

## Combined Graduate Level Examination-2019 (Tier-I)

Roll Number	
Candidate Name	
Venue Name	
Exam Date	05/03/2020
Exam Time	10:00 AM - 11:00 AM
Subject	CGLE Tier I

### Section : General Intelligence and Reasoning

**Q.1** 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.

- Ans ✗ 1. 169-197  
✓ 2. 225-241  
✗ 3. 121-145  
✗ 4. 289-325

Question ID : 314360227

Status : Answered

Chosen Option : 4

**Q.2** The two given expressions on both the side of the '=' sign will have the same value if two numbers from either side or both side are interchanged. Select the correct numbers to be interchanged from the given options.

$$3 + 5 \times 4 - 24 \div 3 = 7 \times 4 - 3 + 36 \div 6$$

- Ans ✓ 1. 5, 7  
✗ 2. 4, 7  
✗ 3. 6, 3  
✗ 4. 24, 36

Question ID : 314360230

Status : Not Answered

Chosen Option : --

**Q.3** Select the number that can replace the question mark (?) in the following series.

40, 37, 43, 34, 46, ?

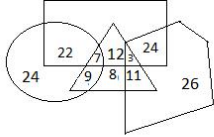
- Ans ✓ 1. 31  
✗ 2. 51  
✗ 3. 41  
✗ 4. 61

Question ID : 314360225

Status : Answered

Chosen Option : 1

- Q.4** In the given Venn diagram, the triangle represents students playing table tennis, the rectangle represents students playing badminton, the circle represents female students, and the pentagon represents students playing football. The numbers given in the diagram represent the number of persons in that particular category.



How many female students play both table tennis and badminton?

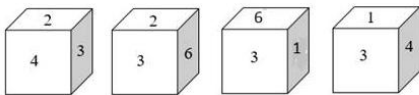
- Ans**
- ☒ 1. 22
  - ☒ 2. 9
  - ☒ 3. 7
  - ☒ 4. 18

Question ID : 314360238

Status : Answered

Chosen Option : 3

- Q.5** Four positions of the same dice are shown. Select the number that will be on the face opposite to the one showing '3'.



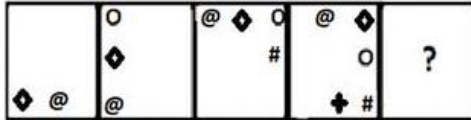
- Ans**
- ☒ 1. 5
  - ☒ 2. 6
  - ☒ 3. 2
  - ☒ 4. 4

Question ID : 314360234

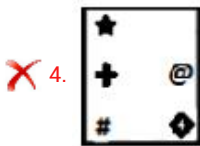
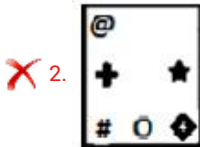
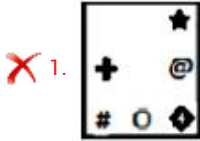
Status : Answered

Chosen Option : 1

Q.6 Select the figure that can replace the question mark (?) in the following series.



Ans



Question ID : 314360232

Status : Answered

Chosen Option : 1

Q.7 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 from the statements.

**Statements:**

1. All parakeets are cuckoos.
2. All cuckoos are rabbits.
3. All rabbits are snakes.

**Conclusions:**

- I. All parakeets are snakes.
- II. All snakes are cuckoos.
- III. All rabbits are parakeets.
- IV. All cuckoos are snakes.

Ans ✓ 1. Only conclusions I and IV follow.

✗ 2. All the conclusions follow.

✗ 3. Only conclusions I and II follow.

✗ 4. Only conclusions II and III follow.

Question ID : 314360224

Status : Answered

Chosen Option : 1

**Q.8** Shaan has a total of ₹5,500 with him. He buys product 'Z' at ₹5,000 from this sum and then sells it to another person, thus making a profit of 15% on it. With all the money he has now, he buys product 'X' and then sells it to another person making a profit of 25% on it. What is the total money Shaan has now?

- Ans**
- ☒ 1. ₹7,812.50
  - ☐ 2. ₹7,815.50
  - ☐ 3. ₹7,187.50
  - ☐ 4. ₹6,325.50

Question ID : 314360231

Status : **Not Answered**

Chosen Option : --

**Q.9** Four letter-clusters have been given, out of which three are alike in some manner, while one is different. Select the odd letter-cluster.

- Ans**
- ☐ 1. DFH
  - ☐ 2. LNP
  - ☐ 3. FHJ
  - ☒ 4. TVW

Question ID : 314360216

Status : **Answered**

Chosen Option : 4

**Q.10** Arrange the following in a logical sequence from small to big.

1. Crocodile
2. Lizard
3. Whale
4. Housefly
5. Monkey

- Ans**
- ☐ 1. 3, 5, 4, 1, 2
  - ☐ 2. 4, 5, 2, 1, 3
  - ☐ 3. 4, 3, 2, 1, 5
  - ☒ 4. 4, 2, 5, 1, 3

Question ID : 314360215

Status : **Answered**

Chosen Option : 4

**Q.11** Select the option that is related to the third word in the same way as the second word is related to the first word.

Ministers : Council :: Sailors : ?

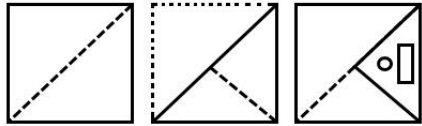
- Ans
- ☒ 1. Captain
  - ☒ 2. Sea
  - ☒ 3. Crew
  - ☒ 4. Ship

Question ID : 314360218

Status : Answered

Chosen Option : 3

**Q.12** The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?



Ans

- ☒ 1.
- ☒ 2.
- ☒ 3.
- ☒ 4.

Question ID : 314360237

Status : Answered

Chosen Option : 3

**Q.13** Study the given pattern carefully and select the number that can replace the question mark (?) in it.

10	4	14	35
15	3	5	25
14	7	6	12
18	?	8	16

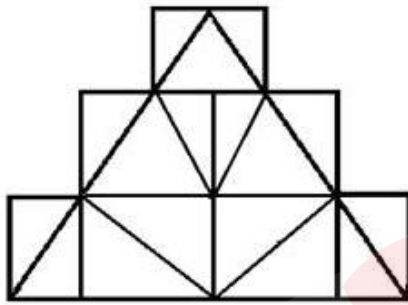
- Ans
- ☒ 1. 7
  - ☒ 2. 9
  - ☒ 3. 8
  - ☒ 4. 6

Question ID : 314360229

Status : Answered

Chosen Option : 2

**Q.14** How many triangles are present in the given figure?



- Ans
- ☒ 1. 21
  - ☒ 2. 20
  - ☒ 3. 22
  - ☒ 4. 23

Question ID : 314360233

Status : Answered

Chosen Option : 3

**Q.15** Which of the option figures is the exact mirror image of the given figure when the mirror is held at the right side?

qv56jk89lm

Ans

☒ 1. mlə8kjəzv̄p

☒ 2. mle8kjəzv̄p

☒ 3. dlzv̄ejk8ajlw

☒ 4. mle8kjəzv̄p

Question ID : 314360236

Status : Answered

Chosen Option : 4

**Q.16** Select the option that is related to the third number in the same way as the second number is related to the first number and the sixth number is related to the fifth number.

72 : 108 :: 84 : ? :: 102 : 153

Ans

☒ 1. 135

☒ 2. 126

☒ 3. 117

☒ 4. 144

Question ID : 314360226

Status : Answered

Chosen Option : 4

**Q.17** There is a family of five members: K, L, M, N and O. Among them, there is one married couple. O is unmarried and is the brother of K. N is the sister of O. M is the only married female and the mother of N. L and O are the only males in the group.

Who is the father of K?

Ans

☒ 1. L

☒ 2. O

☒ 3. K

☒ 4. M

Question ID : 314360223

Status : Not Answered

Chosen Option : --

**Q.18** Select the option in which the words share the same relationship as that shared by the given pair of words.

Blunder : Error

- Ans
- ☒ 1. Anger : Rage
  - ☒ 2. Euphoria : Happiness
  - ☒ 3. Speak : Hear
  - ☒ 4. War : Peace

Question ID : 314360219

Status : Answered

Chosen Option : 1

**Q.19** In a certain code language, U is written as C, K is written as H, L is written as U, N is written as E, S is written as L, E is written as K, and C is written as N. How will 'KNUCKLES' be written as in that language?

- Ans
- ☒ 1. HECNHULK
  - ☒ 2. HECNHUKL
  - ☒ 3. KECNKHUL
  - ☒ 4. CHUECKN

Question ID : 314360220

Status : Answered

Chosen Option : 2

**Q.20** Select the letter-cluster that can replace the question mark (?) in the following series.

aYd, fTi, kOn, pJs, ?

- Ans
- ☒ 1. uEw
  - ☒ 2. uEx
  - ☒ 3. VeX
  - ☒ 4. uFw

Question ID : 314360214

Status : Answered

Chosen Option : 2

**Q.21** If each letter of the English alphabet is assigned an odd numerical value in increasing order, such as A = 1, B = 3 and so on, then what will be the code of HONEY?

- Ans
- ☒ 1. 132725745
  - ☒ 2. 152927947
  - ☒ 3. 152927949
  - ☒ 4. 132725747

Question ID : 314360221

Status : Answered

Chosen Option : 3



**Q.22** Select the option in which the numbers are related in the same way as are the numbers in the given set.  
(13, 65, 117)

- Ans
- ☒ 1. (12, 55, 109)
  - ☒ 2. (15, 75, 135)
  - ☒ 3. (17, 85, 163)
  - ☒ 4. (14, 70, 127)

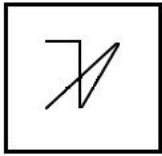
Question ID : 314360228  
Status : Answered  
Chosen Option : 2

**Q.23** Four words have been given, out of which three are alike in some manner, while one is different. Select the odd word.

- Ans
- ☒ 1. Plenty
  - ☒ 2. Destitution
  - ☒ 3. Indigence
  - ☒ 4. Penury

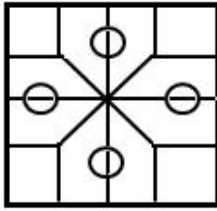
Question ID : 314360217  
Status : Not Answered  
Chosen Option : --

**Q.24** Select the option figure in which the given figure is embedded (rotation is NOT allowed).

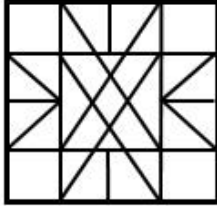


Ans

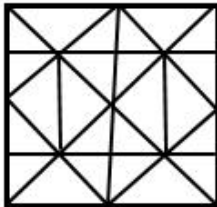
✗ 1.



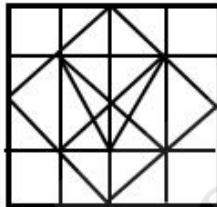
✗ 2.



✗ 3.



✓ 4.



Question ID : 314360235

Status : Answered

Chosen Option : 4

**Q.25** Select the set of letters that when sequentially placed in the blanks of the given letter series will complete the series.

f \_ h g \_ f h \_ g f \_ h g \_ f h \_ g

Ans

✓ 1. g, h, f, g, h, f

✗ 2. h, f, g, h, f, g

✗ 3. g, f, g, f, h, f

✗ 4. f, g, h, f, g, h

Question ID : 314360222

Status : Answered

Chosen Option : 2

Q.1 In January 2020, B. Sai Deepak set a Guinness World Record for most side lunges in 60 seconds. How many lunges did he do?

- Ans ☒ 1. 59  
☐ 2. 30  
☐ 3. 40  
☐ 4. 50

Question ID : 314360260

Status : Not Answered

Chosen Option : --

Q.2 Which of the following rivers flows through Tiruttani a famous pilgrimage place of South India?

- Ans ☐ 1. Vaigai  
☐ 2. Palar  
☐ 3. Kaveri  
☒ 4. Nandi

Question ID : 314360248

Status : Answered

Chosen Option : 1

Q.3 In terms of area, which state has the largest forest cover in India?

- Ans ☒ 1. Madhya Pradesh  
☐ 2. Kerala  
☐ 3. Maharashtra  
☐ 4. Odisha

Question ID : 314360249

Status : Answered

Chosen Option : 1

Q.4 Which National Park among the following is the largest protected area in the Eastern Himalayan sub-region?

- Ans ☐ 1. Bandipur National Park  
☐ 2. Keibul Lamjao National Park  
☐ 3. Jim Corbett National Park  
☒ 4. Namdapha National Park

Question ID : 314360250

Status : Answered

Chosen Option : 3

**Q.5** VISHWAS, which is a major e-governance initiative launched by the government in January 2020, is the acronym for which of the following?

- Ans
- ☐ 1. Video Interface and State Wide Advanced Security
  - ☐ 2. Video Integration and System Wide Advanced Security
  - ☐ 3. Video Integration and State Wide Advanced System
  - ☒ 4. Video Integration and State Wide Advanced Security

Question ID : 314360257  
Status : Answered  
Chosen Option : 4

**Q.6** G. Babita Rayudu took charge as an Executive Director for which of the following organisations in January 2020?

- Ans
- ☐ 1. Small Industries Development Bank of India
  - ☐ 2. Bombay Stock Exchange
  - ☐ 3. Insurance Regulatory and Development Authority of India
  - ☒ 4. The Securities and Exchange Board of India

Question ID : 314360255  
Status : Answered  
Chosen Option : 1

**Q.7** Pongal festival is celebrated for four days in Tamil Nadu. What is the fourth day of Pongal called?

- Ans
- ☐ 1. Bhogi Pongal
  - ☒ 2. Kaanum Pongal
  - ☐ 3. Thai Pongal
  - ☐ 4. Mattu Pongal

Question ID : 314360240  
Status : Answered  
Chosen Option : 4

**Q.8** The 23rd National Youth Festival (NYF) 2020 was celebrated in Lucknow to commemorate the birth anniversary of \_\_\_\_.

- Ans
- ☒ 1. Swami Vivekananda
  - ☐ 2. Jawaharlal Nehru
  - ☐ 3. Sardar Vallabhbhai Patel
  - ☐ 4. Mahatma Gandhi

Question ID : 314360262  
Status : Answered  
Chosen Option : 1

**Q.9 What was the theme of the 107th Indian Science Congress held in Bengaluru?**

- Ans ☒ 1. Science and Technology: Rural Development
- ☐ 2. Science and Technology for National Development
- ☐ 3. Reaching the Unreached through Science and Technology
- ☐ 4. Future India : Science and Technology

Question ID : **314360245**  
 Status : **Answered**  
 Chosen Option : **1**

**Q.10 In which year was the Currency Building in the BBD Bagh or Dalhousie area of Kolkata constructed?**

- Ans ☒ 1. 1833
- ☐ 2. 1910
- ☐ 3. 1900
- ☐ 4. 1850

Question ID : **314360254**  
 Status : **Not Answered**  
 Chosen Option : --

**Q.11 Which dynasty built the pancha rathas of Mahabalipuram?**

- Ans ☒ 1. Pallava
- ☐ 2. Chera
- ☐ 3. Satavahana
- ☐ 4. Chola

Question ID : **314360253**  
 Status : **Not Answered**  
 Chosen Option : --

**Q.12 The Indian Railways has integrated its helpline numbers into a single number. What is the number?**

- Ans ☐ 1. 150
- ☐ 2. 145
- ☒ 3. 139
- ☐ 4. 160

Question ID : **314360263**  
 Status : **Answered**  
 Chosen Option : **3**

**Q.13** The researchers of which academic institution employed the nanoscale phenomenon called 'Electrokinetic streaming potential' to harvest energy from flowing water on a small scale like water flowing through household water taps?

- Ans ☒ 1. IIT Guwahati  
☒ 2. IIT Delhi  
☒ 3. IIT Madras  
☒ 4. IIT Bombay

Question ID : 314360243  
 Status : Not Answered  
 Chosen Option : --

**Q.14** Chiropody is a branch of science related to which part of the body?

- Ans ☒ 1. Kidney  
☒ 2. Liver  
☒ 3. Feet  
☒ 4. Lungs

Question ID : 314360246  
 Status : Not Answered  
 Chosen Option : --

**Q.15** Name the law in Physics which states that equal volume of all gases under the same conditions of temperature and pressure contain equal number of molecules.

- Ans ☒ 1. Ohm's Law  
☒ 2. Boyle's Law  
☒ 3. Avogadro's Law  
☒ 4. Charles's Law

Question ID : 314360247  
 Status : Answered  
 Chosen Option : 3

**Q.16** In which of the following locations was the Quit India Movement launched by Mahatma Gandhi in 1942?

- Ans ☒ 1. Pragati Maidan  
☒ 2. August Kranti Maidan  
☒ 3. Shivaji Park  
☒ 4. Jallianwala Bagh

Question ID : 314360252  
 Status : Answered  
 Chosen Option : 1

Q.17 The famous 11-day long 'Dhanu Jatra', considered as the largest open-air theatre of the world is celebrated in which state?

- Ans
- ☒ 1. Meghalaya
  - ☒ 2. Odisha
  - ☒ 3. Manipur
  - ☒ 4. Assam

Question ID : 314360239  
Status : Answered  
Chosen Option : 2

Q.18 Ishwar Sharma has been honoured with the Global Child Prodigy Award 2020. What is this award associated with?

- Ans
- ☒ 1. Sports
  - ☒ 2. Yoga
  - ☒ 3. Science
  - ☒ 4. Literature

Question ID : 314360256  
Status : Not Answered  
Chosen Option : --

Q.19 Jasprit Bumrah has been selected to receive which of the following awards for his performance in international cricket in the 2018-19 season?

- Ans
- ☒ 1. C.K. Nayudu
  - ☒ 2. Madhavrao Scindia
  - ☒ 3. M.A. Chidambaram
  - ☒ 4. Polly Umrigar

Question ID : 314360259  
Status : Answered  
Chosen Option : 4

Q.20 What is the colour of the light emitted by the Sun?

- Ans
- ☒ 1. Red
  - ☒ 2. Yellow
  - ☒ 3. White
  - ☒ 4. Orange

Question ID : 314360244  
Status : Not Answered  
Chosen Option : --

Q.21 As per the government rules, how much percentage of advance tax needs to be paid by 15th June by an individual who is liable to pay advance tax?

- Ans ☒ 1. 15%
- ☐ 2. 30%
- ☐ 3. 25%
- ☐ 4. 10%

Question ID : 314360242

Status : Not Answered

Chosen Option : --

Q.22 In which year was the Nahargarh Fort in Jaipur built by Maharaja Sawai Jai Singh II ?

- Ans ☒ 1. 1734
- ☐ 2. 1800
- ☐ 3. 1805
- ☐ 4. 1780

Question ID : 314360251

Status : Not Answered

Chosen Option : --

Q.23 The police of which state was honoured with the President's Colours award in December 2019?

- Ans ☒ 1. Gujarat
- ☐ 2. Kerala
- ☐ 3. Tamil Nadu
- ☐ 4. Maharashtra

Question ID : 314360258

Status : Not Answered

Chosen Option : --

Q.24 Which district has been awarded the Plastic Waste Management Award -2020 for being the best district of India in the plastic waste management category during Swachhta Hi Seva 2019?

- Ans ☐ 1. Jorhat
- ☒ 2. Dibrugarh
- ☐ 3. Hojai
- ☐ 4. Majuli

Question ID : 314360261

Status : Not Answered

Chosen Option : --



**Q.25** Which is the first Indian company to hit the ₹10 lakh crore mark in market capitalisation?

- Ans ☒ 1. Reliance Industries  
☒ 2. Tata Consultancy Services  
☒ 3. HDFC Bank  
☒ 4. ICICI Bank

Question ID : 314360241  
 Status : Answered  
 Chosen Option : 1

Section : Quantitative Aptitude

**Q.1** The given table represents the exports (in ₹crores) of four items A, B, C and D over a period of six years. Study the table and answer the question that follows.

Item Year ↓	A	B	C	D
2010	240	128	180	214
2011	250	134	244	282
2012	225	138	230	247
2013	370	169	340	224
2014	425	182	300	309
2015	400	209	306	275

What is the ratio of the total exports of item A in 2014 and 2015 to the total exports of item C in 2011 and 2015?

- Ans ☒ 1. 3 : 2  
☒ 2. 4 : 3  
☒ 3. 5 : 4  
☒ 4. 7 : 5

Question ID : 314360285  
 Status : Answered  
 Chosen Option : 1

**Q.2** If the nine-digit number  $708x6y8z9$  is divisible by 99, then what is the value of  $x + y + z$ ?

- Ans ☒ 1. 5  
☒ 2. 27  
☒ 3. 16  
☒ 4. 9

Question ID : 314360264  
 Status : Answered  
 Chosen Option : 3

**Q.3** D is the midpoint of side BC of  $\triangle ABC$ . Point E lies on AC such that  $CE = \frac{1}{3} AC$ . BE and AD intersect at G. What is  $\frac{AG}{GD}$ ?

- Ans
- ☒ 1. 8 : 3
  - ☒ 2. 3 : 1
  - ☒ 3. 5 : 2
  - ☒ 4. 4 : 1

Question ID : 314360281

Status : Answered

Chosen Option : 4

**Q.4** If  $16a^4 + 36a^2b^2 + 81b^4 = 91$  and  $4a^2 + 9b^2 - 6ab = 13$ , then what is the value of  $3ab$ ?

- Ans
- ☒ 1. 5
  - ☒ 2.  $-\frac{3}{2}$
  - ☒ 3.  $\frac{3}{2}$
  - ☒ 4. -3

Question ID : 314360277

Status : Not Answered

Chosen Option : --

**Q.5** The given table represents the exports (in ₹crores) of four items A, B, C and D over a period of six years. Study the table and answer the question that follows.

Item Year ↓	A	B	C	D
2010	240	128	180	214
2011	250	134	244	282
2012	225	138	230	247
2013	370	169	340	224
2014	425	182	300	309
2015	400	209	306	275

The total exports of item D in 2010, 2012 and 2014 is what percentage of the total exports of all the four items in 2011 and 2012?

- Ans
- ☒ 1. 46.2%
  - ☒ 2. 45%
  - ☒ 3. 44%
  - ☒ 4. 44.8%

Question ID : 314360288

Status : Not Answered

Chosen Option : --

Q.6 If  $5 \sin \theta = 4$ , then the value of  $\frac{\sec \theta + 4 \cot \theta}{4 \tan \theta - 5 \cos \theta}$  is:

- Ans ☒ 1. 2  
☒ 2.  $\frac{3}{2}$   
☒ 3.  $\frac{5}{4}$   
☒ 4. 1

Question ID : 314360283

Status : Answered

Chosen Option : 1

Q.7 The compound interest on a certain sum at  $16\frac{2}{3}\%$  p.a. for 3 years is ₹6,350. What will be the simple interest on the same sum at the same rate for  $5\frac{2}{3}$  years?

- Ans ☒ 1. ₹10,200  
☒ 2. ₹7,620  
☒ 3. ₹11,400  
☒ 4. ₹9,600

Question ID : 314360271

Status : Not Answered

Chosen Option : --

Q.8 The given table represents the exports (in ₹crores) of four items A, B, C and D over a period of six years. Study the table and answer the question that follows.

Item Year ↓	A	B	C	D
2010	240	128	180	214
2011	250	134	244	282
2012	225	138	230	247
2013	370	169	340	224
2014	425	182	300	309
2015	400	209	306	275

In which year, the exports of item D were 1.4 times the average exports of item B during six years?

- Ans ☒ 1. 2011  
☒ 2. 2012  
☒ 3. 2014  
☒ 4. 2013

Question ID : 314360286

Status : Answered

Chosen Option : 4

Q.9 If  $x^2 - 2\sqrt{5}x + 1 = 0$ , then what is the value of  $x^5 + \frac{1}{x^5}$ ?

- Ans
- ☒ 1.  $612\sqrt{5}$
  - ☒ 2.  $408\sqrt{5}$
  - ☒ 3.  $610\sqrt{5}$
  - ☒ 4.  $406\sqrt{5}$

Question ID : 314360276

Status : Answered

Chosen Option : 3

Q.10 The value of  $\frac{\sec^6 \theta - \tan^6 \theta - 3\sec^2 \theta \tan^2 \theta + 1}{\cos^4 \theta - \sin^4 \theta + 2\sin^2 \theta + 2}$  is:

- Ans
- ☒ 1. 1
  - ☒ 2.  $\frac{1}{2}$
  - ☒ 3.  $\frac{2}{3}$
  - ☒ 4.  $\frac{3}{4}$

Question ID : 314360284

Status : Not Answered

Chosen Option : --

Q.11 If  $P = \frac{x^2 + y^2}{(x-y)^2 + 3xy}$ ,  $Q = \frac{(x+y)^2 - 3xy}{x^2 - y^2}$  and  $R = \frac{(x+y)^2 + (x-y)^2}{x^2 - y^2}$ , then what is the value of  $(P \div Q) \times R$ ?

- Ans
- ☒ 1.  $2xy$
  - ☒ 2.  $2(x^2 + y^2)$
  - ☒ 3.  $x^2 + y^2$
  - ☒ 4.  $4xy$

Question ID : 314360275

Status : Not Answered

Chosen Option : --

Q.12

The value of  $\frac{3\frac{2}{3} + \frac{11}{30} \text{ of } \frac{2}{3} - \frac{1}{4} \text{ of } 2\frac{1}{2} + \frac{3}{5} \times 4\frac{4}{5}}{\frac{2}{5} \text{ of } 7\frac{1}{2} + \frac{3}{4} - \frac{3}{4} \times 1\frac{1}{2} + 2\frac{1}{4}}$  is:

Ans

☐ 1.  $\frac{10}{21}$

☐ 2.  $3\frac{4}{7}$

☒ 3.  $2\frac{6}{7}$

☐ 4.  $2\frac{2}{9}$

Question ID : 314360265

Status : Answered

Chosen Option : 3

Q.13 The diagonal of a square A is  $(a + b)$  units. What is the area (in square units) of the square drawn on the diagonal of square B whose area is twice the area of A?

Ans

☐ 1.  $4(a + b)^2$

☐ 2.  $8(a + b)^2$

☒ 3.  $2(a + b)^2$

☐ 4.  $(a + b)^2$

Question ID : 314360274

Status : Not Answered

Chosen Option : --

Q.14 If  $12\cos^2\theta - 2\sin^2\theta + 3\cos\theta = 3$ ,  $0^\circ < \theta < 90^\circ$ , then what is the value of  $\frac{\operatorname{cosec}\theta + \sec\theta}{\tan\theta + \cot\theta}$ ?

Ans

☐ 1.  $\frac{2+\sqrt{3}}{4}$

☐ 2.  $\frac{1+2\sqrt{2}}{2}$

☐ 3.  $\frac{4+\sqrt{3}}{4}$

☒ 4.  $\frac{1+\sqrt{3}}{2}$

Question ID : 314360282

Status : Not Answered

Chosen Option : --

**Q.15** Sides AB and DC of a cyclic quadrilateral ABCD are produced to meet at E, and sides AD and BC are produced to meet at F. If  $\angle ADC = 75^\circ$ , and  $\angle BEC = 52^\circ$ , then the difference between  $\angle BAD$  and  $\angle AFB$  is:

- Ans
- ☒ 1.  $22^\circ$
  - ☒ 2.  $21^\circ$
  - ☒ 3.  $23^\circ$
  - ☒ 4.  $31^\circ$

Question ID : 314360278

Status : Not Answered

Chosen Option : --

**Q.16** A train takes  $2\frac{1}{2}$  hours less for a journey of 300 km, if its speed is increased by 20 km/h from its usual speed. How much time will it take to cover a distance of 192 km at its usual speed?

- Ans
- ☒ 1. 6 hours
  - ☒ 2. 2.4 hours
  - ☒ 3. 4.8 hours
  - ☒ 4. 3 hours

Question ID : 314360273

Status : Not Answered

Chosen Option : --

**Q.17** In an examination in which the full marks were 500, A scored 25% more marks than B, B scored 60% more marks than C and C scored 20% less marks than D. If A scored 80% marks, then the percentage of marks obtained by D is:

- Ans
- ☒ 1. 60%
  - ☒ 2. 54%
  - ☒ 3. 65%
  - ☒ 4. 50%

Question ID : 314360268

Status : Not Answered

Chosen Option : --

**Q.18** Two chords AB and CD of a circle with centre O intersect each other at P. If  $\angle APC = 95^\circ$  and  $\angle AOD = 110^\circ$ , then  $\angle BOC$  is:

- Ans
- ☒ 1.  $60^\circ$
  - ☒ 2.  $55^\circ$
  - ☒ 3.  $70^\circ$
  - ☒ 4.  $65^\circ$

Question ID : 314360279

Status : Answered

Chosen Option : 2

**Q.19** Pipes A and B can fill a tank in 10 hours and 40 hours, respectively. C is an outlet pipe attached to the tank. If all the three pipes are opened simultaneously, it takes 80 minutes more time than what A and B together take to fill the tank. A and B are kept opened for 7 hours and then closed and C was opened. C will now empty the tank in:

- Ans
- ☒ 1. 38.5 hours
  - ☒ 2. 45.5 hours
  - ☒ 3. 49 hours
  - ☒ 4. 42 hours

Question ID : 314360272

Status : **Not Answered**

Chosen Option : --

**Q.20** The average of 24 numbers is 56. The average of the first 10 numbers is 71.7 and that of the next 11 numbers is 42. The next three numbers (i.e., 22<sup>nd</sup>, 23<sup>rd</sup> and 24<sup>th</sup>) are in the ratio  $\frac{1}{2} : \frac{1}{3} : \frac{5}{12}$ . What is the average of the 22<sup>nd</sup> and 24<sup>th</sup> numbers?

- Ans
- ☒ 1. 60.5
  - ☒ 2. 58
  - ☒ 3. 55
  - ☒ 4. 49.5

Question ID : 314360266

Status : **Answered**

Chosen Option : 1

**Q.21** A shopkeeper bought 80 kg of rice at a discount of 10%. Besides 1 kg rice was offered free to him on the purchase of every 20 kg rice. If he sells the rice at the marked price, his profit percentage will be:

- Ans
- ☒ 1.  $15\frac{1}{3}\%$
  - ☒ 2.  $15\frac{3}{7}\%$
  - ☒ 3.  $16\frac{2}{3}\%$
  - ☒ 4.  $14\frac{2}{7}\%$

Question ID : 314360267

Status : **Not Answered**

Chosen Option : --

**Q.22** The given table represents the exports (in ₹crores) of four items A, B, C and D over a period of six years. Study the table and answer the question that follows.

Item Year ↓	A	B	C	D
2010	240	128	180	214
2011	250	134	244	282
2012	225	138	230	247
2013	370	169	340	224
2014	425	182	300	309
2015	400	209	306	275

The total exports of item A from 2012 to 2014 is what percentage less than the total exports of all the four items in 2015? (Correct to one decimal place)

- Ans
- ☒ 1. 15.2%
  - ☒ 2. 16.7%
  - ☒ 3. 14.3%
  - ☒ 4. 13.8%

Question ID : **314360287**  
Status : **Answered**  
Chosen Option : **3**

**Q.23** The ratio of the ages of A and B, 8 years ago, was 2 : 3. Four years ago, the ratio of their ages was 5 : 7. What will be the ratio of their ages 8 years from now?

- Ans
- ☒ 1. 4 : 5
  - ☒ 2. 7 : 8
  - ☒ 3. 3 : 4
  - ☒ 4. 5 : 6

Question ID : **314360270**  
Status : **Answered**  
Chosen Option : **1**

**Q.24** Sudha sold an article to Renu for ₹576 at a loss of 20%. Renu spent a sum of ₹224 on its transportation and sold it to Raghu at a price which would have given Sudha a profit of 24%. The percentage of gain for Renu is:

- Ans
- ☒ 1. 13.2%
  - ☒ 2. 12.9%
  - ☒ 3. 11.6%
  - ☒ 4. 10.5%

Question ID : **314360269**  
Status : **Not Answered**  
Chosen Option : **--**



**Q.25** In  $\triangle ABC$ ,  $\angle C = 90^\circ$ ,  $AC = 5$  cm and  $BC = 12$  cm. The bisector of  $\angle A$  meets  $BC$  at  $D$ . What is the length of  $AD$ ?

- Ans
- ☒ 1.  $2\sqrt{13}$  cm
  - ☒ 2.  $\frac{5\sqrt{13}}{3}$  cm
  - ☒ 3.  $\frac{2}{3}\sqrt{13}$  cm
  - ☒ 4.  $\frac{4}{3}\sqrt{13}$  cm

Question ID : 314360280

Status : Not Answered

Chosen Option : --

Section : English Comprehension

**Q.1** Select the correct passive form of the given sentence.

They offered me a chair

- Ans
- ☒ 1. A chair is offered to me by them.
  - ☒ 2. A chair was being offered to me.
  - ☒ 3. I was offered a chair by them.
  - ☒ 4. I offered a chair to them.

Question ID : 314360291

Status : Answered

Chosen Option : 3

**Q.2** Select the most appropriate word to fill in the blank.

I like both tea and coffee but prefer the \_\_\_\_\_.

- Ans
- ☒ 1. least
  - ☒ 2. latter
  - ☒ 3. last
  - ☒ 4. later

Question ID : 314360314

Status : Answered

Chosen Option : 4

**Q.3** Select the correct indirect form of the given sentence.

"What a good idea!", Seema remarked.

- Ans
- ☒ 1. Seema said what a good idea it is.
  - ☒ 2. Seema told what an idea!
  - ☒ 3. Seema exclaimed that it was a very good idea.
  - ☒ 4. Seema exclaimed that the idea is good.

Question ID : 314360292

Status : Answered

Chosen Option : 3

**Q.4 Select the most appropriate meaning of the given idiom**

**A close-fisted person**

- Ans
- ☒ 1. A kind person
  - ☒ 2. A strong person
  - ☒ 3. A cruel person
  - ☒ 4. A miserly person

Question ID : 314360308

Status : Not Answered

Chosen Option : --

**Q.5 In the sentence identify the segment which contains the grammatical error.**

**Modern man is completely engross in the mad pursuit of material pleasures and luxuries.**

- Ans
- ☒ 1. Modern man is
  - ☒ 2. material pleasures and luxuries
  - ☒ 3. mad pursuit of
  - ☒ 4. completely engross

Question ID : 314360290

Status : Answered

Chosen Option : 4

**Q.6 Select the most appropriate meaning of the given idiom**

**A bed of roses**

- Ans
- ☒ 1. A difficult path
  - ☒ 2. An easy and happy situation
  - ☒ 3. A pleasant perfume
  - ☒ 4. A valley full of flowers

Question ID : 314360307

Status : Answered

Chosen Option : 2

**Comprehension:**

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.

A (1) \_\_\_\_\_ of trucks carrying soldiers was coming down the mountain pad. The trucks (2) \_\_\_\_\_ slowly as there had been heavy snowfall in that area. Suddenly, with a (3) \_\_\_\_\_ a huge tree on the hill side fell bringing along with it boulders and mud. (4) \_\_\_\_\_, the driver of first truck stopped in time. The soldiers got down and stated (5) \_\_\_\_\_ the road.

**SubQuestion No : 7**

**Q.7 Select the most appropriate option for blank no. 1**

- Ans  1. bevy  
 2. convoy  
 3. flock  
 4. crew

Question ID : 314360296

Status : Answered

Chosen Option : 2

**Comprehension:**

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.

A (1) \_\_\_\_\_ of trucks carrying soldiers was coming down the mountain pad. The trucks (2) \_\_\_\_\_ slowly as there had been heavy snowfall in that area. Suddenly, with a (3) \_\_\_\_\_ a huge tree on the hill side fell bringing along with it boulders and mud. (4) \_\_\_\_\_, the driver of first truck stopped in time. The soldiers got down and stated (5) \_\_\_\_\_ the road.

**SubQuestion No : 8**

**Q.8 Select the most appropriate option for blank no. 2**

- Ans  1. were moving  
 2. has moved  
 3. was moving  
 4. are moving

Question ID : 314360297

Status : Answered

Chosen Option : 1

**Comprehension:**

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.

A (1) \_\_\_\_\_ of trucks carrying soldiers was coming down the mountain pad. The trucks (2) \_\_\_\_\_ slowly as there had been heavy snowfall in that area. Suddenly, with a (3) \_\_\_\_\_ a huge tree on the hill side fell bringing along with it boulders and mud. (4) \_\_\_\_\_, the driver of first truck stopped in time. The soldiers got down and stated (5) \_\_\_\_\_ the road.

**SubQuestion No : 9**

**Q.9** Select the most appropriate option for blank no. 3

- Ans ☒ 1. buzz  
☒ 2. crash  
☒ 3. splash  
☒ 4. scream

Question ID : 314360298

Status : Not Answered

Chosen Option : --

**Comprehension:**

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.

A (1) \_\_\_\_\_ of trucks carrying soldiers was coming down the mountain pad. The trucks (2) \_\_\_\_\_ slowly as there had been heavy snowfall in that area. Suddenly, with a (3) \_\_\_\_\_ a huge tree on the hill side fell bringing along with it boulders and mud. (4) \_\_\_\_\_, the driver of first truck stopped in time. The soldiers got down and stated (5) \_\_\_\_\_ the road.

**SubQuestion No : 10**

**Q.10** Select the most appropriate option for blank no. 4

- Ans ☒ 1. Magically  
☒ 2. Fortunately  
☒ 3. Similarly  
☒ 4. Logically

Question ID : 314360299

Status : Answered

Chosen Option : 2

**Comprehension:**

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.

A (1) \_\_\_\_\_ of trucks carrying soldiers was coming down the mountain pad. The trucks (2) \_\_\_\_\_ slowly as there had been heavy snowfall in that area. Suddenly, with a (3) \_\_\_\_\_ a huge tree on the hill side fell bringing along with it boulders and mud. (4) \_\_\_\_\_, the driver of first truck stopped in time. The soldiers got down and stated (5) \_\_\_\_\_ the road.

**SubQuestion No : 11**

**Q.11** Select the most appropriate option for blank no. 5

- Ans
- ☒ 1. moving
  - ☒ 2. changing
  - ☒ 3. altering
  - ☒ 4. clearing

Question ID : 314360300

Status : Answered

Chosen Option : 4

**Q.12** Select one word for the following group of words.

One who loves his country

- Ans
- ☒ 1. Conspirator
  - ☒ 2. Traitor
  - ☒ 3. Collaborator
  - ☒ 4. Patriot

Question ID : 314360309

Status : Answered

Chosen Option : 4

**Q.13** Select synonym of the given word.

EXPENSIVE

- Ans
- ☒ 1. Dear
  - ☒ 2. Sober
  - ☒ 3. Gentle
  - ☒ 4. Mild

Question ID : 314360303

Status : Answered

Chosen Option : 2

Q.14 Select antonym of the given word.

DEXTERITY

- Ans ☒ 1. Skill  
☒ 2. Ignorance  
☒ 3. Mastery  
☒ 4. Agility

Question ID : 314360306  
 Status : Answered  
 Chosen Option : 4

Q.15 Select antonym of the given word.

DIVIDE

- Ans ☒ 1. Split  
☒ 2. Unite  
☒ 3. Break  
☒ 4. Engulf

Question ID : 314360305  
 Status : Answered  
 Chosen Option : 2

Q.16 Select the most appropriate word to fill in the blank.

He tried to \_\_\_\_\_ my ring.

- Ans ☒ 1. steal  
☒ 2. stile  
☒ 3. still  
☒ 4. steel

Question ID : 314360313  
 Status : Answered  
 Chosen Option : 1

Q.17 Given below are four jumbled sentences. Out of the given options pick the one that gives their correct order.

- A. He is a gifted volleyball player.  
 B. But now a days he does not play international matches.  
 C. It is because he had an accident last year.  
 D. Sanjay is my best friend.

- Ans ☒ 1. DCAB  
☒ 2. ABCD  
☒ 3. DABC  
☒ 4. CDBA

Question ID : 314360301  
 Status : Answered  
 Chosen Option : 3

Q.18 Given below are four jumbled sentences. Out of the given options pick the one that gives their correct order.

- A. Aesop was one of them who lived in Greece about 2500 years ago.
- B. He told many interesting stories to the people.
- C. There were many talented people in ancient Greece.
- D. Although he was ugly, he had a very clever brain.

- Ans
- ☒ 1. BDAC
  - ☒ 2. BADC
  - ☒ 3. CADB
  - ☒ 4. CDBA

Question ID : 314360302  
Status : Answered  
Chosen Option : 3

Q.19 Select the word which means the same as the group of words given.

Incapable of paying debts

- Ans
- ☒ 1. Insolvent
  - ☒ 2. Obsolete
  - ☒ 3. Corrupt
  - ☒ 4. Extravagant

Question ID : 314360310  
Status : Answered  
Chosen Option : 1

Q.20 Select the wrongly spelt word.

- Ans
- ☒ 1. Champion
  - ☒ 2. Chouffer
  - ☒ 3. Charisma
  - ☒ 4. Choir

Question ID : 314360312  
Status : Answered  
Chosen Option : 4

Q.21 Select the wrongly spelt word.

- Ans
- ☒ 1. Cremator
  - ☒ 2. Creator
  - ☒ 3. Cricketer
  - ☒ 4. Cracker

Question ID : 314360311  
Status : Answered  
Chosen Option : 1

Q.22 Select synonym of the given word.

RETAIN

- Ans
- ☒ 1. Gain
  - ☒ 2. Convey
  - ☒ 3. Maintain
  - ☒ 4. Destroy

Question ID : 314360304  
Status : Answered  
Chosen Option : 1

Q.23 Select the most appropriate word to substitute the underlined word of the given sentence. If no substitution is required, select 'No improvement'.

The diver dive in the pool from a great height.

- Ans
- ☒ 1. dived at the pool
  - ☒ 2. No improvement
  - ☒ 3. dived into the pool
  - ☒ 4. dives to a pool

Question ID : 314360293  
Status : Answered  
Chosen Option : 3

Q.24 In the sentence identify the segment which contains the grammatical error.

My brother, who live in Delhi, has written me a letter.

- Ans
- ☒ 1. has written
  - ☒ 2. me a letter
  - ☒ 3. who live in Delhi
  - ☒ 4. My brother

Question ID : 314360289  
Status : Answered  
Chosen Option : 3

Q.25 Select the most appropriate segment to substitute the underlined segment of the given sentence. If no substitution is required, select 'No substitution'.

Hardly had he sit on the chair than it broke.

- Ans
- ☒ 1. sat on the chair when
  - ☒ 2. sat onto a chair then
  - ☒ 3. sit in the chair when
  - ☒ 4. No substitution

Question ID : 314360294  
Status : Answered  
Chosen Option : 1