$ are the dimensions of?
Options:
1) Gravitational constant
2) Gravitational potential energy
3) Gravitational potential

4) Gravitational intensity
Correct Answer: Gravitational constant

QID : 704 -

Match the Type of wave with its Method of detection.

लहर के प्रकार के साथ उसके पहचान की विधि की जोड़ी जमायें।

A. X-rays एक्स-रे	1. Point contact diodes प्वाइंट संपर्क डायोड
B. Infra-red अवरक्त	2. Thermopiles थर्मापाईल्स
C. Microwave माइक्रोवेव	3. Geiger tubes गीजर ट्यूब

Options:
1) A-2, B-3, C-1
2) A-3, B-2, C-1
3) A-2, B-1, C-3
4) A-3, B-1, C-2
Correct Answer: A-3, B-2, C-1

QID : 705 - 1 atomic mass unit (u) is equivalent to _____ the mass of carbon isotope C-12.

Options:
1) 12 times
2) 1/12th
3) 1/6th
4) 6 times
Correct Answer: 1/12th

QID : 706 - $_{1}n^{0} + {}_{235}U^{92} \rightarrow {}_{140}Ba^{56} + {}_{y}Kr^{36} + {}_{31}n^{0}$. Find y from the given fission equation of an uranium nucleus?

Options:
1) 91
2) 95
3) 93
4) 92
Correct Answer: 93

QID : 707 - What does 32^{o} Fahrenheit equals to?

Options:
1) 373.15 K
2) 100o C
3) 89.6o C
4) 273.15 K
Correct Answer: 273.15 K

QID : 708 - $4\,{}_{1}H^{1} \rightarrow {}_{4}He^{2}$ + _____ + energy. Find the missing element/s.

Options:
1) 2 neutrons
2) 2 electrons
3) 2 protons
4) 2 positrons
Correct Answer: 2 positrons

QID : 709 - A ball is thrown vertically upwards with a velocity of 20 m/s. How high will the ball rise (in meters)? (use g = 10 m/s²)

Options:
1) 10
2) 20
3) 5
4) 40
Correct Answer: 20

QID : 710 - A boy standing on a 20 m tall building throws a stone horizontally with a speed of 15 m/s. With what speed will the stone hit the ground (in m/s)? (use g = 10 m/s²)

Options:
1) 20
2) 25
3) 15
4) 10
Correct Answer: 25

QID : 711 - A cyclic heat engine does 24kJ of work per cycle. If the efficiency of the engine is 0.8, then what will be the heat (in kJ) rejected per cycle?

Options:
1) 30
2) 6
3) 19.2
4) 39.2
Correct Answer: 6

QID : 712 - A mono atomic molecule free to move in space has how many translational degrees of freedom?

Options:
1) three
2) two
3) one
4) five
Correct Answer: three

QID : 713 -

Options:
1) 50
2) 6
3) 40
4) 8
Correct Answer: 8

QID : 714 - A point of maximum positive displacement in a transverse wave is called?

Options:
1) trough
2) vertex
3) apex
4) crest
Correct Answer: crest

QID : 715 - A ray emanating from the object parallel to the principal axis of a convex lens after refraction _____.

Options:
1) passes through the second principal focus
2) passes through the center of curvature
3) passes through the pole
4) remains parallel to the principal axis
Correct Answer: passes through the second principal focus

QID : 716 - A resistor which has a silver coloured ring signifies that the resistor has _____ percent tolerance.

Options:
1) 10
2) 5
3) 1
4) 20
Correct Answer: 10

QID : 717 - An adiabatic wall between two thermodynamic systems _____.

Options:
1) allows both heat and matter to pass across it at constant temperature
2) does not allow heat to pass across it but allows matter to pass
3) does not allow matter to pass but allows heat to pass across it
4) does not allow heat or matter to pass across it
Correct Answer: does not allow heat or matter to pass across it

QID : 718 - An alpha particle is same as?

Options:
1) a helium nucleus
2) a hydrogen nucleus
3) a proton
4) a positron
Correct Answer: a helium nucleus

QID : 719 - At what temperature (in oC) is the r.m.s. velocity of hydrogen molecules twice the r.m.s. velocity of oxygen molecules at 327o C?

Options:
1) 150
2) -123
3) -150
4) 123
Correct Answer: -123

QID : 720 - B/μo - M is equal to? (B is magnetic field, M is magnetisation of the material and μo is permeability of free space)

Options:
1) magnetic susceptibility
2) magnetic moment
3) magnetic intensity
4) magnetic flux
Correct Answer: magnetic intensity

QID : 721 - By what percent should the pressure of a gas be increased so as to decrease its volume by 20%, at constant temperature?

Options:
1) 20%
2) 16%
3) 25%
4) 40%
Correct Answer: 25%

QID : 722 - Electric potential at a point with position vector r due to a point charge Q placed at the origin is given by the formula _____.

Options:
1) V = Q/(2π?or2)
2) V = Q/(4π?or2)
3) V = Q/(4π?or)
4) V = Q/(2π?or)
Correct Answer: V = Q/(4π?or)

QID : 723 - Fermi is a unit of?

Options:
1) Length
2) Mass
3) Area
4) Time
Correct Answer: Length

QID : 724 - Find the uniform angular acceleration of a wheel if its angular speed increases from 420 rpm to 660 rpm in 8 seconds?

Options:
1) 2? rad/s²
2) 1 rad/s²
3) ? rad/s²
4) 2 rad/s²
Correct Answer: ? rad/s²

QID : 725 - For a transistor in common emitter configuration _____ is the ratio of change in base-emitter voltage (ΔVBE) to the resulting change in base current (ΔIB) at constant collector-emitter voltage (VCE).

Options:
1) Output resistance
2) Current amplification factor
3) Voltage gain
4) Input resistance
Correct Answer: Input resistance

QID : 726 - For small deformations, the stress and strain are proportional to each other. What is this known as?

Options:
1) Hooke’s law
2) Gauss's Law
3) Henry's Law
4) Joule's Law
Correct Answer: Hooke’s law

QID : 727 - How much heat (in joules) would be required to raise the temperature of 500 g of an aluminium sphere from 20 oC to 720 oC? [Specific Heat Capacity of Aluminium is 900 J/(kgK)]

Options:
1) 3.15 x 105
2) 3.15 x 107
3) 1.26 x 105
4) 1.26 x 107
Correct Answer: 3.15 x 105

QID : 728 - If 1,2 and 3 represent different mediums and 'n' is refractive index, then which of the following equations is true?

Options:
1) n23 = n31 × n12
2) n32 = n31 × n12
3) n32 = n13 × n12
4) n23 = n13 × n12
Correct Answer: n32 = n31 × n12

QID : 729 - If 'A' is the angle of a prism, 'I' is angle of incidence, 'e' is angle of emergence, then the angle of deviation 'δ' of light incident on the prism is equal to?

Options:
1) i + e + A
2) i - e + A
3) i - e - A
4) i + e - A
Correct Answer: i + e - A

QID : 730 - If a metal wire of length 'l' and cross section area 'A' has resistance 'R', then the resistivity of the material of the wire is equal to?

Options:
1) RA/l
2) Rl/A
3) lA/R

4) A/(lR)
Correct Answer: RA/l

QID : 731 - If a projectile is thrown with velocity v and makes an angle θ with the x-axis then the time taken for achieving maximum height is given by which formula?

Options:
1) t= vsinθ/g
2) t= v²sinθ/g
3) t= v²sin²θ/g
4) t= vsin²θ/g
Correct Answer: t= vsinθ/g

QID : 732 - If an object is placed 10 cm in front of a convex lens of focal length 6 cm, then find the position of the image (in cm)?

Options:
1) 12
2) -15
3) 15
4) -12
Correct Answer: 15

QID : 733 - If chlorine has two isotopes one of 35u and the other 37u and the average mass of chlorine atom is 35.5u, then the ratio of abundance of the two isotopes of masses 35u and 37u is _____.

Options:
1) 1/3
2) 1/4
3) 3/1
4) 4/1
Correct Answer: 3/1

QID : 734 - If 'E' is magnitude of uniform electric field in a conductor, 'τ' is the relaxation time, ('e' is charge and'm' is mass of an electron) then, the term -eEτ/m is equal to the _____ the electrons.

Options:
1) force experienced by
2) acceleration experienced by
3) drift velocity of
4) charge density due to
Correct Answer: drift velocity of

QID : 735 - If the empirical formula for the observed wavelengths for hydrogen is 1/λ = R(1/12 - 1/n2), where n is integral values higher than 1, then it represents the _____ spectral series.

Options:
1) Balmer
2) Paschen
3) Lyman
4) Brackett
Correct Answer: Lyman

QID : 736 - If the energy of the electron in the 2nd orbit of hydrogen is -3.4 eV, then how much is the energy (in eV) in the 3rd orbit?

Options:
1) -1.511
2) -2.22
3) -5.1
4) -13.6
Correct Answer: -1.511

QID : 737 - If the gas particles are of diameter 'd', average speed 'v', number of particles per unit volume 'n', then the volume a particle sweeps in time 't' is?

Options:
1) ?d2vt
2) ?v2td
3) ?t2vd
4) ?2tvd
Correct Answer: ?d2vt

QID : 738 - If the ideal gas equation is written as PV = kBNT, where N is number of molecules, then kB represents?

Options:
1) Gas Constant
2) Bohr radius
3) Boltzmann constant
4) B-Factor
Correct Answer: Boltzmann constant

QID : 739 - If x is displacement, time taken is t, initial velocity is u, final velocity is v and acceleration is a, then which of the following equations is true?

Options:
1) $u^2 = v^2 + 2ax$
2) $x = (v^2 - u^2)/2a$
3) $v^2 = u^2 - 2ax$
4) $x = (v^2 + u^2)/2a$
Correct Answer: $x = (v^2 - u^2)/2a$

QID : 740 - If 'x' is the displacement of a particle performing simple harmonic motion, then "kx2/2" is equal to its _____ energy.

Options:
1) kinetic
2) potential
3) total mechanical
4) vibrational
Correct Answer: potential

QID : 741 - If 'φ' is Electric flux through a closed surface 'S', 'q' is total charge enclosed by 'S' and '?'o is permittivity of free space, then these three are related by Gauss' Law formula _____.

Options:
1) φ = q?o
2) φ = q/?o
3) φ = ?o/q
4) φ = √(q?o)
Correct Answer: φ = q/?o

QID : 742 - In _____the conduction band overlaps on the valence band.

Options:
1) elemental semiconductors
2) compound semiconductors
3) metallic conductors
4) insulators
Correct Answer: metallic conductors

QID : 743 - In a nuclear power plant based on pressurised-water reactor, which substance is used both as the moderator and as the heat transfer medium?

Options:
1) air
2) hydrogen
3) nitrogen
4) water
Correct Answer: water

QID : 744 - In a stationary wave in a stretched string fixed at both ends the first anti-node is formed at x = _____. ('λ' is the wavelength of the stationary wave)

Options:
1) λ/4
2) λ/2
3) λ
4) 2λ
Correct Answer: λ/4

QID : 745 - In a uniform magnetic field 'B', a charge 'q' of mass 'm' executes a circular orbit in a plane normal to 'B'. Its frequency of uniform circular motion is called the cyclotron frequency which is equal to?

Options:
1) qB/(2πm)
2) 2qB/(πm)
3) 2π/qB
4) pπ/(2qB)
Correct Answer: qB/(2πm)

QID : 746 - In Einstein's mass-energy equivalence relation E = mc2, 'c' stands for?

Options:
1) Planck constant
2) elementary charge
3) atomic mass constant
4) speed of light
Correct Answer: speed of light

QID : 747 - In equilibrium, the total energy is equally distributed in all possible energy modes for a molecule, with each mode having an average energy equal to?

Options:
1) kBT/2
2) kBT
3) 2kBT
4) kBT/4
Correct Answer: kBT/2

QID : 748 - In Rutherford's gold foil experiment which of the following were directed towards the gold foil?

Options:
1) β-particles
2) γ-particles
3) electrons
4) α-particles
Correct Answer: α-particles

QID : 749 - In simple harmonic motion, the particle velocity lags behind the displacement by a phase angle of _____.

Options:
1) π/2
2) -π/4
3) π
4) -π
Correct Answer: π/2

QID : 750 - In the formula, $1/\lambda = R(1/52 - 1/n2)$ which represents the Pfund spectral series for hydrogen, 'R' is _____ constant.

Options:
1) Planck
2) Bohr
3) Thomson
4) Rydberg
Correct Answer: Rydberg

QID : 751 -In the relation from Kinetic theory of gases, PV = (1/3)Nmv2, if 'N' is number of particles then 'm' stands for?

Options:
1) Molecular mass
2) Mass of the gas
3) Mass of the particle
4) Number of moles of the gas
Correct Answer: Mass of the particle

QID : 752 - In the simple harmonic motion $x = \sqrt{2}\sin(\omega t - \pi/4)$, the phase constant can be shown as?

Options:
1) $\sqrt{2}$
2) $2\pi/\omega$
3) ωt
4) $7\pi/4$
Correct Answer: $7\pi/4$

QID : 753 - In which Thermodynamic process is temperature constant?

Options:
1) Isobaric
2) Isochoric
3) Adiabatic
4) Isothermal
Correct Answer: Isothermal

QID : 754 - Inductive reactance is equal to?

Options:
1) $1/(\omega L)$
2) ω/L
3) L/ω
4) ωL
Correct Answer: ωL

QID : 755 - Louis de Broglie argued that the electron in its circular orbit must be seen as a particle wave, whose wavelength is equal to _____ , where 'p' is the magnitude of the electron's momentum and 'h' is Planck's constant.

Options:
1) hp
2) p/h
3) h/p2
4) h/p
Correct Answer: h/p

QID : 756 - One end of a cylindrical pipe of cross-section 6.6 cm^2 has 14 holes each of radius 1 mm. If water is flowing in the pipe at 1 m/min then what is the speed (in m/s) of efflux through the holes?

Options:
1) 0.25
2) 0.125
3) 0.625
4) 0.5
Correct Answer: 0.25

QID : 757 - What does STP means?

Options:
1) 0 degree Celsius temperature and 1 pascal pressure.
2) 0 kelvin temperature and 1 atm pressure.
3) 0 kelvin temperature and 1 pascal pressure.
4) 0 degree Celsius and 1 atm pressure.
Correct Answer: 0 degree Celsius and 1 atm pressure.

QID : 758 - Tensile stress on a metal wire of radius 1 mm is 10,000 N/m^2. How much is the restoring force developed in it (in N)?

Options:
1) 3.14×10^2
2) 3.14 x 10-2
3) 3.14 x 10-4
4) 3.14 x 104
Correct Answer: 3.14 x 10-2

QID : 759 - The _____ of thermodynamics states that if two thermodynamic systems are each in thermal equilibrium with a third system separately are in thermal equilibrium with each other.

Options:
1) Zeroth Law
2) First Law

3) Second Law (Clausius statement)
4) Second Law (Kelvin-Planck statement)
Correct Answer: Zeroth Law

QID : 760 - The _____ Law is an equation that describes the magnetic field created by a current-carrying wire, and allows you to calculate its strength at various points.

Options:
1) Ampere's
2) Lorentz's
3) Biot-Savart's
4) Kirchhoff's
Correct Answer: Biot-Savart's

QID : 761 - The _____ is a device to measure the flow speed of incompressible fluid.

Options:
1) Alti-meter
2) Baro-meter
3) Venturi-meter
4) Hydro-meter
Correct Answer: Venturi-meter

QID : 762 - The acceleration of an object moving with speed 'v' in a circle of radius 'R' has a magnitude given by which formula?

Options:
1) $a = v^2 \times R$
2) $a = v/R^2$
3) $a = v \times R^2$
4) $a = v^2/R$
Correct Answer: $a = v^2/R$

QID : 763 - The amount of scattering of light is inversely proportional to the fourth power of its wavelength. This is known as _____ scattering.

Options:
1) Maxwell
2) Hertz
3) Huygens
4) Rayleigh
Correct Answer: Rayleigh

QID : 764 - The capacity of a parallel plate capacitor where 'A' is the area of each plate, 'd' the separation between them and with vacuum between the plates is given as?

Options:
1) C = ?oAd
2) C = ?o/(Ad)
3) C = ?oA/d
4) C = ?oA/d2
Correct Answer: C = ?oA/d

QID : 765 - The charge on an electron is _____x 10-19 C.

Options:
1) 2.4
2) 3.2
3) 1.6
4) 4.8
Correct Answer: 1.6

QID : 766 - The current in the inductor _____.

Options:
1) lags the voltage by п/2
2) leads the voltage by п/2
3) lags the voltage by п
4) leads the voltage by п
Correct Answer: lags the voltage by п/2

QID : 767 - The expression eт/m, where 'т' is the relaxation time, 'e' is charge and 'm' is mass of an electron is equal to the _____.

Options:
1) conductivity of the material
2) mobility of the electrons
3) resistivity of the material
4) permittivity of the material
Correct Answer: mobility of the electrons

QID : 768 - The fringe pattern observed in Young's Experiment to produce interference pattern will strictly be a?

Options:
1) Hyperbola
2) Ellipse
3) Circular
4) Parabola
Correct Answer: Hyperbola

QID : 769 - The human eye can detect electromagnetic radiation in the range of wavelength _____.

Options:
1) 800 nm to 1050 nm
2) 400 nm to 750 nm
3) 1200 nm to 1550 nm
4) 1600 nm to 1950 nm
Correct Answer: 400 nm to 750 nm

QID : 770 - The hydraulic lift is based on which of the following?

Options:
1) Bernoulli's principle
2) Pascal's Law
3) Archimedes' principle
4) Boyle's law
Correct Answer: Pascal's Law

QID : 771 - Which of the following is the ice point of water in the Fahrenheit scale?

Options:
1) 212o F
2) 0o F
3) 273o F
4) 32o F
Correct Answer: 32o F

QID : 772 - The mass of the hydrogen isotope, tritium is about the same as the masses of?

Options:
1) 3 electrons
2) 3 protons + 3 neutrons
3) 1 proton + 3 neutrons
4) 1 proton + 2 neutrons

Correct Answer: 1 proton + 2 neutrons

QID : 773 - The mathematical difference between molar specific heat capacities of an ideal gas at constant pressure and volume is equal to which of the following?

Options:
1) Carnot constant
2) Boltzmann constant
3) Universal gas constant
4) Rydberg constant
Correct Answer: Universal gas constant

QID : 774 - The molar specific heat at constant volume for monoatomic gas is which of the following?

Options:
1) 7R/2
2) 9R/2
3) 3R/2
4) 5R/2
Correct Answer: 3R/2

QID : 775 - The nucleus of which of the following atoms whose atomic mass numbers 'A' are given in the options would have the highest binding energy per nucleon?

Options:
1) 200
2) 100
3) 5
4) 20
Correct Answer: 100

QID : 776 - The period 'T' a pendulum of string length 'L', bob of mass 'm' and moment of inertia 'I' is given by _____.

Options:
1) $T = 2\pi \sqrt{(IL/mg)}$
2) $T = 2\pi \sqrt{(I/mgL)}$
3) $T = 2\pi \sqrt{(mgL/I)}$
4) $T = 2\pi \sqrt{(mg/IL)}$
Correct Answer: $T = 2\pi \sqrt{(I/mgL)}$

QID : 777 - The phenomenon of rainbow is due to the combined effect of all of the following properties of light except _____.

Options:
1) dispersion
2) refraction
3) reflection
4) polarization
Correct Answer: polarization

QID : 778 - The power loss in a conductor of resistance 'R' across which a potential difference of 'V' is equal to which of the following?

Options:
1) V/R2
2) V2R
3) VR2
4) V2/R
Correct Answer: V2/R

QID : 779 - Which of the following is the product of moment of inertia and angular velocity?

Options:
1) Angular momentum
2) Power
3) Torque
4) Work
Correct Answer: Angular momentum

QID : 780 - The radius of orbit of the electron in a hydrogen atom is equal to? (?o is permittivity of free space, 'e' is charge and 'm' is mass of an electron)

Options:
1) e/(4п?omv2)
2) mv2e2/(4п?o)
3) mv2e/(4п?o)
4) e2/(4п?omv2)
Correct Answer: e2/(4п?omv2)

QID : 781 - The refractive index of denser medium 2 with respect to rarer medium 1 will be _____ (where 'C' is the measure of the critical angle).

Options:
1) n12 = 1/sinC
2) n21 = 1/sinC
3) n12 = sinC
4) n12 = 1/(-sinC)
Correct Answer: n12 = 1/sinC

QID : 782 - The speed 'c' of electromagnetic wave in vacuum is equal to? (where μo and ?o are free space permeability and permittivity constants)

Options:
1) 1/√(μo?o)
2) 1/(μo?o)
3) μo?o
4) (μo?o)2
Correct Answer: 1/√(μo?o)

QID : 783 - The speed 'v' of transverse waves on a stretched string of linear mass density 'μ' and tension 'T' is equal to?

Options:
1) √(μ/T)
2) √(T/μ)
3) (T/μ)2
4) (μ/T)2
Correct Answer: √(T/μ)

QID : 784 - The statement, "The liquid pressure is the same at all points at the same horizontal level irrespective of cross sectional area or base area or the shape of the container" represents which of the following?

Options:
1) Anomalous behaviour of water
2) The hydrostatic paradox
3) Algol paradox
4) Archimedes' principle
Correct Answer: The hydrostatic paradox

QID : 785 - Electric flux through a closed surface 'S' enclosing a charge 'q' is equal to _____. (?o is permittivity of free space)

Options:
1) q?o
2) q2?o
3) ?o/q
4) q/?o
Correct Answer: q/?o

QID : 786 - There is a fundamental limit on the efficiency of a heat engine set by an independent principle of nature called the _____Law of Thermodynamics.

Options:
1) Zeroth
2) First
3) Third
4) Second
Correct Answer: Second

QID : 787 - Three quantities are needed to specify the magnetic field of the earth on its surface. Which of the following is not needed?

Options:
1) the vertical component
2) the horizontal component
3) the magnetic declination
4) the magnetic dip
Correct Answer the vertical component

QID : 788 - Water at 4 oC has maximum _____.

Options:
1) volume
2) viscosity
3) compressibility

4) density
Correct Answer density

QID : 789 - What is the magnifying power of a compound microscope whose eyepiece has a focal length of 10 cm and the magnifying power of objective is 4? (Use least distance of distinct vision as 25 cm)

Options:
1) 3.5
2) 14
3) 8
4) 16
Correct Answer: 14

QID : 790 - What is the Moment of Inertia of a thin circular ring of mass 'M' and radius 'R' about its diameter?

Options:
1) $MR^2/4$
2) $MR^2/3$
3) $MR^2/2$
4) $MR^2/6$
Correct Answer: $MR^2/2$

QID : 791 - What would be the acceleration (in m/s^2) due to gravity on a planet whose mass is 1/7th the mass of earth and radius, half the radius of earth?

Options:
1) 5.6
2) 4.9
3) 4.2
4) 3.5
Correct Answer: 5.6

QID : 792 - What would be the frequency (in Hz) of the beats when two sounds of frequencies 256 Hz and 260 Hz superimpose?

Options:
1) 8
2) 2
3) 16
4) 4
Correct Answer: 4

QID : 793 - When temperature is held constant, the pressure and volume of a quantity of gas are related as PV = constant. This relationship is known as?

Options:
1) Charles' law
2) Boyle's law
3) Combined Gas Law
4) Gay-Lussac's Law
Correct Answer: Boyle's law

QID : 794 - When the transistor is used in the cut-off or saturation state, it acts as?

Options:
1) An amplifier
2) Zener diode
3) A switch
4) An AND gate
Correct Answer: A switch

QID : 795 - Which formula represents Newton's Law of Gravitation?

Options:
1) F= Gm1m2/r (G is gravitational constant)
2) $F= Gm1m2/r^2$ (G is gravitational constant)
3) $F= gm1m2/r^2$ (g is acceleration due to gravity)
4) F= gm1m2/r (g is acceleration due to gravity)
Correct Answer: $F= Gm1m2/r^2$ (G is gravitational constant)

QID : 796 -

Options:
1) AND
2) NAND
3) NOR
4) OR
Correct Answerr: OR

QID : 797 - Which of the following is a periodic function if 'ω' is a constant and 't' represents time?

Options:
1) log (ωt)
2) $e^{-\omega t}$
3) 2?√(1/ωt)
4) sin ωt + cos 2 ωt + sin 4 ωt
Correct Answer: sin ωt + cos 2 ωt + sin 4 ωt

QID : 798 - Which of the following is false about Electrostatic field lines?

Options:
1) Field lines start from positive charges and end at negative charges.

2) If there is a single positive charge field lines will end at infinity.

3) Two field lines can never cross each other.

4) Electrostatic field lines form closed loops.

Correct Answer: Electrostatic field lines form closed loops.

QID : 799 - Which of the following statements is consistent with the Doppler effect?

Options:
1) As the source of sound moves towards the listener the pitch of the sound appears to be higher.
2) As the source of sound moves towards the listener the pitch of the sound appears to be lower.
3) As the source of sound moves away from the listener the pitch of the sound appears to be higher.
4) As the listener moves towards the source of sound the pitch of the sound appears to be lower.
Correct Answer: As the source of sound moves towards the listener the pitch of the sound appears to be higher.

QID : 800 - Zener diode is fabricated by _____ of the junction.

Options:
1) lightly doping both p and n-sides
2) heavily doping both p and n-sides
3) heavily doping p-side and lightly doping n-side
4) lightly doping p-side and heavily doping n-side
Correct Answerheavily doping both p and n-sides