

## Combined Graduate Level Examination 2020 Tier-I

Roll Number	Join YouTube Channel
Venue Name	iON Digital Zone iDZ 1 Patia
Exam Date	24/08/2021
Exam Time	9:00 AM - 10:00 AM
Subject	Combined Graduate Level Examination 2020 Tier 1

Candidate Name **Join YouTube Channel**

### Section : General Intelligence and Reasoning

**Q.1** Select the option in which the numbers are related in the same way as are the numbers of the following set.

(12, 14, 143)

Ans ☒ 1. (16, 10, 235)

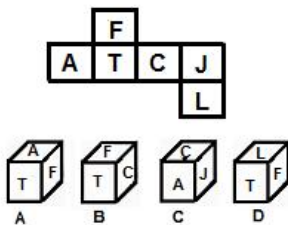
☒ 2. (17, 12, 134)

☒ 3. (15, 19, 252)

☒ 4. (12, 18, 246)

Question ID : **81616114237**Status : **Answered**Chosen Option : **3**

**Q.2** Select the cubes that can be formed by folding the given sheet along the lines.



Ans ☒ 1. Only A and B

☒ 2. Only B and C

☒ 3. Only A, B and D

☒ 4. Only A, B and C

Question ID : **81616114242**Status : **Answered**Chosen Option : **1**

**Q.3** Select the option that is related to the third word in the same way as the second word is related to the first word.

Canada : Ottawa :: Cuba : ?

- Ans
- ☐ 1. Bern
  - ☐ 2. Madrid
  - ☐ 3. Oslo
  - ☒ 4. Havana

Question ID : 81616113014

Status : Answered

Chosen Option : 4

**Q.4** In a certain code language, 'COW' is written as 'ZRF' and 'DOG' is written as 'JRG'. How will 'RAT' be written in that language?

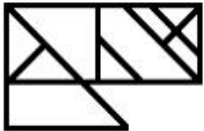
- Ans
- ☐ 1. UDW
  - ☒ 2. WDU
  - ☐ 3. VEU
  - ☐ 4. XDV

Question ID : 81616112511

Status : Answered

Chosen Option : 2

**Q.5** How many triangles are there in the given figure?



- Ans
- ☒ 1. 11
  - ☐ 2. 10
  - ☐ 3. 13
  - ☐ 4. 12

Question ID : 81616114241

Status : Marked For Review

Chosen Option : 4

**Q.6** Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series.

r\_vql\_mv\_lrm\_q\_rm\_ql

- Ans
- ☒ 1. m, r, q, v, l, v
  - ☐ 2. v, v, q, r, l, m
  - ☐ 3. l, m, q, r, v, v
  - ☐ 4. q, r, v, l, v, m

Question ID : 81616113018

Status : Answered

Chosen Option : 1

**Q.7** Select the option in which the words share the same relationship as that shared by the given pair of words.

**Tintometer : Colour**

- Ans** ☒ 1. Viscometer : Wind  
☒ 2. Spirometer : Speed  
☒ 3. Protractor : Angles  
☒ 4. Planimeter : Pressure

Question ID : **81616113015**

Status : **Marked For Review**

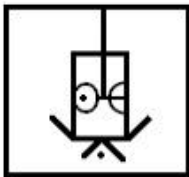
Chosen Option : **3**

**Q.8** Select the option figure in which the given figure is embedded (rotation is NOT allowed).

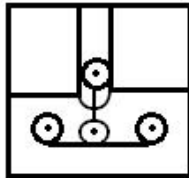


**Ans**

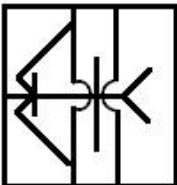
☒ 1.



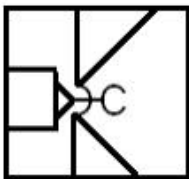
☒ 2.



☒ 3.



☒ 4.



Question ID : **81616113031**

Status : **Answered**

Chosen Option : **2**

**Q.9** In a certain code language, 'MINT' is coded as '224' and 'FANCY' is coded as '245'. How will 'CONTOUR' be coded in that language?

- Ans**
- ☐ 1. 301
  - ☐ 2. 259
  - ☐ 3. 597
  - ☒ 4. 742

Question ID : 81616114229

Status : Answered

Chosen Option : 4

**Q.10** 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:**

All pencils are erasers.

Some sharpeners are pencils.

**Conclusions:**

I. Some sharpeners are erasers.

II. All pencils are sharpeners.

- Ans**
- ☐ 1. Neither conclusion I nor II follows
  - ☐ 2. Both conclusions I and II follow
  - ☒ 3. Only conclusion I follows
  - ☐ 4. Only conclusion II follows

Question ID : 81616112515

Status : Answered

Chosen Option : 3

**Q.11** Select the number from among the given options that can replace the question mark (?) in the following series.

3, 20, 38, 52, 75, 82, 114, ?

- Ans**
- ☐ 1. 101
  - ☐ 2. 104
  - ☒ 3. 110
  - ☐ 4. 118

Question ID : 81616113021

Status : Answered

Chosen Option : 3

**Q.12** Pointing to a baby girl in a cradle, Sripad said, "She is the daughter of my father's mother's only daughter's elder daughter".

How is the baby girl's mother related to Sripad?

- Ans
- ☐ 1. Cousin
  - ☐ 2. Sister-in-law
  - ☐ 3. Niece
  - ☒ 4. Aunt

Question ID : 81616113019

Status : Answered

Chosen Option : 3

**Q.13** Akshar and Manvita recently celebrated their silver wedding anniversary and their older son Sanju's birthday. If the age of Sanju 18 years after his parent's marriage, and his age at their golden anniversary is in the ratio 5 : 21, how many years after their marriage was Sanju born?

- Ans
- ☐ 1. 12 years
  - ☐ 2. 10 years
  - ☐ 3. 15 years
  - ☒ 4. 8 years

Question ID : 81616113027

Status : Not Answered

Chosen Option : --

**Q.14** Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the letter-cluster that is different.

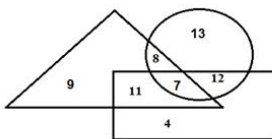
- Ans
- ☐ 1. RDMI
  - ☒ 2. FHWU
  - ☐ 3. JNCQ
  - ☐ 4. TFKG

Question ID : 81616113012

Status : Answered

Chosen Option : 3

**Q.15** In the following diagram, the circle represents 'rural folk', the triangle represents 'businessmen' and the rectangle represents 'graduates'. Study the diagram carefully and answer the question that follows.



What is the number of rural businessmen, who are NOT graduates?

- Ans
- ☐ 1. 7
  - ☐ 2. 11
  - ☒ 3. 8
  - ☐ 4. 15

Question ID : 81616112529

Status : Answered

Chosen Option : 3

**Q.16** Select the correct mirror image of the given combination when the mirror is placed at 'PQ' as shown.

COGNITIVE  
P  
|  
Q

- Ans** ☒ 1. EVITINƆOO
- ☐ 2. CONEITIAE
- ☐ 3. EVITIGNOO
- ☐ 4. COEITIAE

Question ID : **81616113032**  
Status : **Answered**  
Chosen Option : 1

**Q.17** 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. 22 : 127
- ☐ 2. 16 : 91
- ☐ 3. 28 : 163
- ☒ 4. 27 : 82

Question ID : **81616114235**  
Status : **Answered**  
Chosen Option : 4

**Q.18** Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.





MEND, PHJZ, SKFV, VNBR, ?

- Ans** ☒ 1. YQXN
- ☐ 2. YJYN
- ☐ 3. YQZM
- ☐ 4. YRXO

Question ID : **81616113010**  
Status : **Answered**  
Chosen Option : 1

**Q.19** Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.

1. Topology
2. Topper
3. Tolerance
4. Together
5. Tomorrow

**Ans**  1. 4, 2, 1, 5, 3  
 2. 4, 3, 5, 1, 2  
 3. 4, 2, 3, 1, 5  
 4. 4, 5, 3, 1, 2

Question ID : **81616113011**  
Status : **Answered**  
Chosen Option : **2**

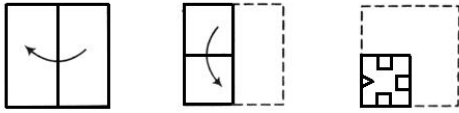
**Q.20** Which two signs should be interchanged to make the given equation correct?

$$156 - 13 + 9 \times 18 \div 5 = 169$$

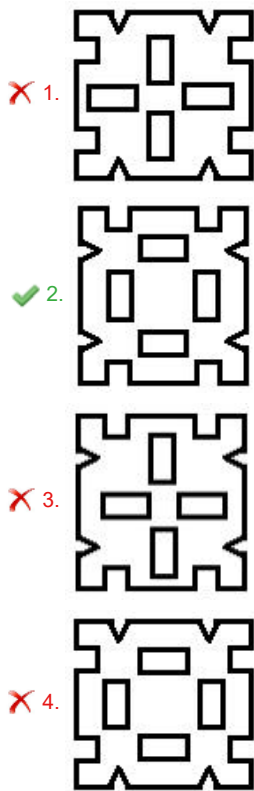
**Ans**  1. ÷ and +  
 2. + and –  
 3. × and –  
 4. × and ÷

Question ID : **81616114238**  
Status : **Answered**  
Chosen Option : **2**

**Q.21** 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



Question ID : 81616113033

Status : Answered

Chosen Option : 2

**Q.22** Select the option in which the numbers are NOT related in the same way as are the numbers of the following set.

(64, 91, 118)

- Ans
- 1. (55, 82, 109) (marked with a red X)
  - 2. (46, 73, 101) (marked with a green checkmark)
  - 3. (72, 99, 126) (marked with a red X)
  - 4. (48, 75, 102) (marked with a red X)

Question ID : 81616112519

Status : Answered

Chosen Option : 2



**Q.23** Select the option that is related to the third number in the same way as the second number is related to the first number.

23 : 531 :: 27 : ?

Ans ☒ 1. 731

☒ 2. 656

☒ 3. 802

☒ 4. 573

Question ID : 81616112517

Status : Answered

Chosen Option : 1

**Q.24** Select the figure from among the given options that can replace the question mark (?) in the following series.

E	A	A	U	U	I	I	O	
	U		I		O		E	?
I		O	O	E	E	A	A	U

Ans

☒ 1.

A		E
	U	
I		O

☒ 2.

E		A
	U	
I		O

☒ 3.

O		E
	I	
U		A

☒ 4.

O		E
	A	
U		I

Question ID : 81616113028

Status : Answered

Chosen Option : 4

**Q.25** Four words have been given, out of which three are alike in some manner and one is different. Select the word that is different.

Ans ☒ 1. Ecology

☒ 2. Myology

☒ 3. Ophthalmology

☒ 4. Dermatology

Question ID : 81616114225

Status : Answered

Chosen Option : 1

Section : **General Awareness**

**Q.1 Who among the following Indian actresses joined the list of Young Global Leaders (YGL) compiled by the World Economic Forum in March 2021?**

- Ans** ☒ 1. Shilpa Shetty  
☒ 2. Deepika Padukone  
☒ 3. Aishwarya Rai  
☒ 4. Alia Bhatt

Question ID : **81616113051**  
Status : **Marked For Review**  
Chosen Option : **2**

**Q.2 'Thullal' is a solo satiric dance form belonging to the state of \_\_\_\_.**

- Ans** ☒ 1. Goa  
☒ 2. Kerala  
☒ 3. Arunachal Pradesh  
☒ 4. Haryana

Question ID : **81616112530**  
Status : **Marked For Review**  
Chosen Option : **2**

**Q.3 Prophet Muhammad founded the faith of Islam in the \_\_\_\_ century.**

- Ans** ☒ 1. sixth  
☒ 2. ninth  
☒ 3. seventh  
☒ 4. eighth

Question ID : **81616114260**  
Status : **Marked For Review**  
Chosen Option : **3**

**Q.4 Which of the following is known as alkaline earth metal?**

- Ans** ☒ 1. Magnesium  
☒ 2. Cobalt  
☒ 3. Copper  
☒ 4. Platinum

Question ID : **81616112537**  
Status : **Marked For Review**  
Chosen Option : **2**

**Q.5** \_\_\_\_\_ is a sessile animal, that relies upon its relationship with plants like algae to build the largest structures of biological origin on earth.

- Ans**
- ☒ 1. Mammal
  - ☒ 2. Bird
  - ☒ 3. Reptile
  - ☒ 4. Coral

Question ID : **81616113043**  
Status : **Marked For Review**  
Chosen Option : **4**

**Q.6** As of December 2020, there are \_\_\_\_\_ official languages of the United Nations.

- Ans**
- ☒ 1. 7
  - ☒ 2. 10
  - ☒ 3. 11
  - ☒ 4. 6

Question ID : **81616114265**  
Status : **Marked For Review**  
Chosen Option : **2**

**Q.7** Which of the following states became the first one to launch blockchain-enabled solar power trading in December 2020?

- Ans**
- ☒ 1. Sikkim
  - ☒ 2. Uttar Pradesh
  - ☒ 3. Karnataka
  - ☒ 4. Madhya Pradesh

Question ID : **81616113057**  
Status : **Marked For Review**  
Chosen Option : **3**

**Q.8** Which of the following places is NOT located on the banks of river Ganga?

- Ans**
- ☒ 1. Varanasi
  - ☒ 2. Kanpur
  - ☒ 3. Hazaribagh
  - ☒ 4. Phaphamau

Question ID : **81616114256**  
Status : **Marked For Review**  
Chosen Option : **4**

**Q.9** How many brightest stars is the constellation called the Great Bear made up of?

- Ans**
- ☒ 1. Nine
  - ☒ 2. Five
  - ☒ 3. Seven
  - ☒ 4. Three

Question ID : **81616112534**  
Status : **Marked For Review**  
Chosen Option : **2**

**Q.10** A/an \_\_\_\_\_ is a natural geo-hydrological unit of land, which collects water and drains it through a common point by a system of streams.

- Ans** ☒ 1. watershed  
☒ 2. reservoir  
☒ 3. aquifer  
☒ 4. warabandi

Question ID : **81616113046**  
Status : **Marked For Review**  
Chosen Option : **3**

**Q.11** Who among the following had invaded India in 712 AD?

- Ans** ☒ 1. Muhammad Bin-Quasim  
☒ 2. Mahmud of Ghazni  
☒ 3. Muhammad Ghorī  
☒ 4. Qutub-ud-Din Aibak

Question ID : **81616113049**  
Status : **Marked For Review**  
Chosen Option : **1**

**Q.12** Which of the following companies announced the launch of India's first virtual academy programme Esports Academy?

- Ans** ☒ 1. Dell  
☒ 2. Jio  
☒ 3. Samsung  
☒ 4. Asus

Question ID : **81616113058**  
Status : **Marked For Review**  
Chosen Option : **2**

**Q.13** Coulomb per second is equivalent to \_\_\_\_\_.

- Ans** ☒ 1. ampere  
☒ 2. ohm  
☒ 3. volt  
☒ 4. joule

Question ID : **81616114253**  
Status : **Marked For Review**  
Chosen Option : **4**

**Q.14** Who among the following is one of the authors of 'The Hitman: The Rohit Sharma Story'?

- Ans** ☒ 1. G Krishnan  
☒ 2. Anupam Kher  
☒ 3. Sanjana Desai  
☒ 4. S Hareesh

Question ID : **81616113052**  
Status : **Marked For Review**  
Chosen Option : **3**

**Q.15** An economy in which both, the private sector and the government are involved is known as a/an \_\_\_\_\_ economy.

- Ans** ☒ 1. mixed  
☒ 2. blended  
☒ 3. amalgam  
☒ 4. parallel

Question ID : **81616114250**  
Status : **Answered**  
Chosen Option : **1**

**Q.16** Force of attraction between molecules of the same substance is called \_\_\_\_\_.

- Ans** ☒ 1. viscosity  
☒ 2. cohesive force  
☒ 3. surface tension  
☒ 4. adhesive force

Question ID : **81616113040**  
Status : **Answered**  
Chosen Option : **2**

**Q.17** Who among the following is one of the founder members of Bhartiya Jana Sangh?

- Ans** ☒ 1. Baldev Singh  
☒ 2. KM Munshi  
☒ 3. Minoo Masani  
☒ 4. Shyama Prasad Mukherjee

Question ID : **81616113054**  
Status : **Answered**  
Chosen Option : **4**

**Q.18 Who among the following was the first player from the Indian sub-continent to play for a European Football club (Celtic FC)?**

- Ans** ☒ 1. Pradeep Kumar Banerjee  
☒ 2. Mohammed Salim  
☒ 3. Sailen Manna  
☒ 4. Neville D'Souza

Question ID : **81616112551**  
Status : **Answered**  
Chosen Option : **1**

**Q.19 Which Sultan established a separate department (Diwan-i-Amir Kohi) to take care of agriculture?**

- Ans** ☒ 1. Khizr Khan  
☒ 2. Tughril Beg  
☒ 3. Jalal-ud-din Khalji  
☒ 4. Muhammad Bin Tughlaq

Question ID : **81616112545**  
Status : **Answered**  
Chosen Option : **3**

**Q.20 In which present day state will you find the Megudi temple?**

- Ans** ☒ 1. Tamil Nadu  
☒ 2. Karnataka  
☒ 3. Odisha  
☒ 4. Kerala

Question ID : **81616112542**  
Status : **Answered**  
Chosen Option : **4**

**Q.21 Who among the following Indian-American scientists was appointed as the acting chief of staff of the US space agency NASA, in February, 2021?**

- Ans** ☒ 1. Ramesh Raskar  
☒ 2. Shantanu Narayen  
☒ 3. Bhavya Lal  
☒ 4. Manmohan Attavar

Question ID : **81616113059**  
Status : **Answered**  
Chosen Option : **3**

**Q.22** Through which of the following actions does the lithosphere move over the asthenosphere?

- Ans** ☒ 1. Weathering  
☒ 2. Plate tectonics  
☒ 3. Deposition  
☒ 4. Continental drift

Question ID : **81616113045**  
Status : **Answered**  
Chosen Option : **2**

**Q.23** 'Ghoomar' is a folk-dance form from the state of \_\_\_\_\_.

- Ans** ☒ 1. Tripura  
☒ 2. Jharkhand  
☒ 3. Bihar  
☒ 4. Rajasthan

Question ID : **81616114248**  
Status : **Answered**  
Chosen Option : **4**

**Q.24** \_\_\_\_\_ is an economic scenario where a peculiar combination of low growth and rising inflation leads to high unemployment.

- Ans** ☒ 1. Recession  
☒ 2. Deflation  
☒ 3. Depreciation  
☒ 4. Stagflation

Question ID : **81616113037**  
Status : **Answered**  
Chosen Option : **1**

**Q.25** In which of the following countries were the first modern Olympic Games held?

- Ans** ☒ 1. China  
☒ 2. Spain  
☒ 3. United Kingdom  
☒ 4. Greece

Question ID : **81616113055**  
Status : **Answered**  
Chosen Option : **4**

Section : **Quantitative Aptitude**

**Q.1** ABCD is a cyclic quadrilateral such that when sides AB and DC are produced, they meet at E, and sides AD and BC meet at F, when produced. If  $\angle ADE = 80^\circ$  and  $\angle AED = 50^\circ$ , then what is the measure of  $\angle AFB$ ?

- Ans**
- ☒ 1.  $50^\circ$
  - ☒ 2.  $20^\circ$
  - ☒ 3.  $30^\circ$
  - ☒ 4.  $40^\circ$

Question ID : 81616114287

Status : Answered

Chosen Option : 3

**Q.2** The area of a table top in the shape of an equilateral triangle is  $9\sqrt{3} \text{ cm}^2$ . What is the length (in cm) of each side of the table?

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

Question ID : 81616113070

Status : Answered

Chosen Option : 3

**Q.3**

Simplify  $\sec^2 \alpha \left( 1 + \frac{1}{\operatorname{cosec} \alpha} \right) \left( 1 - \frac{1}{\operatorname{cosec} \alpha} \right)$ .

- Ans**
- ☒ 1.  $\tan^4 \alpha$
  - ☒ 2. -1
  - ☒ 3.  $\sin^2 \alpha$
  - ☒ 4. 1

Question ID : 81616112675

Status : Answered

Chosen Option : 4

**Q.4** In  $\triangle ABC$ , right angled at B, if  $\cot A = \frac{1}{2}$ , then the value of  $\frac{\sin A (\cos C + \cos A)}{\cos C (\sin C - \sin A)}$  is

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

Question ID : 81616113686

Status : Answered

Chosen Option : 2



**Q.5** The vertices of a  $\Delta ABC$  lie on a circle with centre O. AO is produced to meet the circle at the point P. D is a point on BC such that  $AD \perp BC$ . If  $\angle B = 68^\circ$  and  $\angle C = 52^\circ$ , then the measure of  $\angle DAP$  is:

- Ans** ☒ 1.  $16^\circ$   
☒ 2.  $18^\circ$   
☒ 3.  $12^\circ$   
☒ 4.  $28^\circ$

Question ID : **81616113074**  
 Status : **Answered**  
 Chosen Option : **1**

**Q.6** In a triangle ABC, length of the side AC is 4 cm more than 2 times the length of the side AB. Length of the side BC is 4 cm less than the three times the length of the side AB. If the perimeter of  $\Delta ABC$  is 60 cm, then its area (in  $cm^2$ ) is:

- Ans** ☒ 1. 144  
☒ 2. 150  
☒ 3. 100  
☒ 4. 120

Question ID : **81616113076**  
 Status : **Answered**  
 Chosen Option : **4**

**Q.7** Study the following table and answer the question:

Number of students Appeared (A) and Passed (P) in an annual examination from four schools Q, R, S & T in five years (2014 to 2018)

School Year	Q		R		S		T	
	A	P	A	P	A	P	A	P
2014	320	240	400	340	420	273	250	225
2015	400	320	380	285	350	280	300	228
2016	440	286	360	288	330	264	320	256
2017	350	252	420	294	380	247	350	315
2018	375	320	450	405	400	344	375	300

The difference between the average number of students passed from school R in 2015 to 2017 and the number of students passed from school Q in 2015 is  $x$ . The value of  $x$  lies between:

- Ans** ☒ 1. 30 and 35  
☒ 2. 20 and 25  
☒ 3. 35 and 40  
☒ 4. 25 and 30

Question ID : **81616114294**  
 Status : **Answered**  
 Chosen Option : **1**

**Q.8** The average of 23 numbers is 51. The average of first 12 numbers is 49 and the average of last 12 numbers is 54. If the twelfth number is removed, then the average of the remaining numbers (correct to two decimal places) is:

- Ans**
- ☒ 1. 51.75
  - ☒ 2. 53.25
  - ☒ 3. 50.45
  - ☒ 4. 52.65

Question ID : 81616113062  
Status : Answered  
Chosen Option : 3

**Q.9** If  $a^4 + b^4 + a^2b^2 = 273$  and  $a^2 + b^2 - ab = 21$ , then one of the values of  $\left(\frac{1}{a} + \frac{1}{b}\right)$  is:

- Ans**
- ☒ 1.  $-\frac{9}{4}$
  - ☒ 2.  $-\frac{3}{4}$
  - ☒ 3.  $\frac{9}{8}$
  - ☒ 4.  $\frac{3}{2}$

Question ID : 81616114285  
Status : Answered  
Chosen Option : 2

**Q.10** The total number of students in a school is 1400, out of which 35% of the students are girls and the rest are boys. If 80% of the boys and 90% of the girls passed in an annual examination, then the percentage of the students who failed is:

- Ans**
- ☒ 1. 16.5
  - ☒ 2. 15.8
  - ☒ 3. 17.4
  - ☒ 4. 21.5

Question ID : 81616114276  
Status : Answered  
Chosen Option : 1

**Q.11** If p is the third proportional to 3, 9, then what is the fourth proportional to 6, p, 4?

- Ans**
- ☒ 1.  $\frac{3}{2}$
  - ☒ 2. 18
  - ☒ 3. 10
  - ☒ 4.  $2\sqrt{3}$

Question ID : 81616112561  
Status : Answered  
Chosen Option : 2

**Q.12** If  $x + \frac{1}{x} = 7$ , then  $x^2 + \frac{1}{x^2}$  is equal to:

- Ans** ☒ 1. 47  
☒ 2. 61  
☒ 3. 49  
☒ 4. 51

Question ID : **81616113071**  
 Status : **Answered**  
 Chosen Option : **1**

**Q.13** Let  $\triangle ABC \sim \triangle RPQ$  and  $\frac{ar(\triangle ABC)}{ar(\triangle PQR)} = \frac{16}{25}$ . If  $PQ = 4$  cm,  $QR = 6$  cm and  $PR = 7$  cm, then  $AC$  (in cm) is equal to:

- Ans** ☒ 1. 7.2  
☒ 2. 6  
☒ 3. 4.8  
☒ 4. 3.6

Question ID : **81616113077**  
 Status : **Answered**  
 Chosen Option : **3**

**Q.14** Table shows the number of trees planted in 4 cities from 2016 to 2020.

Years	Chandigarh	Ahmadabad	Pune	Kolkata
2016	1800	2500	1800	2000
2017	2500	2300	1850	1800
2018	2300	2400	1840	1760
2019	2440	1950	1900	1600
2020	2250	2100	2000	1750

What is the total number of trees planted in Chandigarh in 2017 and in Kolkata in 2020?

- Ans** ☒ 1. 3550  
☒ 2. 4500  
☒ 3. 4750  
☒ 4. 4250

Question ID : **81616112375**  
 Status : **Answered**  
 Chosen Option : **4**

Q.15

If  $2x + 3y + 1 = 0$ , then what is the value of  $(8x^3 + 8 + 27y^3 - 18xy)$ ?

Ans ☒ 1. -7☒ 2. 7☒ 3. 9☒ 4. -9

Question ID : 81616112567

Status : Answered

Chosen Option : 2

Q.16

A sum of ₹9500 amounts to ₹11495 in 2 years at a certain rate percent per annum, interest compounded yearly. What is the simple interest (in ₹) on the same sum for the same time and double the rate?

Ans ☒ 1. 3420☒ 2. 3990☒ 3. 3800☒ 4. 4560

Question ID : 81616114279

Status : Answered

Chosen Option : 3

Q.17

Table shows income (in ₹) received by 4 employees of a company during the month of December 2020 and all their income sources.

Source	Amit	Suresh	Nitin	Varun
Salary	35000	38500	29000	42000
Arrears	6000	6300	5000	7500
Bonus	1000	1100	1000	1240
Overtime	1800	1950	1400	1500

What is the ratio of salary of Varun to his income other than salary?

Ans ☒ 1. 128 : 653☒ 2. 128 : 525☒ 3. 653 : 128☒ 4. 525 : 128

Question ID : 81616112377

Status : Answered

Chosen Option : 4

Q.18

The value of  $3\frac{1}{5} \div 4\frac{1}{2}$  of  $5\frac{1}{3} - \frac{1}{8} \div \frac{1}{2}$  of  $\frac{1}{4} + \frac{1}{4} \left( \frac{1}{2} \div \frac{1}{8} \times \frac{1}{4} \right)$  is :

Ans

✗ 1.  $\frac{17}{60}$

✗ 2.  $-\frac{17}{60}$

✓ 3.  $-\frac{37}{60}$

✗ 4.  $\frac{37}{60}$

Question ID : 81616113061

Status : Answered

Chosen Option : 3

Q.19

The sum of 3-digit numbers abc, cab and bca is not divisible by:

Ans

✗ 1. 3

✗ 2. 37

✓ 3. 31

✗ 4.  $a + b + c$

Question ID : 81616114272

Status : Answered

Chosen Option : 3

Q.20 Study the following table and answer the question:

Number of students Appeared (A) and Passed (P) in an annual examination from four schools Q, R, S & T in five years (2014 to 2018)

School Year	Q		R		S		T	
	A	P	A	P	A	P	A	P
2014	320	240	400	340	420	273	250	225
2015	400	320	380	285	350	280	300	228
2016	440	286	360	288	330	264	320	256
2017	350	252	420	294	380	247	350	315
2018	375	320	450	405	400	344	375	300

The total number of students passed from school S in 2014 and 2017 is what percent of 90% of the total number of students appeared from school T in 2015, 2016 and 2017? (correct to one decimal place)

Ans

✗ 1. 57.4

✓ 2. 59.6

✗ 3. 53.9

✗ 4. 54.8

Question ID : 81616114296

Status : Answered

Chosen Option : 2

**Q.21** A train covers 450 km at a uniform speed. If the speed had been 5 km/h more, it would have taken 1 hour less to cover the same distance. How much time will it take to cover 315 km at its usual speed?

- Ans**
- ☐ 1. 6 h 30 m
  - ☐ 2. 7 h 52 m
  - ☐ 3. 6 h 18 m
  - ☒ 4. 7 h

Question ID : 81616112564  
Status : Answered  
Chosen Option : 4

**Q.22** If selling price of 75 articles is equal to cost price of 60 articles, then the approximate loss or gain percent is :

- Ans**
- ☐ 1. No profit no loss
  - ☐ 2. Loss of 30%
  - ☐ 3. Profit of 25%
  - ☒ 4. Loss of 20%

Question ID : 81616113065  
Status : Answered  
Chosen Option : 4

**Q.23** A can complete a work in  $11\frac{1}{2}$  days. B is 25% more efficient than A and C is 50% efficient than B. Working together A, B and C will complete the same work

- Ans**
- ☐ 1. 3 days
  - ☐ 2. 5 days
  - ☐ 3. 8 days
  - ☒ 4. 4 days

Question ID : 81616114280  
Status : Marked For Review  
Chosen Option : 4

**Q.24** If  $\tan \theta + 3 \cot \theta - 2\sqrt{3} = 0$ ,  $0^\circ < \theta < 90^\circ$ , then what is the value of  $(\operatorname{cosec}^2 \theta + \cos^2 \theta)$ ?

- Ans**
- ☐ 1.  $\frac{11}{12}$
  - ☐ 2.  $\frac{14}{3}$
  - ☒ 3.  $\frac{19}{12}$
  - ☐ 4.  $\frac{2}{3}$

Question ID : 81616114290  
Status : Answered  
Chosen Option : 3

**Q.25** A customer wanted to purchase an item marked for ₹10000. Shopkeeper offered two types of discounts, 25% flat discount or successive discounts of 14% and 12%. Which is the better offer for the customers and by how much?

- Ans**
- ☒ 1. first offer by ₹32
  - ☒ 2. second offer by ₹68
  - ☒ 3. first offer by ₹68
  - ☒ 4. second offer by ₹100

Question ID : **81616112558**  
Status : **Answered**  
Chosen Option : **3**

Section : **English Comprehension**

**Q.1** Select the option that expresses the given sentence in reported speech.

"I live in Mumbai," she said.

- Ans**
- ☒ 1. She said that she has been living in Mumbai.
  - ☒ 2. She said that she had been living in Mumbai.
  - ☒ 3. She says that she was living in Mumbai.
  - ☒ 4. She said that she lived in Mumbai.

Question ID : **81616113088**  
Status : **Answered**  
Chosen Option : **4**

**Q.2** Select the most appropriate synonym of the given word.

**Leverage**

- Ans**
- ☒ 1. Suggestion
  - ☒ 2. Conclusion
  - ☒ 3. Weakness
  - ☒ 4. Influence

Question ID : **81616113100**  
Status : **Marked For Review**  
Chosen Option : **4**

**Q.3** Select the option that can be used as a one-word substitute for the given group of words.

A corporation made up of a number of different companies that operate in diversified fields

- Ans**
- ☒ 1. Association
  - ☒ 2. Agreement
  - ☒ 3. Correlation
  - ☒ 4. Conglomerate

Question ID : **81616114318**  
Status : **Marked For Review**  
Chosen Option : **4**

**Q.4 Select the option that expresses the given sentence in passive voice.**

**Richard wore a broad belt with shiny buckles.**

- Ans**
- ☒ 1. A broad belt with shiny buckles wore Richard.
  - ☒ 2. A broad belt with shiny buckles was wear by Richard.
  - ☒ 3. A broad belt with shiny buckles was worn by Richard.
  - ☒ 4. A broad belt with shiny buckles had been worn by Richard.

Question ID : **81616114299**

Status : **Answered**

Chosen Option : **3**

**Q.5 Select the INCORRECTLY spelt word.**

- Ans**
- ☒ 1. Aesthetic
  - ☒ 2. Licenced
  - ☒ 3. Haphazard
  - ☒ 4. Chandelier

Question ID : **81616113108**

Status : **Marked For Review**

Chosen Option : **4**

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

**The gift of the gab**

- Ans**
- ☒ 1. Used to grabbing others' gifts
  - ☒ 2. Talks well and persuasively
  - ☒ 3. Writes very well
  - ☒ 4. Loves to give gifts

Question ID : **81616112599**

Status : **Answered**

Chosen Option : **2**

**Q.7 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.**

- A. It is also a rich source of news updates around the world.
- B. Older people and children remain glued to it.
- C. It has become a great source of entertainment for all.
- D. TV has become a powerful medium these days.

- Ans**
- ☒ 1. DBCA
  - ☒ 2. ABCD
  - ☒ 3. ACBD
  - ☒ 4. BDCA

Question ID : **81616113097**

Status : **Answered**

Chosen Option : **1**



**Q.8** Select the most appropriate option to fill in the blank.

The lack of regular academic sessions has meant that in 2020 the country has had the \_\_\_\_\_ share of students who have attended educational institutions.

- Ans** ☒ 1. last  
☒ 2. lowest  
☒ 3. low  
☒ 4. lower

Question ID : 81616114321  
Status : Answered  
Chosen Option : 2

**Q.9** The following sentence has been divided into parts. One of them contains an error. Select the part that contains the error from the given options.

The Committee agreed / that small businesses / has been adversely affected / by COVID-19.

- Ans** ☒ 1. that small businesses  
☒ 2. by COVID-19  
☒ 3. The Committee agreed  
☒ 4. has been adversely affected

Question ID : 81616114298  
Status : Answered  
Chosen Option : 4

**Q.10** Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.

- A. "Buy sweet apples, or none at all", he instructed his servant.  
B. A rich man sent his servant to an orchard to buy some apples.  
C. The servant asked, "How am I to know that all of them are sweet if I taste just one?"  
D. The owner of the orchard said to the servant, "All my apples are sweet. Try one."

- Ans** ☒ 1. ACBD  
☒ 2. BADC  
☒ 3. ABCD  
☒ 4. BDAC

Question ID : 81616112593  
Status : Answered  
Chosen Option : 2

**Q.11** Select the most appropriate ANTONYM of the given word.

Sprightly

- Ans** ☒ 1. Lethargic  
☒ 2. Energetic  
☒ 3. Active  
☒ 4. Lively

Question ID : 81616112597  
Status : Marked For Review  
Chosen Option : 1

**Q.12** Select the most appropriate meaning of the given idiom.

**Feel at sea**

- Ans** ☒ 1. Feel seasick  
☒ 2. Feel angry  
☒ 3. Feel comfortable while travelling by water  
☒ 4. Feel lost or confused

Question ID : 81616112598

Status : Answered

Chosen Option : 4

**Q.13** The following sentence has been divided into parts. One of them contains an error.  
Select the part that contains the error from the given options.

The food / in the new eatery / is much best than / the one in RK Puram.

- Ans** ☒ 1. in the new eatery  
☒ 2. the one in RK Puram  
☒ 3. The food  
☒ 4. is much best than

Question ID : 81616112580

Status : Answered

Chosen Option : 4

**Q.14** Select the option that will improve the underlined part of the given sentence. In case no improvement is needed select 'No improvement required'.

A need of an hour is to provide employment to the youth of the country.

- Ans** ☒ 1. The need of the  
☒ 2. No improvement required  
☒ 3. The need of an  
☒ 4. The need in an

Question ID : 81616113090

Status : Answered

Chosen Option : 1

**Q.15** Select the most appropriate synonym of the given word.

**Integrate**

- Ans** ☒ 1. Separate  
☒ 2. Assimilate  
☒ 3. Distribute  
☒ 4. Disburse

Question ID : 81616113099

Status : Answered

Chosen Option : 2

**Q.16** Select the option that will substitute the underlined part of the given sentence. In case no substitution is needed, select 'No substitution required'.

Japan has made important and original contributions inside some fields like photography and electronics.

- Ans**
- ☒ 1. No substitution required
  - ☒ 2. on some field like
  - ☒ 3. in some fields like
  - ☒ 4. for some field like

Question ID : **81616114301**  
Status : **Answered**  
Chosen Option : **3**

**Q.17** Select the most appropriate ANTONYM of the given word.

Infirm

- Ans**
- ☒ 1. Frail
  - ☒ 2. Strong
  - ☒ 3. Feeble
  - ☒ 4. Weak

Question ID : **81616113101**  
Status : **Answered**  
Chosen Option : **2**

**Q.18** Select the INCORRECTLY spelt word.

- Ans**
- ☒ 1. Boasting
  - ☒ 2. Ascetic
  - ☒ 3. Override
  - ☒ 4. Evidence

Question ID : **81616113107**  
Status : **Marked For Review**  
Chosen Option : **3**

**Q.19** Select the most appropriate option to fill in the blank.

His \_\_\_\_\_ of the topic was so good that students had few doubts at the end of the class.

- Ans**
- ☒ 1. qualification
  - ☒ 2. exhibition
  - ☒ 3. picturisation
  - ☒ 4. exposition

Question ID : **81616113110**  
Status : **Marked For Review**  
Chosen Option : **2**

**Q.20** Select the option that can be used as a one-word substitute for the given group of words.

**A short rest or sleep taken after lunch**

- Ans**
- ☒ 1. Slumber
  - ☒ 2. Doze
  - ☒ 3. Leisure
  - ☒ 4. Siesta

Question ID : 81616114317

Status : **Answered**

Chosen Option : 4

**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.

Smoking causes mutation in cells leading to cancer. Quitting smoking can help reverse the (1)\_\_\_\_\_ risk; and it can replenish cells that actually (2)\_\_\_\_\_ those of a person who has never smoked. The (3)\_\_\_\_\_ you smoke the more mutations you have. The (4)\_\_\_\_\_ damage to the cells lining the airway and lungs can (5)\_\_\_\_\_ to cancers in the lungs, oesophagus, larynx and pharynx.

**SubQuestion No : 21**

**Q.21** Select the most appropriate option to fill in blank no.1.

- Ans**
- ☒ 1. impossible
  - ☒ 2. nominal
  - ☒ 3. potential
  - ☒ 4. factual

Question ID : 81616113092

Status : **Answered**

Chosen Option : 3

**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.

Smoking causes mutation in cells leading to cancer. Quitting smoking can help reverse the (1)\_\_\_\_\_ risk; and it can replenish cells that actually (2)\_\_\_\_\_ those of a person who has never smoked. The (3)\_\_\_\_\_ you smoke the more mutations you have. The (4)\_\_\_\_\_ damage to the cells lining the airway and lungs can (5)\_\_\_\_\_ to cancers in the lungs, oesophagus, larynx and pharynx.

**SubQuestion No : 22**

**Q.22** Select the most appropriate option to fill in blank no.2.

- Ans**
- ☒ 1. resemble
  - ☒ 2. differ
  - ☒ 3. disagree
  - ☒ 4. identify

Question ID : 81616113093

Status : **Marked For Review**

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.

Smoking causes mutation in cells leading to cancer. Quitting smoking can help reverse the (1)\_\_\_\_\_ risk; and it can replenish cells that actually (2)\_\_\_\_\_ those of a person who has never smoked. The (3)\_\_\_\_\_ you smoke the more mutations you have. The (4)\_\_\_\_\_ damage to the cells lining the airway and lungs can (5)\_\_\_\_\_ to cancers in the lungs, oesophagus, larynx and pharynx.

**SubQuestion No : 23**

**Q.23** Select the most appropriate option to fill in blank no.3.

**Ans**  1. more

 2. much

 3. many

 4. most

Question ID : **81616113094**

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.

Smoking causes mutation in cells leading to cancer. Quitting smoking can help reverse the (1)\_\_\_\_\_ risk; and it can replenish cells that actually (2)\_\_\_\_\_ those of a person who has never smoked. The (3)\_\_\_\_\_ you smoke the more mutations you have. The (4)\_\_\_\_\_ damage to the cells lining the airway and lungs can (5)\_\_\_\_\_ to cancers in the lungs, oesophagus, larynx and pharynx.

**SubQuestion No : 24**

**Q.24** Select the most appropriate option to fill in blank no.4.

**Ans**  1. broken

 2. stable

 3. incomplete

 4. constant

Question ID : **81616113095**

Status : **Marked For Review**

Chosen Option : 4





**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.

Smoking causes mutation in cells leading to cancer. Quitting smoking can help reverse the (1)\_\_\_\_\_ risk; and it can replenish cells that actually (2)\_\_\_\_\_ those of a person who has never smoked. The (3)\_\_\_\_\_ you smoke the more mutations you have. The (4)\_\_\_\_\_ damage to the cells lining the airway and lungs can (5)\_\_\_\_\_ to cancers in the lungs, oesophagus, larynx and pharynx.

**SubQuestion No : 25**

**Q.25** Select the most appropriate option to fill in blank no.5.

- Ans**    1. direct  
          2. guide  
          3. seize  
          4. lead

Question ID : **81616113096**

Status : **Answered**

Chosen Option : **4**