

## Combined Graduate Level Examination 2020 Tier-I

Roll Number	
Candidate Name	
Venue Name	iON Digital Zone iDZ 1 Sector 62
Exam Date	24/08/2021
Exam Time	9:00 AM - 10:00 AM
Subject	Combined Graduate Level Examination 2020 Tier 1

### Section : General Intelligence and Reasoning

**Q.1** 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. YJYN

☒ 2. YQXN

☒ 3. YRXO

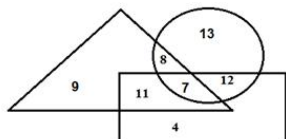
☒ 4. YQZM

Question ID : 81616113010

Status : Answered

Chosen Option : 2

**Q.2** 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. 8

☒ 3. 15

☒ 4. 11

Question ID : 81616112529

Status : Answered

Chosen Option : 2

**Q.3** 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. Aunt  
☒ 3. Niece  
☒ 4. Sister-in-law

Question ID : 81616113019  
 Status : Answered  
 Chosen Option : 3

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

Question ID : 81616114235  
 Status : Answered  
 Chosen Option : 3

**Q.5** 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. (12, 18, 246)  
☒ 2. (17, 12, 134)  
☒ 3. (16, 10, 235)  
☒ 4. (15, 19, 252)

Question ID : 81616114237  
 Status : Not Answered  
 Chosen Option : --

**Q.6** 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. (46, 73, 101)  
☒ 2. (48, 75, 102)  
☒ 3. (72, 99, 126)  
☒ 4. (55, 82, 109)

Question ID : 81616112519  
 Status : Answered  
 Chosen Option : 4

**Q.7** Select the figure from among the given options that can replace the question mark (?) in the following series.

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

Ans

✗ 1.

A	E
U	
I	O

✗ 2.

O	E
I	
U	A

✓ 3.

O	E
A	
U	I

✗ 4.

E	A
U	
I	O

Question ID : 81616113028

Status : Answered

Chosen Option : 3

**Q.8** Which two signs should be interchanged to make the given equation correct?

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

Ans ✗ 1.  $\times$  and  $-$

✓ 2.  $\div$  and  $-$

✗ 3.  $\div$  and  $+$

✗ 4.  $\times$  and  $\div$

Question ID : 81616114238

Status : Answered

Chosen Option : 2

**Q.9** 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?

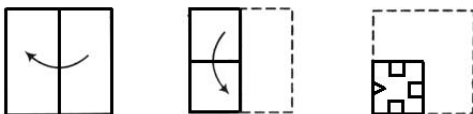
- Ans
- ☒ 1. 10 years
  - ☒ 2. 12 years
  - ☒ 3. 15 years
  - ☒ 4. 8 years

Question ID : 81616113027

Status : Answered

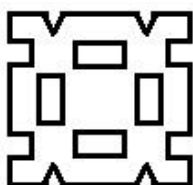
Chosen Option : 3

**Q.10** 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?

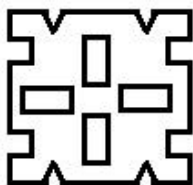


Ans

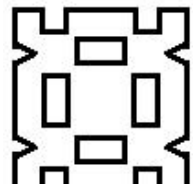
☒ 1.



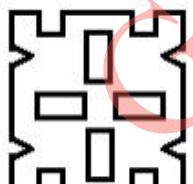
☒ 2.



☒ 3.



☒ 4.



Question ID : 81616113033

Status : Answered

Chosen Option : 3

**Q.11** Select the correct mirror image of the given combination when the mirror is placed at 'PQ' as shown.

COGNITIVE | P  
Q

- Ans
- ☒ 1. COGNITIVE
  - ☒ 2. EVITIGNOC
  - ☒ 3. EVITIGNOC
  - ☒ 4. CONEITIAE

Question ID : 81616113032

Status : Answered

Chosen Option : 3

**Q.12** 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. l, m, q, r, v, v
  - ☒ 2. v, v, q, r, l, m
  - ☒ 3. m, r, q, v, l, v
  - ☒ 4. q, r, v, l, v, m

Question ID : 81616113018

Status : Answered

Chosen Option : 3

**Q.13** 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. Protractor : Angles
  - ☒ 3. Planimeter : Pressure
  - ☒ 4. Spirometer : Speed

Question ID : 81616113015

Status : Answered

Chosen Option : 2

Q.14 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. Havana
  - ☒ 4. Oslo

Question ID : 81616113014

Status : Not Answered

Chosen Option : --

Q.15 In a certain code language, 'COW' is written as 'ZRF' and 'DOG' is written as 'JRG'. How will 'RAT' be written in that language?

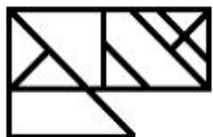
- Ans
- ☒ 1. XDV
  - ☒ 2. WDU
  - ☒ 3. UDW
  - ☒ 4. VEU

Question ID : 81616112511

Status : Answered

Chosen Option : 2

Q.16 How many triangles are there in the given figure?



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

Question ID : 81616114241

Status : Answered

Chosen Option : 3

Q.17 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

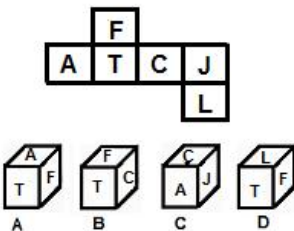
Ans ☒ 1. 4, 5, 3, 1, 2  
☒ 2. 4, 2, 3, 1, 5  
☒ 3. 4, 2, 1, 5, 3  
☒ 4. 4, 3, 5, 1, 2

Question ID : 81616113011

Status : Answered

Chosen Option : 4

Q.18 Select the cubes that can be formed by folding the given sheet along the lines.



Ans ☒ 1. Only A and B  
☒ 2. Only A, B and C  
☒ 3. Only A, B and D  
☒ 4. Only B and C

Question ID : 81616114242

Status : Not Answered

Chosen Option : --

Q.19 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 II follows  
☒ 4. Only conclusion I follows

Question ID : 81616112515

Status : Answered

Chosen Option : 4

Q.20 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. 259
  - ☐ 2. 301
  - ☐ 3. 597
  - ☒ 4. 742

Question ID : 81616114229

Status : Not Answered

Chosen Option : --

Q.21 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. TFKG
  - ☒ 2. FHWU
  - ☐ 3. RDMI
  - ☐ 4. JNCQ

Question ID : 81616113012

Status : Not Answered

Chosen Option : --

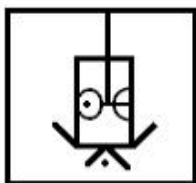


**Q.22** Select the option figure in which the given figure is embedded (rotation is NOT allowed).

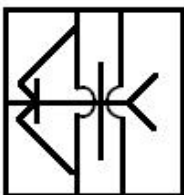


Ans

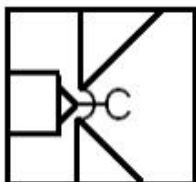
✗ 1.



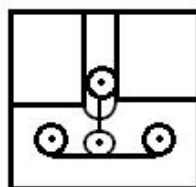
✗ 2.



✗ 3.



✓ 4.



Question ID : 81616113031

Status : Answered

Chosen Option : 4

**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. 802

✗ 2. 573

✓ 3. 731

✗ 4. 656

Question ID : 81616112517

Status : Answered

Chosen Option : 3

Q.24 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. Myology  
☒ 2. Dermatology  
☒ 3. Ecology  
☒ 4. Ophthalmology

Question ID : 81616114225

Status : Answered

Chosen Option : 3

Q.25 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. 104  
☒ 2. 101  
☒ 3. 118  
☒ 4. 110

Question ID : 81616113021

Status : Not Answered

Chosen Option : --

Section : General Awareness

Q.1 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 : Answered

Chosen Option : 1

Q.2 Prophet Muhammad founded the faith of Islam in the \_\_\_\_ century.

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

Question ID : 81616114260

Status : Answered

Chosen Option : 2

Q.3 In which present day state will you find the Megudi temple?

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

Question ID : 81616112542  
Status : Not Answered  
Chosen Option : --

Q.4 Through which of the following actions does the lithosphere move over the asthenosphere?

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

Question ID : 81616113045  
Status : Not Answered  
Chosen Option : --

Q.5 'Ghoomar' is a folk-dance form from the state of \_\_\_\_.

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

Question ID : 81616114248  
Status : Answered  
Chosen Option : 3

Q.6 Who among the following is one of the authors of 'The Hitman: The Rohit Sharma Story'?

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

Question ID : 81616113052  
Status : Not Answered  
Chosen Option : --

Q.7 Which Sultan established a separate department (Diwan-i-Amir Kohi) to take care of agriculture?

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

Question ID : 81616112545  
Status : Answered  
Chosen Option : 1

Q.8 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. aquifer  
☐ 3. warabandi  
☐ 4. reservoir

Question ID : 81616113046  
Status : Answered  
Chosen Option : 4

Q.9 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. Shantanu Narayen  
☐ 2. Ramesh Raskar  
☒ 3. Bhavya Lal  
☐ 4. Manmohan Attavar

Question ID : 81616113059  
Status : Not Answered  
Chosen Option : --

Q.10 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. Aishwarya Rai  
☒ 3. Deepika Padukone  
☐ 4. Alia Bhatt

Question ID : 81616113051  
Status : Answered  
Chosen Option : 3

Q.11 Which of the following is known as alkaline earth metal?

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

Question ID : 81616112537  
Status : Not Answered  
Chosen Option : --

Q.12 In which of the following countries were the first modern Olympic Games held?

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

Question ID : 81616113055  
Status : Answered  
Chosen Option : 1

Q.13 An economy in which both, the private sector and the government are involved is known as a/an \_\_\_\_\_ economy.

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

Question ID : 81616114250  
Status : Answered  
Chosen Option : 2

Q.14 Which of the following places is NOT located on the banks of river Ganga?

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

Question ID : 81616114256  
Status : Answered  
Chosen Option : 1

Q.15 Who among the following is one of the founder members of Bhartiya Jana Sangh?

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

Question ID : 81616113054  
Status : Not Answered  
Chosen Option : --

Q.16 As of December 2020, there are \_\_\_\_\_ official languages of the United Nations.

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

Question ID : 81616114265  
Status : Not Answered  
Chosen Option : --

Q.17 Which of the following states became the first one to launch blockchain-enabled solar power trading in December 2020?

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

Question ID : 81616113057  
Status : Not Answered  
Chosen Option : --

Q.18 Which of the following companies announced the launch of India's first virtual academy programme Esports Academy?

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

Question ID : 81616113058  
Status : Not Answered  
Chosen Option : --

Q.19 Who among the following had invaded India in 712 AD?

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

Question ID : 81616113049  
Status : Answered  
Chosen Option : 3

Q.20 \_\_\_\_\_ is an economic scenario where a peculiar combination of low growth and rising inflation leads to high unemployment.

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

Question ID : 81616113037  
Status : Answered  
Chosen Option : 4

Q.21 Coulomb per second is equivalent to \_\_\_\_.

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

Question ID : 81616114253  
Status : Not Answered  
Chosen Option : --

Q.22 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 : 4

Q.23 Who among the following was the first player from the Indian sub-continent to play for a European Football club (Celtic FC)?

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

Question ID : 81616112551  
Status : Not Answered  
Chosen Option : --

Q.24 'Thullal' is a solo satiric dance form belonging to the state of \_\_\_\_.

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

Question ID : 81616112530  
Status : Not Answered  
Chosen Option : --

Q.25 \_\_\_\_\_ 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. Bird
  - ☒ 2. Mammal
  - ☒ 3. Coral
  - ☒ 4. Reptile

Question ID : 81616113043  
Status : Answered  
Chosen Option : 3

Section : Quantitative Aptitude

Q.1 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 : Not Answered  
Chosen Option : --

Q.2 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. 7 h 52 m
  - ☒ 2. 6 h 30 m
  - ☒ 3. 6 h 18 m
  - ☒ 4. 7 h

Question ID : 81616112564  
Status : Not Answered  
Chosen Option : --

Q.3 If selling price of 75 articles is equal to cost price of 60 articles, then the approximate loss or gain percent is :

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

Question ID : 81616113065  
Status : Not Answered  
Chosen Option : --



**Q.4** 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. 10  
 ✓ 3. 18  
 ✗ 4.  $2\sqrt{3}$

Question ID : 81616112561

Status : Not Answered

Chosen Option : --

**Q.5** 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. 6  
 ✓ 2. 4.8  
 ✗ 3. 3.6  
 ✗ 4. 7.2

Question ID : 81616113077

Status : Not Answered

Chosen Option : --

**Q.6** 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. 53.9  
 ✗ 2. 54.8  
 ✓ 3. 59.6  
 ✗ 4. 57.4

Question ID : 81616114296

Status : Not Answered

Chosen Option : --

Q.7 The sum of 3-digit numbers abc, cab and bca is not divisible by:

- Ans
- ☒ 1. 37
  - ☒ 2. 3
  - ☒ 3. 31
  - ☒ 4.  $a + b + c$

Question ID : 81616114272

Status : Answered

Chosen Option : 4

Q.8 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 ₹68
  - ☒ 2. second offer by ₹68
  - ☒ 3. first offer by ₹32
  - ☒ 4. second offer by ₹100

Question ID : 81616112558

Status : Answered

Chosen Option : 1

Q.9 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.  $\frac{2}{3}$
  - ☒ 2.  $\frac{19}{12}$
  - ☒ 3.  $\frac{14}{3}$
  - ☒ 4.  $\frac{11}{12}$

Question ID : 81616114290

Status : Not Answered

Chosen Option : --

Q.10 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.  $40^\circ$
  - ☒ 2.  $20^\circ$
  - ☒ 3.  $50^\circ$
  - ☒ 4.  $30^\circ$

Question ID : 81616114287

Status : Answered

Chosen Option : 3

**Q.11** 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. 3
  - ☒ 2. -3
  - ☒ 3. -2
  - ☒ 4. 2

Question ID : 81616113686

Status : Not Answered

Chosen Option : --

**Q.12** 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. 6
  - ☒ 2. 2
  - ☒ 3. 4
  - ☒ 4. 3

Question ID : 81616113070

Status : Answered

Chosen Option : 1

**Q.13** 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. 20 and 25
  - ☒ 2. 35 and 40
  - ☒ 3. 30 and 35
  - ☒ 4. 25 and 30

Question ID : 81616114294

Status : Not Answered

Chosen Option : --

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

Question ID : 81616112375  
Status : Answered  
Chosen Option : 3

**Q.15** 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.  $18^\circ$
  - ☒ 2.  $16^\circ$
  - ☒ 3.  $12^\circ$
  - ☒ 4.  $28^\circ$

Question ID : 81616113074  
Status : Not Answered  
Chosen Option : --

**Q.16** 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. 5 days
  - ☒ 2. 4 days
  - ☒ 3. 3 days
  - ☒ 4. 8 days

Question ID : 81616114280  
Status : Answered  
Chosen Option : 4

**Q.17** 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. 53.25
  - ☒ 2. 50.45
  - ☒ 3. 51.75
  - ☒ 4. 52.65

Question ID : 81616113062

Status : Answered

Chosen Option : 2

**Q.18** 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. 21.5
  - ☒ 3. 17.4
  - ☒ 4. 15.8

Question ID : 81616114276

Status : Answered

Chosen Option : 1

**Q.19** If  $x + \frac{1}{x} = 7$ , then  $x^2 + \frac{1}{x^2}$  is equal to:

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

Question ID : 81616113071

Status : Answered

Chosen Option : 1

**Q.20** 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  $\triangle ABC$  is 60 cm, then its area (in  $cm^2$ ) is:

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

Question ID : 81616113076

Status : Answered

Chosen Option : 4

Q.21 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.22 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. 3990
  - ☒ 2. 3420
  - ☒ 3. 4560
  - ☒ 4. 3800

Question ID : 81616114279  
Status : Answered  
Chosen Option : 4

Q.23 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. 653 : 128
  - ☒ 3. 128 : 525
  - ☒ 4. 525 : 128

Question ID : 81616112377  
Status : Answered  
Chosen Option : 4

Q.24 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.  $\sin^2 \alpha$
  - ☒ 3. 1
  - ☒ 4. -1

Question ID : 81616112675  
Status : Answered  
Chosen Option : 4

Q.25

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.  $-\frac{37}{60}$

✗ 2.  $-\frac{17}{60}$

✗ 3.  $\frac{17}{60}$

✗ 4.  $\frac{37}{60}$

Question ID : 81616113061

Status : Answered

Chosen Option : 4

## Section : English Comprehension

Q.1 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. ABCD

✓ 2. BADC

✗ 3. BDAC

✗ 4. ACBD

Question ID : 81616112593

Status : Not Answered

Chosen Option : --

Q.2 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 : Not Answered

Chosen Option : --

Q.3 Select the most appropriate ANTONYM of the given word.

Infirm

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

Question ID : 81616113101  
Status : Not Answered  
Chosen Option : --

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

The gift of the gab

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

Question ID : 81616112599  
Status : Not Answered  
Chosen Option : --

Q.5 Select the most appropriate ANTONYM of the given word.

Sprightly

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

Question ID : 81616112597  
Status : Not Answered  
Chosen Option : --

Q.6 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. The food  
☒ 2. is much best than  
☒ 3. the one in RK Puram  
☒ 4. in the new eatery

Question ID : 81616112580  
Status : Not Answered  
Chosen Option : --



**Q.7** 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. for some field like
  - ☒ 3. in some fields like
  - ☒ 4. on some field like

Question ID : **81616114301**  
Status : **Not Answered**  
Chosen Option : --

**Q.8** Select the most appropriate synonym of the given word.

**Leverage**

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

Question ID : **81616113100**  
Status : **Not Answered**  
Chosen Option : --

**Q.9** 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. Leisure
  - ☒ 3. Doze
  - ☒ 4. Siesta

Question ID : **81616114317**  
Status : **Not Answered**  
Chosen Option : --

**Q.10** 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. No improvement required
  - ☒ 2. The need in an
  - ☒ 3. The need of the
  - ☒ 4. The need of an

Question ID : **81616113090**  
Status : **Not Answered**  
Chosen Option : --

Q.11 Select the INCORRECTLY spelt word.

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

Question ID : 81616113108

Status : Not Answered

Chosen Option : --

Q.12 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. lower
  - ☒ 2. lowest
  - ☒ 3. low
  - ☒ 4. last

Question ID : 81616114321

Status : Not Answered

Chosen Option : --

Q.13 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 said that she lived in Mumbai.
  - ☒ 4. She says that she was living in Mumbai.

Question ID : 81616113088

Status : Not Answered

Chosen Option : --

Q.14 Select the INCORRECTLY spelt word.

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

Question ID : 81616113107

Status : Not Answered

Chosen Option : --

Q.15 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. Correlation
  - ☒ 2. Conglomerate
  - ☒ 3. Agreement
  - ☒ 4. Association

Question ID : 81616114318  
Status : Not Answered  
Chosen Option : --

Q.16 Select the most appropriate meaning of the given idiom.

Feel at sea

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

Question ID : 81616112598  
Status : Not Answered  
Chosen Option : --

Q.17 Select the most appropriate synonym of the given word.

Integrate

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

Question ID : 81616113099  
Status : Not Answered  
Chosen Option : --

Q.18 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. ACBD
  - ☒ 3. ABCD
  - ☒ 4. BDCA

Question ID : 81616113097  
Status : Not Answered  
Chosen Option : --

Q.19 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 was worn by Richard.
  - ☐ 2. A broad belt with shiny buckles had been worn by Richard.
  - ☐ 3. A broad belt with shiny buckles wore Richard.
  - ☐ 4. A broad belt with shiny buckles was wear by Richard.

Question ID : 81616114299

Status : Not Answered

Chosen Option : --

Q.20 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. The Committee agreed
  - ☐ 2. that small businesses
  - ☒ 3. has been adversely affected
  - ☐ 4. by COVID-19

Question ID : 81616114298

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.

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. potential
  - ☐ 3. nominal
  - ☐ 4. factual

Question ID : 81616113092

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.

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. disagree

☒ 2. resemble

☒ 3. identify

☒ 4. differ

Question ID : 81616113093

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.

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. many

☒ 2. much

☒ 3. more

☒ 4. most

Question ID : 81616113094

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.

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. incomplete
  - ☒ 2. broken
  - ☒ 3. constant
  - ☒ 4. stable

Question ID : 81616113095

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.

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. seize
  - ☒ 2. direct
  - ☒ 3. lead
  - ☒ 4. guide

Question ID : 81616113096

Status : Not Answered

Chosen Option : --