STAFF SELECTION COMMISSION SUB-INSPECTOR IN DELHI POLICE AND CENTRAL ARMED POLICE FORCES EXAMINATION (PAPER-I)

SOLVED PAPER

(28th June 2024: Shift-2)

Time Allotted- 2 hours Max marks- 200

General Intelligence & Reasoning

Select the option that is related to the fifth letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster and the fourth letter-cluster is related to the third letter-cluster.

TRUTH: IVXVY:: SIMPLE: FNSONY:: AROUND:? 1. EOVPSB 2. EPXSWG 3. EPXSRA 4. DNUORA

In a certain code language, 'MARCH' is written as 'LBQDG' and 'TAXAS' is written as 'SBWBR'. How will 'PIECE' be written in the given language?

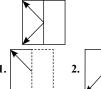
1. OJDDD

2. OJDED

3. QJDDF

4. QHCED

A transparent sheet with a pattern is given below. Select the option that depicts the pattern that would appear when the given transparent sheet is folded at the middle vertical line.









Shivani drives 17 km to the North, then drives 9 km East, and then drives 17 km South. How far is Shivani from the starting point when considered in a straight line?

1. 26 km

2. 9 km

3. 17 km

4. 12 km

In a certain code language, 'HEMANT' is coded as 24-15-39-3-42-60 and 'VINAY' is coded as 66-27-42-3-75. How will 'MOHAN' be coded in the same language?

1. 43-24-3-56-7

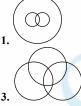
2. 36-3-41-24-39

3. 24-39-4-42-27

4. 39-45-24-3-42

6. Select the Venn diagram that best illustrates the relationship between the following classes.

Grapes, Apples, Fruits





Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which letter-cluster does not belong to that group? (Note: The odd letter-cluster is not based on the number of consonants/vowels or their position in the letter-cluster.)

1. FLI

2. IOL

3. RXU

4. MSO

What will come in place of the question mark (?) in the following equation, if '+' and '-' are interchanged and 'x' and '÷' are interchanged?

 $712 \div 6 - 15 \times 3 + 15 = ?$

1. 4262

2. 4263

3. 4265

4. 4256

If 'I' stands for 'x', 'J' stands for '+', 'K' stands for '÷' and 'L' stands for '-', what will come in place of the question mark (?) in the following equation?

17 I (11 L 8 J 4) L 148 K 4 J 22 = ?

1. 128

2. 104

3, 114

4. 98

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



Maget. Maget. Maget. Mages. 1

11. Two 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 conclusions logically follow(s) from the

All pebbles are stones.

No stones are shells.

Conclusions:

I. Some pebbles are shells.

II. No shells are stones.

- 1. Neither conclusion I nor II follows
- 2. Only conclusion I follows
- 3. Only conclusion II follows
- 4. Both conclusions I and II follow
- 12. Which of the following numbers will replace the question mark (?) in the given series?

$$-32, -8, -2, ?, -\frac{1}{8}$$

1. $-\frac{1}{4}$ 2. -1

13. Select the figure from among the given options that can logically replace the question mark (?) in the following series.

{{ α	3	α {{	:	3 α	{{ ::	α 3 {{	?	
1.	::	{{ α 2.	3 α	# {{ 	3. [α [{{{	3	4. [:	:: α

14. Which of the following terms will replace the question mark (?) in the given series?

ADO, DGR, GJU,?

1. LON

2. JCB

3. JMX

4. RCB

15. In a code language, 'ACID' is written as 'XDFE', and 'HAND' is written as 'EBKE'. How will 'ZEST' be written in that language?

1. PUWF

2. WPUF

3. UWPF

4. WFPU

16. Which of the following numbers will replace the question mark (?) in the given series?

78, 86, 258, 322, ?

1. 1288

2. 1360

3. 1420

4. 1610

17. 20 is related to 30 following a certain logic. Following the same logic, 30 is related to 45. Which of the following numbers is related to 120 using the same logic?

1.60

2. 80

1. South-east 2. North-west 3. South

3. 70

3. 18

4. 75

18. Priya starts from point A and drives 9 km towards North. She then takes a right turn, drives 4 km to reach point B. She then turns right, drives 10 km and stops at point C. In which direction is point C with respect to point A?

4. North-east

19. If + means -, - means \times , \times means \div , and \div means +, what will be the value of the following expression?

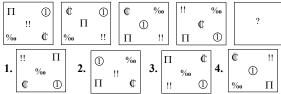
 $20 \times 5 - 7 \div 4 + 3 = ?$

1.35

2. 29

4. 25

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



21. A dice has numbers 2, 3, 4, 5, 8 and 9 on its sides. Two different positions of the same dice are shown below. Select the number that will be on the face opposite to the one having 3.



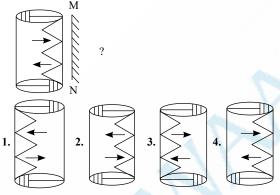
1 8

2. 4

3. 5

4. 2

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



23. In a certain code language,

M & N means 'M is the husband of N',

M @ N means 'M is the brother of N',

M \$ N means 'M is the father of N',

M # N means 'M is the mother of N'.

Based on the above, how is F related to J if 'F & G # H @ I \$

1. Mother's father

2. Father's father

3. Mother

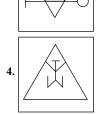
4. Sister

24 Select the option figure in which the given figure (X) is embedded as its part (rotation is NOT allowed).









25. In a code language, 'BEAM' is written as 'AFZN', and 'BILL' is written as 'AJKM'. How will 'WELL' be written in that language?

1. VKMF

2. KMVF

3. VFKM

4. MVKF

26. If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '-', what will come in place of the question mark (?) in the following equation?

342 A 2 C 125 B 1 D 43 = ?

1. 250

2. 252

3. 251

4. 253

27. What will come in the place of '?' in the following equation, if '+' and '-' are interchanged and also 'x' and '÷' are interchanged?

 $47 \div 3 - 126 \times 6 + 18 = ?$

1. 144 **2.** 149

3. 156

4. 138

28. Which two numbers should be interchanged to make the given equation correct?

$$71+32\times2-63\div7+\left[(81)^{\frac{1}{4}} \right] \times 3-22=113$$

1. 3 and 7

2. 71 and 22 **3.** 2 and 3

22 2 2 ...

4. 32 and 22

29. J, K, L, M, O and P are sitting around a circular table facing the centre. Both L and M are immediate neighbours of J. Only one person sits between M and P. O sits second to the right of J. O is not an immediate neighbour of L. Who is sitting to the immediate right of K?

1. J

2. L

3. P

4. 0

30. Which of the following numbers will replace the question mark (?) in the given series?

324, 361, 400, 441, 484, ?

1. 567

70, 441

2. 586

3. 592

4. 529

31. A dice has letters A, B, C, R, S and T on its sides. Two different positions of the same dice are shown below. Select the letter that will be on the face opposite to the one having A.





1. T

2. R

3. S

4. C

32. In a certain code language, 'PANDA' is coded as 33-78-39-69-78 and 'SNAKE' is coded as 24-39-78-48-66. How will 'ZEBRA' be coded in the same language?

1. 6-46-63-38-78

2. 7-46-65-13-78

3. 3-66-75-27-78

4. 5-66-71-29-78

33. Select the option in which the numbers share the same relationship as that shared by the given pair of numbers. 23 – 27

1. 11 – 55

2. 15 – 25

3. 15 – 45

4. 11 – 33

34. Select the option that is related to the fifth number in the same way as the fourth number is related to the third number and the second number is related to the first number.

76:69::49:45::69:?

1. 67

2. 65

3. 63

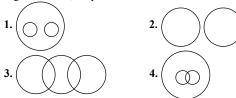
4. 62

35. Select the option that is related to the fifth letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster and the fourth letter-cluster is related to the third letter-cluster.

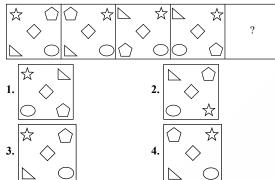
NAPE: MZOD:: DULL: CTKK:: KIND:?

- 1. LHOC
- 2. LJOE
- 3. IFLB
- 4. JHMC
- 36. Select the Venn diagram that best illustrates the relationship between the following classes.

Tigers, Snakes, Elephants



37. Identify the option figure that when put in place of the question mark (?) will logically complete the series.



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



- 1. 7 A E F b W
- 2. A7E 7bW
- MdF37A.
- M9F3LV.
- 39. Select the option that indicates the correct arrangement of the given words in the order in which they appear in an English dictionary.
 - 1- Incest
 - 2- Inception
 - 3- Incense
 - 4- Incapacity

 - 5- Incentive
 - 1. 4, 5, 3, 2, 1

2. 5, 3, 2, 1, 4

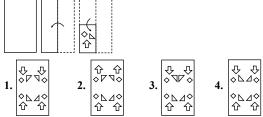
3. 5, 4, 3, 2, 1

4. 4, 3, 5, 2, 1

- 40. In a certain code language,
 - 'A x B' means 'A is the son of B',
 - 'A B' means 'A is the brother of B',
 - 'A + B' means 'A is the wife of B',
 - 'A % B' means 'A is the father of B'.

How is M related to T if 'M + N \times P % S – T'?

- 1. Wife's father's mother
- 2. Brother's wife
- 3. Mother's mother
- 4. Brother's wife's father's mother
- 41. The sequence of folding a paper and the manner in which the folded paper is cut is shown in the following figures. How would this paper look when unfolded?



- 42. In a certain code language, 'HEN' is coded as '9' and 'AFTER' is coded as '25'. How will 'SMALLEST' be coded in that language?
 - 1.31
- **2.** 56
- **3.** 81
- 43. Which letter cluster will replace the question mark (?) to complete the given series?

RDLS, VKBF, ?, DYHF, HFXS

- 1. FHWR
- 2. ZTTS
- 3. ZRRS
- 4. KBET
- 44. What will come in the place of '?' in the following equation, if '+' and '-' are interchanged and also 'x' and '÷' are interchanged?

$$53 - 48 \times 6 \div 9 + 11 = ?$$

- 1. 114
- 2. 101
- **3.** 129
- **4.** 107
- 45. Given below are two statements and two conclusions. Take the statements to be true even if they are at variance with commonly known facts, and decide whether the conclusion(s) follow(s) the given statements.

Statements:

All trains are buses.

Some buses are cars.

Conclusions:

- I. All cars are buses.
- II. Some buses are trains.
- 1. Only conclusion I follows
- 2. Both the conclusions follow
- 3. Neither conclusion I nor II follows
- 4. Only conclusion II follows
- 46. 15 is related to 20 following a certain logic. Following the same logic, 6 is related to 8. Which of the following numbers is related to 12 using the same logic?
 - **1.** 10
- 2. 8
- 3. 7
- 47. 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.)

(54, 51, 48)

(46, 40, 34)

- 1. (58, 47, 36)
- **2.** (48, 53, 38)
- **3.** (50, 42, 28)
- 4. (42, 45, 32)
- **48.** Select the option that represents the correct order of the given words as they would appear in an English dictionary.
 - 1. Dinnerware
 - 2. Dingiest
 - 3. Dinosaurs
 - 4. Dinucleotide
 - 5. Dinkier
 - 6. Dingling
 - **1.** 5, 2, 3, 6, 1, 4
- **2.** 2, 6, 5, 1, 3, 4
- **3.** 2, 6, 3, 5, 1, 4
- **4.** 5, 2, 6, 3, 1, 4
- 49. Which of the following letter-clusters will replace the question mark (?) in the given series?

ICE, LGJ, OKO, ? 1. OPT **2.** ROT 3. RPT 4. SPT 50. Select the number from among the given options that can replace the question mark (?) in the following series. 125, 150, 177, 207, 242, ?

General Knowledge and General Awareness

3. 282

4, 290

- 51. Which of the following books was written by Chitra Banerjee Divakaruni?
 - 1. Malgudi Days

1, 280

- 2. The Palace of Illusions
- 3. A Fine Balance
- 4. The feast of roses
- 52. Where is the Atal Bihari Vajpayee Institute of Mountaineering and Allied Sports situated?
 - 1. Pahalgam, Jammu and Kashmir
 - 2. Darjeeling, West Bengal
 - 3. Manali, Himachal Pradesh
 - 4. Uttar Kashi, Uttarakhand
- 53. Under which of the following Acts of British India did the British government take direct control of the administration of India in its own hands?
 - 1. Charter Act of 1813
 - 2. Bengal Regulation Act of 1818
 - 3. Indian Contract Act of 1872
 - 4. Government of India Act 1858
- 54. Which hairpin-like structure serves to anchor and stabilise the tick's mouthparts to its host's skin and to channel the exchange of fluids?
 - 1. Peduncle
- 2. Substratum
- **3.** Hypostome
- 4. Trunk
- 55. Which city has been selected to host Olympics 2032 by IOC on 21 July 2021?

2. Moscow

- 1. Brisbane
- 3. New York 4. Sydney
- 56. The tendency of an atom or a functional group to attract a shared pair of electrons toward itself, is known as:
 - 1. electronegativity
- 2. electron affinity
- 3. electro-positivity
- 4. electro attraction
- 57. Krishna III of Rashtrakuta dynasty established a victory pillar and a temple at which of the following cities of south India after defeating the Chola ruler Parantaka I?
 - 1. Poompuhar
- 2. Udaiyalur
- 3. Takkolam
- 4. Rameswaram
- 58. Who received the 67th National Film Award for Best Music Direction?
 - 1. M Jayachandran
- 2. A. R. Rahman
- 3. Composer D Imman
- 4. Gopi Sunder
- 59. Which of the following statements are correct regarding State Legislatures?
 - A. Notwithstanding anything in part XVII, but subject to the provisions of Article 348, business in the Legislature of a State shall be transacted in the official language or languages of the State or in Hindi or in English.
 - B. The Speaker of the Legislative Assembly or Chairman of the Legislative Council can permit any member to speak in his
 - C. Only the Supreme Court is entitled to inquire into the proceeding of the State Legislature.
 - 1. B and C only
- 2. A and C only
- **3.** A, B and C
- 4. A and B only
- 60. Which Five Year Plan period saw the initiation of the Hill Area Development Programme?

- 1. Sixth Five Year Plan 2. Fourth Five Year Plan
- 3. Eighth Five Year Plan 4. Fifth Five Year Plan
- 61. What was the winning throw of Neeraj Chopra in Tokyo Olympics-2020?
 - **1.** 90.00 m **2.** 87.58 m
- **3.** 80.00 m **4.** 90.58 m
- 62. Pandit Acchan Maharaj was a Kathak legend of which of the following gharanas?
 - 1. Jaipur 2. Benaras
- 3. Lucknow 4. Agra
- Which of the following is a term for the common local wind 63. that blows in North and North-western parts of India during summers?
 - 1. Loo 2. Chinook
- 3. Foehn 4. Bora
- 64. Identify a muscle responsible for exit of waste material from the body.
 - 1. Rectus
- 2. Pectoralis
- 3. Sphincter
- 4. Gastrocnemius
- 65. As per the decision by the Cabinet Committee on Economic Affairs (CCEA) of the Government of India in 2023, the MSP for Paddy (Common) has been fixed at _ higher than the last season.
 - 1.8%
- 3, 5%
- 4, 7%
- 66. Which of the following compounds is an Alicyclic compound?
 - 1. Ethane
- 2. Isobutane
- 3. Acetic acid
- 4. Cyclopropane
- 67. Who among the following wrote the novel 'Grimus'? 2. Salman Rushdie
 - 1. Amitav Ghosh 3. Arvind Adiga
- 4. Vikram Seth
- **68.** Which of the following is NOT an agro-based industry?
 - 1. Jute
- 2. Fertiliser
 - 4. Edible oil 3. Sugar
- 69. Which of the following is the most traditional mode of entering into the foreign market?
 - 1. Exporting
 - 2. Undertaking portfolio investment
 - 3. Mergers and acquisitions
 - 4. Setting up fully owned manufacturing facilities
- 70. Who among the following is the pioneer and founder of Kirana Gharana of Hindustani music?
 - 1. Firoz Dastur
- 2. Abdul Karim Khan
- 3. Bhimsen Joshi
- 4. Sawai Gandharva

2. Egypt

- 71. In 2023, the President of which of the following countries was invited as the chief guest at India's Republic Day celebration?
 - 1. United States of America
 - 3. Japan
 - 4. Russia
- 72. According to Agricultural Statistics at a Glance 2022, Government of India, which state recorded the highest production of Bajra?
 - 1. Rajasthan
 - 2. Haryana
 - 3. Maharashtra
 - 4. Madhya Pradesh
- 73. Which physicist is known to establish the relationship between mechanical work and heat transfer?
 - 1. Hermann Helmholtz
- 2. John Dalton
- 3. James Prescott Joule
- 4. William Henry
- 74. Harshacharita book was written by which of the following writers?
 - 1. Vararuchi
- 2. Amarasimha
- 3. Banabhatta
- 4. Harisena
- 75. Identify an organelle found both in eukaryotic as well as prokaryotic.
 - 1. Endosomes
- 2. Ribosomes
- 3. Lysosomes
- 4. Mitochondria

76.	Which Article of the Indian Constitution mentions that 'The Council of Ministers shall be collectively responsible to the	
	Legislative Assembly of the state'? 1. Article 164(3) 2. Article 164(1)	
	3. Article 164(2) 4. Article 164(4)	
77.	Which of the following is an open chain organic compound? 1. Acetaldehyde 2. Tetrahydrofuran	
	3. Benzene 4. Toluene	
	How much percentage of Earth's water make up the oceans? 1. 57% 2. 7% 3. 37% 4. 97%	
79.	Assume that the value of the cash reserve ratio is 25%. What will be the value of money multiplier? 1. 3 2. 5 3. 4 4. 2	
80.	The Supreme Court of India consists of judges and Chief Judges of India.	
	1. 30 2. 35 3. 28 4. 33	
81.		
	total number of carbon atoms present in the longest carbon	
	chain belonging to the compound.	
	1. Infix 2. Suffix 3. Root 4. Prefix	
82.	Article 21 is related to which of the following fundamental rights?	
	1. Freedom to Manage Religious Affairs	
	2. Protection of Language, Culture of Minorities	
	3. Protection of Life and Personal Liberty	
	4. Freedom of Speech	
83.		
	Constitution is to be consisted of persons who are, or have	
	been or are qualified to be appointed as 1. Judges of Supreme court 2. Judges of Lower court	
	3. Judges of High court 4. Judges of District court	
84.		
	'establisher of the Yavana kingdom'?	
	 Vira Narasimha Raya Achyuta Deva Raya 	
	3. Krishna Deva Raya 4. Sada Siva Raya	
85.	The Himalayas have uplifted from which of the following geosynclines?	
	1. Tethys geosynclines	
	2. Appalachians geosynclines	
	3. Caledonian geosynclines	
	4. Aravalli geosynclines	
86.	Which of the following is a tributary of river Indus?	
0=	1. Betwa 2. Lohit 3. Dibang 4. Shyok	
87.	The Sadir dancer R Muthukannammal is the recipient of which of the following awards in the year 2022?	
	1. Bharat Ratna Award 2. Padma Shri Award	
	3. Padma Vibhushan Award 4. Padma Bhushan Award	
88.	In which of the following years, were separate electorates	
00.	introduced in the Imperial Legislative Assembly elections in	
	the name of Morley- Minto Reforms?	
	1. Indian Council Act, 1861	
	2. Government of India Act, 1935	
	3. Indian Council Act, 1909	
00	4. Government of India Act, 1919	
ō9.	Sitara Devi, a doyen of Dance, was hailed as the Queen of Kathak by Rabindranath Tagore.	
	1. Odissi 2. Sattriya 3. Kathak 4. Manipuri	
90.		
70.	Olympics 2020?	
	1. Mirabai Chanu 2. Aditi Ashok	

3. MC Mary Kom

1. Sattriya

- **92.** Which of the following acts gave the British Indian government the authority to arrest anyone without a trial?
 - 1. Pitt's India Act
 - 2. The Indian Slavery Act
 - 3. The Indian Press Act
 - 4. The Rowlatt Act
- **93.** What is a population (or subspecies or race) that is adapted to local environmental conditions called?
 - 1. Niche
- 2. Ecotype
- 3. Prototype
- 4. Biome
- **94.** If a person who is arrested, is NOT produced before the Magistrate within 24 hours from the time of arrest, he will be entitled to be released on the writ of
 - 1. Habeas Corpus
- 2. Prohibition
- 3. Quo-warranto
- 4. Mandamus
- **95.** Taxes like gift tax, wealth tax etc are also referred to as which type of taxes?
 - 1. Rich taxes
- 2. Paper taxes
- 3. Paperless taxes
- 4. Direct taxes
- 96. Who among the following belongs to Patiala Gharana?
 - 1. Ali Baksh Khan
- 2. Nathu Khan
- 3. Abdul Wahid Khan
- 4. Chhaju Khan
- 97. Which festival is celebrated by Christians as the birth of Jesus Christ?
 - 1. Christmas
- 2. Easter
- 3. Eid ul Fitr
- 4. Good Friday
- Identify a conventional source of energy from the following options.
 - 1. Geothermal energy
- 2. Atomic energy
- 3. Cattle dung
- 4. Solar power
- 99. When was the Prime Minister's Employment Generation Programme (PMEGP) launched?
 - 1. 2008
- **2.** 2009
- **3.** 2006 **4.** 2012
- 100. In which year was the Mahatma Gandhi National Rural Employment Guarantee Act passed?
 - 1. 2004
- **2.** 2005
- 3. 2003
- **4.** 2006

Quantitative Aptitude

- **101.** If $(a-18)^2 + (b-12)^2 + (c-6)^2 = 0$, then find the value of $(a+b+c)^{1/2}$.
 - 1. ±3
- 2. ±6
- 3. ±4
- **4.** ±2
- 102. The below table shows the number of trees of 3 different fruits, planted during 2018-2022. Study the table carefully and answer the question based on it.

Year	Jackfruit	Mango	Butter Fruit
2018	35,000	40,000	55,000
2019	38,000	48,000	58,000
2020	42,000	52,000	62,000
2021	45,000	55,000	65,000
2022	48,000	58,000	68,000

What was the percentage increase in the number of mango trees planted in 2020 compared to the number of mango trees planted in 2018?

- 1.15%
- **2.** 17.5%
- **3.** 30%
- **4.** 23.08%
- **103.** A person covers 11 km with a speed of 7 km/h, 25 km with a speed of 10 km/h and 30 km with a speed of 20 km/h. What isthe average speed of the person?
 - 1. $11\frac{7}{13}$

4. Lovlina Borgohain

4. Kuchipudi

3. Odissi

91. Mallika Sarabhai is famous for which of the following dances?

2. Kathak

- 2. $11\frac{11}{13}$
- 3. $11\frac{10}{13}$
- **4.** 11 $\frac{9}{13}$
- 104. The sum of two numbers is 28 and the sum of their squares is

- 528. Find the square root of the product of both the numbers.
- 1. $8\sqrt{2}$
- **2.** $2\sqrt{2}$
- 3. $4\sqrt{2}$
- **4.** $6\sqrt{2}$
- 105. Study the given table and answer the question that follows. The table below shows the number of people who responded to a survey about their favourite style of music.

Age	25-30	31-50	51+
Classical	2	9	16
Pop	10	16	8
Нір-Нор	4	7	6
Rock	14	17	14
Ambient	7	13	0
Total	37	62	64

What percentage of respondents aged 31-50 indicated a favourite style other than Pop music (rounded off to 2 decimal places)?

- 1. 78.20%
- **2.** 76.25%
- **3.** 82.39%
- **4.** 74.19%
- 106. A cylinder has a radius of 7 cm and the area of its curved surface is 396 cm2. The volume of the cylinder is:

- **1.** 1396 cm³ **2.** 1381 cm³ **3.** 1386 cm³ **4.** 1391 cm³
- 107. Ramnarayan's salary was reduced by $3\frac{1}{8}\%$, and then the reduced salary was increased by $7\frac{2}{5}$ %. By what percentage (rounded off to two decimal places) is his new salary more/ less as compared to his original salary?
 - 1. 3.03% less
- 2. 4.04% more
- 3. 4.04% less
- 4. 3.03% more
- 108. A cylinder of radius 7 cm has a curved surface area of 2200 cm². Find its total surface area. (Use $\pi = \frac{22}{7}$)
 - 1. 2508 cm²
- **2.** 2260 cm² **3.** 2550 cm² **4.** 1580 cm²
- 109. Study the given table and answer the question that follows. The table shows the number of eggs produced in five farms.

Year			Farm		
	P	Q	R	S	T
2010	1020	1418	1630	1740	1580
2011	1260	1390	1460	1530	1620
2012	1120	1765	1480	1515	1640
2013	1465	1555	1746	1418	1545

What is the respective ratio of the dozens of eggs produced by farms P to farm T in the year 2011?

- **1.** 5 : 7
- **2.** 7:5
- 3.7:9
- **110.** If x y = 25 and xy = 444, compute the value of $x^3 y^3$. 1. 48,925
 - **2.** 42,985
- **3.** 28,495
- 4. 26,725
- 111. If four distinct positive numbers, a, b, c and d, in the order given are in proportion, then which of the following options is NOT correct?
 - 1. b, a, d and c, in the order given are in proportion.
 - 2. c, d, b and a, in the order given are in proportion.
 - 3. d, c, b and a, in the order given are in proportion.
 - **4.** a, c, b and d, in the order given are in proportion.
- 112. In an election between A and B, every fifth vote polled was marked as invalid by the machine. In the remaining votes, A wins the election with a margin of 2500 votes or 10% of the total votes polled, over B. If 90% of the invalid votes would have been in favour of B, then which of the following would have been the result of the election?
 - 1. B would have won by 8%

- 2. B would have won by 3%
- **3.** A would have won by 3%
- 4. A would have won by 8%
- 113. The following table shows the population (in hundreds) of five different cities (A, B, C, D and E) categorised by gender.

City	Population	Men : Women
A	2340	1:2
В	900	3:1
С	1510	3:2
D	2010	2:3
Е	1750	4:3

What is the total number of women (in hundreds) in City A and City B?

- 1. 1898
- **2.** 1998
- **3.** 1658
- **4.** 1785
- 114. Study the given table and answer the question that follows.

Category	2019	2020
Raw material	5000	6000
Power and fuel	10000	12000
Salary and wages	8000	12000
Advertising	10000	20000

Find the difference between the least percentage increase and the highest percentage increase in year 2019-2020.

- 1.80%
- 2. 50%
- 3. 60%
- 115. Manish, Nakul and Pintoo alone can complete a certain work in 21 days, 28 days and 15 days, respectively. Manish and Pintoo started the work together while Nakul joined them after 5 days and worked with them till the completion of the work. For how many days did Nakul work?

- 116. Shiya invests ₹1,53,000, which is 30% of her annual income, in mutual funds. What is her monthly income (in ₹)?
 - 1. 52,300
- 2. 45,800
- **3.** 42,500
- **117.** If $9 \sin^2 \theta = 3(1 + \cos \theta)$, $0^{\circ} < \theta < 90^{\circ}$ then what is the value of $\sqrt{15} \tan \theta + \frac{4}{\sqrt{15}} \sin \theta + 2 \sec \theta$
- **2.** $4\sqrt{15}$ **3.** $\frac{8}{\sqrt{15}}$
- 118. If $\tan \theta + \cot \theta = 6$, then the value of $\tan^2 \theta + \cot^2 \theta$ is **2.** 34 **3.** 20
- 119. On the tag price, a seller offers a 10% discount and a cashback of ₹250. He still earns 10% profit. If the cost price is ₹1,200,then the tag price (rounded off to 2 decimal places) is
 - **1.** 1447.44 **2.** 1777.44
- **3.** 1744.44 **4.** 1774.44
- 120. If the radius of a sphere is increased by 125%, then by what percentage will its surface area increase (correct to two decimal places)?
 - **2.** 509.54% **3.** 409.76% **4.** 406.25% **1.** 506.25%
- **121.** Simplify the given expression.

$$[\{9 \times 81 + (142 \div 2)\} + 350 - 155 + 5] \div [(25 \times 25) - 125]$$

1. -1 **2.** 2 **3.** -2 **4.** 1

- **2.** 2

- **122.** The value of $66 \div [34 (32 \text{ of } 2 4) \div (4 \times 15)]$
- **1.** 2 **2.** 1 **123.** The area of a sector of a circle having radius 14 cm is 231 cm².

Find the degree measure of the corresponding central angle.

(Use
$$\pi = \frac{22}{7}$$
)

1. 125°

- 2. 150°
- 3. 140°
- 4. 135°

124. A man travels 1200 km by train at 80 km/h, 1600 km by ship at 40 km/h, 1000 km by plane at 400 km/h, and 200 km by car at50 km/h. What is the average speed for the entire distance? (rounded off to 2 decimal places)

1. 75.40 km/h

2. 68.14 km/h

3. 72.40 km/h

- 4. 65.04 km/h
- **125.** Simplify $(4 + 4) \times (4 \div 4) \times (4 \times 4)$.

1. 144

2. 130

3. 128

126. A shopkeeper gives a discount of 12% on the purchase of 10 kg of sugar. The cost price of the sugar is ₹30/kg, and the marked price is ₹38/kg. The weighing machine of the shopkeeper is faulty, and it shows weight of 1 kg when the actual weight is 900 grams. Find the percentage profit of the shopkeeper (rounded off to two decimal places).

1.30.18%

2. 12.5%

3. 22.25%

4. 23.85%

127. In a class, there are 60 students. The average weight of the entire class is 42 kg. If there are 36 boys in the class and theaverage weight of all the boys is 50 kg, then what is the average weight (in kg) of all the girls?

1.30

2. 32

3. 36

128. Two towns P and Q are 275 km apart. A motorcycle rider starts from P towards Q at 10:00 a.m. at the speed of 25 km/h. Another rider starts from Q towards P at 12 noon on the same day at the speed of 20 km/h. At what time will they cross each other?

1. 3:00 p.m.

2. 5:00 p.m. **3.** 1:15 p.m. **4.** 4:30 p.m.

129. Ronak and Riya can do a work in 12 and 18 days, respectively. They worked together for six days and then Ronak left. Find the time taken by Riya to complete the work.

1. 5 days

2. 7 days

3. 6 days

4. 3 days

4. 3

130. If $855 \div 15 - k + 32 \times 5 = 1152 \div 16 \times 111 \div 37$, then the value of k is:

1.2 131. Simplify **2.** 1

3. 0

$$3\frac{2}{5} \times \left\{ 2\frac{3}{4} + 3.3\left(5\frac{1}{3} + 3\frac{1}{3} - 2\frac{1}{3}\right) \right\}$$

1. 80.41

2. 46.29

3. 53.25

4. 70.25

132. A hollow sphere of external and internal diameters of 10 cm and 6 cm, respectively, is melted and made into another solid in the shape of a right circular cone of base diameter 10 cm. Find the height of the cone.

1. 13.68 cm

2. 14.68 cm

3. 16.68 cm **4.** 15.68 cm

133. $(1 - \cos^2 A) \sec^2 A$ is equal to:

1. cos²A cot²A

2. tan²A

3. cot²A

4. cosec²A

134. The population of a city increases every year at the rate of 5%. If the population of the city is 16000, what will be thepopulation after 2 years?

1.17640

2. 17000

3. 17700

4. 17600

135. The distance (d) a moving body travels, varies directly with the time (t) when it moves. A train travels 72 km in 2 hours. Find the equation that relates d and t.

1. d = t + 36

2. d = t - 36

3. d = 36t

4. $d = \frac{t}{36}$

136. Simplify the given expression.

 $1000 \times 100 - 1000 + 4000 \div 200$

1.99235

2. 99980

3. 99020

4. 99999

137. What is the length (in cm) of chord PQ in a circle with a radius of 7 cm, where a diameter AB and non-diameter chord PQ

intersect perpendicularly at point C, and the ratio of AC to BC is 4:3?

1. 4√3

2. $8\sqrt{3}$

3. $2\sqrt{3}$

4. 6√3

138. Applied to a bill for ₹1000, what is the difference between a discount of 40% and two successive discounts of 36% and 4%?

1. ₹154

2. ₹144

3. ₹15.40

4. ₹14.40

139. Study the given table and answer the question that follows. The table shows the number of students in various courses in various cities A, B, C, D and E in India during the academic year 2022-2023

City	ity MBA Sci-		Engi-	Medi-	MCA	Total		
		ence	neer-	cine				
			ing					
A	1200	2560	4520	1100	960	10340		
В	1350	2650	5100	1050	850	11000		
С	1250	2640	4580	1120	750	10340		
D	1960	1250	3500	1850	1600	10160		
E	1200	2100	3500	1960	1540	10300		
Total	6960	11200	21200	7080	5700			

In city A, the number of students in Medicine is nearly what percentage of MBA?.

1. 89%

2. 85%

3.87%

4. 92%

140. A train covers a distance of 850 metres in 45 seconds. Travelling at the same speed, how many kilometres will the traincover in an hour?

1.67.5

2. 69

3.68

141. Find the value of 15% of $1.5 + 0.15 \div 0.1 + 0.01$ of $1.1 \times 0.5 + 0.15 \div 0.1 + 0.01$ $2.5 \times 25.$

1. 77.2305

2. 64.2305

3. 62.2305

4. 6.42305

142. A dishonest dealer professes to sell his goods at cost price but uses a false weight of 950 grams instead of 1 kilogram. His gain percentage is:

2. $6\frac{5}{19}\%$

3. $5\frac{5}{19}\%$

143. If the sides of a triangle are 7, 12 and x, and x is an integer, then find the number of possible values of x.

1. 14

2. 13

3. 15

144. Simplify the following expression. $(6+6 \text{ of } 5 \div 5) \div 6 \text{ of } 5 + (24 \div 2 \text{ of } 3 - 6 \text{ of } 5 + 4)$

1. $-26\frac{2}{5}$ 2. $-17\frac{2}{5}$ 3. $-21\frac{3}{5}$ 4. $-23\frac{1}{5}$

145. If the three sides of a triangle are 12, 22 and m units, then which of the following is correct?

1. $10 \le m \le 34$

1. 2500

1. $\sqrt{2} \sin x$

2. 10 < m < 34

3. $10 \le m \le 34$

4. $10 < m \le 34$

146. A certain sum of money is given at a certain rate of simple interest for 4 years. Had it been given at 11% higher rate for the same time, it would have fetched ₹1320 more. Find the sum (in ₹).

147. If $\sin x + \cos x = \sqrt{2} \sin x$, then the value of $\sin x - \cos x$ is:

2. 3000

2. $2 \sin x$

3. . 4580

4. 3240 3. $-\sqrt{2} \cos x$ 4. $\sqrt{2} \cos x$

148. A spherical box has surface area 528 cm². Find the radius of the spherical box

1. $\sqrt{37}$ cm

2. $\sqrt{42}$ cm

3. $\sqrt{29}$ cm 4. $\sqrt{35}$ cm

149. The following table shows the table number of employees in 4 different colleges and the percentage of female employees and that of male employees. study the table carefully and answer the question that follows.

College	Total Number of Employees	Percentage of Female Employees	Percentage of Male Employees
A	700	35%	65%
В	550	30%	70%
С	600	40%	60%
D	800	55%	45%

The number of females in colleges A and D together is what percentage of the number of males in colleges B and C together (rounded off to two decimal place)?

1.80.95%

2. 80.84%

3. 91.95%

3. Entrepreneur 4. 90.86%

150. Find the simplified value of $5055 - (1002 \div 20.04)$.

1.4050

2. 5005

3. 50.05

4. 5050

English Comprehension

151. Select the INCORRECTLY spelt word.

1. Supremecy

2. Prevention

3. Reconsidered

4. Passage

152. Select the sentence that uses the given idiom correctly. Have your head in the clouds

- 1. They had their heads in the clouds by looking up at the sky during a meteor shower.
- 2. The pilot had his head in the clouds while flying a plane.
- 3. He had his head in the clouds during an important meeting.
- 4. She had her head in the clouds by wearing a cloud-shaped hat.
- 153. Three segments of the following sentence have been underlined and given as options. One of them may contain an error. Select the option that contains the error. If you don't find any error, mark 'No error' as your answer.

When my father will come, I will make sure that I discuss the possibilities of a new business venture with him.

1. I will make sure

2. No error

3. When my father will come 4. I discuss the possibilities

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

Consonance of sounds.

1. Orchestration

2. Woodwinds

3. Symphony

4. Troupe

- 155. Select the most appropriate ANTONYM of the underlined word. The arrival of spring brings an ebullient feeling as flowers bloom and the weather warms.
 - 1. Weary
- 2. Clamant 3. Deciduous 4. Rude
- 156. Select the option that expresses the meaning of the underlined segment.Partly, it may be a desire to stop emotions in front of strangers.
 - 1. Quell
- 2. Put out
- 3. Smash
- 4. Quiet
- 157. Select the most appropriate option that can substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution'. In yesterday's fire accident, her feets are burnt badly.
 - 1. her feet was

2. her feet were

3. her foots were

- 4. No substitution
- 158. Select the most appropriate ANTONYM of the given word. Upright
 - 1. Ethical
- 2. Stout
- 3. Brave
- 4. Immoral
- 159. Based on the situation in the sentence, select the most appropriate idiom for the underlined segment.

He always takes up difficult tasks - those which are beyond his capabilities.

- 1. Bite off more than you can chew
- 2. Pull someone's leg
- 3. No pain no gain
- 4. Miss the boat
- **160.** Identify the INCORRECTLY spelt word in the given sentence. Generousity is a godly feature among many individuals on the

1. godly 3. individuals 2. Generousity

161. Select the INCORRECTLY spelt word.

2. Vicinity

4. feature

1. Supersede

4. Dissapear

162. Select the most appropriate ANTONYM of the underlined word in the following sentence. The government is proposing to incinerate cattle carcasses at many sites, some of which are in populated areas.

1. Combust

2. Blaze

3. Extinguish

4. Oxidise

163. Select the most appropriate option with correct usage of the preposition to substitute the underlined segment in the given sentence.

The Centre of Excellence for Data Analytics (CEDA) provides quality data analytic services to various government departments on all levels as well as to public sector units at the Centre and in states.

- 1. various government departments at all levels
- 2. various government departments from all levels
- 3. various government departments in all levels
- 4. various government departments through all levels
- 164. Select the most appropriate idiom from the options to replace the underlined segment in the given sentence.

After his business failed, he had to reduce spending and adjust to a frugal lifestyle.

1. let the cat out of the bag

2. hit the nail on the head

3. kick the bucket

4. tighten his belt

165. Select the most appropriate option that can substitute the underlined word in the given idiom.

A goose's eye view

1. bird's 3. fool's 2. hornet's

4. dog's

166. Select the most appropriate meaning of the given idiom.

When pigs fly

- 1. Something that will never happen
- 2. Something that will never deviate
- 3. something that will get completed
- 4. Something that will never last long
- 167. Select the most appropriate segment to substitute the underlined words in the given sentence.

You have tears, prepare to shed them now.

- 1. Until you have tears
- 2. Yet you have tears,
- 3. Unless you have tears,
- 4. If you have tears,
- **168.** Select the most appropriate synonym of the given word.

Bind

- 1. Flourish
- 2. Secure
- 3. Disengage
- 4. Amuse

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

A doubtful look or examination of one's motives.

- 1. Introspect
- 2. Suspect
- **3.** Circumspect
- 4. Retrospect

170. Select the option to the given group of	hat can be used as a one-word substitute for	This is the group of leaders in whom the ruling government has placed its trust.
One who does not		1. no substitution
1. Atheist	2. Priest	2. in who the ruling government
	4. Reverent	3. on who the ruling government
3. Catholic		4. with who the ruling government
	ce that has the correct use of words and	181 Select the correctly spelt word.
	options given below.	1. registration 2. refridgerator
	arauma of freshly baked cookies waftad	3. litrature 4. allegater
	chen, making mouths water. arauma of freshely baked cookes wafted	182. Parts of the following sentence have been given as options.
	chen, making mouths water.	Select the option that contains a spelling error.
	aroma of freshly baked cookies wafted	My strength is as the strength of ten because my heart is pure.
	chen, making mouths water.	1. my heart is pure 2. as the strenght
	aroma of freshely baked cookies wafted	3. of ten because 4. My strength is
	chen, making mouths water.	183. Select the most appropriate option that can substitute the
_	itence has been divided into four segments.	underlined segment in the given sentence.
	ent that has a grammatical error.	During the preparation for competitive exams, Meena avoided
	ndian Armed Forces are / trained never to /	going to parties.
fight cowardly.	ndian / timed i orees are / trained never to /	1. steered clear of 2. cracked a joke
1. fight cowardly		3. fired a cracker 4. whispered a secret
2. the Indian Armo	ed Forces are	184 Select the option that can be used as a one-word substitute for
3. trained never to		the given group of words.
4. Soldiers in		The patronage bestowed in consideration of family
173 Select the most an	propriate ANTONYM of the given word.	relationships and not of merit.
Aggravate	propriate Aiv 101v 1 wi of the given word.	1. Egotism 2. Neologism
1. Humiliate	2. Alleviate	3. Mannerism 4. Nepotism
3. Ignorant	4. Exasperate	185. Select the incorrect form of the verb.
e		1. stricken 2. strucken
word.	appropriate ANTONYM of the underlined	3. strike 4. struck
	get out to vanguish the fearsame dragen and	186. Select the most appropriate ANTONYM of the given word.
	set out to <u>vanquish</u> the fearsome dragon and m from its menace.	Tight
1. Engage	2. Instill	1. Resilient 2. Cordial
3. Measure	4. Liberate	3. Comfortable 4. Slack
		187. Select the most appropriate meaning of the given idiom.
to fill in the blank.	opropriate synonym of the word in brackets	Black sheep
	tion provides the necessary for	1. Disreputable 2. Miscreant
creative imagination		3. Intelligent 4. Naive
1. freedom	2. fertility	188. Select the option that can be used as a one-word substitute for
3. fulcrum	4. force	the given group of words.
	gment that can substitute the bracketed word	A place for storage of arms and ammunition
	and complete the sentence meaningfully.	1. Mint 2. Monastery
	nised to provide free laptops to the public if	3. Scullery 4. Arsenal
his (party came in		189. Identify the error in the verb form in the following sentence
1. he loses the elec	•	and choose the correct sentence from the given options
	government 4. he comes to a party	(Present Tense).
	propriate meaning of the given idiom.	The committee work diligently to ensure fair and unbiased
Sacred cow	propriate meaning of the given idiom.	decision. 1. The committee is work diligently to ensure fair and
1. Unquestionable	2. Interrogate	unbiased decision.
3. Hateful	4. Harmful	2. The committee worked diligently to ensure fair and
	hat can be used as a one-word substitute for	unbiased decision.
the given group of		3. The committee has work diligently to ensure fair and
Vivacious and ent		unbiased decision.
1. Introverted	2. Brazen	4. The committee works diligently to ensure fair and unbiased
3. Rowdy	4. Effervescent	decision.
•	hat can be used as a one-word substitute for	190. Select the most appropriate idiom for the underlined part in
the given group of		the given sentence:
	of trees and shrubs in pots	Amar was left in a <u>difficult situation</u> by his business partners.
1. Bonafide	2. Bonsai	1. Heart and soul 2. Hard and fast 4. Head and about down about an arms.
3. Orchard	4. Botanical	3. High and dry 4. Head and shoulders above
	appropriate option that can substitute the	Comprehension:
	nt in the given sentence. If there is no need	In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option
	ect 'No substitution'.	to fill in each blank. Mowgli is a (1) character
,		co mi ni cach olank. Mowgii is a (1) chalactel

- **191.** Select the most appropriate option to fill in blank number 1.
 - 1. despised
- 2. overlooked
- 3. beloved
- 4. scorned
- **192.** Select the most appropriate option to fill in blank number 2.
 - 1. exaggerates
- 2. excavates
- 3. experiences
- 4. enunciates
- **193.** Select the most appropriate option to fill in blank number 3.
 - 1. procures
- 2. customises
- 3. navigates
- 4. coordinates
- 194. Select the most appropriate option to fill in blank number 4.
 - 1. captivate
- 2. manipulate
- 3. magnify
- 4. register
- 195. Select the most appropriate option to fill in blank number 5.
 - 1. ordinary
- 2. enchanting
- 3. abnormal
- 4. surprising

Comprehension:

Read the given passage and answer the questions that follow. On 3 September 2016, a magnitude 5.8 earthquake struck just North-west of Pawnee, Oklahoma, causing moderate to severedamages in buildings near the epicentre. It was the largest ever recorded in the state. The Pawnee earthquake followed the dramatic increase of seismic events in the central United States beginning in 2009, associated with the increase of underground wastewater disposal by oil and gas operators. This and other events in the area raised public concerns and led governmental agencies to shut down injection wells and establish new regulations regarding wastewater injections. While human-caused earthquakes have been documented

for more than a century, their increasing number reported worldwide has drawn much scientific, social and political attention. Such earthquakes are related to industrial activities such as mining, construction of water dams, injection of liquids such as waste water and carbon dioxide, and extractions associated with oil and gas exploitation. With the ever-increasing demand for energy and mineral supplies worldwide, the number of human-caused earthquakes is expected to rise in the upcoming years. Some of the largest and more destructive earthquakes of the past few years have been related to man-made activities, such as the 2008 magnitude 7.9 Wenchuan (China) earthquake and the 2015 magnitude 7.8 Nepal earthquake. In most of the cases industrial activities do not induce earthquakes. But this becomes problematic when such activities are close to active faults. In this case, even small stresses underground caused by man-made activities can destabilise faults, inducing earthquakes.

- **196.** Human-caused earthquakes are related to
 - 1. population explosion
 - 2. artificial intelligence
 - 3. space expedition
 - 4. industrial activities
- 197. Select the most suitable word from the passage which means 'create'.
 - 1. Destabilise 2. Increase 3. Deplet 4. Seismic
- 198. Identify the most suitable title for the passage.
 - 1. Man Vs Man
 - 2. How Safe Are We on this Earth?
 - 3. Seismic Depression
 - 4. Industrial Threats
- 199. Why does the passage observe that more human-caused earthquakes are expected?
 - 1. It is due to the fragility of the Earth.
 - 2. It is due to the demand for energy and minerals.
 - 3. It is due to the Greenhouse Effect.
 - 4. It is due to the over soil erosion.
- 200. What is the tone of the speaker?
 - 1. Contemptuous
- 2. Cynical
- 3. Apologetic
- 4. Dogmatic

Answer Key

1.	(2)	2.	(1)	3.	(4)	4.	(2)	5.	(4)	6.	(4)	7.	(4)	8.	(1)	9.	(2)	10.	(2)
11.	(3)	12.	(4)	13.	(4)	14.	(3)	15.	(4)	16.	(4)	17.	(2)	18.	(1)	19.	(2)	20.	(1)
21.	(2)	22.	(1)	23.	(2)	24.	(2)	25.	(3)	26.	(4)	27.	(1)	28.	(1)	29.	(2)	30.	(4)
31.	(1)	32.	(3)	33.	(3)	34.	(3)	35.	(4)	36.	(2)	37.	(2)	38.	(3)	39.	(4)	40.	(2)
41.	(1)	42.	(4)	43.	(3)	44.	(1)	45.	(4)	46.	(4)	47.	(1)	48.	(2)	49.	(2)	50.	(2)
51.	(2)	52.	(3)	53.	(4)	54.	(3)	55.	(1)	56.	(1)	57.	(4)	58.	(3)	59.	(4)	60.	(4)
61.	(2)	62.	(3)	63.	(1)	64.	(3)	65.	(4)	66.	(4)	67.	(2)	68.	(2)	69.	(1)	70.	(2)
71.	(2)	72.	(1)	73.	(3)	74.	(3)	75.	(2)	76.	(3)	77.	(1)	78.	(4)	79.	(3)	80.	(4)
81.	(3)	82.	(3)	83.	(3)	84.	(3)	85.	(1)	86.	(4)	87.	(2)	88.	(3)	89.	(3)	90.	(4)
91.	(4)	92.	(4)	93.	(2)	94.	(1)	95.	(2)	96.	(1)	97.	(1)	98.	(3)	99.	(1)	100.	(2)
101.	(2)	102.	(3)	103.	(2)	104.	(1)	105.	(4)	106.	(3)	107.	(2)	108.	(1)	109.	(3)	110.	(1)
111.	(2)	112.	(1)	113.	(4)	114.	(1)	115.	(4)	116.	(3)	117.	(1)	118.	(2)	119.	(3)	120.	(4)
121.	(2)	122.	(1)	123.	(4)	124.	(4)	125.	(3)	126.	(4)	127.	(1)	128.	(2)	129.	(4)	130.	(2)
131.	(1)	132.	(4)	133.	(2)	134.	(1)	135.	(3)	136.	(3)	137.	(2)	138.	(4)	139.	(4)	140.	(3)
141.	(2)	142.	(3)	143.	(2)	144.	(3)	145.	(2)	146.	(2)	147.	(4)	148.	(2)	149.	(3)	150.	(2)
1.71					()		()		(-)		\ /		\ /						
151.	(1)	152.	(3)	153.	(3)	154.	(3)	155.	(1)	156.	(1)	157.	(2)	158.	(4)	159.	(1)	160.	(2)
161.	(1) (4)	152. 162.	(3)	153. 163.	. ,	154. 164.	_ ` /	155. 165.		156. 166.		157. 167.	(2)	158. 168.	(4)	159. 169.	(1) (2)	160. 170.	(2) (1)
	_ ` /		_ ` /		(3)		(3)		(1)		(1)		` /		_ ` _				
161.	(4)	162.	(3)	163.	(3)	164.	(3)	165.	(1)	166.	(1)	167.	(4)	168.	(2)	169.	(2)	170.	(1)

Answers with Explanations

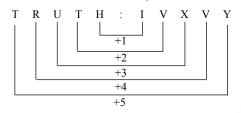
1. Option (2) is correct.

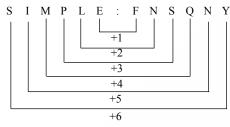
Table of Alphabetical series (point to remember)

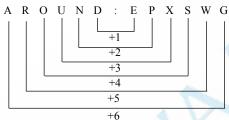
Alphabets	Α	В	С	D	Е	F	G	Н	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Alphabets	Z	Y	X	W	V	U	Т	S	R	Q	P	О	N
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14

Now,

TRUTH: IVXVY:: SIMPLE: FNSQNY:: AROUND:?







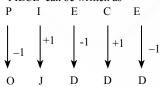
2. Option (1) is correct.

'MARCH' is written as 'LBQDG

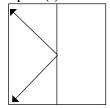


Similarly,

'PIECE' can be written as



3. Option (4) is cor rect.



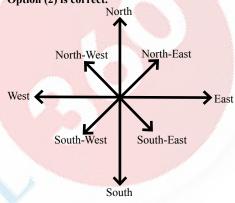
Logic:

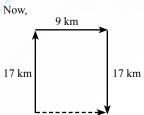
Follow the pattern and the symmetry. Hence,



That is the correct answer.

4. Option (2) is correct.





Hence, from the starting point, SHIVA is 9 km.

5. Option (4) is correct.

'HEMANT' is coded as 24-15-39-3-42-60

			-,		
Н	Е	M	A	N	T
8	5	13	1	14	20
▼×3	▼ ×3	▼ ×3	▼×3	▼×3	▼×3
24	15	39	3	42	60

Similarly.

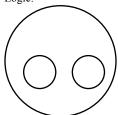
MOHAN can be coded as

M	О	Н	A	N
13	15	8	1	14
▼ ×3	▼ ×3	▼ ×3	▼ ×3	▼ ×3
▼×3	▼ ×3	▼ ×3	▼×3 3	▼ ×3

6. Option (4) is correct.

Grapes, Apples, Fruits

Logic: -



Both Apple and Grapes are fruits.

7. Option (4) is correct.

Table of Alphabetical series (point to remember)

Alphabets	A	В	С	D	Е	F	G	Н	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Alphabets	Z	Y	X	W	V	U	Т	S	R	Q	P	О	N
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: -

Solve by options

F +6	L -3	I
6	12	9

	I +6	O -3	L
ı			
	9	15	12

R +6	X	-3	U
18	24		21

M +6	S -4	0
13	19	15

8. Option (1) is correct.

$$712 \div 6 - 15 \times 3 + 15 = ?$$

On interchanging + and -, and \times and \div

$$= 712 \times 6 + 15 \div 3 - 15$$

Using BODMAS Rule

$$=712 \times 6 + 5 - 15$$

$$=4272+5-15$$

=4262

9. Option (2) is correct.

17 I (11 L 8 J 4) L 148 K 4 J 22 = ?

Now, according to the question

$$17 \times (11 - 8 + 4) - 148 \div 4 + 22$$

Using BODMAS Rule

$$= 17 \times 7 - 148 \div 4 + 22$$

= 17 \times 7 - 37 + 22

$$= 119 - 37 + 22 = 104$$

10. Option (2) is correct.

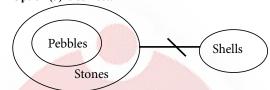


Logic: -

In the mirror image, the left becomes right, and the right becomes left. Hence,

MaGe4

11. Option (3) is correct.



From the Venn diagram only, the conclusion II follows.

12. Option (4) is correct.

$$-32, -8, -2, ?, -\left(\frac{1}{8}\right)$$

Logic: -

$$-32 \div 4 = -8$$

$$-8 \div 4 = -2$$

$$-2 \div 4 = \left(-\frac{1}{2}\right)$$

$$\left(-\frac{1}{2}\right) \div 4 = \left(-\frac{1}{8}\right)$$

13. Option (4) is correct.







Logic: -

Follow the pattern and the symmetry. Hence, the next pattern will be



14. Option (3) is correct.

Option (3) is correct.				
A	D	О		
+3	+3	+3		
D	G	R		
+3	+3	+3		
G	J	U		
+3	+3	+3		
J	M	X		

15. Option (4) is correct.

'ACID' is written as 'XDFE'

1	3	9	4
A	C	I	D
↓ -3	+1	↓ -3	V +1
X	D	F	Е

Similarly, ZEST can be written as: -

26	5	19	20
Z	E	S	T
▼ -3	▼ +1	▼-3	▼ +1
▼-3 W	▼ +1 F	▼-3 P	▼+1 U

16. Option (4) is correct.

78, 86, 258, 322, ?

Logic: -

78 + 8 = 86

 $86 \times 3 = 258$

 $258 + 8^2 = 322$

 $322 \times 5 = 1610$

17. Option (2) is correct.

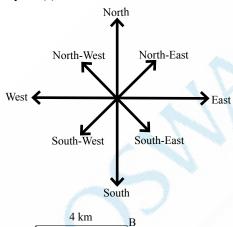
Logic: -

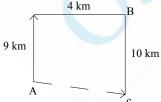
 $20 + 20 \div 2 = 30$

 $30 + 30 \div 2 = 45$

 $80 + 80 \div 2 = 120$

18. Option (1) is correct.





Hence, C is in South-East direction of A.

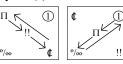
19. Option (2) is correct.

According to the question, after replacing the signs: $20 \div 5 \times 7 + 4 - 3$

Using BODMAS Rule

 $4 \times 7 + 4 - 3 = 28 + 4 - 3 = 29$

20. Option (1) is correct.







Logic: -

Follow the pattern and the symmetry. Hence, the next pattern will be



21. Option (2) is correct.





Logic: -

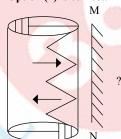
Move-in clockwise direction from 9

 $9 \rightarrow 3 \rightarrow 5$

 $9 \rightarrow 4 \rightarrow 2$

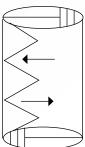
Hence, 4 is opposite to 3.

22. Option (1) is correct.

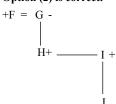


Logic: -

In the mirror image, the left becomes right, and the right becomes left. Hence,



23. Option (2) is correct.



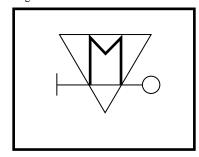
F is father's father of J.

29

24. Option (2) is correct.



Logic: -



25. Option (3) is correct.

2	5	1	13
В	E	A	M
V -1	+1	↓ _1	↓ +1
A	F	Z	N
1	6	26	14

Similarly,

W	Е	L	L
▼-1	+1	↓ −1	▼ +1
V	F	K	M

26. Option (4) is correct.

According to the question, after replacing the alphabets with sign,

$$342 \div 2 + 125 \times 1 - 43$$

Using BODMAS Rule

$$171 + 125 \times 1 - 43$$

$$171 + 125 - 43 = 253$$

27. Option (1) is correct.

According to the question, after replacing the signs,

$$47 \times 3 + 126 \div 6 - 18$$

Using BODMAS Rule

$$47 \times 3 + 21 - 18$$

$$129 + 21 - 18 = 144$$

28. Option (1) is correct.

After interchanging 3 and 7,

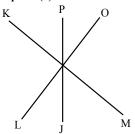
$$71 + 32 \times 2 - 63 \div 3 + \left[(81)^{\frac{1}{4}} \right] \times 7 - 22 = 113$$

Using BODMAS Rule

$$= 71 + 32 \times 2 - 63 \div 3 + 3 \times 7 - 22$$

$$= 71 + 64 - 21 + 21 - 22 = 113 = RHS$$

29. Option (2) is correct.



L is sitting to the immediate right of K.

30. Option (4) is correct.

324, 361, 400, 441, 484, ?

Logic: -

 $18^2 = 324$

 $19^2 = 361$

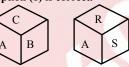
 $20^2 = 400$

 $21^2 = 441$

 $22^2 = 484$

 $23^2 = 529$

31. Option (1) is correct.



Logic: -

Move clockwise from A

A C B Opposite faces

Hence, T is opposite to A.

32. Option (3) is correct.

Table of Alphabetical series (point to remember)

Alphabets	A	В	С	D	Е	F	G	Н	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Alphabets	Z	Y	X	W	V	U	Т	S	R	Q	P	О	N
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: -

Place value of letters from the end ×3

'PANDA' is coded as 33-78-39-69-78

1ANDA 15 coucu as 55-76-59-09-76								
P	A	N	D	A				
11	26	13	23	26				
▼×3 ▼×3		▼×3	▼×3	▼×3				
33	78	39	69	78				

Similarly,

Z	Е	В	R	A
1	22	25	9	26
▼×3	▼ ×3	▼×3	▼×3	▼×3
3	66	75	27	78

33. Option (3) is correct.

23 - 27

Logic: -

 $(2+3) \times 3 = 15$

 $(2+7) \times 5 = 45$

Hence, 15-45 is the correct answer.

34. Option (3) is correct.

76:69::49:45::69:?

Logic: -

Subtract the 2nd digit from the number. Hence,

76 - 7 = 69

49 - 4 = 45

69 - 6 = 63

35. Option (4) is correct.

NAPE: MZOD:: DULL: CTKK:: KIND:?

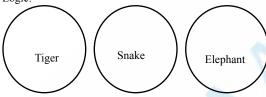
Logic: -

N	A	P	Е	
▼ -1	↓ -1	↓ _1	↓ −1	
M	Z	0	D	
Similarly,				
K	I	N	D	
▼-1	↓ -1	↓ _1	↓ −1	
J	Н	M	С	

36. Option (2) is correct.

Tigers, Snakes, Elephants

Logic: -



37. Option (2) is correct.



Logic:

Follow the pattern and the symmetry. Hence, the next pattern will be



38. Option (3) is correct.



Logic: -

In the mirror image, the left becomes right, and the right becomes left. Hence,

MdF37A

39. Option (4) is correct.

The English dictionary order is as follows: -

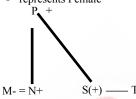
4-Incapacity 3- Incense 5- Incentive 2- Inception 1- Ince

40. Option (2) is correct.

Logic: -

'+' represents Male

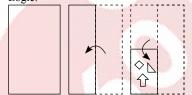
'-' represents Female



M is the Brother's wife of T.

41. Option (1) is correct.

Logic: -



Follow the pattern and the symmetry. Hence,



42. Option (4) is correct.

'HEN' is coded as '9'

Logic: -

Square of the total number of letters in the word.

Now,

 $HEN=3^2=9$

Similarly,

SMALLEST= $8^2 = 64$

43. Option (3) is correct.

RDLS, VKBF, ?, DYHF, HFXS

R+4	V +	4 Z	+4 D +4	H •
D +7	K +	7 R	+7 Y +7	F
L -10	B -10) R	-10 H -10	X
S -13	F -1	3 S	-13 F -13	S

44. Option (1) is correct.

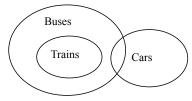
 $53 - 48 \times 6 \div 9 + 11 = ?$

Logic: -

After replacing the sign according to the question, Using BODMAS Rule

 \Rightarrow 53 + 48 ÷ 6 × 9 − 11 \Rightarrow 53 + 8 × 9 − 11 \Rightarrow 53 + 72 − 11 = 114

45. Option (4) is correct.



From the Venn diagram, only conclusion II follows.

46. Option (4) is correct.

Logic: -

 $15 + 15 \div 3 = 20$

 $6 + 6 \div 3 = 8$

 $9 + 9 \div 3 = 12$

Hence, 9 is related to 12 using the same logic.

47. Option (1) is correct.

(54, 51, 48)

(46, 40, 34)

Logic: -

Now,

 $(54 + 48) \div 2 = 51$

 $(46 + 34) \div 2 = 40$

Similarly,

 $(58 + 36) \div 2 = 47$

Hence, (58, 47, 36) is correct answer.

48. Option (2) is correct.

The correct sequence is as follows: -

- 2. Dingiest
- 6. Dingling
- 5. Dinkier
- 1. Dinnerware
- 3. Dinosaurs
- 4. Dinucleotide

49. Option (2) is correct.

ICE, LGJ, OKO, ?

Logic: -

I +3	L -	+3	0	+3	R
C +4	G -	+4	K	+4	0
E +5	J	+5	0	+5	T +4

50. Option (2) is correct.

125, 150, 177, 207, 242, ?

Logic: -

125 + 25 = 150

150 + (25 + 2 = 27) = 177

177 + (27 + 3 = 30) = 207

207 + (30 + 5 = 35) = 242

242 + (35 + 7 = 42) = 284

51. Option (2) is correct.

Chitra Banerjee Divakaruni is a well-known author whose works often explore Indian myths, history, and culture. "The Palace of Illusions" is one of her most famous books.

It is a retelling of the Mahabharata from the perspective of Draupadi, a central character in the epic.

52. Option (3) is correct.

The Atal Bihari Vajpayee Institute of Mountaineering and Allied Sports (ABVIMAS), located in Manali, Himachal Pradesh, is one of India's leading institutes for mountaineering and adventure sports. Named after former Prime Minister Atal Bihari Vajpayee, ABVIMAS offers a wide range of courses and training programs in mountaineering, skiing, water sports, and other adventure activities. The institute plays a vital role in promoting adventure tourism and training individuals in various aspects of these sports.

53. Option (4) is correct.

The Government of India Act 1858 was the legislation that resulted in the British government taking direct control of India's administration. This Act was passed in response to the Indian Rebellion of 1857, which highlighted the inadequacies of the East India Company's rule. The Act effectively ended the rule of the East India Company and transferred its powers directly to the British Crown. The governance of India was subsequently overseen by the British Parliament, with a Secretary of State for India and a Council of India assisting in administration. This marked the beginning of the British Raj, during which India was governed as a colony of the British Empire.

54. Option (3) is correct.

The hypostome is a hairpin-like structure in ticks that secures and stabilises their mouthparts to the host's skin. This structure is equipped with backwards-facing barbs, which help secure the tick in place while it feeds.

55. Option (1) is correct.

Brisbane, Australia, was chosen as the host city for the 2032 Summer Olympics. This decision was made by the IOC during a meeting in Tokyo, ahead of the 2021 Olympic Games.

56. Option (1) is correct.

Electronegativity is the tendency of an atom or a functional group to attract a shared pair of electrons toward itself in a chemical bond. This concept is fundamental in chemistry, elucidating how atoms behave within molecules and interact with each other. Greater electronegativity in an atom signifies a heightened capacity to attract electrons, influencing whether bonds are ionic, polar covalent, or non-polar covalent, and ultimately determining molecular polarity.

57. Option (4) is correct.

Krishna III, a powerful Rashtrakuta king, defeated the Chola ruler Parantaka I. To commemorate this victory, Krishna III constructed a victory pillar and a temple at Rameswaram, a significant religious site in South India.

58. Option (3) is correct.

The 67^{th} National Film Awards were announced during a press conference on March 22, 2021, to honour the finest Indian films released between January 1 and December 31, 2019. Former Vice President Shri M. Venkaiah Naidu presented the awards. Composer D Imman received the award for Best Music Direction for his work on the popular 2019 Tamil film Viswasam.

59. Option (4) is correct.

A. Correct. Article 210 allows business in the State Legislature to be transacted in the official language(s) of the State, Hindi, or English, subject to Article 348.

B. Correct. The Speaker or Chairman can permit a member to

speak in his or her mother tongue.

C. Incorrect. Both the Supreme Court and High Courts can inquire into the proceedings of the State Legislature if there's a breach of constitutional provisions.

So, the correct statements are A and B.

60. Option (4) is correct.

The Hill Area Development Programme (HADP) was initiated during the Fifth Five Year Plan of India. This program was specifically designed to address the unique challenges faced by hilly regions and to harness their potential for development.

61. Option (2) is correct.

Neeraj Chopra, competing for India in the Tokyo Olympics 2020, clinched the gold medal in the men's javelin throw event with an impressive throw spanning 87.58 meters. This achievement not only secured his victory but also marked a historic moment as he became the first Indian athlete to claim a gold medal in track and field events at the Olympics.

62. Option (3) is correct.

Pandit Acchan Maharaj was a renowned figure in the Kathak dance tradition, known for his association with the Lucknow gharana. This school of Kathak is celebrated for its unique style, marked by graceful movements, intricate footwork, and emotive expressions that distinguish it within the realm of classical dance.

63. Option (1) is correct.

Loo is the term used for the hot, dry summer wind that blows over the North and North-western parts of India during the summer months. It typically originates in the arid regions of Rajasthan and Punjab and moves towards the Indo-Gangetic Plains, bringing with it scorching heat and discomfort.

64. Option (3) is correct.

A sphincter is a ring-like muscle that controls the passage of waste materials out of the body through different openings, such as the anus and the urethra.

65. Option (4) is correct.

In 2023, the Cabinet Committee on Economic Affairs (CCEA) decided to increase the Minimum Support Price (MSP) for Paddy (Common) by 7% for the 2023-24 marketing season. This decision was part of a broader initiative aimed at increasing MSPs for various Kharif crops, ensuring farmers receive remunerative prices for their produce.

66. Option (4) is correct.

An alicyclic compound is a type of organic compound that contains a ring structure but is not aromatic. Among the given options:

Ethane - This is an alkane (saturated hydrocarbon) with a straight chain, not a ring structure.

Isobutane - This is a branched alkane (also a saturated hydrocarbon) with no ring structure.

Acetic acid - This is a carboxylic acid with no ring structure. Cyclopropane - This is an alicyclic compound with a three-membered ring structure.

So, the correct answer is Cyclopropane.

67. Option (2) is correct.

Salman Rushdie, a renowned British-Indian novelist, wrote the novel "Grimus." Published in 1975, "Grimus" was his debut novel.

68. Option (2) is correct.

Agro-based industries use agricultural products as raw materials and are directly linked to agriculture. These

industries process and transform agricultural raw materials into various forms suitable for consumption or further manufacturing. Fertiliser, however, is NOT an agro-based industry. Fertiliser production involves chemical processes and raw materials mostly derived from minerals and other non-agricultural sources.

69. Option (1) is correct.

Exporting involves producing goods in one country and selling them to customers in another. It is considered the most traditional and straightforward way for companies to expand their market reach internationally without significant investment or risk.

70. Option (2) is correct.

Abdul Karim Khan (1872-1937) is widely regarded as the founder of the Kirana Gharana, one of the most prominent schools of Hindustani classical music. He established the distinct style and principles that define the Kirana Gharana, emphasising the importance of Swara (notes) and a slow, methodical development of the raga. His approach and teachings have influenced generations of musicians within the Kirana Gharana and beyond.

71. Option (2) is correct.

In 2023, Egypt's President, Abdel Fattah el-Sisi, was invited as the chief guest at India's Republic Day celebration. This was the first time an Egyptian President received this honour, highlighting the strong bilateral relations between India and Egypt.

72 Option (1) is correct.

According to the Agricultural Statistics at a Glance 2022, released by the Government of India, Rajasthan recorded the highest production of Bajra. Rajasthan's climate and soil conditions are particularly well-suited for cultivating Bajra, making it the leading state in Bajra production in India.

73. Option (3) is correct.

The physicist known for establishing the relationship between mechanical work and heat transfer is James Prescott Joule. He was a British physicist famous for his work on the relationship between heat and mechanical work. Joule conducted experiments demonstrating that energy is conserved in mechanical processes and quantified the amount of mechanical work needed to produce a unit of heat. This relationship is now known as the mechanical equivalent of heat.

74. Option (3) is correct.

The book "Harshacharita" was written by Banabhatta. Banabhatta was a 7th-century Sanskrit scholar and poet in the court of King Harsha. "Harshacharita" is a biography of King Harsha and provides a detailed account of his life and achievements.

75. Option (2) is correct.

Ribosomes are organelles responsible for protein synthesis and are present in both eukaryotic and prokaryotic cells. In both cell types, ribosomes perform the essential function of translating mRNA into proteins. However, they differ slightly in size and structure: prokaryotic ribosomes are 70S, while eukaryotic ribosomes are 80S.

76. Option (3) is correct.

Article 164(2) of the Indian Constitution states that "The Council of Ministers shall be collectively responsible to the Legislative Assembly of the state." This implies that the entire Council of Ministers, including the Chief Minister, is

accountable to the Legislative Assembly. If the Legislative Assembly passes a vote of no confidence against the Council of Ministers, they must all resign.

77. Option (1) is correct.

An open-chain organic compound, also known as an aliphatic compound, consists of carbon atoms connected in a linear or branched structure, without forming rings. Acetaldehyde (CH₃CHO) is an open-chain organic compound as it has a linear structure with no rings.

78. Option (4) is correct.

Oceans hold about 97% of the Earth's water. This significant portion is saline and resides in the world's oceans, which cover around 71% of the Earth's surface. The remaining 3% is freshwater, located in glaciers, ice caps, underground aquifers, rivers, lakes, and the atmosphere.

79. Option (3) is correct.

To calculate the money multiplier based on the cash reserve ratio, use the formula:

Money Multiplier=1/Cash Reserve Ratio

Here, the cash reserve ratio is 25%, which is equivalent to 0.25 in decimal form. Applying the formula:

Money Multiplier=1/0.25=4

Therefore, with a cash reserve ratio of 25%, the money multiplier is 4.

80. Option (4) is correct.

The Supreme Court of India comprises the Chief Justice and 33 other Judges appointed by the President of India. The Supreme Court of India is the highest judicial authority in the country and serves as the apex court under the Indian Constitution. It is headed by the Chief Justice of India, who is the principal judge of the Court. The establishment and organizational structure of the Supreme Court are outlined in Article 124 of the Constitution.

81. Option (3) is correct.

In IUPAC nomenclature, the root represents the total number of carbon atoms in the longest continuous chain of the compound. It forms the base name of the compound, indicating the length of the carbon chain.

82. Option (3) is correct.

Article 21 states: "No person shall be deprived of his life or personal liberty except according to the procedure established by law." This fundamental right ensures that every individual is entitled to life and personal liberty. These rights can only be limited or restricted if done in accordance with a legal procedure established by law. Article 21 is a key aspect of individual rights in India, mandating that any action depriving a person of their life or liberty must adhere to a fair and just legal process.

83 Option (3) is correct.

Clause (4) of Article 22 specifies that any law permitting preventive detention cannot sanction the detention of an individual for more than three months without an advisory board's report confirming sufficient cause for such detention. This advisory board must be composed of individuals who are, or have been, or are eligible to be appointed as judges of a High Court.

84. Option (3) is correct.

Krishna Deva Raya was one of the most prominent rulers of the Vijayanagara Empire, reigning from 1509 to 1529. He is renowned for his military conquests and for expanding the empire. Among his many titles, he took the title of 'establisher of the Yavana kingdom' after defeating the Deccan Sultanates, which were considered part of the Yavana kingdoms.

85. Option (1) is correct.

The Himalayas were formed from the Tethys geosyncline. This ancient sea, known as the Tethys Sea, existed between the landmasses of Gondwana and Laurasia before the Indian plate collided with the Eurasian plate.

86. Option (4) is correct.

The Shyok River, a tributary of the Indus River, originates from the Rimo Glacier in the Karakoram Range and flows through the Ladakh region in India before merging with the Indus River.

87. Option (2) is correct.

R. Muthukannammal, a renowned sadir dancer, received the Padma Shri Award in 2022. Sadir, an ancient dance form from Tamil Nadu, is the precursor to modern Bharatanatyam. Muthukannammal was honoured for her significant contributions to preserving and promoting this traditional dance form.

88. Option (3) is correct.

The Morley-Minto Reforms were implemented through the Indian Council Act of 1909. These reforms represented a major shift in British colonial policy by introducing separate electorates for Muslims, enabling them to elect their own representatives to the Imperial Legislative Council. This change was a central aspect of the reforms, designed to meet some of the Muslim community's demands and to enhance representation in the legislative bodies.

89. Option (3) is correct.

Sitara Devi was a prominent exponent of Kathak dance, a classical Indian dance form. She was highly acclaimed for her contributions to Kathak and was recognized as a leading figure in this dance style.

90. Option (4) is correct.

Lovlina Borgohain won the bronze medal in women's boxing at the Tokyo 2020 Olympics. She competed in the women's welterweight (69 kg) category and became the third Indian boxer to win an Olympic medal.

91. Option (4) is correct.

Mallika Sarabhai is renowned for her contributions to classical dance. Hailing from Gujarat, she is an accomplished Indian classical dancer with expertise in Bharatanatyam and Kuchipudi. She is the daughter of space scientist Vikram Sarabhai and classical dancer Mrinalini Sarabhai.

92. Option (4) is correct.

The Rowlatt Act, enacted in 1919, gave the British Indian government the authority to arrest and detain individuals without trial.

93. Option (2) is correct.

An ecotype is a population, subspecies, or race of an organism that has adapted to the specific environmental conditions of its habitat. This adaptation may involve physiological, behavioural, or morphological changes that help the organism thrive in its environment.

94. Option (1) is correct.

The writ of Habeas Corpus is a legal order issued by a court to produce an individual who has been detained or imprisoned before the court. If the person is not produced before the magistrate within 24 hours of arrest, the writ of Habeas Corpus can be filed to challenge the legality of the detention

and secure the release of the individual if the detention is found to be unlawful.

95. Option (2) is correct.

Taxes that are primarily significant only on paper and have little impact on actual revenue generation are referred to as "paper taxes." Examples of such taxes include Gift Tax, Estate Duty, and Wealth Tax.

96. Option (1) is correct.

Ali Baksh Khan is one of the founders of the Patiala Gharana, a distinguished school of Hindustani classical music. The Patiala Gharana is renowned for its rich and elaborate vocal renditions, including intricate taans and layakari (rhythmic play). Ali Baksh Khan, together with Fateh Ali Khan, established the Patiala Gharana, which has produced many eminent musicians. The other options do not belong to the Patiala Gharana.

97. Option (1) is correct.

The festival celebrated by Christians as the birth of Jesus Christ is Christmas. Observed on December 25th, Christmas commemorates the nativity of Jesus, marking His birth in Bethlehem as described in the New Testament of the Bible. It is one of the most significant and widely celebrated holidays in the Christian calendar, featuring religious services, festive decorations, gift-giving, and various cultural traditions worldwide.

98. Option (3) is correct.

Cattle dung is a conventional source of energy. Conventional sources of energy are those that have been traditionally used for a long time and are widely established. These include fossil fuels (coal, oil, natural gas) and biomass (such as wood and cattle dung). Cattle dung has been used for centuries as a fuel source in rural areas for cooking and heating.

In contrast, geothermal energy, atomic energy (nuclear power), and solar power are considered non-conventional or renewable sources of energy. These sources have gained prominence more recently due to advancements in technology and the growing need for sustainable energy solutions.

99. Option (1) is correct.

The Prime Minister's Employment Generation Programme (PMEGP) was launched in 2008. This credit-linked subsidy scheme, introduced by the Government of India, is designed to create self-employment opportunities by supporting the establishment of micro-enterprises in urban and rural areas. By providing financial assistance to individuals and groups to start new projects, PMEGP fosters entrepreneurship and helps alleviate unemployment.

100. Option (2) is correct.

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) was passed in 2005. This act guarantees at least 100 days of wage employment per financial year to every rural household willing to do unskilled manual labour. Its primary objectives are to improve livelihood security in rural areas by creating durable assets and providing a safety net for the rural poor.

101. Option (2) is correct.

Given that,
$$(a-18)^2 + (b-12)^2 + (c-6)^2 = 0$$

So, $(a-18)^2 = 0$, $(b-12)^2 = 0$ and $(c-6)^2 = 0$
Hence, $a = 18$, $b = 12$ and $c = 6$
Now, value of $(a+b+c)^{1/2} = (18+12+6)^{1/2} = \pm 6$

102. Option (3) is correct.

According to the given table,

Required percentage =
$$\frac{52000 - 40000}{40000} \times 100 = 30\%$$

103. Option (2) is correct.

Using, average speed =
$$\frac{\text{Total distance}}{\text{Total Time}}$$

= $\frac{11+25+30}{\frac{11}{7}+\frac{25}{10}+\frac{30}{20}} = \frac{66\times140}{780} = \frac{154}{13}$
= $11\frac{11}{13}$ km/h

104. Option (1) is correct.

Let the numbers are x and y.

Given,
$$x + y = 28$$

And $x^2 + y^2 = 528$
Using, $(x + y)^2 = x^2 + y^2 + 2xy$
 $\Rightarrow 784 = 528 + 2xy$
 $\Rightarrow xy = 128$

105. Option (4) is correct.

So, $\sqrt{xy} = \sqrt{128} = 8\sqrt{2}$

According to the given table,

Required percentage =
$$\frac{62-16}{62} \times 100 = 74.19\%$$

106. Option (3) is correct.

Using, the curved surface area of the cylinder = $2\pi rh$

⇒ 396 =
$$2 \times \frac{22}{7} \times 7 \times h$$

⇒ $h = 9$ cm
Now, the volume of the cylinder = $\pi \times r^2 \times h$
= $\frac{22}{7} \times 7 \times 7 \times 9 = 1386$ cm³

Let the salary of Ramnarayan = Rs. 100

Now his salary after reducing it by $3\frac{1}{8}\%$ = 100 - 3.125

= Rs. 96.875
Again, his salary after increasing it by
$$7\frac{2}{5}\% = 96.875 \times \frac{107.4}{100} = \text{Rs. } 104.04$$

Required percentage =
$$\frac{104.04 - 100}{100} \times 100 = 4.04\%$$

108. Option (1) is correct.

Using curved surface area = $2\pi rh$

$$\Rightarrow 2200 = 2 \times \frac{22}{7} \times 7 \times h$$

$$\Rightarrow h = 50 \text{ cm}$$
So, total surface area = $2\pi r (r + h) = 2 \times \frac{22}{7} \times 7 (50 + 7)$
= 2508 cm²

109. Option (3) is correct.

According to the given table,

Required ratio =
$$\frac{1260}{1620} = \frac{7}{9} = 7:9$$

110. Option (1) is correct.

Using,
$$x^3 - y^3 = (x - y)(x^2 + y^2 + xy)$$

= $(x - y)((x - y)^2 + 3xy)$
= $25(25^2 + 3 \times 444) = 48925$

111. Option (2) is correct.

According to the question,
$$\frac{a}{b} = \frac{c}{d}$$

Option 1:
$$\frac{a}{b} = \frac{c}{d}$$
 (correct)

Option 2:
$$\frac{c}{d} = \frac{b}{a} \Rightarrow \frac{a}{b} \neq \frac{c}{d}$$
 (incorrect)

Option 3:
$$\frac{d}{c} = \frac{b}{a} \Rightarrow \frac{a}{b} = \frac{c}{d}$$
 (correct)

Option 4:
$$\frac{a}{c} = \frac{b}{d} \Rightarrow \frac{a}{b} = \frac{c}{d}$$
 (correct)

So, option (2) is correct.

112. Option (1) is correct.

According to the question,

Total number of votes =
$$2500 \times 10 = 25000$$

So, the total number of valid votes = $25000 \times \frac{80}{100} = 20000$

And total number of invalid votes = 25000 - 20000 = 5000Again, according to the question,

Total votes in favour of A = 11250

And total votes in favour of B = 8750

When 90% of the invalid votes polled in favour of B.

Then total votes of B = 8750 + 4500 = 13250

So, the percentage of votes by which B wins = $\frac{13250 - 11250}{25000} \times 100 = 8\%$

113. Option (4) is correct.

Number of women in city A =
$$2340 \times \frac{2}{3} = 1560$$

Number of women in city B =
$$900 \times \frac{1}{4} = 225$$

So, total number of women in city A and B =
$$1560 + 225$$

114. Option (1) is correct.

Increase in raw material =
$$\frac{6000 - 5000}{5000} \times 100 = 20\%$$

Increase in Power and Fuel =
$$\frac{12000 - 10000}{10000} \times 100 = 20\%$$

Increase in Salary and wages =
$$\frac{12000 - 8000}{8000} \times 100 = 50\%$$

Increase in raw material =
$$\frac{20000 - 10000}{10000} \times 100 = 100\%$$

Required difference = 100 - 20 = 80%

115. Option (4) is correct.

Time taken by Manish alone to finish the work = 21 days Time taken by Nakul alone to finish the work = 28 days Time taken by Pintoo alone to finish the work = 15 days

Let total work = LCM(21, 28, 15) = 420 unit

Efficiency of Manish =
$$\frac{420}{21}$$
 = 20 unit per day

Efficiency of Nakul =
$$\frac{420}{28}$$
 = 15 unit per day

Efficiency of Pintoo =
$$\frac{420}{15}$$
 = 28 unit per day

5 days work done by Manish and Pintoo = $(20 + 28) \times 5 = 240$

Time taken by all of them to complete the remaining work =

$$\frac{420-240}{20+15+28} = \frac{180}{63} = \frac{20}{7} = 2\frac{6}{7}$$
 days

116. Option (3) is correct.

According to the question,

Shiya's annual income =
$$153000 \times \frac{100}{30} = 510000$$

So, her monthly income =
$$\frac{510000}{12}$$
 = Rs. 42500

117. Option (1) is correct.

Given,
$$4\sin^2\theta = 3(1 + \cos\theta)$$

 $\Rightarrow 4(1 - \cos^2\theta) = 3 + 3\cos\theta$
 $\Rightarrow 4 - 4\cos^2\theta = 3 + 3\cos\theta$
 $\Rightarrow 4\cos^2\theta + 3\cos\theta - 1 = 0$
 $\Rightarrow \cos\theta = \frac{1}{4} \text{ (As, } 0 < \theta < 90)$

So,
$$\sin \theta = \sqrt{1 - \frac{1}{16}} = \frac{\sqrt{15}}{4}$$

And
$$\tan \theta = \sqrt{15}$$

Now value of
$$\sqrt{15} \tan \theta + \frac{4}{\sqrt{15}} \sin \theta + 2 \sec \theta$$

$$= \sqrt{15} \times \sqrt{15} + \frac{4}{\sqrt{15}} \times \frac{\sqrt{15}}{4} + 2 \times 4$$
$$= 15 + 1 + 8$$
$$= 24$$

118. Option (2) is correct.

Given, $\tan \theta + \cot \theta = 6$ Squaring both sides, $\tan^2 \theta + \cot^2 \theta + 2\tan \theta \cdot \cot \theta = 36$ $\Rightarrow \tan^2 \theta + \cot^2 \theta + 2 = 36$ $\Rightarrow \tan^2 \theta + \cot^2 \theta = 34$

119. Option (3) is correct.

According to the question,

Selling price =
$$1200 \times \frac{110}{100} = 1320$$

Let the selling price = x

So,
$$x \times \frac{90}{100} - 250 = 1320$$

 $\Rightarrow x = 1744.44$

120. Option (4) is correct.

Explanation:

Given that the radius of the sphere is increased by 125%.

We have, the surface area of the sphere =

Using successive percentage changes,

Total percentage change in surface area of sphere = 125 + 125

$$+ \frac{125 \times 125}{100} = 406.25\%$$

121. Option (2) is correct.

Value of
$$[\{9 \times 81 + (142 \div 2)\} + 350 - 155 + 5] \div [(25 \times 25) - 125],$$

= $[\{9 \times 81 + 71\} + 350 - 155 + 5] \div [625 - 125]$
= $[\{729 + 71\} + 350 - 155 + 5] \div [500]$
= $[800 + 350 - 155 + 5] \div [500]$
= $1000 \div 500$
= $1000 \div 500$

122. Option (1) is correct.

Value of
$$66 \div [34 - (32 \text{ of } 2 - 4) \div (4 \times 15)],$$

= $66 \div [34 - (64 - 4) \div (4 \times 15)]$

$$= 66 \div [34 - 60 \div 60]$$
$$= 66 \div [34 - 1]$$
$$= 66 \div 33$$
$$= 2$$

123. Option (4) is correct.

Explanation:

Given that the radius = 14 cm

Area of sector = 231 cm^2

Using, area of sector of circle =
$$\frac{\theta}{360} \times \pi r^2$$

$$\Rightarrow 231 = \frac{\theta}{360} \times \frac{22}{7} \times 14 \times 14$$

$$\Rightarrow \theta = 135^{\circ}$$

124. Option (4) is correct.

Using, average speed =
$$\frac{\text{Total distance}}{\text{Total time}}$$

$$= \frac{1200 + 1600 + 1000 + 200}{\frac{1200}{80} + \frac{1600}{40} + \frac{1000}{400} + \frac{200}{50}}$$

$$= \frac{4000}{15+40+2.5+4} = 65.04 \text{ km/h}$$

125. Option (3) is correct.

Value of
$$(4 + 4) \times (4 \div 4) \times (4 \times 4)$$

$$= (8) \times (1) \times (16)$$

= 128

126. Option (4) is correct.

Cost price of 10 kg sugar = $30 \times 10 = Rs.300$

The selling price of 10 kg sugar =
$$38 \times \frac{100 - 12}{100} \times 10 = 334.4$$

Also given that he is using a faulty weight of 900 gm instead of 1 kg.

So, his actual cost =
$$300 \times \frac{90}{100}$$
 = Rs. 270

Now, percentage profit =
$$\frac{334.4 - 270}{270} \times 100 = 23.85\%$$

127. Option (1) is correct.

Total weight of 60 students = $42 \times 60 = 2520 \text{ kg}$

Total weight of 36 boys = $36 \times 50 = 1800 \text{ kg}$

So, weight of 24 girls =
$$2520 - 1800 = 720 \text{ kg}$$

Now, the average weight of girls = $\frac{720}{24}$ = 30 kg

128. Option (2) is correct.

Given that the distance between P and Q = 275 km

Distance travelled by 1st rider in two hours = $25 \times 2 = 50 \text{ km}$

Now the distance between 1^{st} and 2^{nd} rider at 12 noon = 275 - 50 = 225 km

Using relative speed, now time required to them to cross each

other =
$$\frac{225}{25+20}$$
 = 5 hr

Hence, required time = 12 noon + 5 hr = 5:00 PM

129. Option (4) is correct.

Ram can do a work in = 12 days

And Riya can do a work in = 18 days

Let the total work = LCM(12, 18) = 36 unit

So, efficiency of Ram =
$$\frac{36}{12}$$
 = 3 unit per day

And efficiency of Riya =
$$\frac{36}{18}$$
 = 2 unit per day

Their six days work = $(3 + 2) \times 6 = 30$ unit

Time taken by Riya to complete the remaining work = $\frac{36-30}{2}$ = 3 days

130. Option (2) is correct.

Using BODMAS rule

Given,
$$855 \div 15 - K + 32 \times 5 = 1152 \div 16 \times 111 \div 37$$
,

$$\Rightarrow$$
 57 – K + 32 × 5 = 72 × 3

$$\Rightarrow$$
 57 – K + 32 × 5 = 72 × 3

$$\Rightarrow K = 1$$

131. Option (1) is correct.

Using BODMAS rule

Value of
$$\left[3\frac{2}{5} \times \left\{ 2\frac{3}{4} + 3.3 \left(5\frac{1}{3} + 3\frac{1}{3} - 2\frac{1}{3} \right) \right\} \right]$$

$$= \left\lceil \frac{17}{5} \times \left\{ \frac{11}{4} + 3.3 \left(\frac{16}{3} + \frac{10}{3} - \frac{7}{3} \right) \right\} \right\rceil$$

$$=\left[\frac{17}{5} \times \left\{ \frac{11}{4} + 3.3 \left(\frac{19}{3} \right) \right\} \right]$$

$$= \left[\frac{17}{5} \times \{2.75 + 20.9\} \right]$$

$$= [3.4 \times 23.65]$$

$$= 80.41$$

132. Option (4) is correct.

Volume of hollow sphere = $\frac{4}{3}\pi(5^3 - 5^3) = \frac{392}{3}\pi$

Volume of cone = $\frac{1}{3}\pi r^2 h$

According to the question, $\frac{1}{3} \times \pi \times 5 \times 5 \times h = \frac{392}{3} \pi$

$$\Rightarrow$$
 h = 15.68

133 Option (2) is correct.

Value of
$$(1 - \cos^{2v} A) \sec^{2v} A$$
,

$$= (\sec^2 A - \cos^2 A \cdot \sec^2 A)$$

$$= \sec^2 A - 1$$

$$= \tan^2 A$$

134. Option (1) is correct.

Population of city after two years = $16000 \times \frac{105}{100} \times \frac{105}{100} = 17640$

135. Option (3) is correct.

According to the question,

$$\Rightarrow d \propto t$$
 (1)

or, d = kt (Here, k is the proportionality constant) Given that the train travels 72 km in 2 hr.

So, $72 = k \times 2$

$$\Rightarrow k = 36$$

By equation (1),

d = 36t

136. Option (3) is correct.

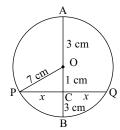
Value of, $1000 \times 100 - 1000 + 4000 \div 200$,

$$= 1000 \times 100 - 1000 + 20$$

$$= 100000 - 1000 + 20$$

= 99020

137. Option (2) is correct.



Let
$$PC = CQ = x$$
 cm

In ΔPCO , using pythagoras theorem,

$$x^2 = 7^2 - 1^2$$

$$x^2 = 49 - 1$$

$$x = 4\sqrt{3}$$

 \therefore Length of chord $PQ = 2x = 8\sqrt{3}$ cm

138. Option (4) is correct.

Bill after 40% discount = $1000 \times \frac{60}{100} = 600$

Bill after two successive discounts of 36% and 4% = $1000 \times \frac{64}{100} \times \frac{96}{100} = 614.4$

So, required difference = 614.4 - 600 = 14.40

139. Option (4) is correct.

Required percentage = $\frac{1100}{1200} \times 100 = 91.66\% \approx 92\%$

140. Option (3) is correct.

Speed of the train =
$$\frac{850}{45} = \frac{170}{9}$$
 m/s

Speed in km/h =
$$\frac{170}{9} \times \frac{18}{5} = 68 \text{ km/h}$$

So, the train covers 68 km in 1 hour.

141. Option (2) is correct.

Value of 15% of
$$1.5 + 0.15 \div 0.1 + 0.01$$
 of $1.1 \times 0.5 + 2.5 \times 25$,
= $0.225 + 0.15 \div 0.1 + 0.011 \times 0.5 + 2.5 \times 25$
= $0.225 + 1.5 + 0.011 \times 0.5 + 2.5 \times 25$
= $0.225 + 1.5 + 0.00055 + 62.5$
= 64.2305

142. Option (3) is correct.

Given that the shopkeeper uses 950 gm instead of 1kg.

So, profit percentage =
$$\frac{1000 - 950}{950} \times 100 = \frac{100}{19} = 5\frac{5}{19}\%$$

143. Option (2) is correct.

Explanation:

By triangles property,

Sum of two sides be always greater than the 3^{rd} side. i.e., (7 + 12) > x

Difference of two sides be always less than the 3^{rd} side. i.e., x > (12-7)

So,
$$5 < x < 19$$
.

Hence, possible values of x are 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18.

So, total 13 values of x are possible.

144. Option (3) is correct.

Using BODMAS rule

Value of,
$$(6+6 \text{ of } 5 \div 5) \div 6 \text{ of } 5 + (24 \div 2 \text{ of } 3 - 6 \text{ of } 5 + 4)$$
,
= $(6+30 \div 5) \div 30 + (24 \div 6 - 30 + 4)$
= $(6+6) \div 30 + (4-30+4)$

$$= \frac{2}{5} - 22$$
$$= -21\frac{3}{5}$$

145. Option (2) is correct.

By triangles property,

Sum of two sides be always greater than the 3^{rd} side. i.e., m < 34

Difference of two sides be always less than the 3^{rd} side. i.e., m > 10

So, option (2), $10 \le m \le 34$ is correct.

146. Option (2) is correct.

Let the sum of money = Rs. P

Given that the amount increased due to 11% more rate of interest = Rs. 1320

Per year earned amount due to this access rate of interest =

$$\frac{1320}{4}$$
 = Rs. 330

According to the question, $P \times \frac{11}{100} = 330$

$$\Rightarrow P = \text{Rs. } 3000$$

147 Option (4) is correct.

Given, $\sin x + \cos x = \sqrt{2} \sin x$

Squaring both sides,

$$\sin^2 x + \cos^2 x + 2\sin x. \cos x = 2\sin^2 x$$

$$\Rightarrow 2\sin x \cdot \cos x = 2\sin^2 x - 1$$

Using, $(\sin x - \cos x)^2 = \sin^2 x + \cos^2 x - 2\sin x \cdot \cos x$

$$= 1 - (2\sin^2 x - 1) = 2(1 - \sin^2 x) = 2\cos^2 x$$

$$\Rightarrow \sin x - \cos x = \sqrt{2}\cos x$$

148. Option (2) is correct.

Let the radius of sphere = r cm

Using, surface area of sphere = $4\pi r^2$

$$\Rightarrow 528 = 4 \times \frac{22}{7} \times r^2$$

$$\Rightarrow r = \sqrt{42}$$
 cm

149. Option (3) is correct.

Number of females in college A and D together =

$$700 \times \frac{35}{100} + 800 \times \frac{55}{100} = 685$$

Number of males in college B and C together =

$$550 \times \frac{70}{100} + 600 \times \frac{60}{100} = 745$$

Required percentage = $\frac{685}{745} \times 100 = 91.95\%$

150. Option (2) is correct.

Using BODMAS rule

Value of
$$5055 - (1002 \div 20.04)$$

$$=5055-50$$

$$=5005$$

151. Option (1) is correct.

Out of all the options, the word 'Supremecy' is spelt incorrectly. It is spelled as 'Supremacy', meaning 'the state or condition of being superior to all others in authority, power, or status.'

152. Option (3) is correct.

The idiom 'Have your head in the clouds' implies 'to be daydreaming, not paying attention, being distracted, out of touch with reality.' Out of the given sentences, only option

(3) captures its connotation most appropriately – 'He had his head in the clouds during an important meeting' means the person was not paying attention during an important meeting; he seemed distracted.

153. Option (3) is correct.

The correct sentence will be: When my father comes, I will make sure that I discuss the possibilities of a new business venture with him. The part 'When my father will come' will be replaced by 'When my father comes'. This is a clear example of the first conditional that manifests real possibilities, and it is used to talk about real and possible situations in the future. The structure is If + [present simple], ... will + [infinitive]. Therefore, simple present tense is used for the conditional clause.

154. Option (3) is correct.

As per the sentence provided, Orchestration is the arrangement of a musical composition for performance by an orchestra. Another term, *Woodwind* is any group of wind musical instruments, composed of flutes and reed pipes. The term Symphony is a consonance of sounds, while the term 'Troupe' is a group of dancers, actors, or other entertainers who tour different venues.

155. Option (1) is correct.

As per the statement given in the question, the term 'ebullient' means 'cheerful and full of energy.' Another terms such as Clamant means urgently demanding attention. Whereas, 'weary' means fatigued/tired. So, 'weary' is the most appropriate antonym.

156. Option (1) is correct.

As per the statement, the word 'quell' implies 'put an end to (a rebellion or other disorder), typically by the use of force.' Thus, 'to stop' best explains the word 'quell'.

157. Option (2) is correct.

The correct sentence will be: In yesterday's fire accident, her feet were burnt badly. The part 'her feets are' will be replaced by 'her feet were' because the incident took place 'yesterday' (a past phrase of time). Moreover, 'feet' is the plural form of 'foot'; thus, as per English convention, the verb will be plural (were).

158. Option (4) is correct.

As per the word provided, the term 'Upright' means 'honest and just; honorable.' So, the correct antonym is 'immoral'. 'Ethical' can be considered as a synonym.

159. Option (1) is correct.

The idiom 'Bite off more than you can chew' means 'take on a commitment one cannot fulfill.' 'Pull someone's leg' means 'to make someone believe something that is not true as a joke." No pain no gain' is suffering and is necessary to achieve something. 'Miss the boat' means 'be too slow to take advantage of an opportunity.' Thus, to explain 'difficult tasks – those which are beyond his capabilities' the best idiom is: Bite off more than you can chew.

160. Option (2) is correct.

In the sentence, 'Generousity is a godly feature among many individuals on the Earth', the word 'generousity' is misspelled. It must be spelled as generosity (kindness).

161. Option (4) is correct.

'Disappear' is incorrectly spelt. 'Disappear' is the correct spelling.

162. Option (3) is correct.

As per the given sentence, the word 'incinerate' means

'destroy (something, especially waste material) by burning.' Thus, Options (1) and (4) are near synonyms. Therefore, the antonym is 'extinguish', meaning 'to cause (a fire or light) to cease to burn or shine'.

163. Option (1) is correct.

The correct sentence will be: The Centre of Excellence for Data Analytics (CEDA) provides quality data analytic services to various government departments on all levels as well as to public sector units at the Centre and in states. The part 'various government departments on all levels' will be substituted by 'various government departments at all levels. "At all levels" emphasises the presence and operation across different levels of government.

164. Option (4) is correct.

The correct sentence is: After his business failed, he had to tighten his belt and adjust to a frugal lifestyle. The idiom 'tighten his belt' will replace 'had to reduce spending'. The idiom 'tighten his belt' means 'to spend less money and manage without things because you have less money than you used to have.' The idiom 'let the cat out of the bag' implies 'to reveal a secret carelessly or by mistake.' The idiom 'hit the nail on the head' means 'to do or say something exactly right'. While 'kick the bucket' means 'die'.

165. Option (1) is correct.

The correct idiom will be: A bird's eye view, which means a view from a high angle as if seen by a bird in flight.

166. Option (1) is correct.

'When pigs fly' is an idiom meaning 'something will (most likely) never happen.' Example: She said she'll stop partying when pigs fly." (Meaning: She's unlikely to ever stop partying.)

167. Option (4) is correct.

The correct sentence will be: If you have tears, prepare to shed them now. 'If you have tears' will replace 'You have tears' because the sentence presents a condition, that should take the conjunction 'if' to express it, 'unless' means 'if not'; hence contextually misfit.

168. Option (2) is correct.

The term 'Bind' implies 'tie or fasten something securely'. 'Another term 'Disengage' is the antonym. The correct synonym is 'secure'.

169. Option (2) is correct.

As per the given sentence, "A doubtful look or examination of one's motives", 'Introspect' means 'to examine one's thoughts, feelings, and motives.' 'Suspect' is closely tied to the idea of suspicion — a feeling or belief that someone may have committed an illegal, dishonest, or harmful act. It is often used in legal contexts and discussions involving crime or wrongdoing. 'Circumspect' implies a thoughtful and deliberate approach to decision-making. 'Retrospect' is a noun that refers to the act of looking back on, reviewing, or reflecting on past events, experiences, or actions. Thus, the correct one-word substitute for a doubtful look or examination of one's motives is suspect.

170. Option (1) is correct.

As per the question, the term 'Atheist' refers to a person who does not believe in the existence of any gods or deities.

171. Option (3) is correct.

Sentence (1) has 'arauma' and 'waftad' incorrectly spelt; Sentence (2) has 'arauma'. 'freshely' and 'cookes incorrectly spelt. Sentence (4) has 'delicius and 'freshely' incorrectly spelt. Only statement (3) is technically correct, as all the words have been spelled correctly.

172. Option (1) is correct.

The correct sentence will be: Soldiers in the Indian Armed Forces are trained never to fight in a coward manner. 'In a cowardly manner' is the correct form. 'Cowardly' is an 'adjective'. 'Fight' is a 'verb' and needs an 'adverb' to qualify if

173. Option (2) is correct.

The term 'Aggravate' means 'make (a problem, injury, or offense) worse or more serious.' Therefore, the correct antonym is 'alleviate' (make suffering, deficiency, or a problem) less severe.) Even the term 'Exasperate' means 'irritate and frustrate (someone) intensely.'

174. Option (4) is correct.

The word 'vanquish' means 'defeat thoroughly/ conquer'. Example: The little boy vanquishes the pride and smugness of the cricketer with his talent. Therefore, the antonym is 'liberate'.

175. Option (2) is correct.

The correct sentence will be: Emotional stimulation provides the necessary fertility for creative imagination. Fecundity means the ability to produce many new ideas. This implies the ability to produce in abundance, so to say, fertility.

176. Option (3) is correct.

The correct sentence will be: The minister promised to provide free laptops to the public if his party forms the government. The part 'party came in power' means electoral victory/ formation of government. Options (1) and (2) have a negative interpretation, hence incorrect. Thus, the correct replacement is 'party forms the government'.

177. Option (1) is correct.

As per the statement given, the term 'Sacred cow' is an idiom meaning 'a belief, custom, etc. that people support and do not question or criticize.' Therefore, the most suitable word is 'Unquestionable'.

178. Option (4) is correct.

As per the words given in the question, the term 'Introverted' means 'shy, quiet, and preferring to spend time alone rather than often being with other people'. Another term 'Brazen' refers to 'very bold and do not care what other people think about them or their behaviour.' 'Rowdy' is 'noisy and disorderly'. While, 'effervescent' means 'vivacious and enthusiastic.'

179. Option (2) is correct.

'As per the sentence, Bonafide' means 'genuine; real.' While the term 'Orchard' means 'an area of land where fruit trees (but not orange trees or other citrus trees) are grown'. 'Botanical' implies 'of or relating to plants or botany.' Bonsai is the Japanese art of growing and shaping miniature trees in containers.

180. Option (1) is correct.

The correct sentence will be: This is the group of leaders in whom the ruling government has placed its trust. No substitution is required. The correct pronoun is 'whom', not 'who'. Upon rephrasing, the sentence seems like- The ruling government has placed its trust in them. Therefore, the correct pronoun must be in the objective case.

181. Option (1) is correct.

The correctly spelt word is 'registration'. Incorrect spellings

include: refridgerator (refrigerator), litrature (literature), and allegater (alligator).

182. Option (2) is correct.

In the sentence, 'My strength is as the strength of ten because my heart is pure', 'strength' has been spelt incorrectly. It is written as 'strength'.

183. Option (1) is correct.

The correct sentence will be: During the preparation for competitive exams, Meena steered clear of going to parties. The phrase 'steered clear of' will replace 'avoided', the phrase means 'to get or keep away from (as a responsibility) through cleverness or trickery'.

184. Option (4) is correct.

As per the statement provided, the term 'Egotism' is 'the fact of being excessively conceited or absorbed in oneself.' 'Neologism' refers to 'a newly coined word or expression.' 'Mannerism' is a habitual gesture or way of speaking or behaving. While 'nepotism' is the act of granting an advantage, privilege, or position to relatives or friends in an occupation or field.

185. Option (2) is correct.

'Strike' is the base form of verb, 'struck' is the past form, while 'stricken' is the participle form. Thus, 'strucken' is the incorrect form of verb.

186. Option (4) is correct.

'Resilient' means strong/robust; 'cordial' means pleasant. While 'slack' means not tight or taut. Thus, 'slack' is the antonym of 'tight'.

187. Option (1) is correct.

The idiom 'Black sheep' refers to a person who has done something bad that brings embarrassment or shame to his or her family or a person who brings bad reputation for the family. Thus 'Disreputable' is the correct meaning of the given idiom.

188. Option (4) is correct.

As per the statement provided, A 'mint' can refer to a place where coins are produced under government authority. A 'monastery' is a building or complex of buildings occupied by a community of monks living under religious vows, typically secluded from the outside world. A 'scullery' is a small room or section of a kitchen where dishes and utensils are cleaned and stored. An 'arsenal' is a place where weapons and military equipment are stored, manufactured, or repaired. Thus, 'arsenal' is the correct one-word substitute for a place for storage of arms and ammunition.

189. Option (4) is correct.

The correct sentence will be: The committee works diligently to ensure fair and unbiased decision. Since the sentence must be in simple present tense, the suitable verbs are 'work' 'works'. As per standard English usage, 'work' will be used with a plural noun, while 'works' will be used with a singular noun; therefore to align with the collective noun 'committee', the verb will be singular. It is to be noted that when a collective noun functions as a unit, singular verb is used, as is the case here.

190. Option (3) is correct.

As per the statement, 'Heart and soul' implies full dedication. The phrase "hard and fast" is an idiomatic expression that typically means strict or rigid, without any flexibility or room for negotiation. The phrase "head and shoulders above" is

an idiomatic expression used to indicate that someone or something is significantly superior to others in a particular aspect. Whereas, 'high and dry' implies in a difficult situation.

191. Option (3) is correct.

The correct sentence will be: Mowgli is a beloved character from Rudyard Kipling's classic 'The Jungle Book'. The success of Rudyard Kipling's classic 'The Jungle Book' is a testimony of the adored character Mowgli. Thus, 'beloved' aligns with the context.

192. Option (3) is correct.

The correct sentence will be: Raised by wolves in the Indian jungle, Mowgli experiences thrilling adventures and forms friendships with various animals, like Bagheera the panther and Baloo the bear. The contact with thrilling adventures and friendships with various animals are a part of his experiences.

193. Option (3) is correct.

The correct sentence will be: Throughout the story, he navigates the challenges of living among both humans and jungle creatures, all while learning essential life lessons. 'Navigates' means to plan, direct; to steer.

194. Option (1) is correct.

The correct sentence will be: 'The Jungle Book' continues to captivate readers of all ages. The blank needs a word that speaks of the appeal of 'The Jungle Book'. Thus, 'captivate' best aligns with the text.

195. Option (2) is correct.

The correct sentence is: 'The Jungle Book' continues to captivate readers of all ages with its enchanting portrayal of Mowgli's remarkable journey of self-discovery and the beauty of the natural world. The sentence manifests 'The Jungle Book' and the portrayal of Mowgli's remarkable journey of self-discovery in a positive light and how it continues its charm with the readers. So, 'enchanting' best fits the blank.

196. Option (4) is correct.

It is evident in the sentence 'While human-caused earthquakes ... are related to industrial activities such as mining, construction of water dams, injection of liquids such as waste water and carbon dioxide, and extractions associated with

oil and gas exploitation' that human-caused earthquakes are related to industrial activities.

197. Option (2) is correct.

As per the question, the term 'Create' means to bring (something) into existence. 'Destabilise' and 'Deplete' negate existence, while 'seismic' is unrelated. Thus, the correct meaning is 'increase'.

198. Option (4) is correct.

The passage is about the human-caused earthquakes and the concerns that they cause and the source can be pinned down to industrial activities. Owing to the ever-increasing demand for energy and mineral supplies worldwide, this will pave way for industrial activities, thereby increasing the number of human-caused earthquakes manifold. As per the writer, even small stresses happening underground caused by man-made activities can destabilise faults by inducing earthquakes. The passage covers the consequences of industrial threats on earthquakes, therefore, the most suitable title for the passage is 'Industrial Threats'.

199. Option (2) is correct.

The assertion of the writer in 'With the ever-increasing demand for energy and mineral supplies worldwide, the number of human-caused earthquakes is expected to rise in the upcoming years' determines that due to the demand for energy and minerals more human-caused earthquakes are expected.

200. Option (1) is correct.

The term 'Contemptuous' refers to manifesting, feeling, or expressing deep hatred or disapproval. The speaker discusses the issue of human-caused earthquakes associated with industrial activities such as wastewater disposal, mining, and oil and gas extraction. The writer appears disdainful at the assumption that 'ever-increasing demand for energy and mineral supplies worldwide, the number of human-caused earthquakes is expected to rise in the upcoming years'. The problem arises when small stresses underground caused by man-made activities can destabilise faults, inducing earthquakes.