

Combined Graduate Level Examination 2024 Tier I

Exam Date	18/09/2024
Exam Time	4:00 PM - 5:00 PM
Subject	Combined Graduate Level Examination Tier I

Section : General Intelligence and Reasoning

Q.1 Select the number from among the given options that can replace the question mark (?) in the following series.
3, 6, 9, 18, 21, ?

- Ans**
- ☒ 1. 42
 - ☐ 2. 24
 - ☐ 3. 40
 - ☐ 4. 63

Q.2 Read the given statements and conclusions carefully. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. You have to decide which conclusion/s logically follow/s from the given statements.

Statements:

All beaches are sand.

Some deserts are sand.

All mountains are rocky.

Conclusions:

(I) At least some beaches are desert.

(II) At least some sands are rocky.

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

Q.3 Select the combination of letters that when sequentially placed in the blanks of the given series will logically complete the series.

QUA_TO_ANT_UAN_KU_NT

- Ans**
- ☒ 1. NUMTA
 - ☐ 2. NUTMA
 - ☐ 3. NUTAM
 - ☐ 4. NULTA

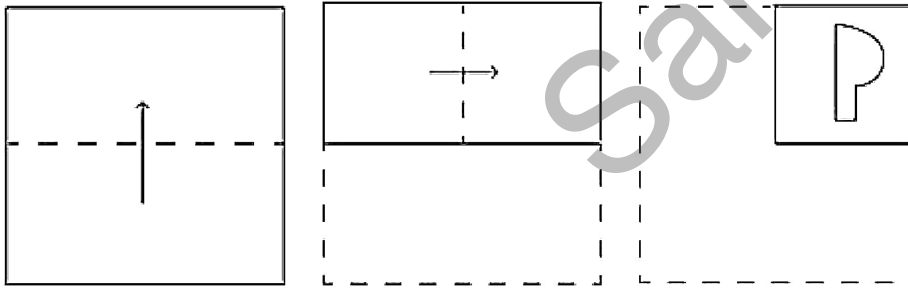
Q.4 Select the option that can replace the question mark (?) in the following series.
NW17, PY19, RA21, TC23, ?

- Ans**
- ☒ 1. VE25
 - ☐ 2. WD24
 - ☐ 3. XD24
 - ☐ 4. WF23

Q.5 In a certain code language, 'MORE' is coded as '14 - 12 - 9 - 22' and 'KNOW' is coded as '16 - 13 - 12 - 4'. How will 'SAID' be coded in the given language?

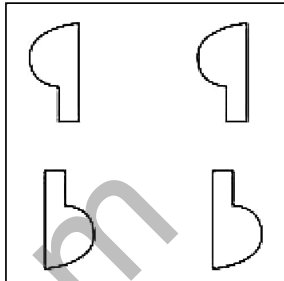
- Ans**
- ☐ 1. 7 - 26 - 18 - 22
 - ☒ 2. 8 - 26 - 18 - 23
 - ☐ 3. 8 - 26 - 17 - 23
 - ☐ 4. 7 - 25 - 18 - 23

Q.6 A paper is folded and cut as shown below. How will it appear when unfolded?

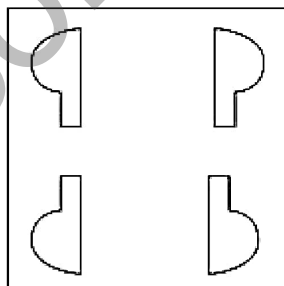


Ans

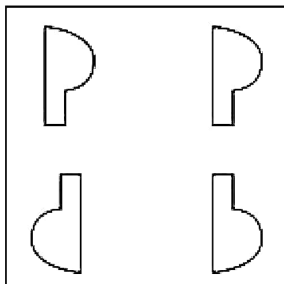
X 1.



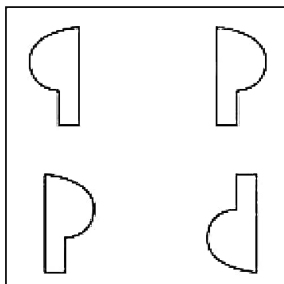
✓ 2.



X 3.



X 4.



Q.7 Select the word pair that best represents a similar relationship to the one expressed in the pair of words given below. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)

Control : Domination

Ans

X 1. Creation : Destruction

X 2. Liberation : Slavery

X 3. Descend : Fall

✓ 4. Manipulation : Deceive

Q.8 In this question, three statements are given, followed by two conclusions numbered I and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusion(s) logically follows/follow from the statements.

Statements:

No medicine is a capsule.

Some capsules are tablets.

Some tablets are laptops.

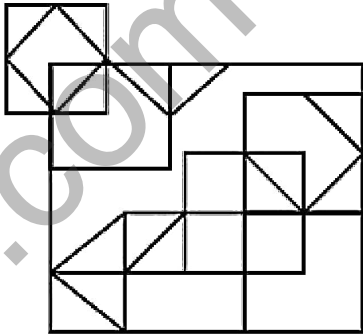
Conclusions:

I. Some capsules are laptops.

II. All tablets can never be medicines.

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

Q.9 How many triangles are there in the given figure?

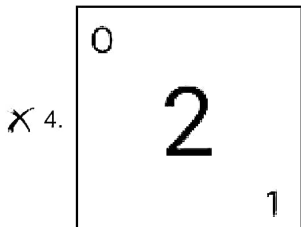
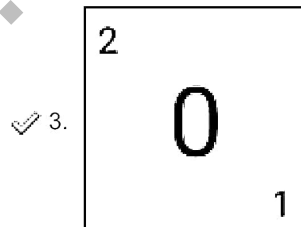
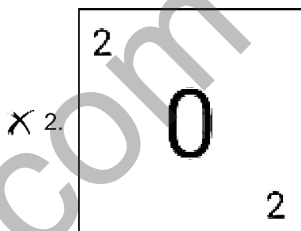
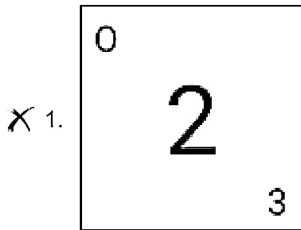


- Ans**
- ☐ 1. 17
 - ☐ 2. 12
 - ☐ 3. 15
 - ☒ 4. 18

Q.10 Identify the figure given in the options which when put in place of ? will logically complete the series.

5 9 6	9 6 3	6 3 2	3 2 0	?
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Ans



Q.11 In a certain code language,
'A + B' means 'A is the mother of B';
'A - B' means 'A is the father of B';
'A \$ B' means 'A is the daughter of B' and
'A % B' means 'A is the sister of B'.
Based on the above, how is P related to S if $P + Q - R \$ S \% T$?

- Ans
- ✗ 1. Sister's daughter
 - ✗ 2. Sister's husband
 - ✓ 3. Husband's mother
 - ✗ 4. Mother

Q.12 Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /deleting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)
(21, 504, 8)
(15, 270, 6)

- Ans
- ✗ 1. (16, 320, 5)
 - ✗ 2. (23, 230, 5)
 - ✗ 3. (17, 272, 8)
 - ✓ 4. (16, 336, 7)

Q.13 Select the number that will come in the place of the question mark(?), if '+' and '-' are interchanged and 'x' and '÷' are interchanged
 $93 - 7 \div 65 \times 13 + 34 = ?$

- Ans**
- ☒ 1. 87
 - ☐ 2. 94
 - ☐ 3. 99
 - ☐ 4. 104

Q.14 In a certain code language, 'BIRD' is written as 'DKTF' and 'KITE' is written as 'MKVG'. How will 'EAGLE' be written in that language?

- Ans**
- ☒ 1. GCING
 - ☐ 2. GGNCI
 - ☐ 3. INGGC
 - ☐ 4. IGNCG

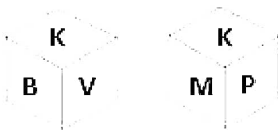
Q.15 Which two numbers (not digits) should be interchanged to make the given equation correct?
 $19 + 125 \div 25 - 100 \div 5 + 4 \times 3 = 52$

- Ans**
- ☐ 1. 19 and 4
 - ☐ 2. 125 and 100
 - ☒ 3. 25 and 5
 - ☐ 4. 4 and 5

Q.16 Select the option that is related to the fifth number in the same way as the second number is related to the first number and the fourth number is related to the third number.
 $10 : 110 :: 7 : 56 :: 9 : ?$
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /deleting /multiplying etc., to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

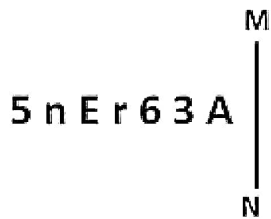
- Ans**
- ☒ 1. 90
 - ☐ 2. 91
 - ☐ 3. 85
 - ☐ 4. 81

Q.17 Two different positions of the same dice with faces K, B, V, M, P and T are shown below. Select the letter that will be on the face opposite to the one having B.



- Ans**
- ☐ 1. V
 - ☐ 2. P
 - ☐ 3. K
 - ☒ 4. M

Q.18 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



Ans

X 1. A 6 3 r E n 5

X 2. A 6 3 r E n 5

X 3. A 6 3 r E n 5

✓ 4. A 6 3 r E n 5

Q.19 Three of the following four letter-clusters are alike in a certain way and thus form a group. Which is the letter-cluster that does NOT belong to that group?

(Note: The odd one out is not based on the number of consonants/vowels or their positions in the letter-cluster.)

Ans

X 1. MPR

X 2. CFH

✓ 3. IKN

X 4. EHJ

Q.20 Select the figure from among the given option that can replace the question mark (?) in the following series.

X	=	△	X	F	O	N	F	
D	I	N	K	F	N	I	O	↑ △ X = S X △ V
△		↑	↑	=	N	I	I	O
								?

Ans

X 1.

S	N
X	△
V	F
O	I

X 2.

I	O
V	N
F	S
X	△

X 3.

I	N
V	S
X	△
O	F

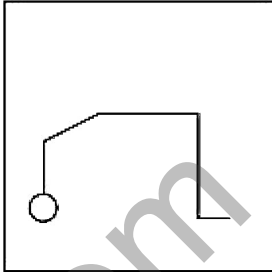
✓ 4.

S	V
I	N
F	O
X	△

Q.21 40 is related to 53 following certain logic. Following the same logic, 8 is related to 13. To which of the following numbers is 68 related, following the same logic? (NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /deleting /multiplying etc., to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

- Ans
- ☒ 1. 84
 - ☒ 2. 85
 - ☒ 3. 83
 - ☒ 4. 73

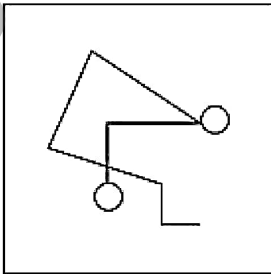
Q.22 Select the option figure in which the given figure (X) is embedded (rotation is NOT allowed).



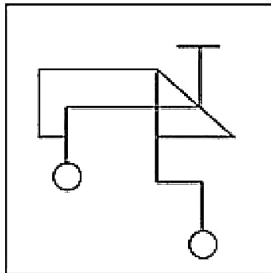
(X)

Ans

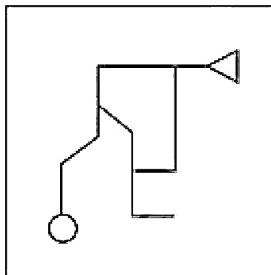
☒ 1.



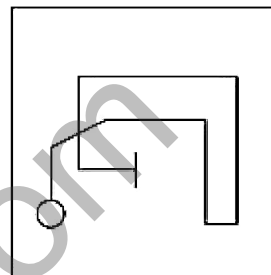
☒ 2.



☒ 3.



☒ 4.



Q.23 Three of the following numbers are alike in a certain way and one is different. Pick the odd one out.
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /deleting /multiplying etc., to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

- Ans**
- ☒ 1. 11 – 882
 - ☐ 2. 3 – 72
 - ☐ 3. 4 – 128
 - ☐ 4. 7 – 392

Q.24 The position of how many letters will remain unchanged if each of the letter in the word 'HUSBAND' is arranged in English alphabetical order?

- Ans**
- ☐ 1. Three
 - ☒ 2. Zero
 - ☐ 3. One
 - ☐ 4. Two

Q.25 Select the option that represents the letters that when sequentially placed from left to right in the blanks below will complete the letter series.

_ _ C _ D C _ _ C C _ _

- Ans**
- ☐ 1. CCDCCDD
 - ☒ 2. CDCCDDC
 - ☐ 3. DCCCDCC
 - ☐ 4. DDCCDD

Section : General Awareness

Q.1 The Pandya Kingdom was first mentioned by Megasthenes, who said that their kingdom was famous for pearls. Their capital was:

- Ans**
- ☐ 1. Thanjavur
 - ☐ 2. Uraiyur
 - ☒ 3. Madurai
 - ☐ 4. Kaveripatnam

Q.2 Harivarasanam award is given in the field of music by which of the following state governments?

- Ans**
- ☒ 1. Kerala
 - ☐ 2. Karnataka
 - ☐ 3. Maharashtra
 - ☐ 4. Himachal Pradesh

Q.3 Easter festival is celebrated by which community?

- Ans**
- ☒ 1. Christian
 - ☐ 2. Parsi
 - ☐ 3. Hindu
 - ☐ 4. Sikh

Q.4 Which of the following Sikh reform movements was started in 1873 in Amritsar?

- Ans**
- ☐ 1. Babbar Akali Movement
 - ☐ 2. Akali Movement
 - ☒ 3. Singh Sabha Movement
 - ☐ 4. Gurudwara Movement

Q.5 'Bhagirathi' and 'Alaknanda' rivers confluence at:

- Ans**
- ☐ 1. Joshimath
 - ☐ 2. Haridwar
 - ☐ 3. Karanprayag
 - ☒ 4. Devaprayag

Q.6 Which of the following institutions has contributed mainly in improving the economic status of the poor women in rural areas?

- Ans**
- ☐ 1. Indira Awas Yojana
 - ☐ 2. Integrated Development Project
 - ☒ 3. Self-help Group
 - ☐ 4. Rural Health Scheme

Q.7 Identify a spiral-shaped bacteria.

- Ans**
- ☐ 1. Bacillus
 - ☒ 2. Spirillum
 - ☐ 3. Coccus
 - ☐ 4. Vibrio

Q.8 In which year did the Central Government launch the National Air Sports Policy?

- Ans**
- ☒ 1. 2022
 - ☐ 2. 2021
 - ☐ 3. 2023
 - ☐ 4. 2020

Q.9 As of 14 October 2021, which Indian footballer was in the news for breaking Pele's 77 international goals?

- Ans**
- ☐ 1. Bhaichung Bhutia
 - ☒ 2. Sunil Chhetri
 - ☐ 3. Gurpreet Singh Sandhu
 - ☐ 4. Sandesh Jhingan

Q.10 Which of the following Acts introduced 'provincial autonomy' by discontinuing the application of dyarchy?

- Ans**
- ☐ 1. Government of India Act, 1919
 - ☐ 2. Charter Act of 1813
 - ☐ 3. India Council Act, 1909
 - ☒ 4. Government of India Act, 1935

Q.11 Which committee recommended Constitutional recognition for the local government bodies in 1989?

- Ans**
- ☐ 1. Ashok Mehta Committee
 - ☒ 2. PK Thungon Committee
 - ☐ 3. Balwant Rai Committee
 - ☐ 4. Verma Committee

Q.12 Which of the following is NOT related to reticulate venation?

- Ans**
- ☐ 1. China rose
 - ☐ 2. Tulsi
 - ☒ 3. Maize
 - ☐ 4. Coriander

Q.13 In which of the following Major Rock Edicts of Ashoka is the Kalinga war mentioned?

- Ans**
- ☐ 1. XII
 - ☐ 2. X
 - ☒ 3. XIII
 - ☐ 4. XI

Q.14 Who among the following is NOT a member of the National Human Rights Commission?

- Ans**
- ☒ 1. District Magistrate
 - ☐ 2. Former Chief Justice of the High Court
 - ☐ 3. Former Chief Justice of the Supreme Court
 - ☐ 4. Former Judge of the Supreme Court

Q.15 Which of the following is an inosilicate amphibole mineral used in highway construction and as railroad ballast?

- Ans**
- ☐ 1. Shale
 - ☐ 2. Olivine
 - ☐ 3. Geyserite
 - ☒ 4. Hornblende

Q.16 Ranjana Prakash Desai who became the first woman chairperson of the Press Council of India originally worked in which of the following organs of the government?

- Ans**
- ☐ 1. Legislature
 - ☒ 2. Judiciary
 - ☐ 3. Vigilance
 - ☐ 4. Executive

Q.17 Which state of India has the maximum number of large dams?

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

Q.18 Identify a monoatomic molecule.

- Ans**
- ☐ 1. carbon monoxide
 - ☐ 2. Oxygen
 - ☒ 3. Helium
 - ☐ 4. Chlorine

Q.19 According to Census 2011, which district displays the highest population?

- Ans**
- ☐ 1. Kollam
 - ☐ 2. Ajmer
 - ☒ 3. Thane
 - ☐ 4. Pune

Q.20 Consider the following statements and identify the INCORRECT statement(s).

1. The 'Saksham Anganwadi and Poshan 2.0' scheme has been implemented under the National Food Security Act, 2003.
2. It is an ongoing, Central Government-sponsored scheme under the Ministry of Women and Child Development.
3. It is extended to children aged below 6 years only.
4. Six services are provided under this scheme through the National Health Mission and Public Health Infrastructure.

- Ans**
- ☒ 1. Only 1, 3 and 4
 - ☐ 2. Only 4
 - ☐ 3. Only 1, 2 and 3
 - ☐ 4. Only 2 and 3

Q.21 In which five-year plan was the 'food, work, and productivity' slogan used?

- Ans**
- ☐ 1. Sixth
 - ☐ 2. Fifth
 - ☐ 3. Fourth
 - ☒ 4. Seventh

Q.22 Which of the following chemical reactions takes place when quick lime reacts with water?

- Ans**
- ☐ 1. $\text{CaO(s)} + \text{H}_2\text{O(l)} \rightarrow \text{Ca} + \text{H}_2\text{(aq)}$
 - ☐ 2. $\text{C(s)} + \text{O}_2\text{(g)} \rightarrow \text{CO}_2\text{(g)}$
 - ☒ 3. $\text{CaO(s)} + \text{H}_2\text{O(l)} \rightarrow \text{Ca(OH)}_2\text{(aq)}$
 - ☐ 4. $\text{CH}_4\text{(g)} + 2\text{O}_2\text{(g)} \rightarrow \text{CO}_2\text{(g)} + 2\text{H}_2\text{O(g)}$

Q.23 With which of the following dances is Yamini Krishnamurthy associated?

- Ans**
- ☒ 1. Bharatanatyam
 - ☐ 2. Mohiniyattam
 - ☐ 3. Odissi
 - ☐ 4. Sattriya

Q.24 Who among the following is the first vocalist to receive the Bharat Ratna in 2008 and is also credited to have popularised 'Khyal Gayaki'?

- Ans**
- ☒ 1. Pandit Bhimsen Joshi
 - ☐ 2. Begum Akhtar
 - ☐ 3. Vishnu Digambar Palushkar
 - ☐ 4. Gangubai Hangal

Q.25 The third edition of the Khelo India University Games was hosted by which of the following states?

- Ans**
- ☒ 1. Uttar Pradesh
 - ☐ 2. Haryana
 - ☐ 3. Punjab
 - ☐ 4. Madhya Pradesh

Section : Quantitative Aptitude

Q.1 Two equal circles pass through each other's centre. If the radius of each of the circle is 13 cm, then what is the length of the common chord?

- Ans**
- ☐ 1. $13\sqrt{6}$ cm
 - ☐ 2. $7\sqrt{3}$ cm
 - ☐ 3. $13\sqrt{2}$ cm
 - ☒ 4. $13\sqrt{3}$ cm

Q.2 If the 9-digit number $5x79856y6$ is divisible by 36, then what is the negative value of $\sqrt{(2x + y)}$ for the largest possible value of y, given x and y are natural numbers?

- Ans**
- ☐ 1. -7
 - ☐ 2. -2
 - ☐ 3. -4
 - ☒ 4. -5

Q.3 Anna and Ben each have a collection of marbles. If Anna gives one marble to Ben, they will both have an equal number of marbles. Conversely, if Ben gives one marble to Anna, she will end up with three times the number of marbles that Ben has. What is the total number of marbles they both have?

- Ans**
- ☐ 1. 10
 - ☒ 2. 8
 - ☐ 3. 11
 - ☐ 4. 9

Q.4 If $A:B = 6 : 8$ and $B:C = 7 : 12$, then $A:B:C$ is:

- Ans**
- ☐ 1. 14:31:20
 - ☐ 2. 21:32:40
 - ☐ 3. 11:23:40
 - ☒ 4. 21:28:48

Q.5 The value of $9 - 5 \times 6 + \{29 - (7 - 2)\} \div 8$ is:

- Ans**
- ☐ 1. -8
 - ☐ 2. 18
 - ☒ 3. -18
 - ☐ 4. 8

Q.6 A man can row a distance of 6 km in 1 hour in still water. He can row the same distance in 45 minutes with the current. Find the total time taken by him to row a distance of 16 km with the current and to return to the starting point.

- Ans**
- ☐ 1. 4 hours and 40 minutes
 - ☒ 2. 6 hours
 - ☐ 3. 4 hours
 - ☐ 4. 6 hours and 40 minutes

Q.7 If $3a + 2b = 27$ and $27a^3 + 8b^3 = 1458$, then find $2ab$.

- Ans**
- ☐ 1. 72
 - ☐ 2. 70
 - ☐ 3. 77
 - ☒ 4. 75

Q.8 The side MN of a parallelogram MNOP is produced to Q such that $MN = NQ$. PQ intersects ON at R. The point R divides ON in the ratio:

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

- Q.9** The following table gives the total number of employees in 5 different companies A, B, C, D and E and the percentage of males and females. Study the table carefully and answer the question. Find the number of females in companies A, C and E put together.

Companies	Total No. of Employees	Percentage of males	Percentage of females
A	600	75	25
B	570	65	35
C	700	70	30
D	800	55	45
E	850	60	40

Ans ✓ 1. 700

✗ 2. 675

✗ 3. 650

✗ 4. 725

- Q.10** Simplify the given expression.

$$\frac{(4x^2 + 9y^2 - 12xy)}{(3y - 2x)}$$

Ans ✗ 1. $2y - 3x$

✓ 2. $3y - 2x$

✗ 3. $2x - 3y$

✗ 4. $3x - 2y$

- Q.11** $\sin A \sin B =$ _____.

Ans ✗ 1. $\frac{1}{2} \{ \sin(A + B) + \sin(A - B) \}$

✗ 2. $\frac{1}{2} \{ \sin(A + B) - \sin(A - B) \}$

✗ 3. $\frac{1}{2} \{ \cos(A + B) - \cos(A - B) \}$

✓ 4. $\frac{1}{2} \{ \cos(A - B) - \cos(A + B) \}$

- Q.12** An investor, invested ₹2,00,000 in shares. The shares rose by 18% on the first day, fell by 15% on the second day, and then fell by 3% on the third day. What is the net percentage increase or decrease in the value of the investor's shares? (Rounded up to one decimal place)

Ans ✗ 1. increase by 2.2%

✗ 2. increase by 2.7%

✓ 3. decrease by 2.7%

✗ 4. decrease by 2.2%

Q.13 The following table shows the expenditure of a company (in ₹ lakh) per annum over the given years. Study the table and answer the question that follows.

Year	Salary	Bonus	Interest on loans	Fuel and transport	Taxes
2005	348	3.00	25.0	110	75
2006	405	4.25	28.5	145	90
2007	458	4.50	30.5	120	120
2008	389	4.85	38.0	168	100
2009	425	4.90	48.5	190	140

The total amount of bonus paid by the company during the given period is what percentage of the total amount of fuels and transport paid during this period (correct to two places of decimals)?

- Ans**
- ☐ 1. 3.92%
 - ☐ 2. 2.39%
 - ☐ 3. 3.29%
 - ☒ 4. 2.93%

Q.14 If we extend a chord infinitely on both sides, then the chord becomes a _____.

- Ans**
- ☐ 1. diameter
 - ☐ 2. tangent
 - ☒ 3. secant
 - ☐ 4. normal

Q.15 Aman borrows a sum of ₹192208 at the rate of 15% per annum simple interest. At the end of the first year, he repays ₹20196 towards return of principal amount borrowed. If Aman clears all pending dues at the end of the second year, including interest payment that accrued during the first year, how much does he pay (in ₹) at the end of the second year?

- Ans**
- ☒ 1. 226645
 - ☐ 2. 221777
 - ☐ 3. 221757
 - ☐ 4. 230028

Q.16 A seller sold 19 cookies for ₹95 instead of 20 cookies in one kg, cheating a customer. What is the gain (in ₹) if the seller bought the cookies for ₹76?

- Ans**
- ☐ 1. 28.2
 - ☐ 2. 26.2
 - ☒ 3. 22.8
 - ☐ 4. 25.8

Q.17 Find the area (in cm^2) of the sector, where the radius of the circle is 24 cm and length of the arc is 7 cm.

- Ans**
- ☐ 1. 72
 - ☒ 2. 84
 - ☐ 3. 48
 - ☐ 4. 168

Q.18 If the selling price of an article is ₹1,792 after a 20% discount, then the marked price of the article is:

- Ans**
- ☐ 1. ₹2,140
 - ☒ 2. ₹2,240
 - ☐ 3. ₹2,160
 - ☐ 4. ₹2,260

Q.19 Pipe Q can fill the tank in 60 hours while pipe R may fill in 45 hours. Q and R pipes are opened together for 6 hours after which pipe W is also opened to empty the tank. All three pipes are opened simultaneously for 24 hours to reach the half level mark. How much time (in hours) will pipe W alone take to empty the entire tank?

- Ans**
- ☐ 1. 48
 - ☐ 2. 42
 - ☒ 3. 36
 - ☐ 4. 30

Q.20 Study the given table and answer the question that follows.

The table represents the number of scooters (in thousands) manufactured by four companies A, B, C and D from the period 2012 to 2015.

Years	A	B	C	D
2012	360	420	380	520
2013	580	940	570	980
2014	1000	780	1020	1090
2015	1240	950	1180	1660

The average number of scooters produced by company D is what per cent (rounded off to 2 decimal places) more than the combined average number of scooters produced by the three companies A, B, and C?

- Ans**
- ☐ 1. 52.75%
 - ☐ 2. 27.25%
 - ☐ 3. 44.66%
 - ☒ 4. 35.35%

Q.21 The given expression is equivalent to:

$$\sqrt{\frac{\sec \theta + 1}{\sec \theta - 1}} + \sqrt{\frac{\sec \theta - 1}{\sec \theta + 1}}$$

- Ans**
- ☐ 1. $2 \sin \theta$
 - ☒ 2. $2 \operatorname{cosec} \theta$
 - ☐ 3. $2 \tan \theta$
 - ☐ 4. $2 \tan \theta \sec \theta$

Q.22 What is the value of $\sqrt{\frac{9 \sin^2 26^\circ + 9 \sin^2 64^\circ + 36}{32 - 7 \cos^2 32^\circ - 7 \cos^2 58^\circ}}$?

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

Q.23 Find the average of first 125 natural numbers.

- Ans**
- ☐ 1. 62.5
 - ☒ 2. 63
 - ☐ 3. 62
 - ☐ 4. 63.5

- Q.24 There is constant growth rate (in %) every year in the production of a company as seen the given table.

Year	2018	2019	2020
Production (in units)	9000	10,800	X

Find the value of 'X' from the data given in the table.

- Ans
- ☐ 1. 12600
 - ☐ 2. 11880
 - ☐ 3. 12000
 - ☒ 4. 12960

- Q.25 What is the volume of a cone (in cubic units) with radius 3 units and slant height $3\sqrt{2}$ units?

- Ans
- ☐ 1. 18π
 - ☐ 2. $\frac{10\pi}{3}$
 - ☐ 3. $\frac{9\pi}{2}$
 - ☒ 4. 9π

Section : English Comprehension

- Q.1 Identify the correct antonym for the given word.
Envious

- Ans
- ☒ 1. Generous
 - ☐ 2. Suspicious
 - ☐ 3. Malicious
 - ☐ 4. Untrustworthy

- Q.2 Select the most appropriate verb / verb phrase to fill in the blank.
They _____ their house for the past two months, and it's finally starting to look fantastic.

- Ans
- ☐ 1. were renovating
 - ☐ 2. will renovate
 - ☐ 3. has renovated
 - ☒ 4. have been renovating

- Q.3 Select the most appropriate option to substitute the underlined segment in the given sentence.
Do you know where does she reside ?

- Ans
- ☐ 1. where does she resides?
 - ☐ 2. where she reside?
 - ☒ 3. where she resides?
 - ☐ 4. where do she reside?

- Q.4 Select the option that expresses the given sentence in passive voice.
People will respect his bravado.

- Ans
- ☐ 1. His bravado will being respected by people.
 - ☐ 2. His bravado will have to be respected by people.
 - ☒ 3. His bravado will be respected by people.
 - ☐ 4. His bravado will be respect by people.

Q.5 Select the word with the correct spelling to fill in the blank.
Hiren loves to use _____ words while writing anything.

- Ans**
- ☐ 1. coloquial
 - ☒ 2. colloquial
 - ☐ 3. colloquil
 - ☐ 4. colloqual

Q.6 Select the most appropriate ANTONYM of the word in the brackets to fill in the blank.

Dhara _____ the way to Mumbai. [lost]

- Ans**
- ☐ 1. paved
 - ☐ 2. slept
 - ☒ 3. found
 - ☐ 4. helped

Q.7 Select the most appropriate synonym of the given word.
Mellifluous

- Ans**
- ☐ 1. Distinct
 - ☒ 2. Musical
 - ☐ 3. Loud
 - ☐ 4. Cacophonous

Q.8 Parts of a sentence are given below in jumbled order. Arrange the parts in the correct order to form a meaningful sentence.
A: new facts and advanced
B: but my opinion is
C: he has discovered
D: unchanged
E: new arguments

- Ans**
- ☐ 1. DACBE
 - ☒ 2. CAEBD
 - ☐ 3. BDAEC
 - ☐ 4. EBDCA

Q.9 Select the option that expresses the given sentence in passive voice.
People know Stellenbosch for its greenery and delicious street foods.

- Ans**
- ☐ 1. Stellenbosch was known to people for its greenery and delicious street foods.
 - ☒ 2. Stellenbosch is known to people for its greenery and delicious street foods.
 - ☐ 3. Stellenbosch had been known to people for its greenery and delicious street foods.
 - ☐ 4. Stellenbosch have been known to people for its greenery and delicious street foods.

Q.10 The following sentence has been split into four segments. Identify the segment that contains a grammatical error.
He never talks / for anybody. / He is alone / all day.

- Ans**
- ☐ 1. He is alone
 - ☒ 2. for anybody
 - ☐ 3. He never talks
 - ☐ 4. all day

Q.11 Select the most appropriate synonym of the underlined word in the given sentence.

A period of free outdoor play can provide a very necessary respite from the hustle and bustle of the day.

- Ans**
- ☐ 1. Progression
 - ☐ 2. Commencement
 - ☒ 3. Break
 - ☐ 4. Continuation

Q.12 Select the option that can be used as a one-word substitute for the given group of words.
Much more than usual or expected

- Ans**
- ☐ 1. Mordancy
 - ☐ 2. Ordinate
 - ☐ 3. Subordinate
 - ☒ 4. Exceeding

Q.13 Select the most appropriate ANTONYM of the underlined word in the given sentence.
Coffee was too hot; it burnt my tongue.

- Ans**
- ☐ 1. Scorching
 - ☒ 2. Frigid
 - ☐ 3. Balmy
 - ☐ 4. Subtle

Q.14 Select the most appropriate ANTONYM of the given word.
Triumphant

- Ans**
- ☐ 1. Flourishing
 - ☒ 2. Unsuccessful
 - ☐ 3. Jubilant
 - ☐ 4. Tender

Q.15 Select the option that can be used as a one-word substitute for the given group of words.

A short stay that you make while on a longer journey

- Ans**
- ☐ 1. Saga
 - ☒ 2. Stopover
 - ☐ 3. Refugee
 - ☐ 4. Tent

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

- Ans**
- ☐ 1. A mean person
 - ☐ 2. A bad habit
 - ☐ 3. A faithful dog
 - ☒ 4. One who does same thing in the same way

Q.17 Select the most appropriate option to substitute the underlined segment in the given sentence.
A computer can't function without it's mother board.

- Ans**
- ☒ 1. its
 - ☐ 2. his
 - ☐ 3. their
 - ☐ 4. it is

Q.18 Select the most appropriate meaning of the given idiom.

Hit the roof

- Ans**
- ☐ 1. To destruct a building
 - ☒ 2. To become very angry
 - ☐ 3. To jump high
 - ☐ 4. To play joyfully

Q.19 Select the option that can be used as a one-word substitute for the given group of words.
Having unlimited power

- Ans**
- ☒ 1. Omnipotent
 - ☐ 2. Omnipresence
 - ☐ 3. Omniscient
 - ☐ 4. Omnivorous

Q.20 Select the INCORRECTLY spelt word in the given sentence.

Economics began with growth and removal of poverty as its grand theme.

- Ans**
- ☐ 1. Poverty
 - ☐ 2. Grand
 - ☒ 3. Removal
 - ☐ 4. Economics

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

According to a poll conducted in 2018–19 by an online internship and training platform, (1)_____ number of businesses actively (2)_____ intern profiles has increased over the previous five years. This study demonstrates that India received 80% more internship applications in 2018, with 2.2 million applications (3)_____ 1.27 million in 2017. The rise was influenced (4)_____ part by an increase in the number of industries seeking fresh perspectives and innovative ideas to improve (5)_____ on existing projects. Obtaining an internship prior to entering the job market, which was once viewed as a Western concept, is quickly gaining steam in Indian workplaces.

SubQuestion No : 21

Q.21 Select the most appropriate option to fill in blank number 1.

- Ans**
- ☐ 1. few
 - ☐ 2. a
 - ☒ 3. the
 - ☐ 4. an

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

According to a poll conducted in 2018–19 by an online internship and training platform, (1)_____ number of businesses actively (2)_____ intern profiles has increased over the previous five years. This study demonstrates that India received 80% more internship applications in 2018, with 2.2 million applications (3)_____ 1.27 million in 2017. The rise was influenced (4)_____ part by an increase in the number of industries seeking fresh perspectives and innovative ideas to improve (5)_____ on existing projects. Obtaining an internship prior to entering the job market, which was once viewed as a Western concept, is quickly gaining steam in Indian workplaces.

SubQuestion No : 22

Q.22 Select the most appropriate option to fill in blank number 2.

- Ans**
- ☒ 1. seeking
 - ☐ 2. neglecting
 - ☐ 3. declining
 - ☐ 4. reducing

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

According to a poll conducted in 2018–19 by an online internship and training platform, (1)_____ number of businesses actively (2)_____ intern profiles has increased over the previous five years. This study demonstrates that India received 80% more internship applications in 2018, with 2.2 million applications (3)_____ 1.27 million in 2017. The rise was influenced (4)_____ part by an increase in the number of industries seeking fresh perspectives and innovative ideas to improve (5)_____ on existing projects. Obtaining an internship prior to entering the job market, which was once viewed as a Western concept, is quickly gaining steam in Indian workplaces.

SubQuestion No : 23

Q.23 Select the most appropriate option to fill in blank number 3.

- Ans**
- ☐ 1. similar to
 - ☐ 2. according to
 - ☒ 3. compared to
 - ☐ 4. combine to

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

According to a poll conducted in 2018–19 by an online internship and training platform, (1)_____ number of businesses actively (2)_____ intern profiles has increased over the previous five years. This study demonstrates that India received 80% more internship applications in 2018, with 2.2 million applications (3)_____ 1.27 million in 2017. The rise was influenced (4)_____ part by an increase in the number of industries seeking fresh perspectives and innovative ideas to improve (5)_____ on existing projects. Obtaining an internship prior to entering the job market, which was once viewed as a Western concept, is quickly gaining steam in Indian workplaces.

SubQuestion No : 24

Q.24 Select the most appropriate option to fill in blank number 4.

- Ans**
- ☐ 1. on
 - ☐ 2. to
 - ☐ 3. up
 - ☒ 4. in

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

According to a poll conducted in 2018–19 by an online internship and training platform, (1)_____ number of businesses actively (2)_____ intern profiles has increased over the previous five years. This study demonstrates that India received 80% more internship applications in 2018, with 2.2 million applications (3)_____ 1.27 million in 2017. The rise was influenced (4)_____ part by an increase in the number of industries seeking fresh perspectives and innovative ideas to improve (5)_____ on existing projects. Obtaining an internship prior to entering the job market, which was once viewed as a Western concept, is quickly gaining steam in Indian workplaces.

SubQuestion No : 25

Q.25 Select the most appropriate option to fill in blank number 5.

- Ans**
- ☐ 1. effecting
 - ☐ 2. effortless
 - ☒ 3. efficiencies
 - ☐ 4. efficient