



SSC CGL 9th March 2020 Shift-1

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in any retrieval system of any nature without the permission of cracku.in, application for which shall be made to support@cracku.in

General Intelligence and Reasoning

Instructions

For the following questions answer them individually

Question 1

Identify the number that does NOT belong to the following series.

2, 6, 14, 30, 62, 126, 250

- A 14
- B 126
- C 250
- D 62

Answer: C

Explanation:

The series follows pattern as,

$$2 + 2^2 = 2 + 4 = 6$$

$$6 + 2^3 = 6 + 8 = 14$$

$$14 + 2^4 = 14 + 16 = 30$$

$$30 + 2^5 = 30 + 32 = 62$$

$$62 + 2^6 = 62 + 64 = 126$$

$$126 + 2^7 = 126 + 128 = 254$$

∴ The correct answer is option C.

SSC CGL Free Mock Test

Question 2

$A + B$ means 'A is the sister of B'.

$A \times B$ means 'A is the father of B':

$A \div B$ means 'A is the brother of B':

Which of the following expressions means 'H is the grandson of P'?

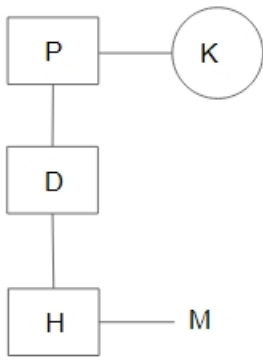
- A $P + K + D \times H \div M$
- B $H + K + D \times P \div M$
- C $D + H + K \times M \div P$
- D $K + P \times D \times H \times M$

Answer: D

Explanation:

In the diagram, Circle shows the female, square shows the male, vertical lines show the generation, single horizontal line shows the brother/sister and double horizontal lines show the couple.

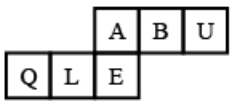
From the option D,



So, 'H is the grandson of P'.
 ∴ The correct answer is option D.

Question 3

A cube is made by folding the given sheet. In the cube so formed, which of the following pairs of letters will be on opposite sides?



- A Q and E
- B A and Q
- C L and U
- D B and E

Answer: A

Question 4

60 students participated in one or more of the three competitions, i.e. Quiz, Extempore and Debate. A total of 22 students participated either in Quiz only or in Extempore only. 4 students participated in all three competitions. A total of 14 students participated in any of the two competitions only. How many students participated in Debate only?

- A 11
- B 20
- C 14
- D 22

Answer: B

Explanation:

Total students = 60
 Students participated either in Quiz only or in Extempore only = 22
 Students participated in all three competitions = 4
 Students participated in any of the two competitions only = 14
 Students participated in Debate only = $60 - 22 - 4 - 14 = 20$
 ∴ The correct answer is option B.

Question 5

Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

- 1. Some dancers are writers.
- 2. All writers are students.

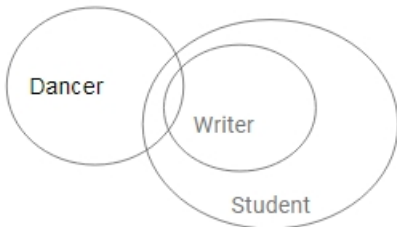
Conclusions:

- I. Some students are dancers.
- II. Some students are writers.
- III. No student is a dancer.

- A Either conclusion I or III follows.
- B Only conclusions II and III follow.
- C Only conclusions I and II follow.
- D All conclusions I, II and III follow.

Answer: C

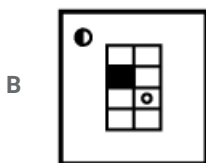
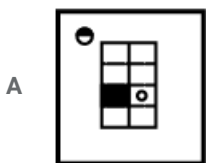
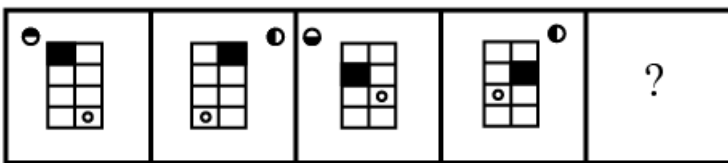
Explanation:

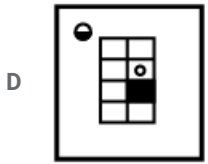
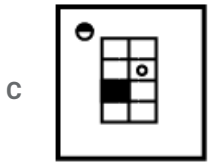


From the Venn diagram,
Only conclusion I and II follow.
∴ The correct answer is option C.

Question 6

Select the figure that can replace the question mark (?) in the following series.





Answer: C

Question 7

Select the option that is related to the third number in the same way as the second number is related to the first number.
 $56 : 30 :: 78 : ?$

- A 46
- B 41
- C 50
- D 53

Answer: B

Explanation:

$$30 \times 2 - 4 = 60 - 4 = 56$$

Similarly,

$$41 \times 2 - 4 = 82 - 4 = 78$$

∴ The correct answer is option B.

SSC CGL Tier-2 Previous Papers PDF

Question 8

Arrange the following words in the order in which they would appear in an English dictionary.

1. Realistic
2. Realism
3. Restore
4. Research
5. Resurge

- A 2, 1, 4, 3, 5
- B 2, 1, 3, 4, 5
- C 1, 2, 4, 3, 5
- D 2, 1, 4, 5, 3

Answer: A

Explanation:

Word according to English dictionary,

Realism, Realistic, Research, Restore, Resurge

∴ The correct answer is option A.

Question 9

Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the odd letter-cluster.

- A JNQS
- B TVXZ
- C RSTU
- D ADGJ

Answer: A

Explanation:

$$J + 4 = N + 3 = Q + 2 = S$$

$$T + 2 = V + 2 = X + 2 = Z$$

$$R + 1 = S + 1 = T + 1 = U$$

$$A + 3 = D + 3 = G + 3 = J$$

Except option A, remaining all letter-clusters have same difference in between the letters.

∴ The correct answer is option A.

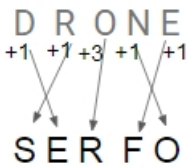
Question 10

In a certain code language, 'DRONE' is written as 'SERFO'. How will 'HOUSE' be written as in that language?

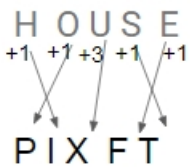
- A QJXGB
- B PIXFT
- C PQWGS
- D PIVFT

Answer: B

Explanation:



Similarly,



∴ The correct answer is option B.

200 SSC Mocks for just Rs. 249 - Enroll now

Question 11

Select the letter-cluster that can replace the question mark (?) in the following series.
DJQC, ELTG, FNWK, GPZO, ?

- A HRBU

- B HRCS
- C HQCT
- D GRDS

Answer: B

Explanation:

The series follows pattern as,
 $(D + 1)(J + 2)(Q + 3)(C + 4) = ELTG$
 $(E + 1)(L + 2)(T + 3)(G + 4) = FNWK$
 $(F + 1)(N + 2)(W + 3)(K + 4) = GPZO$
 $(G + 1)(P + 2)(Z + 3)(O + 4) = HRCS$
 \therefore The correct answer is option B.

Question 12

Select the option in which the words share the same relationship as that shared by the given pair of words.

Audition : Selection

- A Loyalty : Fraud
- B Examination : Pass
- C Machine: Fault
- D Competition : Poem

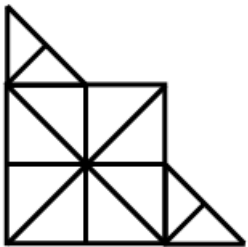
Answer: B

Explanation:

Audition related to selection similarly, examination related to pass.
 \therefore The correct answer is option B.

Question 13

How many triangles are there in the given figure?



- A 23
- B 22
- C 24
- D 21

Answer: B

Question 14

If 'A' stands for 'subtraction', 'B' stands for 'multiplication', 'C' stands for 'addition' and 'D' stands for 'division', then what is the value of the following expression?

$$32B4A 12 B(35A24)C52D4$$

- A 47
- B 39
- C 19
- D 9

Answer: D

Explanation:

$$32B4A 12 B(35A24)C52D4$$

On applying the instructions,

$$= 32 \times 4 - 12 \times (35 - 24) + 52 \div 4$$

$$= 128 - 12 \times 11 + 13$$

$$= 128 - 132 + 13$$

$$= 9$$

Question 15

Select the letter that can replace the question mark (?) in the following series.

Y, R, L, G, ?, Z

- A E
- B F
- C C
- D D

Answer: C

Explanation:

The series follows pattern as,

$$Y - 7 = R$$

$$R - 6 = L$$

$$L - 5 = G$$

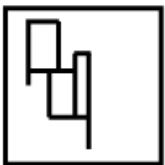
$$G - 4 = C$$

$$C - 3 = Z$$

∴ The correct answer is option C.

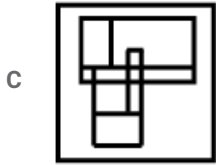
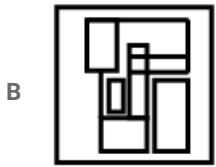
Question 16

Select the option in which the given figure is embedded (rotation is not allowed).



A





Answer: C

1500 + Free Must Solved SSC Questions (With Solutions)

Question 17

In a certain code language, 'POUND' is coded as '106' and 'CLEAN' is coded as '41'. How will 'MAKER' be coded as in that language?

- A 112
- B 78
- C 50
- D 54

Answer: D

Explanation:

$$\text{POUND} = 16 + 15 \times 2 + 21 \times 2 + 14 + 4 = 106$$

$$\text{CLEAN} = 3 + 12 + 5 \times 2 + 1 \times 2 + 14 = 41$$

Similarly,

$$\text{MAKER} = 13 + 1 \times 2 + 11 + 5 \times 2 + 18 = 54$$

∴ The correct answer is option D.

Question 18

Four number-pairs have been given, out of which three are alike in some manner and one is different. Select the number-pair that is different from the rest.

- A 37 : 266
- B 53 : 378
- C 45 : 322
- D 43 : 318

Answer: D

Explanation:

In 37 : 266,

$$37 \times 7 + 7 = 259 + 7 = 266$$

In 53 : 378,

$$53 \times 7 + 7 = 371 + 7 = 378$$

In 45 : 322,

$$45 \times 7 + 7 = 315 + 7 = 322$$

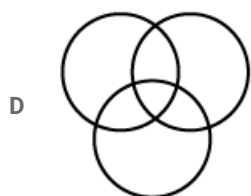
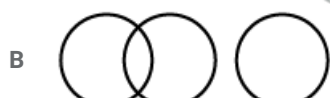
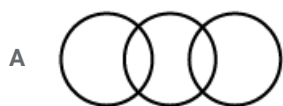
In 43 : 318,

$$43 \times 7 + 7 = 301 + 7 = 308$$

∴ The correct answer is option D.

Question 19

Which of the following Venn diagrams best represents the relationship between the classes?
Tables, Wooden objects, Chairs



Answer: A

General Science Notes for SSC CGL

Question 20

Select the option in which the numbers are related in the same way as are the numbers in the given set.
(88, 60, 37)

A (56, 38, 28)

B (36, 70, 38)

C (94, 42, 34)

D (43, 49, 27)

Answer: C

Explanation:

In (88, 60, 37)

$$8 + 8 = 16$$

$$6 + 0 = 6$$

$$16 - 6 = 10 = (3 + 7)$$

Similarly,

In (94, 42, 34)

$$9 + 4 = 13$$

$$4 + 2 = 6$$

$$13 - 6 = 7 = (3 + 4)$$

∴ The correct answer is option C.

Question 21

Study the given pattern carefully and select the number that can replace the question mark (?) in it.

11	12	18
4	5	6
57	19	?

A 55

B 69

C 205

D 108

Answer: D

Question 22

Select the correct mirror image of the given letter-cluster when a vertical mirror is placed on the right side of the cluster.

RQBKHNT

A **INHKVBR**

B **TNHNKVR**

C **VBVKHNT**

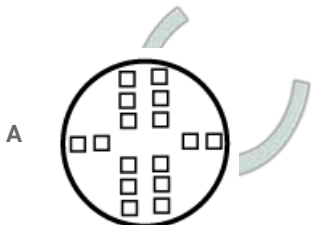
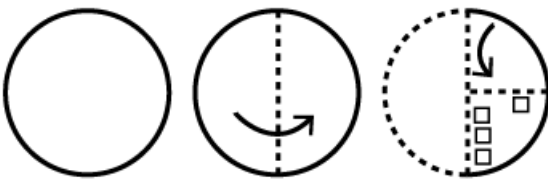
D **TIHNKVR**

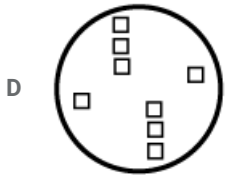
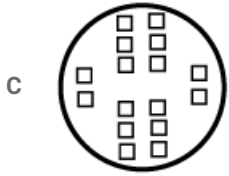
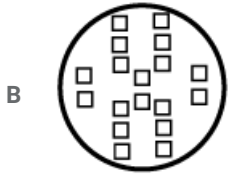
Answer: D

Free SSC Study Material (18,000 Solved Questions)

Question 23

A piece of paper is folded and cut as shown below in the question figures. Select from the given answer figures, how it will appear when unfolded?





Answer: C

Question 24

Four words have been given, out of which three are alike in some manner and one is different. Select the odd word.

- A Volume
- B Gallon
- C Weight
- D Distance

Answer: B

Explanation:

Only 'Gallon' is the unit of measurement (volume).

∴ The correct answer is option B.

Question 25

'Ethiopia' is related to 'Africa' in the same way as 'Brazil' is related to '____';

- A Africa
- B Brasilia
- C North America
- D South America

Answer: D

Explanation:

'Ethiopia' is related to 'Africa' in the same way as 'Brazil' is related to 'South America'

∴ The correct answer is option D.

SSC Exam Free Videos (Youtube)

General Awareness

Instructions

For the following questions answer them individually

Question 26

The Paithan Hydro - Electric Project is on river ____.

- A Brahmaputra
- B Yamuna
- C Narmada
- D Godavari

Answer: D

SSC Free Preparation App**Question 27**

Who designed the logo for Lokpalin India?

- A B.P. Raju
- B Prashant Mishra
- C Deepak Punia
- D Kamareddy

Answer: B

Question 28

The India Meteorological Department (IMD) celebrated ____ its foundation day on January 15, 2020.

- A 145 th
- B 139 th
- C 135 th
- D 140 th

Answer: A

Question 29

What does GNP standfor?

- A Gramin Nigam Parishad
- B Gramin Nisak Praman
- C Gross National Product
- D Gross National Produce

Answer: C

Daily Free SSC Practice Set

Question 30

Which of the following years is called the Year of the Great Divide in the demographic history of India?

- A 1921
- B 1931
- C 1951
- D 1911

Answer: A

Question 31

In which year did the Portuguese capture Goa?

- A 1610 AD
- B 1475 AD
- C 1540 AD
- D 1510 AD

Answer: D

Question 32

Name the author of the book 'Ain-i-Akbari'?

- A Todar Mal
- B Abu' Fazl
- C Dara Shikoh
- D Abdul Rahim Khan-I-Khana

Answer: B

SSC CGL Free Online Coaching

Question 33

Protium, deuterium and tritium are the naturally occurring isotopes of:

- A nitrogen
- B hydrogen
- C carbon
- D gold

Answer: B

Question 34

Name the Indian equestrian to qualify for the Tokyo Olympics officially after a wait / span of two decades.

- A Ghulam Mohammed Khan
- B Raghbir Singh
- C Fouaad Mirza
- D Bishal Singh

Answer: C

Question 35

What is the yellow dust present in the middle of a flower called?

- A Zygote
- B Pollen
- C Stomata
- D Sperm

Answer: B

SSC CHSL Previous Question papers (download pdf)

Question 36

In which of the following is citric acid present?

- A Tamarind
- B Lemon
- C Black Gram
- D Curd

Answer: B

Question 37

Who launched the first phase of the Mumbai Trans Harbour Link (MTHL) on 15th January 2020?

- A Ajit Pawar
- B Devendra Fadnavis
- C Narendra Modi
- D Uddhav Thackeray

Answer: D

Question 38

_____ are called the 'Power houses' of the cell.

- A Lungs
- B Pituitary glands
- C Arteries
- D Mitochondria

Answer: D

Free SSC Study Material (18,000 Solved Questions)

Question 39

In which year was the first Round Table Conference held in London?

- A 1907
- B 1930
- C 1919
- D 1923

Answer: B

Question 40

The Legislative Assembly of which state adopted a new logo on the 9th January 2020?

- A Tripura
- B Assam
- C Andhra Pradesh
- D Arunachal Pradesh

Answer: D

Question 41

Name the first actor to win the Oscar Awards.

- A Emil Jannings
- B Warner Baxter
- C Charlie Chaplin
- D Lionel Barrymore

Answer: A

Latest Job Updates on Telegram - Join here

Question 42

Shaukat Kaifi passed away in 2019. She was the mother of which famous actress?

- A Dia Mirza
- B Shabana Azmi
- C Fatima Sana Shaikh
- D Urmila Matondkar

Answer: B

Question 43

What does the writ of 'Mandamus' mean?

- A To be Certified
- B We Command
- C You May Have the Body
- D By What Warrants

Answer: B

Question 44

On which country has the World Anti-doping Agency recently imposed a 4-year ban?

- A Russia
- B Pakistan
- C Brazil
- D China

Answer: A

SSC CGL Free Mock Test

Question 45

Deficiency of which of the following vitamins causes Night Blindness?

- A Vitamin B
- B Vitamin D
- C Vitamin C
- D Vitamin A

Answer: D

Question 46

What is the pass at the southern end of the Nilgiri hills called?

- A Chorla ghat pass
- B Malshej ghat pass

- C Palakkad gap
- D Goran ghat pass

Answer: C

Question 47

Jai Prakash Narayan Museum of Socialism is situated in:

- A Vadodara
- B New Delhi
- C Lucknow
- D Amritsar

Answer: C

SSC CGL Previous Papers (DOWNLOAD PDF)

Question 48

Which of the following Acts was amended to provide a statutory basis for the implementation of the flexible inflation targeting (FIT) framework?

- A The Industrial Finance Corporation of India Act, 1948
- B Banking Regulation Act, 1949
- C Reserve Bank of India (RBI) Act, 1934
- D Deposit Insurance and Credit Guarantee Corporation Act, 1961

Answer: C

Question 49

Fatehabad district derives its name from the eponymous headquarters town founded by ____ in the 14th century, who named it after his son Fateh Khan.

- A Ghiasuddin Tughlaq
- B Firoz Shah Tughlaq
- C Humayun
- D Allauddin Khilji

Answer: B

Question 50

The wood of which of the following trees is used to make the large plucked string instrument used in Carnatic classical music known as Bobbili Veena / Saraswathi Veena?

- A Walnut wood
- B Jackfruit wood
- C Teak wood

D Sandal wood

Answer: B

SSC CGL Tier-2 Previous Papers PDF

Quantitative Aptitude

Instructions

For the following questions answer them individually

Question 51

Ram makes a profit of 30% by selling an article. What would be the profit percent if it were calculated on the selling price instead of the cost price? (Correct to one decimal place)

A 22.4 %

B 23.1 %

C 20.1 %

D 24.2 %

Answer: B

Explanation:

Let the cost price be Rs.100.

$$\text{Selling price} = 100 \times \frac{130}{100} = \text{Rs.130}$$

$$\text{Profit when it calculated on the selling price} = \frac{30}{130} \times 100 = 23.07\% \approx 23.1\%$$

200 SSC Mocks for just Rs. 249 - Enroll now

Question 52

Ram and Shyam can complete a task in $6\frac{2}{3}$ days and 15 days, respectively. They work together for 4 days, and then Ram leaves. In how many days after Ram leaves, will Shyam complete the remaining task alone?

A $1\frac{1}{2}$ days

B 3 days

C 4 days

D 2 days

Answer: D

Explanation:

Let the total work be 60 units.

(\because L.C.M. of $(6\frac{2}{3} = \frac{20}{3})$ and 15 is 60.)

$$\text{Efficiency of Ram} = \frac{\text{work}}{\text{time}} = \frac{60}{\frac{20}{3}} = 9 \text{ units/day}$$

$$\text{Efficiency of Shyam} = \frac{60}{15} = 4 \text{ units/day}$$

$$\text{Work done by Ram and Shyam in 4 days} = \text{efficiency} \times \text{time} = (9 + 4) \times 4 = 52 \text{ units}$$

$$\text{Remaining work} = 60 - 52 = 8 \text{ units}$$

Time taken by Shyam to complete the remaining work = $8/4 = 2$ days

Question 53

The following table represents the number of candidates that appeared and qualified in a competitive examination from different states over five years. Study the table and answer the questions that follow.

State	Year									
	1997		1998		1999		2000		2001	
	Appeared	Qualified	Appeared	Qualified	Appeared	Qualified	Appeared	Qualified	Appeared	Qualified
M	5200	720	8500	980	7400	850	6800	775	9500	1125
N	7500	840	9200	1050	8450	920	9200	980	8800	1020
P	6400	780	8800	1020	7800	890	8750	1010	9750	1250
Q	8100	950	9500	1240	8700	980	9700	1200	8950	995

The total number of candidates that qualified from all the states together in 1998 is approximately what percentage of the total number of candidates that qualified from all the states together in 2001? (Correct to Two decimal points)

- A 94.7 %
- B 97.72 %
- C 90.72 %
- D 96.70 %

Answer: B

Explanation:

The total number of candidates that qualified from all the states together in 1998 = $980 + 1050 + 1020 + 1240 = 4290$

The total number of candidates that qualified from all the states together in 2001 = $1125 + 1020 + 1250 + 995 = 4390$

Required percentage = $\frac{4290}{4390} \times 100 = 97.72\%$

Question 54

If $A + B = 12$ and $AB = 17$, What is the value of $A^3 + B^3$?

- A 1116
- B 1166
- C 1106
- D 1213

Answer: A

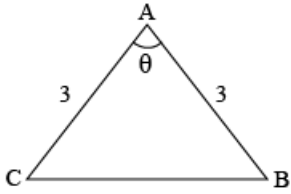
Explanation:

$$\begin{aligned} &A^3 + B^3 \\ &= (A + B)^3 - 3AB(A + B) \\ &= (12)^3 - 3 \times 17(12) \\ &= 1728 - 612 = 1116 \end{aligned}$$

SSC CGL Important Questions PDF

Question 55

In the given figure $\triangle ABC$, if $\theta = 80^\circ$, the measure of each of the other two angles will be:



- A 60°
- B 40°
- C 50°
- D 80°

Answer: C

Question 56

If $3A = 4B = 5C$, then $A : B : C$ is equal to:

- A 10 : 5 : 4
- B 10 : 7 : 6
- C 20 : 15 : 16
- D 20 : 15 : 12

Answer: D

Explanation:

$$3A = 4B = 5C$$

let the $3A = 4B = 5C = k$

$$A = k/3$$

$$B = k/4$$

$$C = k/5$$

$$A : B : C = \frac{k}{3} : \frac{k}{4} : \frac{k}{5} = 20 : 15 : 12$$

Question 57

What is the area of a sector of a circle of radius 14 cm and central angle 45° ? (Take $\pi = \frac{22}{7}$)

- A 70 cm^2
- B 77 cm^2
- C 11 cm^2
- D 67 cm^2

Answer: B

Explanation:

$$\text{Area of a sector of a circle} = \pi r^2 \times \frac{\text{central angle}}{360}$$

Central angle = 45°

$r = 14 \text{ cm}$

$$\begin{aligned} \text{Area of a sector of a circle} &= \frac{22}{7} \times (14)^2 \times \frac{45}{360} = \frac{22}{7} \times 196 \times \frac{45}{360} \\ &= 77 \text{ cm}^2 \end{aligned}$$

1500 + Free Must Solved SSC Questions (With Solutions)

Instructions

The following table represents the number of candidates that appeared and qualified in a competitive examination from different states over five years. Study the table and answer the questions that follow.

State	Year									
	1997		1998		1999		2000		2001	
	Appeared	Qualified	Appeared	Qualified	Appeared	Qualified	Appeared	Qualified	Appeared	Qualified
M	5200	720	8500	980	7400	850	6800	775	9500	1125
N	7500	840	9200	1050	8450	920	9200	980	8800	1020
P	6400	780	8800	1020	7800	890	8750	1010	9750	1250
Q	8100	950	9500	1240	8700	980	9700	1200	8950	995

Question 58

What is the difference between the number of candidates qualifying in the year 1998, in the states M and P?

- A 40
- B 50
- C 44
- D 60

Answer: A

Explanation:

The difference between the number of candidates qualifying in the year 1998, in the states M and P = $1020 - 980 = 40$

Question 59

What is the average number of candidates that appeared from State Q during the given years?

- A 8880
- B 9000
- C 8990
- D 8980

Answer: C

Explanation:

Number of candidates that appeared from State Q in all years = $8100 + 9500 + 8700 + 9700 + 8950 = 44950$

Average number of candidates that appeared from State Q during the given years = $44950/5 = 8990$

(Average = sum of terms/number of terms)

Instructions

For the following questions answer them individually

Question 60

Ravi scores 72 % marks in examinations. If these are 360 marks, then the maximum marks are:

- A 500
- B 450
- C 400
- D 350

Answer: A

Explanation:

According to question,

$$72\% = 360$$

$$\text{Maximum marks}(100\%) = \frac{360}{72} \times 100 = 500$$

General Science Notes for SSC CGL

Question 61

The average age of A and B is 20 years. and that of B and C is 25 years. What is the age of A?

- A 25 years
- B 10 years
- C 15 years
- D 20 years

Answer: B

Question 62

The single discount equivalent to two successive discounts of 20% and 15% is:

- A 28%
- B 30%
- C 32%
- D 22%

Answer: C

Explanation:

$$\text{Single discount for successive discounts} = 20\% + 15\% - \frac{20\% \times 15\%}{100}$$

$$20\% + 15\% - 3\% = 32\%$$

Question 63

What is the smallest integer that is a multiple of 5, 8 and 15?

- A 600
- B 120
- C 60
- D 40

Answer: B

Explanation:

Smallest integer that is a multiple of 5, 8 and 15 = 120

(because LCM of 5, 8 and 15 is 120.)

Free SSC Study Material (18,000 Solved Questions)

Question 64

The simple interest on a sum of money for 3 years at an interest rate of 6% p.a. is Rs.6,750. What will be the compound interest rounded off on the same sum at the same rate for the same period, compounded annually is closest to :

A Rs. 7,133

B Rs. 7,163

C Rs. 7,103

D Rs. 7,663

Answer: B

Explanation:

Simple interest = $\frac{prt}{100}$

$r = 6\%$

$t = 3$ years

$6750 = \frac{p \times 6 \times 3}{100}$

$p = \text{Rs.} 37500$

Compound interest = $p(1 + \frac{r}{100})^t - p$

$= 37500(1 + \frac{6}{100})^3 - 37500$

$= 37500 \times \frac{106}{100} \times \frac{106}{100} \times \frac{106}{100} - 37500$

$= 44663.1 - 37500 = 7363.1 \approx \text{Rs.} 7361$

Question 65

In the figure, PA is a tangent from an external point P to the circle with centre O . If $\angle POB = 110^\circ$, then the measure of $\angle APO$ is:

A 25°

B 40°

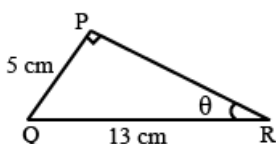
C 20°

D 30°

Answer: C

Question 66

In the right triangle shown in the figure, what is the value of $\csc \theta$?



- A $\frac{13}{5}$
- B $\frac{5}{13}$
- C $\frac{5}{11}$
- D $\frac{12}{13}$

Answer: A

SSC Exam Free Videos (Youtube)

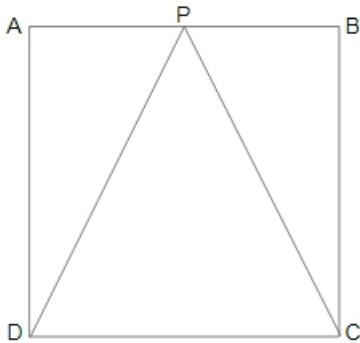
Question 67

Triangle APC is drawn inside the square $ABCD$ of side 24 cm where P lies on AB . What is the area of the triangle?

- A 280 cm^2
- B 288 cm^2
- C 200 cm^2
- D 298 cm^2

Answer: B

Explanation:



Area of the triangle = $\frac{1}{2} \times \text{base} \times \text{height}$
 $= \frac{1}{2} \times 24 \times 24 = 288 \text{ cm}^2$

Question 68

The value of $1800 \div 20 \times [(12-6) + (24-12)]$ is:

- A 2720
- B 840
- C 1720
- D 1620

Answer: D

Explanation:

$1800 \div 20 \times [(12-6) + (24-12)]$
 $= 1800 \div 20 \times [(6) + (12)]$
 $= 90 \times [(6) + (12)]$

$$= \$90 \times 18 = 1620$$

Question 69

\$(3a-4b)^3\$ is equal to:

- A $9a^2 - 16b^2$
- B $27a^3 - 64b^3 - 108a^2b + 144ab^2$
- C $27a^3 - 64b^3$
- D $9a^2 - 24ab + 16b^2$

Answer: B

Explanation:

$$\$(3a-4b)^3\$\$$$

$$= \$(3a)^3 - (4b)^3 - 3(3a \cdot 4b)(3a-4b)\$\$$$

$$(\$\because (a-b)^3 = a^3 - b^3 - 3ab(a-b)\$\$)$$

$$= \$27a^3 - 64b^3 - 36ab(3a-4b)\$\$$$

$$= \$27a^3 - 64b^3 - 108a^2b + 144ab^2\$\$$$

SSC Free Preparation App

Question 70

Expand: $(4a+3b+2c)^2$

- A $16a^2 - 9b^2 + 4c^2 - 24ab + 12bc - 16ca$
- B $16a^2 + 9b^2 + 4c^2 + 24ab + 12bc + 16ca$
- C $4a^2 + 3b^2 + 2c^2 + 24ab + 12bc + 16ca$
- D $16a^2 + 9b^2 + 4c^2 - 24ab - 12bc - 16ca$

Answer: B

Explanation:

$$\$(4a+3b+2c)^2\$\$$$

$$= \$(4a)^2 + (3b)^2 + (2c)^2 + 2(4a \cdot 3b + 3b \cdot 2c + 2c \cdot 4a)\$\$$$

$$(\$\because (a+b+c)^2 = a^2 + b^2 + c^2 + 2(a+b+c)\$\$)$$

$$= \$16a^2 + 9b^2 + 4c^2 + 2(12ab + 6bc + 8ac)\$\$$$

$$= \$16a^2 + 9b^2 + 4c^2 + 24ab + 12bc + 16ac\$\$$$

Question 71

The length, breadth and height of a cuboidal box are in the ratio 7 : 5 : 3 and its whole surface area is 27832 cm^2 . Its volume is:

- A 288120 cm^3
- B 280120 cm^3
- C 208120 cm^3
- D 288100 cm^3

Answer: A

Explanation:

Let the length, breadth and height of a cuboid box be $7x$, $5x$ and $3x$ respectively.

$$\text{Surface area} = 27832 \text{ cm}^2$$

$$2[(\text{length} \times \text{breadth}) + (\text{breadth} \times \text{height}) + (\text{height} \times \text{length})] = 27832$$

$$[(7x \times 5x) + (5x \times 3x) + (3x \times 7x)] = 13916$$

$$35x^2 + 15x^2 + 21x^2 = 13916$$

$$71x^2 = 13916$$

$$x^2 = 13916/71 = 196$$

$$x = 14$$

Volume = length \times breadth \times height

$$= 7x \times 5x \times 3x = 105x^3$$

On putting the value of x ,

$$= 105 \times (14^3) = 105 \times 2744 = 288120 \text{ cm}^3$$

Question 72

If $6\tan\theta - 5\sqrt{3}\sec\theta + 12\cot\theta = 0, 0^\circ < \theta < 90^\circ$, then the value of $(\operatorname{cosec}\theta + \sec\theta)$ is:

A $\frac{3+2\sqrt{3}}{2}$

B $\frac{2(3+2\sqrt{3})}{3}$

C $\frac{2}{3}(3+\sqrt{3})$

D $\frac{3+\sqrt{3}}{2}$

Answer: C

Explanation:

$$6\tan\theta - 5\sqrt{3}\sec\theta + 12\cot\theta = 0, 0^\circ < \theta < 90^\circ$$

$$\frac{6\sin\theta}{\cos\theta} - 5\sqrt{3}\left(\frac{1}{\cos\theta}\right) + \frac{12\cos\theta}{\sin\theta} = 0$$

$$\frac{6\sin^2\theta - 5\sqrt{3}\sin\theta + 12\cos^2\theta}{\sin\theta \cos\theta} = 0$$

$$\frac{6\sin^2\theta + 6\cos^2\theta - 5\sqrt{3}\sin\theta + 6\cos^2\theta}{\sin\theta \cos\theta} = 0$$

$$\frac{6 - 5\sqrt{3}\sin\theta + 6\cos^2\theta}{\sin\theta \cos\theta} = 0$$

$$6 - 5\sqrt{3}\sin\theta + 6(1 - \sin^2\theta) = 0$$

$$6\sin^2\theta + 5\sqrt{3}\sin\theta - 12 = 0$$

From LHS,

$$\text{Put the } \theta = 60^\circ$$

$$6\sin^2\theta + 5\sqrt{3}\sin\theta - 12$$

$$6\sin^2 60^\circ + 5\sqrt{3}\sin 60^\circ - 12$$

$$6\left(\frac{\sqrt{3}}{2}\right)^2 + 5\sqrt{3} \times \frac{\sqrt{3}}{2} - 12$$

$$\frac{18}{4} + \frac{15}{2} - 12 = 0$$

= RHS

$$(\operatorname{cosec}\theta + \sec\theta)$$

$$\text{Put the } \theta = 60^\circ,$$

$$= (\operatorname{cosec}60^\circ + \sec 60^\circ)$$

$$= \frac{2}{\sqrt{3}} + 2$$

$$= \frac{2 + 2\sqrt{3}}{\sqrt{3}}$$

$$= \frac{2\sqrt{3} + 6}{3}$$

$$= \frac{2}{3}(\sqrt{3} + 3)$$

Daily Free SSC Practice Set

Question 73

The following table represents the number of candidates that appeared and qualified in a competitive examination from different states over five years. Study the table and answer the questions that follow.

State	Year									
	1997		1998		1999		2000		2001	
	Appeared	Qualified	Appeared	Qualified	Appeared	Qualified	Appeared	Qualified	Appeared	Qualified
M	5200	720	8500	980	7400	850	6800	775	9500	1125
N	7500	840	9200	1050	8450	920	9200	980	8800	1020
P	6400	780	8800	1020	7800	890	8750	1010	9750	1250
Q	8100	950	9500	1240	8700	980	9700	1200	8950	995

What was the total number of candidates appearing from all the states in the year 1997?

- A 27,000
- B 72,200
- C 27,200
- D 2,700

Answer: C

Explanation:

Total number of candidates appearing from all the states in the year 1997 = 5200 + 7500 + 6400 + 8100 = 27,200

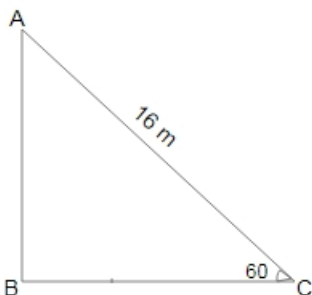
Question 74

Seema flies a kite on a 16 m string at an inclination of 60° . What is the height (h) of the kite above the ground?

- A $4\sqrt{3}$ m
- B $8\sqrt{3}$ m
- C $6\sqrt{3}$ m
- D $16\sqrt{3}$ m

Answer: B

Explanation:



$$\sin \theta = \frac{\text{perpendicular}}{\text{hypotenuse}}$$

$$\sin 60^\circ = \frac{\text{height}}{16}$$

$$\frac{\sqrt{3}}{2} \times \text{height} = 16$$

$$\text{Height} = 8\sqrt{3}$$

∴ Kite is $8\sqrt{3}$ m above of the ground.

Question 75

X and Y are two stations which are 280 km apart. A train starts at a certain time from X and travels towards Y at 60 km/h. After 2 hours, another train starts from Y and travels towards X at 20 km/h. After how many hours does the train leaving from X meets the train which left from Y?

- A 2 hours
- B 6 hours
- C 3 hours
- D 4 hours

Answer: D

Explanation:

Distance between X and Y = 280 km

Speed of train which starts from station A = 60 km/hr

Distance covered in 2 hours = $60 \times 2 = 120$ km

Remaining distance = $280 - 120 = 160$ km

Relative speed in opposite direction = $60 + 20 = 80$ km/hr

Time taken to cover 160 km = $160/80 = 2$ hr

Time taken when train leaving from X meets the train which left from Y = $2 + 2 = 4$ hr

SSC CGL Free Online Coaching

English Comprehension

Instructions

For the following questions answer them individually

Question 76

Select the most appropriate synonym of the given word.

Solemn

- A Furious
- B Ignorant
- C Serious
- D Ordinary

Answer: C

SSC CHSL Previous Question papers (download pdf)

Question 77

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No improvement.

You will not learn cycling unless you don't try.

- A unless you try
- B until you are not trying
- C until you don't try
- D unless you didn't try

Answer: A

Question 78

Select the most appropriate meaning of the given idiom.
Kill two birds with one stone

- A To achieve two results with a single effort
- B To try something impossible
- C To be an expert shooter
- D To plan two murders simultaneously

Answer: A

Question 79

Select the correct passive form of the given sentence.
Fortunately, the fire did not cause much damage.

- A Fortunately, not much damage is caused by the fire
- B Fortunately, not much damage was caused by the fire
- C Fortunately, not much damage is being caused by the fire.
- D Fortunately, not much damage was being caused by the fire.

Answer: B

Free SSC Study Material (18,000 Solved Questions)

Question 80

Select the correct indirect form of the given sentence.
Rahul said to his mother, "Can I go out and play now?"

- A Rahul asked his mother if can he go out and play now.
- B Rahul asked his mother that could he go out and play then
- C Rahul asked to his mother could he go out and play now.
- D Rahul asked his mother if he could go out and play then.

Answer: D

Question 81

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No improvement.

Our new office will become operational from a weeks time.

- A in a week's time
- B No improvement
- C by the week's time
- D for a weeks time

Answer: A

Instructions

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Tourism can cause social, cultural or environmental disruption. The greatest concern is (1)____ damage to environment. In order to attract more tourists, (2)____ resorts are built which take neither the local architecture (3)____ the ecology into consideration. Natural systems get (4)____ as a result of indiscriminate construction to provide water (5)____ waste disposal facilities along with recreational arrangements to tourists.

Question 82

Select the most appropriate option to fill in blank number(1).

- A an
- B one
- C a
- D the

Answer: D

Latest Job Updates on Telegram - Join here

Question 83

Select the most appropriate option to fill in blank number(2).

- A sprawling
- B scheming
- C spreading
- D stretching

Answer: A

Question 84

Select the most appropriate option to fill in blank number(3).

- A none
- B no
- C nor
- D or

Answer: C

Question 85

Select the most appropriate option to fill in blank number(4).

- A destroyed
- B distracted
- C dismayed
- D displayed

Answer: A

SSC CGL Free Mock Test

Question 86

Select the most appropriate option to fill in blank number(5).

- A and
- B but
- C also
- D as

Answer: A

Instructions

For the following questions answer them individually

Question 87

Select the word which means the same as the group of words given.
Central character in a story or play

- A Hedonist
- B Cartoonist
- C Protagonist
- D Opportunist

Answer: C

Question 88

Select the most appropriate synonym of the given word.
Eradicate

- A Condense
- B Approve
- C Magnify
- D Uproot

Answer: D

SSC CGL Previous Papers (DOWNLOAD PDF)

Question 89

Given below are four jumbled sentences. Out of the given options pick the one that gives their correct order.

- A. These baits were temptations that people couldn't resist.
- B. He evolved a theory that the world was a rat-trap.
- C. Once, a peddler sat looking at his rat-traps.
- D. Here, people lay baits for others.

- A BDAC
- B CADB
- C DACB
- D CBDA

Answer: D

Question 90

Select the most appropriate meaning of the given idiom.

Makeoff with

- A To run away
- B To transfer
- C To discover
- D To understand

Answer: A

Question 91

In the sentence identify the segment which contains the grammatical error.

If a few drops of lemon are put in the milk, it has turned sour.

- A it has turned sour
- B drops of lemon
- C If a few
- D are put in the milk

Answer: A

SSC CGL Tier-2 Previous Papers PDF

Question 92

Select the INCORRECTLY spelt word.

- A Potraite
- B Pageant
- C Pamphlet
- D Persevere

Answer: A

Question 93

Fill in the blank with the most appropriate word.

Do you want to ____ to Reader's Digest magazine?

- A ranscribe
- B describe
- C subscribe
- D prescribe

Answer: C

Question 94

Select the INCORRECTLY spelt word.

- A Failure
- B Furious
- C Journy
- D elicious

Answer: C

Question 95

Select the most appropriate ANTONYM of the given word.

Rear

- A Lower
- B Front
- C Hind
- D Back

Answer: B

200 SSC Mocks for just Rs. 249 - Enroll now

Question 96

Given below are four jumbled sentences. Out of the given options pick the one that gives their correct order.

- A. Their prestige and glory spread far and wide.
- B. The first Olympics were held at Olympia in Greece in 776 B.C.
- C. It was because the Christians believed that they encouraged pagan worship in temples.
- D. However, with the advent of Christianity, the games lost their importance.

- A DCAB
- B BADC
- C BCDA
- D ACDB

Answer: B

Question 97

Select the most appropriate **ANTONYM** of the given word.
Persuade

- A Dissuade
- B Pervade
- C Induce
- D Impress

Answer: A

SSC CGL Important Questions PDF

Question 98

Select the word which means the same as the group of words given.
Person or animal living on another

- A Parasite
- B Pupil
- C Heir
- D Successor

Answer: A

Question 99

In the sentence identify the segment which contains the grammatical error.
Mohit did not went to school yesterday as he was unwell.

- A yesterday as he
- B was unwell
- C Mohit did not

D went to school

Answer: D

Question 100

Fill in the blank with the most appropriate word.

Your demands are bound to lead to ____ in the family.

A absence

B discord

C decrease

D barrier

Answer: B

1500 + Free Must Solved SSC Questions (With Solutions)

SSC CGL Free Mock Test

SSC CGL Previous Papers (DOWNLOAD PDF)

SSC CGL Tier-2 Previous Papers PDF

200 SSC Mocks for just Rs. 249 - Enroll now

SSC CGL Important Questions PDF

1500 + Free Must Solved SSC Questions (With Solutions)

General Science Notes for SSC CGL

Free SSC Study Material (18,000 Solved Questions)

SSC Exam Free Videos (Youtube)

SSC Free Preparation App

Daily Free SSC Practice Set

SSC CGL Free Online Coaching

SSC CHSL Previous Question papers (download pdf)



Free SSC Study Material (18,000 Solved Questions)

Latest Job Updates on Telegram - Join here