

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

SOLVED PAPER

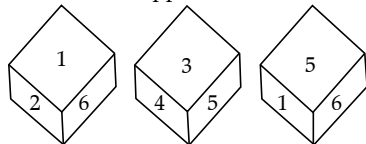
(9th November 2022: Shift-2)

Time Allotted- 2 hours

Max marks- 200

General Intelligence and Reasoning

1. Three different positions of the same dice are shown. Find the number on the face opposite the face showing '2'.



1. 5 2. 3 3. 6 4. 1
2. 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.

PLAN : QOMKBZOM :: SINK : TRJHOMLJ :: RUDE : ?

1. SQVTECFD 2. ECFDSQVT
 3. ECFDECFD 4. SQVTSQVT
3. Select the option that represents the correct order of the given words as they would appear in an English dictionary.
1. Cutiase 2. Cutlery 3. Cyan 4. Cyber
 5. Cyclic
 1. 4, 3, 1, 2, 5 2. 3, 4, 1, 2, 5 3. 1, 2, 3, 4, 5 4. 3, 1, 4, 2, 5

4. Select the set in which the numbers are related in the same way as are the numbers of the given 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 /subtracting /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.)

- (18, 36, 60)
 (14, 28, 44)
 1. (21, 42, 164) 2. (17, 32, 60) 3. (16, 28, 64) 4. (22, 44, 76)

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

s _ _ u _ a r _ s t _ a a _ s _ _ u _ a _ r

1. staurستا 2. stasurستا
 3. starusستا 4. stasusرستا

6. Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.

(The words must be considered as meaningful English words and must NOT be related to each other based on the number of letters/number of consonants/vowels in the word)

- Riyal : Saudi Arabia
1. Lira : Armenia 2. Peso : Germany
 3. Lira : Turkey 4. Mexico : Peso

7. Seven people, P, Q, R, S, T, U and V are sitting in a straight row, facing the north. Only two people sit to the right of U. Only two people sit to the left of R. Only two people sit between U and Q. Only three people sit between R

and V. T is not an immediate neighbour of U. S sits to the right of U. Who sits at the extreme right?

1. Q 2. S 3. V 4. P

8. If I denotes '+', J denotes '×', K denotes '-', and L denotes '+', then what will come in place of '?' in the following equation?

448 I 8 L 17 K 12 J 6 L 19 = ?

1. 14 2. 20 3. 16 4. 18

9. Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out.

1. HSP 2. JQT 3. FUR 4. LOL

10. Select the set in which the numbers are related in the same way as are the numbers of the following sets.

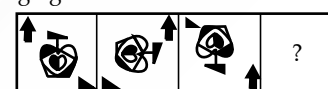
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13- Operations on 13 such as adding /subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

- (111, 208, 313)
 (36, 12, 42)
 1. (41, 69, 107) 2. (66, 92, 151)
 3. (120, 224, 342) 4. (28, 51, 73)

11. If × means -, ÷ means +, - means ÷, and + means ×, then what will be the value of the following expression?
 125 - 25 ÷ 4 + 25 × 4 + 10 = ?

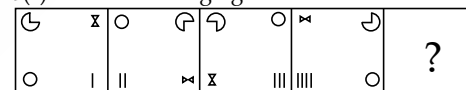
1. 68 2. 62 3. 70 4. 65

12. Select the figure that will replace the question mark (?) in the following figure series.



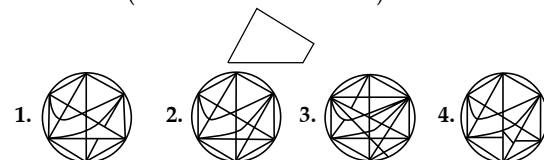
1. 2. 3. 4.

13. Select the figure that will come in place of the question mark (?) in the following figure series.

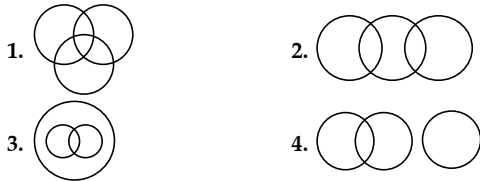


1. 2. 3. 4.

14. Select the option figure in which the given figure is embedded (rotation is NOT allowed).



15. Select the Venn diagram that best illustrates the relationship between the following classes.
Humans, Professionals, Girls



16. Which of the given letter-clusters will replace the question mark (?) in the following series?
BZTR, DBVT, FDXV, ?, JHBZ

1. IFZY 2. HFZX 3. HFZY 4. IFZX

17. Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.

$(626 * 2) * (11 * 9) * 69 * 240 * 103$

1. $\div, +, \times, =, +, +$ 2. $+, \times, =, \div, +, -$
3. $\div, -, \times, =, -, \times$ 4. $+, \times, =, -, \div, +$

18. Which of the following numbers will replace the question mark (?) in the given series?
18, 20, 43, 133, ?

1. 532 2. 537 3. 536 4. 538

19. If A denotes '+', B denotes '×', C denotes '-', and D denotes '÷', then what will be the value of the following expression?

$90 C 20 B 1 A 36 D 2$

1. 88 2. 38 3. 78 4. 86

20. A, B, C, D, E, F, G and H are sitting around a square table facing the centre of the table. Some of them are sitting at the corners while some are sitting at the exact centre of the sides.

G sits second to the right of F. B sits second to the right of A. C sits third to the right of H. E sits third to the right of F. C is not the immediate neighbour of A.

Who sits second to the right of B?

1. E 2. C 3. D 4. A

21. Which letter-cluster will replace the question mark (?) to complete the given series? KRPD, ?, QNRL, TLSP, WJTT

1. NQRH 2. NQRG 3. NPSG 4. NPQH

22. In a certain code language, 'CRUDE' is written as '5421183' and 'BOSTON' is written as '14152019152'. How will 'DOCKET' be written in that language?

1. 815611520 2. 401022630 3. 169251202 4. 205113154

23. Select the set in which the numbers are related in the same way as are the numbers of the given 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 /subtracting /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)

(67, 63, 64)

(24, 17, 343)

1. (75, 69, 216) 2. (27, 22, 120)

3. (46, 41, 40) 4. (97, 88, 81)

24. Which of the following numbers will replace the question mark (?) in the given series? 148, 269, 413, ?, 778

1. 548 2. 512 3. 582 4. 614

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

Statements:

All pens are books.

All books are novels.

All novels are good.

Conclusions:

I. Some novels are pens.

II. All books are good.

1. Both conclusions I and II follow.

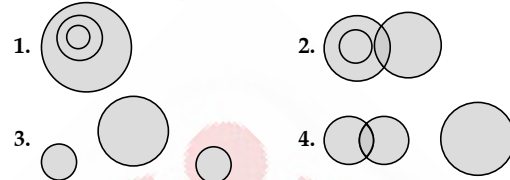
2. Neither conclusion I nor II follows.

3. Only conclusion I follows.

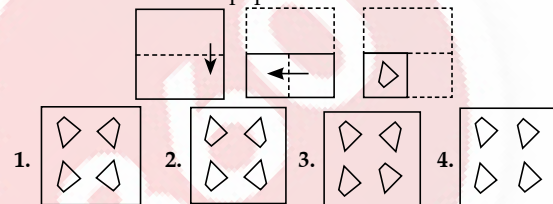
4. Only conclusion II follows.

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

Hawa Mahal, Jaipur, Rajasthan



27. The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown below. Choose the figure that would most closely resemble the unfolded form of the paper.



28. Which of the following interchanges of signs would make the given equation correct? $5 - 4 \div 2 + 7 \times 3 = 14$

1. \div and $+$ 2. \times and $-$ 3. $-$ and \div 4. $+$ and \times

29. 'R = S' means 'R is the mother of S'.

'R @ S' means 'R is the father of S'.

'R × S' means 'R is the father's sister of S'.

'R # S' means 'R is the sister of S'.

'R \$ S' means 'R is the daughter of S'.

'R * S' means 'R is the brother of S'.

How is Z related to Y in the following expression?

$V \times Y \$ \times @ W * A \$ Z$

1. Sister 2. Mother
3. Father's sister 4. Mother's sister

30. Select the option that is related to the third term in the same way as the second term is related to the first term and sixth term is related to fifth term.

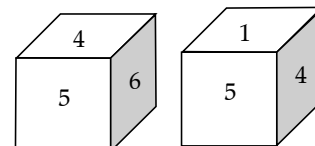
$2 : 8 :: 10 : ? :: 5 : 50$

1. 1000 2. 40 3. 100 4. 200

31. Based on the position in the English alphabetical order, three of the following letter-clusters are alike in some manner and one is different. Select the odd letter-cluster.

1. XUSO 2. NKHE 3. MJGD 4. WTQN

32. Two different positions of the same dice are shown, the six faces of which are numbered from 1 to 6. Select the number that will be on the face opposite to the one showing '6'.



1. 1 2. 2 3. 4 4. 3

33. If A denotes '+', B denotes '×', C denotes '-', and D denotes '÷', then what will be the value of the following expression?

$$54 C 34 A 24 D 8 B 2$$

1. 29 2. 23 3. 26 4. 21

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

_ v p _ _ l h s _ _ k l _ h s v _ k l l _

1. s k l v p l l h 2. s k l v p l p h
3. s l k v p k p h 4. s k l p v l p h

35. In a certain code language, 'MOUNTAIN' is written as 'MNIATNUO' and 'SENTENCE' is written as 'SECNETNE'. How will 'BIRTHDAY' be written in that language?

1. BYADHTRI 2. BIYDHATR
3. YADHTRIB 4. YBIRHTDA

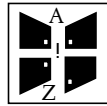
36. If M denotes '-', N denotes '+', O denotes '×', and P denotes '÷', then what will come in place of '?' in the following equation?

$$162 N 6 M \sqrt[3]{729} O 4 P 126 = ?$$

1. 117 2. 125 3. 121 4. 112

37. Which of the option figure is the exact mirror image of the given problem figure when the mirror is held at the right side?

Problem figure:



1. 2. 3. 4.

38. Ahmet's house faces north. He came out of his house and walked straight for 40 m, turned left and walked for 30 m. He then turned right and walked for 35 m. Finally, he took another two successive right turns and covered 30 m and 25 m, respectively, to reach his final destination. How far and in which direction is he from his house now?

1. 25 m due south 2. 50 m due north
3. 15 m due north 4. 25 m due east

39. Three Statements are given followed by three conclusions numbered I, II and III. 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 statements.

Statements:

- All D are V.
Some S are D.
No W is a S.

Conclusions:

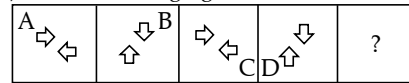
- I. Some W are not D. II. Some V are S.
III. Some D are S.

1. Only Conclusion III follows.
2. Conclusions I, II and III follow.
3. Both Conclusions II and III follow.
4. Only Conclusion I follows.

40. Select the correct option that indicates the arrangement of the following words in a logical and meaningful order.

1. Satellite 2. Galaxy 3. Universe 4. Planet
5. Sun
1. 1, 3, 5, 4, 2 2. 3, 2, 5, 4, 1
3. 1, 2, 3, 4, 5 4. 3, 4, 5, 1, 2

41. Select the figure that will come in place of the question mark (?) in the following figure series.



1. 2. 3. 4.

42. A man said to a lady, "Your mother's father-in-law is my father and I am the only son". How is that man related to that lady?

1. Brother 2. Father
3. Son 4. Father-in-law

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

_ L J _ G H _ L _ I _ H M _ J _ G _ _ L J _ G H

1. M M I J G I L H M I 2. M I M J G L I H M I
3. I M M J G L I M H 4. I M M G J L I H I M

44. In a certain code language, 'COURT' is written as 'ERWUV', and 'DANCE' is written as 'FDPFG'. How will 'EARTH' be written in that language?

1. GDTWJ 2. GDTWK 3. GDTVJ 4. GDTXJ

45. Deepa starts from her house and cycles 4 km towards the north and then turns left and cycles 6 km. She again turns left and cycles for X km to reach her school. Point A is to the east of her school and also 3 km to the south of her house. What is the value of X?

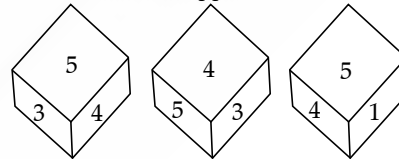
1. 1 km 2. 7 km 3. 9 km 4. 3 km

46. Select the option figure in which the given figure is embedded (rotation is NOT allowed).



1. 2. 3. 4.

47. Three different positions of the same dice are shown. Find the number on the face opposite the face showing '3'.



1. 5 2. 2 3. 1 4. 4

48. Select the option in which the given figure is embedded. (Rotation is NOT allowed)



1. 2. 3. 4.

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

$$357, 372, ?, 447, 507$$

1. 407 2. 417 3. 402 4. 397

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

$$4, 9, 20, 43, 90, ?$$

1. 181 2. 184 3. 186 4. 185

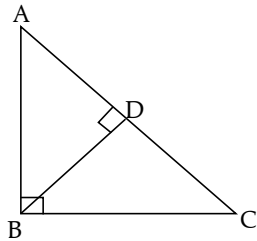
General Knowledge and General Awareness

51. Bacterial and fungal enzymes degrade detritus into simpler inorganic substances. This process is called as ____.
1. Catabolism
 2. Fragmentation
 3. Leaching
 4. Decomposition
52. Which of the following is NOT an allotrope of carbon?
1. Trisulfur
 2. Diamond
 3. Lonsdaleite
 4. Graphite
53. "The vitamin is found in Liver, milk, eggs, fish. It helps in forming RBC. Deficiency of this vitamin causes anemia." Which vitamin is being referred in the above statement?
1. Vitamin K
 2. Vitamin B12
 3. Vitamin C
 4. Vitamin A
54. ____ is the interest rate at which the Reserve Bank absorbs liquidity from banks against the collateral of eligible government securities under the LAF.
1. SDF Rate
 2. Reverse Repo Rate
 3. Bank Rate
 4. Repo Rate
55. What is the valency of Boron?
1. 2
 2. 3
 3. 4
 4. 1
56. Which Article of the Constitution of India abolishes the concept of 'untouchability' and prohibits its practice in any shape or form?
1. Article 20
 2. Article 17
 3. Article 18
 4. Article 19
57. Which of the following Fundamental Duty provisions has laid down that all Indians need to show respect to the Indian National Flag and the Indian National Anthem?
1. Article 51A (d)
 2. Article 51A (a)
 3. Article 51A (b)
 4. Article 51A (c)
58. 'Rongali Bihu', one of the major festivals of Assam, is celebrated in the month of :
1. May
 2. January
 3. August
 4. April
59. The decommissioned have lock bridge has been built over which of the following rivers?
1. Cauvery
 2. Mahanadi
 3. Krishna
 4. Godavari
60. Which of the following tax was taken not in cash but in the form of forced labour in Chola empire?
1. Gudi
 2. Puravu
 3. Vetti
 4. Kadu
61. Who among the following organised the armed rebellion against the British Raj in 1879 in Maharashtra?
1. Vasudev Balwant Phadke
 2. Birsa Munda
 3. Buddhu Bhagat
 4. Tikendrajit Singh
62. A Supreme Court or High Court judge can be removed by the Parliament by:
1. Simple majority
 2. Both simple and two third majority
 3. Special majority
 4. Two third majority
63. The Paralympics Winter Games-2022 was hosted by ____.
1. USA
 2. China
 3. Japan
 4. Australia
64. Select the correct statement regarding Indian monsoon.
1. A monsoon is a seasonal shift in wind direction. It can cause very low rainfall during the summer and heavy rainfall in the winter.
 2. A monsoon is a sudden change in temperature. It can cause moderate rainfall during the summer and dry spells in the winter.
 3. A monsoon is a seasonal shift in wind direction. It can cause heavy rainfall during the summer and dry spells in the winter.
 4. A monsoon is a seasonal shift in wind direction. It can cause moderate rainfall during the summer and no rain in winter.
65. Which of the following countries was the runner-up in ICC Women's T20 World Cup - 2020?
1. India
 2. England
 3. Australia
 4. New Zealand
66. Which state in India received the largest number of immigrants, as per the 2001 Census?
1. Gujarat
 2. Maharashtra
 3. West Bengal
 4. Uttar Pradesh
67. Which of the following is NOT a type of chromosome, on the basis of the location of the centromere?
1. Telocentric
 2. Acrocentric
 3. Logocentric
 4. Metacentric
68. Which of the following was originally a Fundamental Right, but in 1978 was made a legal right as per Article 300A?
1. Right against exploitation
 2. Right to property
 3. Right to education
 4. Right to freedom of religion
69. Which of the following chemicals are vastly used in gunpowder of fireworks?
1. Silver nitrate and charcoal
 2. Silver nitrate and sulphur
 3. Potassium sulphate and Phosphorous
 4. Potassium nitrate, sulphur and charcoal
70. The ____ is a domestic first-class cricket competition played in India.
1. BC Roy Trophy
 2. Duleep Trophy
 3. Maharaja Ranjit Singh Gold Cup
 4. Beighton Cup
71. The Battle of Tukaroi also known as the Battle of Bajhaura or the Battle of Mughulmar was fought between the Mughal Empire and the Bengal Sultanate in which of the following year ____?
1. 1595
 2. 1585
 3. 1532
 4. 1575
72. Which of the following statement is correct according to plate tectonics?
1. A tectonic plate is a massive, regularly-shaped slab of solid rock.
 2. The theory of plate tectonics proposes that the earth's lithosphere is divided into seven major and some minor plates.
 3. Plates move vertically over the asthenosphere as rigid units.
 4. A tectonic plate is composed of only continental lithosphere.
73. The famous musician Ustad Sultan Khan is associated with which musical instrument?
1. Drums
 2. Sarangi
 3. Tabla
 4. Flute
74. Which of the following funds was created in 2005 to channelise funds received from disinvestment proceeds of PSUs?
1. National Public Fund
 2. National Investment Fund
 3. Disinvestment Fund
 4. New Investment Fund
75. Which of the following shows modernization to increase the production of goods and services?
1. Adoption of old technique with large scale
 2. Adoption of same technique in different way
 3. Following western culture
 4. Adoption of new technology

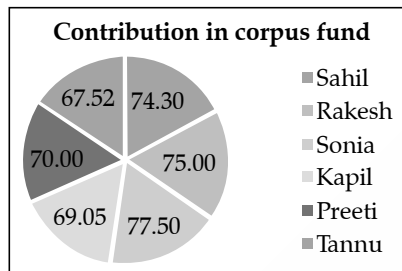
76. The Kadamba Dynasty was an ancient royal dynasty of the modern day:
1. Odisha 2. Kerala 3. Bihar 4. Karnataka
77. In which Five-Year Plan was advocated planning shifted from agriculture to industries?
1. Third 2. Fourth 3. Second 4. Fifth
78. Nupur Arts' Artistic Director _____ is 2021's recipient of the One Dance UK Lifetime Achievement Award in South Asian Dance.
1. Aashrita Kamath 2. Smita Vadnerkar
3. Vasudha Misra 4. Dundhu Renjeev
79. How many times has the term judicial review been mentioned in the constitution?
1. 15 2. 20
3. Not mentioned anywhere 4. 10
80. Who among the following was the first woman to learn the all-male style of Kathakali and was also the founder of Darpana Academy of Performing Arts that caters to various performing arts like dance, music, drama and puppetry?
1. Vidyagauri Adkar 2. Mrinalini Sarabhai
3. Anjali Mehra 4. Niveditha Arjun
81. Which of the following Indian states was the first state to sign a subsidiary alliance with the British?
1. Hyderabad 2. Cochin 3. Travancore 4. Maratha
82. Which of the following states receives the maximum rainfall?
1. Rajasthan 2. Gujarat
3. Maharashtra 4. Assam
83. At which of the following places was the formal proclamation of the Swadeshi movement made on 7 August 1905?
1. Wellington Square, Calcutta
2. Calcutta Town Hall
3. Kanai Dhar Lane, Calcutta
4. Bengal National College, Calcutta
84. The organisers of Wimbledon Open did NOT allow players of two countries to compete in the Wimbledon 2022. One of them was Russia, which was the other country?
1. Estonia 2. Belarus 3. China 4. Ukraine
85. In which element group of the periodic table are fluorine, chlorine, bromine and iodine included?
1. Actinides 2. Chalcogen
3. Lanthanides 4. Halogen
86. What percentage of earth's water is fresh?
1. 4.8 percent 2. 5.2 percent
3. 3.9 percent 4. 2.7 percent
87. Mahadev Govind Ranade was primarily associated with the:
1. Arya Samaj 2. Sadharan Brahmo Samaj
3. Prarthana Samaj 4. Brahmo Samaj
88. Starches found in breads, cereals and pasta are made up of long chains of _____.
1. Cellulose 2. Glucose 3. Maltose 4. Galactose
89. In which year did Teejanbai, the well-known artist of Pandavani music win the Padma Vibhushan?
1. 2020 2. 2019 3. 2021 4. 2017
90. Which of the following books is NOT written by Ruskin Bond?
1. The Room on the Roof 2. The Blue Umbrella
3. Midnight's Children 4. Roads to Mussoorie
91. Ustad Bade Ghulam Ali Khan, a musical genius, learnt which of the following gharanas of music from his father at an early age?
1. Benaras 2. Kasur Patiala
3. Jaipur-Atrauli 4. Gwalior
92. The world famous Kathak dancer Pandit Birju Maharaj was the face of the Kalka-Bindadin gharana of _____.
1. Dharwad 2. Lucknow 3. Bhopal 4. Agra
93. Which of the following regions has more seasonal contrast than other regions of India?
1. Interiors of India 2. Coastal areas of India
3. Hilly areas of India 4. Islands of India
94. How much time was taken to frame the Constitution of India?
1. 3 years, 6 months and 23 days
2. 2 years, 11 months and 18 days
3. 4 years, 3 months and 29 days
4. 1 year, 10 months and 15 days
95. Which of the following is not a kind of Parliamentary Question?
1. Short notice question 2. Long notice question
3. Starred question 4. Unstarred question
96. In 1898, whose theory propounded that the ions/groups bonded to the metal by secondary bonding have spatial arrangements corresponding to different characteristics coordination number?
1. Henry Taube 2. Alfred Werner
3. Erich Huckel 4. Emil Fischer
97. Which of the following is the dominant wind that prevails during the cold season (winter season) in India?
1. Permanent westerlies winds
2. Permanent easterlies winds
3. South-West trade winds
4. North-East trade winds
98. Thiruvathira is a cultural festival of which of the following Indian states?
1. Karnataka 2. Kerala
3. Telangana 4. Tamil Nadu
99. As of March 2022, which of the following monuments is NOT a UNESCO World Heritage Site in India?
1. Qutub Minar, Delhi 2. Charminar, Hyderabad
3. Agra Fort, Agra 4. Red Fort, Delhi
100. Which of the following river rise in the Nepal Himalaya?
1. Gandak 2. Chambal 3. Godavari 4. Narmada

Quantitative Aptitude

101. In a right triangle for an acute angle x , find $\sin x$. It is given that $\tan x = 5$.
1. $\frac{1}{3}$ 2. $\frac{5}{\sqrt{(26)}}$ 3. $\frac{2}{5}$ 4. $\frac{5}{\sqrt{(28)}}$
102. A boat can travel 104 km downstream in 8 hours. If the speed of the stream is 2 km/h, then find in what time will it be able to cover 13 km upstream?
1. $2\frac{2}{3}$ hours 2. $1\frac{4}{9}$ hours
3. $2\frac{1}{2}$ hours 4. $1\frac{2}{3}$ hours
103. $72 \div 8 \times \{[(57 - 49) \div 2] + \{(85 - 60) \div 5\} - \{(28 - 19) \div 3\}]$ is equal to:
1. 56 2. 46 3. 54 4. 60
104. In the given figure, $AB = 8$ cm; $AC = 17$ cm. What is the length of AD?



1. 4.68 cm 2. 5.36 cm 3. 3.76 cm 4. 8.5 cm
105. Two trains start from Delhi and Poona towards each other at 7 a.m. with speeds of 85 km/h and 67km/h, respectively. If they cross each other at 3.30 p.m., the distance between the stations is:
 1. 1245 km 2. 1292 km 3. 1283 km 4. 1227 km
106. If $a + b + c = 10$ and $a^2 + b^2 + c^2 = 48$, then the value of $ab + bc + ca$ is _____.
 1. 25 2. 26 3. 24 4. 18
107. The following pie chart shows the contribution (in Rs.) of some investors in the corpus fund of a company. If total contribution by these investor is 100%, then what is the percentage contribution of Rakesh in the corpus fund?



1. 17.30% 2. 18.12% 3. 17.95% 4. 16.95%
108. The value of 1801×1801 is:
 1. 3423601 2. 3243601 3. 2343601 4. 3243106
109. Refer to the following table. Read the table and answer the question. Food grain Production in a country in 1999. (in lakh tons)

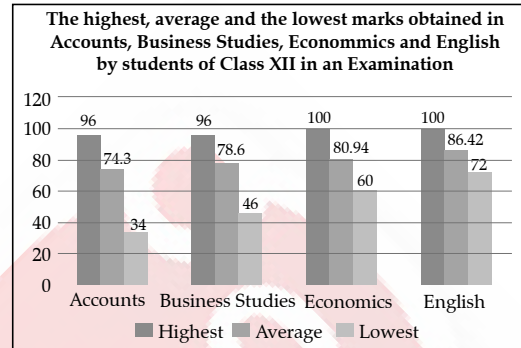
State	Rice	Wheat	Jowar	Pulses	Other
P	55	113	---	37	39
Q	58	96	83	29	25
R	69	42	77	24	41
S	51	47	69	31	24
T	47	32	51	23	21
U	78	25	22	---	28
V	67	18	17	22	20
W	48	38	41	32	55

- State P alone produce how much percentage of wheat out of the total wheat production in the country?
 1. 22.50 percent. 2. 27.50 percent.
 3. 25.50 percent. 4. 23.50 percent.
110. A policeman sees a thief at a distance of 150 m. He starts chasing the thief who is running at a speed of 5 m/sec, while the policeman chases with a speed of 7m/sec. Find the distance covered by the thief when he is caught by the policeman.
 1. 285 m 2. 325 m 3. 375 m 4. 295 m
111. If the number 647592 is divisible by 88 and if the digits are rearranged in increasing order, then the new number thus formed will be divisible by:
 1. 22 2. 66 3. 44 4. 03
112. On selling a car to Anuj, Aman suffered a loss of 10%. Anuj sold the car for ₹ 5,54,400 suffering a loss of 12%. What would be the cost price of the car for Aman?
 1. ₹ 7,00,000 2. ₹ 8,00,000 3. ₹ 6,50,000 4. ₹ 7,50,000

113. A can do a piece of work in 10 days, while A and B together can complete it in $2\frac{1}{2}$ days. How long will B alone take to complete the work?

1. $\frac{3}{10}$ days 2. $\frac{10}{3}$ days 3. 3 days 4. 4 days

114. The following Bar Graph displays the highest, average and lowest marks obtained in Accounts, Business Studies, Economics and English by students of Class XII in an Examination. The maximum marks for each subject is 100. Study the graph carefully and answer the question that follows.



Which of the two Highest Scores is better and by how much?

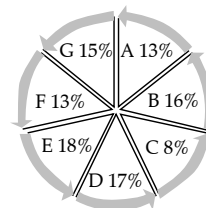
The combined Highest Score of Accounts and Business Studies or the Highest Score of Economics and English taken together.

1. Economics and English by 10
 2. Accounts and Business Studies by 9
 3. Accounts and Business Studies by 8
 4. Economics and English by 8
115. The following table shows the percentage of population of three states below poverty line and the proportion of boys and girls.

State	Percentage of population below poverty line	Proportion of boys and girls	
		Below poverty line	Above poverty line
A	25	3 : 4	4 : 3
B	60	2 : 4	1 : 2
C	15	4 : 5	3 : 1

If the total population of state B is 3000, then what is the number of girls below poverty line in state B?

1. 1200 2. 700 3. 650 4. 720
116. Simplify:
 $\frac{\sin 8\theta \cos \theta - \sin 6\theta \cos 3\theta}{\cos 2\theta \cos \theta - \sin 3\theta \sin 4\theta}$
 1. $\cot \theta$ 2. $\cot 2\theta$ 3. $\tan \theta$ 4. $\tan 2\theta$
117. The population of 7 villages is shown in the following pie chart.



What is the difference between the population of villages D & E, if the total population of the all the villages is 60000?

1. 400 2. 800 3. 500 4. 600

118. A hemispherical bowl whose radius is 21 cm is full of ice cream. Find the volume of the ice cream. (take $\pi = \frac{22}{7}$)
- 20000 cm³
 - 21000 cm³
 - 22000 cm³
 - 19404 cm³
119. The number of persons rose by 20% to 30,942 in a year. What was the population originally a year ago?
- 25585
 - 25785
 - 25758
 - 23785
120. Bhavani spent 15% of his monthly income on kid's education and 20% on food. 40% of the remaining she spent on sports and 30% on transport. She is left with an amount of ₹10,257 after all these expenditures. What is Bhavani's monthly income?
- ₹45,800
 - ₹48,000
 - ₹52,600
 - ₹81,965
121. The monthly income of two persons is in the ratio 4 : 5 and their expenditures are in the ratio 7 : 9. If each saves ₹50 per month, then their monthly incomes are:
- ₹900; ₹500
 - ₹400; ₹500
 - ₹700; ₹900
 - ₹400; ₹700
122. What is the value of 'a' in the below equation?
 $\{(5 \times 5 \times 5 \times 5 \times 5 \times 5)^5 \times (5 \times 5 \times 5 \times 5 \times 5)^6\} \div (5 \times 5) = (625)^a$
- 14
 - 17
 - 16
 - 15
123. How many of the following numbers are divisible by 156? 312, 620, 936, 1402, 1872, 3216, 7176, 8108.
- 5
 - 3
 - 4
 - 2
124. The value of $\frac{(x-y)^3 + (y-z)^3 + (z-x)^3}{(x^2-y^2)^3 + (y^2-z^2)^3 + (z^2-x^2)^3}$ where $x \neq y \neq z$, is:
- 0
 - $\frac{1}{(x+y+z)}$
 - $\frac{1}{(x+y)(y+z)(z+x)}$
 - 1
125. The value of $(\sin^4 45^\circ + \cos^4 60^\circ) + (\tan^4 45^\circ + \cot^4 45^\circ)$ is:
- $\frac{37}{16}$
 - $\frac{33}{16}$
 - $\frac{35}{16}$
 - $\frac{39}{16}$
126. The population of four villages in 4 years is presented in the following table.
- | Village/Year | 2018 | 2019 | 2020 | 2021 |
|--------------|-------|-------|-------|-------|
| A | 12381 | 12800 | 13045 | 13256 |
| B | 10089 | 11478 | 11052 | 11931 |
| C | 7896 | 7942 | 8069 | 8275 |
| D | 5152 | 5230 | 5346 | 5500 |
- What is the percentage increment in the population of village A in 2021 as compared to the population in the year 2018? (Correct up to two decimal place.)
- 8.07
 - 7.07
 - 6.89
 - 9.63
127. A frustum of a right circular cone, whose height is 18 cm, large base radius is 25 cm, and small base radius is 20 cm, is melted to form a small sphere of diameter 2 cm. How many spheres will be formed?
- 6287
 - 6862
 - 4575
 - 5857
128. A person offers a 15% discount on his garments, and he offers a further discount of 10% on the reduced price to those customers who pay cash. What will a customer have to pay in cash for a jacket of Rs.3,600?
- ₹3,240
 - ₹3,366
 - ₹2,754
 - ₹3,060
129. 12 men or 20 boys can finish a work in 10 days. What part of the same work will be done by 4 men and 4 boys in 4 days?
- $\frac{49}{75}$
 - $\frac{16}{75}$
 - $\frac{26}{75}$
 - $\frac{59}{75}$
130. Find the difference between the simple interest and the compound interest payable annually on a sum of ₹6,500 at 7% per annum for 3 years. (Correct to two decimal places.)
- ₹94.34
 - ₹97.78
 - ₹98.73
 - ₹95.67
131. If $a + b + c = 10$; $a^2 + b^2 + c^2 = 38$, what is the value of $(a-b)^2 + (b-c)^2 + (c-a)^2$?
- 15
 - 12
 - 14
 - 13
132. The following table represents the number of computers (numbers in thousands) manufactured by four companies from period 2014 to 2016. Study the table carefully and answer the following question.
- | Years | A | B | C | D |
|-------|------|------|------|-----|
| 2014 | 1350 | 750 | 630 | 810 |
| 2015 | 570 | 520 | 1280 | 990 |
| 2016 | 420 | 1170 | 650 | 580 |
- For the years 2014 to 2016, what is the difference (numbers in thousands) between the combined production of computers by Companies A and D and the production of computers by Companies B and C taken together?
- 460
 - 280
 - 370
 - 310
133. A car covers a particular distance in 3 hours with the speed of 54km/h. If the speed is increased by 27km/h, the time taken by the car to cover the same distance will be:
- 2 h
 - 1 h
 - $2\frac{1}{2}$ h
 - $1\frac{1}{2}$ h
134. Class 10, consisting of 40 students, took a science test. 30 students had an average score of 95. The other students had an average score of 85. What is the average score of the whole class?
- 92.3
 - 92.5
 - 92.4
 - 92.2
135. Shivi drives her car on three different ways to reach the destination. Determine the average speed during this journey.
- | Way | Speed (km/h) | Distance (Km) |
|-----|--------------|---------------|
| A | 38 | 114 |
| B | 42 | 84 |
| C | 46 | 230 |
- 42.8 km/h
 - 41.5 km/h
 - 43.5 km/h
 - 41.8 km/h
136. PQ and RS are two parallel chords of a circle such that PQ is 48 cm and RS is 40 cm. If the chords are on the opposite sides of the centre and the distance between them is 22 cm, what is the radius (in cm) of the circle?
- 25
 - 24
 - 35
 - 22
137. Study the given bar-graph and answer the question that follows.
- The bar-graph shows the export of rice (in ₹ lakh) during five years.
-
- | Year | Export (₹ lakh) |
|------|-----------------|
| 2010 | 10.4 |
| 2011 | 13 |
| 2012 | 15.6 |
| 2013 | 21.6 |
| 2014 | 18.8 |
- The average export of rice for the years 2010 to 2014 (in ₹ lakh) was:
- 13.28
 - 14.78
 - 15.88
 - 16.56
138. The areas of two similar triangles ABC and PQR are 64cm² and 144cm², respectively. If the greatest side of the smaller ΔABC is 24 cm, then what is the greatest side of the bigger ΔPQR ?
- 32 cm
 - 24 cm
 - 42 cm
 - 36 cm

139. Water is flowing through a cylindrical canal with an internal diameter of 7 m at the speed of 18 km/h. Find the volume of water flowing through the canal in 30 minutes. (take $\pi = \frac{22}{7}$)
1. 3,76,500 m³
 2. 3,56,500 m³
 3. 3,66,500 m³
 4. 3,46,500 m³
140. The sum of two numbers is 1224 and their HCF is 68. The number of pairs of numbers satisfying the above condition is:
1. 3
 2. 4
 3. 6
 4. 2
141. The number of factors of 196 which are divisible by 4 is:
1. 228
 2. 4
 3. 57
 4. 3
142. The value of $(1 + \cot A - \operatorname{cosec} A)(1 + \tan A + \sec A) - 1$ is:
1. 1
 2. 2
 3. 3
 4. 0
143. The ratio of two numbers is 4 : 5, and their HCF is 3. What is their LCM?
1. 48
 2. 80
 3. 60
 4. 36
148. The following table shows the number of candidates from different locations, who appeared and passed in a competitive examination over the years.

Year	Rural		Semi-urban		State capitals		Metropolises	
	App.	Passed	App.	Passed	App.	Passed	App.	Passed
1990	1652	208	7894	2513	5054	1468	9538	3214
1991	1839	317	8562	2933	7164	3148	10158	4018
1992	2153	932	8139	2468	8258	3159	9695	3038
1993	5032	1798	9432	3528	8529	3628	11247	5158
1994	4915	1658	9784	4015	9015	4311	12518	6328
1995	5628	2392	9969	4263	1725	4526	13624	6419

- What approximate value was the percentage drop in the no. of semi-urban candidates, who appeared from 1991 to 1992?
1. 15%
 2. 8%
 3. 5%
 4. 10%
149. A hemisphere has 42 cm diameter. Find its curved surface area and the total surface area.
1. 2772 cm², 4158 cm²
 2. 3772 cm², 5158 cm²
 3. 4770 cm², 4238 cm²
 4. 3072 cm², 4058 cm²
150. If three numbers are in the ratio of 1 : 3 : 7, and their LCM is 336, then their HCF is:
1. 16
 2. 18
 3. 10
 4. 12
151. Select the most appropriate meaning of the given idiom.
BE ON THE BREADLINE
1. Having plenty of money
 2. Find a successful way of making money
 3. Earn a lot of money very easily
 4. Be very poor
152. Select the INCORRECTLY spelt word.
1. Auxiliary
 2. Acclaim
 3. Believe
 4. Absence
153. The following sentence has been split into four segments. Identify the segment that contains a grammatical error.
"Mrs. Pooja is / very busy at / the moment." / "All right. I had been waiting."
1. the moment."
 2. "All right. I had been waiting."
 3. very busy at
 4. "Mrs. Pooja is
154. Select the most appropriate option that can substitute the underlined segment in the given sentence.
The lease of our house has run down.
1. run into
 2. run apart
 3. run out
 4. run up to
144. A shopkeeper allows a discount of 15% on a text book with the marked price Rs.100. On request, he further allows a discount of 10% on the new price of the goods. What is the overall discount given to the customer?
1. ₹23.50
 2. ₹75.00
 3. ₹25.00
 4. ₹76.50
145. If two tangents to a circle of radius 3 cm are inclined to each other at angle of 60°, then the length of each tangent is:
1. $\frac{3\sqrt{3}}{4}$ cm
 2. $3\sqrt{3}$ cm
 3. 3 cm
 4. 6 cm
146. A grocer sells rice at 10% profit and uses weights which are 20% less than the market weight. The total gain earned by him is:
1. $33\frac{1}{3}\%$
 2. 20%
 3. 40%
 4. 37.5%
147. The monthly income of Ramesh was Rs.16,500 and his monthly expenditure was Rs.10,500. Next year his income increased by 25% and his expenditure increased by 19%. Find the percentage increase in his saving.
1. 33.5%
 2. 34.5%
 3. 32.5%
 4. 35.5%
155. Select the INCORRECTLY spelt word.
1. Illicite
 2. Illegal
 3. Impunity
 4. Illegible
156. Select the most appropriate synonym of the given word.
Radiant
1. Dismal
 2. Frowning
 3. Glowing
 4. Depressing
157. Select the most appropriate synonym of the bracketed word to fill in the blank.
All the _____ (delicate) things were kept/packed in a different box while shifting to a new place.
1. Crude
 2. Durable
 3. Coarse
 4. Fragile
158. Select the most appropriate ANTONYM of the given word.
Annoy
1. Graze
 2. Mystify
 3. Employ
 4. Satisfy
159. Select the option that expresses the given sentence in passive voice.
She blew the candles on the cake.
1. The candles on the cake were blew by her.
 2. The candles on the cake were blown by her.
 3. The candles on the cake were being blown by her.
 4. The candles on the cake is blown by her.
160. Select the most appropriate ANTONYM of the given word.
Assiduous
1. Belligerent
 2. Meticulous
 3. Idle
 4. Idyllic
161. Select the INCORRECTLY spelt word.
1. Panick
 2. Panicked
 3. Picnicked
 4. Picnic
162. Select the most appropriate ANTONYM of the given word.
Stupendous
1. Terrible
 2. Smart
 3. Perfect
 4. Jealous

English Comprehension

163. 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 required'. This is the worse famine this country has seen in a decade.
1. Most worse 2. Very worst
3. No substitution required 4. The worst
164. Select the option that can be used as a one-word substitute for the given group of words/phrase.
Cause to continue; keep up; preserve (a state of affairs, an activity etc)
1. Maintop 2. Mainly 3. Maintain 4. Mainstay
165. Select the option that can be used as a one-word substitute for the given group of words.
A person who introduces the performers or contestants in a variety show
1. Calligrapher 2. Compeer 3. Compere 4. Cypher
166. Select the most appropriate ANTONYM of the capitalised word in the given sentence.
The fanatics are trying to OBSTRUCT the peace process.
1. Disrupt 2. Assist 3. Spoil 4. Repress
167. Select the most appropriate meaning of the given idiom.
Crying wolf
1. To be in pain by getting hit by something
2. To frighten someone in your comfort zone
3. To ask for help when you don't need it
4. To cry over little things that don't matter
168. Select the most appropriate synonym of the given word.
Glee
1. Anxiety 2. Abhorrence
3. Mirth 4. Distress
169. Identify the INCORRECTLY spelt word in the given sentence.
Spices have exhibited numerous health benefits in preventing and treating a wide variety of diseases such as cancer, ageing, metabolic, neurological, cardiovascular and inflammatory diseases.
1. inflamatory 2. neurological
3. numerous 4. metabolic
170. Select the most appropriate meaning of the given idiom.
Belly laugh
1. Mocking someone
2. Laughing with inhibition
3. A loud and unrestrained laugh
4. To be subjected to mockery and ridicule
171. Select the option that can be used as a one-word substitute for the given group of words.
Taking heed or care; being conscious
1. Mindful 2. Mindless 3. Mindset 4. Mind-read
172. Select the most appropriate meaning of the underlined idiom.
When grandmother found her granddaughter's collection like her numismatist daughter's, she knew her granddaughter is a chip off the old block.
1. Changed
2. A person who is similar in behaviour or actions to his/her parents
3. Damaged
4. Getting obsessed
173. 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 required'.
He and his father take a ride every morning to the top of the hill.
1. taking a ride 2. No substitution required
3. takes an ride 4. takes a ride
174. Select the most appropriate synonym of the given word.
Prodigal
1. Economical 2. Scrimping
3. Extravagant 4. Conserving
175. Identify the INCORRECTLY spelt word in the given sentence.
If Rajat had realised that Meena was in distress, he would have definitely done something to bail her out.
1. bail 2. definitely 3. distress 4. realised
176. Select the most appropriate meaning of the given idiom.
A mare's nest
1. Deep crisis
2. Simple and interesting work
3. Complicated situation
4. Area of law
177. Select the most appropriate meaning of the given idiom.
Beside oneself
1. Almost out of one's senses
2. In the secret
3. Under all conditions
4. To stand for one's own fault
178. Select the most appropriate option that can substitute the underlined segment in the given sentence.
Ms. Suma was a bit apprehensive about doing so much in just one day, but it was all plain sailing.
1. boring
2. very easy
3. mentally and physically exhausting
4. risky
179. 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 required'.
Between Raima and Saima, the former is intelligent, while the latter is beautiful.
1. later is 2. letter is
3. No substitution required 4. later was
180. Select the option that can be used as a one-word substitute for the given group of words.
The scientific study of worms and insects
1. Entomology 2. Anatomy
3. Zoology 4. Anemology
181. Select the most appropriate synonym of the given word.
Populous
1. Crowded 2. Inactive 3. Sleepy 4. Lifeless
182. Select the most appropriate ANTONYM of the given word.
Consummate
1. Inept 2. Ideal 3. Soothing 4. Worrisome
183. Select the most appropriate synonym to replace the italicised word.
We also must do something about our mental and physical lethargy.
1. Eagerness 2. Enthusiasm
3. Hebetude 4. Vigour
184. The following sentence has been divided into parts. One of them may contain an error. Select the part that contains the error from the given options. If you don't find any error, mark 'No error' as your answer.
Everyone was surprised / at his indefatigable courage and determination / to achieve what he desired.
1. Everyone was surprised
2. To achieve what he desired
3. No error
4. At his indefatigable courage and determination

185. Select the option that can be used as a one-word substitute for the given group of words.
The quality of being honest and having strong moral principles
1. Stuck-up 2. Integrity 3. Uptight 4. Ridicule
186. Select the option that can be used as a one-word substitute for the given group of words.
The one who makes maps and charts
1. Artist 2. Cartographer
3. Geographer 4. Sculptor
187. Select the most appropriate synonym of the given word.
Reluctant
1. Definite 2. Hesitant 3. Confident 4. Indiscreet
188. Select the idiom that can correctly replace the underlined part of the given sentence.
It was a very important meeting, but I stayed cool as ice because I knew our product was the best.
1. cool as a cake 2. cool as a cucumber
3. cool as a carrot 4. cool as a cabbage
189. Select the most appropriate meaning of the given idiom.
To give someone the cold shoulder
1. To ignore someone
2. To carry the burden of everyone
3. To be carried on someone's back
4. To listen to someone with empathy
190. Select the most appropriate meaning of the given idiom.
True colours
1. Black and white 2. Light colours
3. Real character 4. Bright colours

Comprehension:

Read the given passage and answer the questions that follow.
Migaloo is by far one of the world's most recognisable whales, because he is completely white. Thanks to genetic sampling of Migaloo's skin, scientists have identified that he's male, and his albino appearance is a result of a variation in the gene responsible for the colour of his skin.
Simply by looking different, Migaloo has become an icon within Australia's east coast humpback whale population. Indeed, Migaloo has his own Twitter account with over 10,000 followers, and website where fans can lodge sightings and learn more about humpback whales.
He was first discovered in 1991 off Byron Bay, Australia, and has since played hide and seek for many years, with many not knowing where or when he'll show up next. He's even surprised Kiwi fans by showing up in New Zealand waters.
With the last official sighting two years ago, the time has once again come for us to ask: where is Migaloo?

- Already this year there have been false sightings, such as a near all white whale spotted off New South Wales. To make things more confusing, regular-looking humpbacks can trick whale watchers when they flip upside down, due to their white bellies.
191. What is the theme of the passage?
1. Protection of whales
2. The extinction of Migaloo
3. The sighting of Migaloo
4. Whale hunting and its aftermath
192. How can regular-looking humpbacks trick whale watchers?
1. By posting tweets on Twitter
2. By appearing secretly and unexpectedly
3. By showing their white coloured bellies
4. By displaying their huge size
193. Where was Migaloo first discovered?
1. South Wales 2. Australia
3. Jamaica 4. New Zealand
194. Select the suitable word given in the passage which means 'turn over with a sudden quick movement'.
1. Albino 2. Flip
3. Humpback 4. Lodge
195. What is the tone of the speaker?
1. Pessimistic 2. Descriptive
3. Cynical 4. Melancholic

Comprehension:

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

- It was a cool and windy day. Shiela, Zora, Lamba and I were (1) _____ our way to the Park to play on the slides. On our way (2) _____, Shiela (3) _____ something stuck to her shoe. "Must be a (4) _____ of chewing gum or something," she muttered as she (5) _____ down to remove the object. What she removed from her shoe was a dirty note of five hundred rupees!
196. Select the most appropriate option to fill in blank 1.
1. on 2. to 3. in 4. by
197. Select the most appropriate option to fill in blank 2.
1. when 2. their 3. where 4. there
198. Select the most appropriate option to fill in blank 3.
1. thought 2. felt 3. found 4. had
199. Select the most appropriate option to fill in blank 4.
1. packet 2. piece 3. part 4. block
200. Select the most appropriate option to fill in blank 5.
1. bind 2. bend 3. went 4. bent

Answer Key

1. (1)	2. (1)	3. (3)	4. (4)	5. (2)	6. (3)	7. (3)	8. (2)	9. (2)	10. (4)
11. (4)	12. (3)	13. (2)	14. (2)	15. (3)	16. (2)	17. (1)	18. (2)	19. (1)	20. (2)
21. (4)	22. (4)	23. (1)	24. (3)	25. (1)	26. (1)	27. (1)	28. (2)	29. (2)	30. (4)
31. (1)	32. (1)	33. (3)	34. (2)	35. (1)	36. (1)	37. (3)	38. (2)	39. (3)	40. (2)
41. (2)	42. (2)	43. (2)	44. (1)	45. (2)	46. (4)	47. (3)	48. (3)	49. (3)	50. (4)
51. (1)	52. (1)	53. (2)	54. (2)	55. (2)	56. (2)	57. (2)	58. (4)	59. (4)	60. (3)
61. (1)	62. (3)	63. (2)	64. (3)	65. (1)	66. (2)	67. (3)	68. (2)	69. (4)	70. (2)
71. (4)	72. (2)	73. (2)	74. (2)	75. (4)	76. (4)	77. (3)	78. (2)	79. (3)	80. (2)
81. (1)	82. (4)	83. (2)	84. (2)	85. (4)	86. (4)	87. (3)	88. (2)	89. (2)	90. (3)
91. (2)	92. (2)	93. (1)	94. (2)	95. (2)	96. (2)	97. (4)	98. (2)	99. (2)	100. (1)
101. (2)	102. (2)	103. (3)	104. (3)	105. (2)	106. (2)	107. (1)	108. (2)	109. (2)	110. (3)
111. (4)	112. (1)	113. (2)	114. (4)	115. (1)	116. (4)	117. (4)	118. (4)	119. (2)	120. (3)
121. (2)	122. (2)	123. (3)	124. (3)	125. (1)	126. (2)	127. (2)	128. (3)	129. (2)	130. (2)
131. (3)	132. (2)	133. (1)	134. (2)	135. (1)	136. (1)	137. (3)	138. (4)	139. (4)	140. (1)

141. (4)	142. (1)	143. (3)	144. (1)	145. (2)	146. (4)	147. (4)	148. (3)	149. (1)	150. (1)
151. (4)	152. (2)	153. (2)	154. (3)	155. (1)	156. (3)	157. (4)	158. (4)	159. (2)	160. (3)
161. (1)	162. (1)	163. (4)	164. (3)	165. (3)	166. (2)	167. (3)	168. (3)	169. (1)	170. (3)
171. (1)	172. (2)	173. (2)	174. (3)	175. (3)	176. (3)	177. (1)	178. (2)	179. (3)	180. (1)
181. (1)	182. (1)	183. (3)	184. (3)	185. (2)	186. (2)	187. (2)	188. (2)	189. (1)	190. (3)
191. (3)	192. (3)	193. (2)	194. (2)	195. (2)	196. (1)	197. (4)	198. (2)	199. (2)	200. (4)

Answers with Explanations

1. **Option (1) is correct.**

From first and third position of dice 1 and 6 is common. Therefore, 5 will be opposite to 2

2. **Option (1) is correct.**

Given that: PLAN : QOMKBZOM



Here, for every letter of the given word is increasing and decreasing by 1.

And SINK : TRJHOMJ



Similarly, RUDE : ?



3. **Option (3) is correct.**

The correct order of the given words as they would appear in the English dictionary is as follows:

- Cutiase 1
- ↓
- Cutlery 2
- ↓
- Cyan 3
- ↓
- Cyber 4
- ↓
- Cyclic 5

4. **Option (4) is correct.**

Given set: (18, 36, 60)

$$18 \times 2 = 36$$

$$36 - 6 = 30 \times 2 = 60$$

And (14, 28, 44)

$$14 \times 2 = 28$$

$$28 - 6 = 22 \times 2 = 44$$

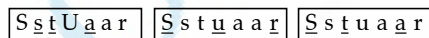
Similarly, from option (4) (22, 44, 76)

$$22 \times 2 = 44$$

$$44 - 6 = 38 \times 2 = 76$$

5. **Option (2) is correct.**

The pattern of the series is as follows:



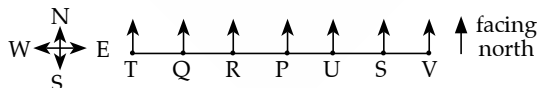
Therefore, stasursta will complete the series.

6. **Option (3) is correct.**

As we know Riyal is the currency of Saudi Arabia. Similarly, Lira is the currency of Turkey.

7. **Option (3) is correct.**

The sitting arrangement of seven people facing north direction is as follows:



So, from the above arrangement, V sits at the extreme right.

8. **Option (2) is correct.**

Given expression: $448 \div 8 \times 17 - 12 \times 6 + 19 = ?$

After putting the signs, we get:

$$448 \div 8 + 17 - 12 \times 6 + 19 = ?$$

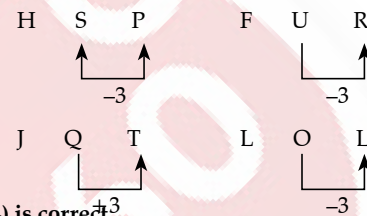
$$56 + 17 - 72 + 19 = ?$$

$$92 - 72 = ?$$

$$20 = ?$$

9. **Option (2) is correct.**

Except for JQT, all others have the same pattern.



10. **Option (4) is correct.**

Given that: (111, 208, 313)

$$111 + 208 = 319$$

$$319 - 313 = 6$$

And (36, 12, 42)

$$36 + 12 = 48$$

$$48 - 42 = 6$$

Similarly, from option (4)

(28, 51, 73)

$$28 + 51 = 79$$

$$79 - 73 = 6$$

11. **Option (4) is correct.**

Given expression:

$$125 - 25 \div 4 + 25 \times 4 + 10 = ?$$

After putting sign, we get:

$$125 \div 25 + 4 \times 25 - 4 \times 10 = ?$$

$$5 + 100 - 40 = ?$$

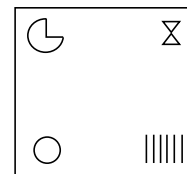
$$65 = ?$$

12. **Option (3) is correct.**

All the elements of the figure move in a clockwise direction. Therefore, figure in option (3) will complete the series.

13. **Option (2) is correct.**

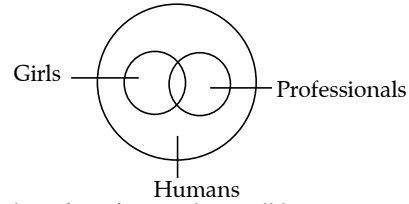
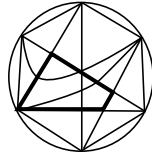
In the given figure circular symbol is moving 1 step clockwise, hence option 2 is the correct answer.



So, option in figure (2) is the correct answer.

14. **Option (2) is correct.**

The figure option (2) is embedded in the given figure.



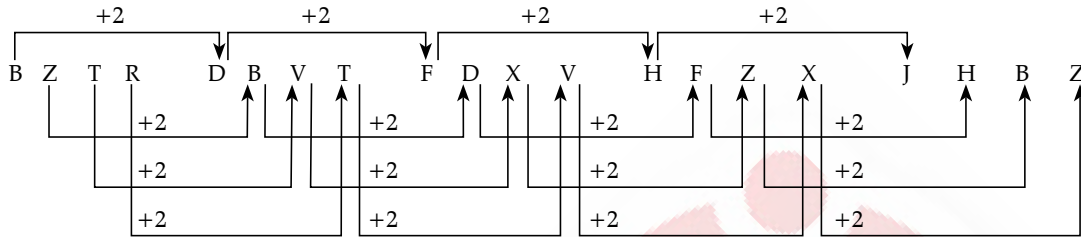
Here, girls and professionals are all humans.

15. **Option (3) is correct.**

The best suited Venn diagram for Humans, Professionals, Girls is as shown below:

16. **Option (2) is correct.**

The pattern of the series is as follows:



Therefore, HFZX will complete the series.

17. **Option (1) is correct.**

Given expression:

$$(626 * 2) \times (11 * 9) * 69 * 240 * 103$$

After putting the signs, we get:

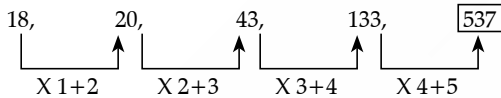
$$(626 \div 2) + (11 \times 9) = 69 + 240 + 103$$

$$313 + 99 = 309 + 103$$

$$412 = 412$$

18. **Option (2) is correct.**

The pattern of the series is as follows:



Therefore, the next term would be 537.

19. **Option (1) is correct.**

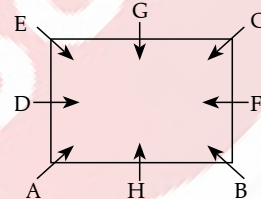
Given expression: 90 C 20 B 1 A 36 D 2

After putting sign, we get:

$$90 - 20 \times 1 + 36 \div 2 = 90 - 20 + 18 = 70 + 18 = 88$$

20. **Option (2) is correct.**

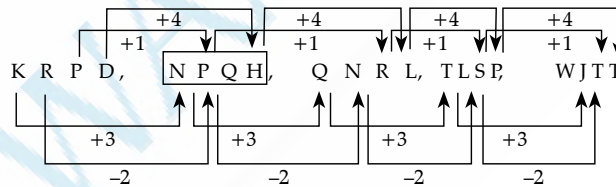
The sitting arrangement around the square table facing the centre of the table is as follows:



From the above arrangement, we can say that C sits second to the right of B.

21. **Option (4) is correct.**

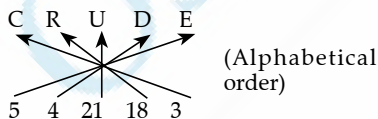
The pattern is as follows:



Therefore, NPQH will complete the series.

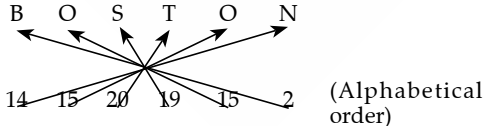
22. **Option (4) is correct.**

Given that: CRUDE is written as 5421183

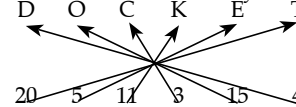


Here, all letters are placed accordingly in alphabetical order, starting at the end.

And, BOSTON is written as 14152019152



Similarly, DOCKET is written this way and, we get



Therefore, DOCKET will be written as 205113154.

23. **Option (1) is correct.**

Given set: (67, 63, 64)

$$67 - 73 = 4, (4)^3 = 64$$

And (24, 17, 343)

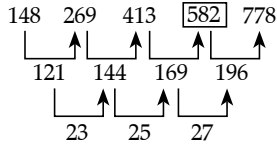
$$24 - 17 = 7, (7)^3 = 343$$

Similarly, from option (1)

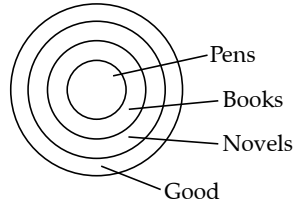
(75, 69, 216)

$$75 - 69 = 16, (16)^3 = 216$$

24. **Option (3) is correct.**
 The pattern followed in the given series is:
 The difference of the difference between the terms is 2.

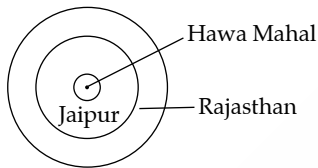


25. **Option (1) is correct.**
 The Venn diagram of the given statements is as follows:



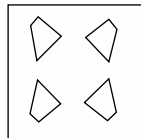
From conclusion I: Some novels are pens is true.
 From conclusion II: All books are good is true.
 Therefore, both conclusion I and II follows.

26. **Option (1) is correct.**
 The best-suited Venn diagram for the given question is as follows:



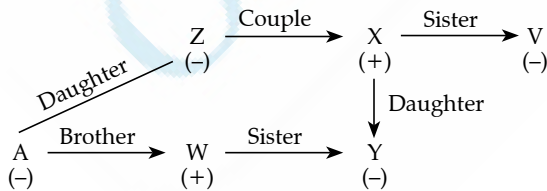
As we know, the Hawa Mahal is in Jaipur, which is located in Rajasthan. Therefore, option (1) will have the best relationship between the following classes.

27. **Option (1) is correct.**
 In option (1), the figure would mostly closely resemble the unfolded form of the paper.



28. **Option (2) is correct.**
 Given expression: $5 - 4 \div 2 + 7 \times 3 = 14$
 After interchanging sign, we get:
 $5 \times 4 \div 2 + 7 - 3 = 14$
 $5 \times 2 + 4 = 14$
 $10 + 4 = 14$
 $14 = 14$

29. **Option (2) is correct.**
 The tree diagram of blood relations is as follows:



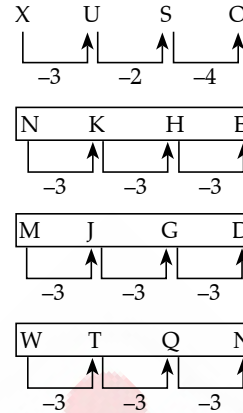
From the above diagram, Z is mother to Y.

30. **Option (4) is correct.**
 Given that: $2 : 8 :: 10 : ? :: 5 : 50$
 $2 : 8$

$$2 = 2 \times 2^2$$

And $5 : 50 \quad 5 = 2 \times 5^2$
 Similarly, $10 : ? \quad 10 = 2 \times 10^2 \Rightarrow 10 = 2 \times 100 \Rightarrow 10 = 200$

31. **Option (1) is correct.**
 Except for XUSO, all others have the same pattern.



Therefore, XUSO is different from the others.

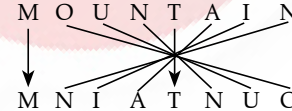
32. **Option (1) is correct.**
 Since, 4 and 5 are common in both the dice, therefore 1 will be opposite to 6.

33. **Option (3) is correct.**
 Given expression: $54 C 34 A 24 D 8 B 2$
 After putting sign, we get: $54 - 34 + 24 \div 8 \times 2$
 $\Rightarrow 20 + 3 \times 2 = 20 + 6 = 26$

34. **Option (2) is correct.**
 The pattern of the series is as follows:
 $\boxed{S v p k l l h} \quad \boxed{s v p k l l h} \quad \boxed{s v p k l l h}$

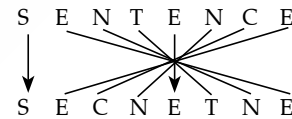
Therefore, sklvpllh will complete the series.

35. **Option (1) is correct.**
 Given that: MOUNTAIN is written as MNIATNUO

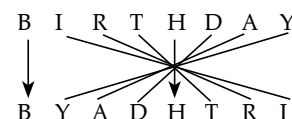


Here, the first letter is written the same as it; the next three letters are written starting at the right end, and the fourth letter is also written the same as it is, and then the next three letters are written starting at the left end, just after the first letter of the given word.

And, SENTENCE is written as SECNETNE



Similarly, BIRTHDAY is written in the same way

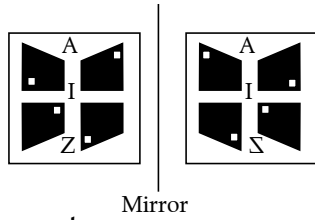


Therefore, BIRTHDAY will be written as BYADHTRI.

36. **Option (1) is correct.**
 Given expression:
 $162 N 6 M \sqrt[3]{729} O 4 P 126 = ?$
 After putting sign, we get:
 $= 162 \div 6 - \sqrt[3]{729} \times 4 + 126 = 27 - 27 \times 4 + 126$
 $= 27 - 36 + 126 = 117$

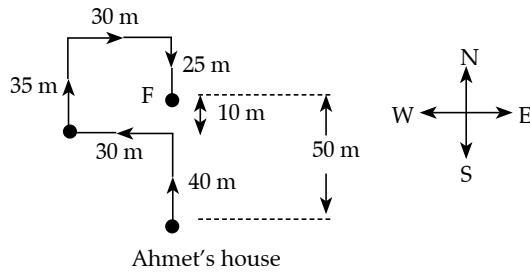
37. **Option (3) is correct.**

The mirror image of the given figure is as follows:



38. **Option (2) is correct.**

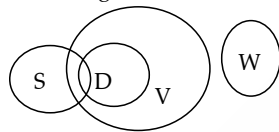
The direction diagram of Ahmet's house is as follows:



From the above diagram, Ahmet is 50 m due north from his house.

39. **Option (3) is correct.**

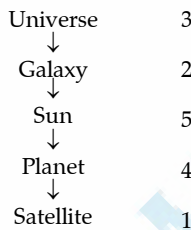
The Venn diagram of the given statements is as follows:



From conclusion I: Some W are not D is false.
 From conclusion II: Some V are S is true.
 From conclusion III: Some D are S is also true.
 Therefore, conclusions II and III follow.

40. **Option (2) is correct.**

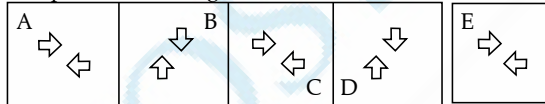
The logical and meaningful order of the given words is as follows:



Therefore, 32541 is the correct order.

41. **Option (2) is correct.**

The pattern of the figure series is as follows



From the observation of the series, the letter element moves in clockwise direction, and the other two elements, i.e., the arrow, moves from left to right, right to left and vice-versa.

42. **Option (2) is correct.**

From the observation of the given question, the man is related to the lady as father.

43. **Option (2) is correct.**

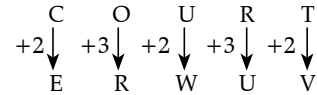
The pattern of the series is as follows:



Therefore, MIMJGLIHMI will complete the series.

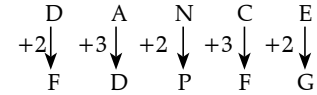
44. **Option (1) is correct.**

Given that: COURT is written as ERWUV

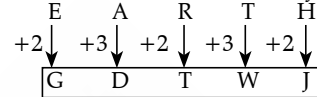


Here, the 1st, 3rd, and 5th letters are increasing by 2 and the 2nd and 4th letters are increasing by 3.

And, DANCE is written as FDPFG



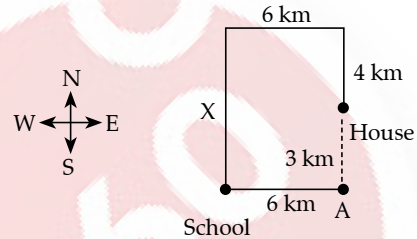
Similarly, EARTH is written in the same way,



Therefore, EARTH will be written as GDTWJ.

45. **Option (2) is correct.**

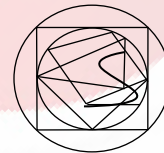
The direction diagram of Deepa is as follows:



From the above diagram, the value of X is 4 km + 3 km = 7 km.

46. **Option (4) is correct.**

Option figure (4) is the correct figure in which the given figure is embedded.

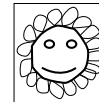


47. **Option (3) is correct.**

From the figures (1) and (3), 4 and 5 is common therefore, 1 is opposite to the face 3.

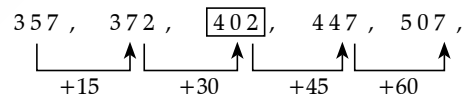
48. **Option (3) is correct.**

Option figure (3) is the correct figure in which the given figure is embedded.



49. **Option (3) is correct.**

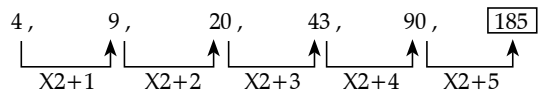
The pattern of the series is as follows:



Therefore, 402 will complete the series.

50. **Option (4) is correct.**

The pattern of the series is as follows:



Therefore, 185 will complete the series.

51. **Option (1) is correct.**

Any biochemical reaction that aids in the breakdown of a complex compound into simpler ones is referred to

as catabolism. It is one of the processes involved in the decomposition process, in which decomposers secrete digestive enzymes that break down complex organic matter in detritus to simple organic or inorganic compounds.

52. **Option (1) is correct.**
Trisulfur is not an allotrope of carbon. Diamond, graphite, and fullerenes are three pure carbon allotropes. Allotropes are different structural forms of the same element that can have very different physical and chemical properties. The forces that affect other structures, such as pressure, light, and temperature, cause the change between allotropic forms. Trisulfur is a cherry-red allotrope of sulfur.
53. **Option (2) is correct.**
B12 is the vitamin found in the Liver, milk, eggs, and fish. It helps in forming RBC and deficiency of this vitamin causes anemia.
54. **Option (2) is correct.**
When there is excess liquidity in the market, the RBI borrows money from banks at the reverse repo rate. Banks benefit from it by receiving interest in their central bank holdings. The interest rate at which the Reserve Bank absorbs liquidity from banks in exchange for eligible government securities as collateral under the LAF. The Reverse Repo Rate assists the RBI in obtaining funds from banks when needed. The Monetary Policy Committee (MPC), chaired by the RBI Governor, determines the Reverse Repo Rate. The decision is made at the Committee's bi-monthly meeting.
55. **Option (2) is correct.**
Boron has three electrons in its valence shell. Boron's atomic number is 5. The boron group is the chemical element in Periodic Table Group 13 that includes boron (B), aluminum (Al), gallium (Ga), indium (In), thallium (Tl), and possibly the chemically uncharacterized nihonium (Nh). The boron group elements are distinguished by having three valence electrons.
56. **Option (2) is correct.**
Article 17 of The Indian Constitution is related to the Abolition of Untouchability. "Untouchability" is abolished and its practice in any form is forbidden. The enforcement of any disability arising out of "Untouchability" shall be an offense punishable by the law.
57. **Option (2) is correct.**
Article 51A of the Indian constitution establishes fundamental duties for citizens in Part IV A. Article 51A (a) of Fundamental Duty provisions has laid down that all Indians need to show respect for the Indian National Flag and the Indian National Anthem.
58. **Option (4) is correct.**
Bhag Bihu, also known as Rongali Bihu, is a major festival in Assam. In Assam, it is known as Rongali Bihu and is celebrated in the middle of the month of April. This festival celebrates the onset of the Assamese New Year (around April 15) and the coming of Spring. This is the first day of the Hindu solar calendar and is celebrated in Bengal, Manipur, Nepal, Orissa, Punjab, Kerala, and Tamil Nadu, though under different names such as Pongal in south India and Baisakhi in north India. This festival is celebrated for the whole month. The new year of the Assamese calendar usually falls on April 15.
59. **Option (4) is correct.**
The old Godavari Bridge is also known as the Havelock Bridge. It is a decommissioned bridge that spans the Godavari River in Andhra Pradesh, India. The bridge was built in 1900 to serve trains traveling between Howrah and Madras. This is the oldest of the three bridges that cross the Godavari River in Rajahmundry.
- The Havelock Bridge was later replaced by the Godavari Arch Bridge. The bridge's construction began on November 11th, 1897, and ended on August 30th, 1900. Sir Arthur Elibank Havelock's name is on the Bridge. The bridge was constructed with stone masonry and steel girders.
60. **Option (3) is correct.**
The Cholas were an ancient Indian dynasty. Between the 9th and 13th centuries, Tamil Chola rulers in South India and other nearby countries established an extremely powerful Hindu kingdom. The inscriptions of the Cholas who ruled Tamil Nadu contain more than 400 words for different types of taxes. The land revenue was known as Kadamai. The tax often mentioned in the Chola inscriptions is Vetti, which was not collected in cash, but in the form of forced labor. Taxes were levied on thatched houses, the use of ladders to climb palm trees, the inheritance of family property, and other items. However, no specific words for these were found in the Chola inscriptions.
61. **Option (1) is correct.**
The Ramosi peasant revolt of 1879 in the Satara region of Maharashtra was a significant uprising in the history of India's peasant movement during British rule. The peasants were opposed to the British's exploitative land revenue policies as well as the British administration, particularly after the Deccan famine of 1876-77, which caused hardships for the peasants. So the peasants under the leadership of Vasudev Balwant Phadke revolted against the British. They raised the Ramosi peasant force as well and thought of establishing the Hindu Raj. The British used the army to put down the Revolt.
62. **Option (3) is correct.**
The Supreme Court Judges can only be removed by Parliament using legal procedure. The removal of Supreme Court and High Court judges is also extremely difficult. A Supreme Court or High Court judge can be removed only for proven misbehavior or incapacity. A removal motion can be initiated by either house of Parliament. A special majority in both Houses of Parliament is required to approve a motion containing the charges against the judge. The motion will be sent to the President once it has been passed by both houses by a special majority. Finally, the President issues his order to remove the judge in question. The power to remove judges from their office rests with the President but he can only do so after receiving duly supported requests from Parliament. So among the given option, Parliament is the right answer.
63. **Option (2) is correct.**
The 2022 Winter Paralympics commonly known as Beijing 2022. From March 4 to March 13, 2022, Beijing, China hosted an international winter multi-sport parasports competition. These were the 13th Winter Paralympic Games, according to the International Paralympic Committee. China took first place in the medal standings with 61 medals won. With 29 medals, Ukraine placed second overall. With a total of 25 medals, Canada maintained its third-place finish in 2010, 2014, and 2018.
64. **Option (3) is correct.**
A monsoon is a seasonal shift in wind direction. It can cause heavy rainfall during the summer and dry spells in the winter. The Indian summer monsoon season typically lasts from June to September. During this time, large parts of western and central India received more than 90% of their annual precipitation. Southern and north-western India, on the other hand, received 50% to 75% of their normal rainfall. Monthly totals range from 200 to 300 mm across the country. Every year, during the first week of June, Kerala is pounded

by a wide area of swirling grey clouds that advance from the Arabian Sea. The impact is accompanied by thunderous booms. As the southwest monsoon moves through the state, sheeting rain will fall. The southwest monsoon, also known as the summer monsoon, travels over India from June to September, drenching the nation with rain. The retreating monsoon, also known as the Northeast monsoon, arrives in Tamil Nadu and the eastern coast of India during the cooler months of October to November.

- 65. Option (1) is correct.**
The 2020 ICC Women's T20 World Cup was the seventh tournament in the series. It was held between 21st February to 8th March 2020 in Melbourne, Australia. The championship was held on International Women's Day. Australia won the tournament by 85 runs over India. Beth Mooney of Australia was the tournament's leading run-scorer and Player of the Series.
- 66. Option (2) is correct.**
Maharashtra receives the most immigrants, with 2.3 million (23 lakhs) net in-migrants, followed by Delhi, Gujarat, and Haryana. Among all the states, Uttar Pradesh and Bihar had the highest number of net out-migrants. The number of internal migrants increased to 453.6 million, according to the 2011 Census. According to the International Migrant Stock 2019 report (released by the Population Division of the United Nations Department of Economic and Social Affairs), India has emerged as the top source of international migrants, accounting for 6.4% of the world's total migrant population with 5 million international migrants. Mumbai, Delhi, and Kolkata are the most popular destinations for internal migrants in India.
- 67. Option (3) is correct.**
Based on the position of the centromere, chromosomes are classified into four types. When the centromere is in the middle of the chromosome, it is said to be metacentric. These are V-shaped. Submetacentric: When the centromere is close to the chromosome's center or midpoint. These are in the shape of an L. When the centromere is sub-terminal or near the tip, it is said to be acrocentric. These are in the shape of a J. When the centromere is terminal or at the tip of the chromosome, it is said to be telocentric. These are I-shaped. Hence Because of the location of the centromere, lophocentric is not a type of chromosome.
- 68. Option (2) is correct.**
The 44th Amendment Act of 1978 removed the right to property from the list of Fundamental Rights. Article 300-A of Part XII of the Constitution makes it a legal right. As a result, there are currently only six Fundamental Rights. Article 19 originally guaranteed all citizens the right to acquire, hold, and dispose of property, whereas Article 31 states that "no person shall be deprived of his property except by authority of law." Later, in 44th Amendment of 1978 deleted the right to property from the list of fundamental rights. As a result, the right to property is no longer a fundamental right, but it remains a legal right.
- 69. Option (4) is correct.**
Potassium nitrate, sulfur, and charcoal chemicals are vastly used in the gunpowder of fireworks. Many incendiary and burning devices, including Greek fire, were used before the invention of gunpowder. Gunpowder was invented by Roger Bacon. Bacon explored the manufacture of gunpowder (also known as black powder). It consists of a mixture of sulfur, charcoal, and potassium nitrate (saltpeter). Sulfur and charcoal serve as fuels, while saltpeter serves as an oxidizer. In Europe, Bacon was the first to explain the explosive force of gunpowder.
- 70. Option (2) is correct.**
India's first-class domestic cricket competition is the Ranji Trophy which was played in India between teams representing geographical zones of India. The competition, named after Kumar Shri Duleepsinhji of Nawanagar (also known as 'Duleep,' was originally contested by teams representing India's geographical zones. The competition was established in 1961-62 by the Board of Control for Cricket in India (BCCI).
- 71. Option (4) is correct.**
On March 3, 1575, Akbar and the Sultanate of Bengal fought the Battle of Tukaroi. The Mughal forces won the battle, resulting in the Mughal annexation of Bengal. This battle took place in the village of Tukaroi, which is now part of Odisha's Balasore District.
- 72. Option (2) is correct.**
According to plate tectonics theory, the earth's lithosphere is divided into seven major and some minor plates. African plate, Antarctic plate, Eurasian plate, Indo-Australian plate, North American plate, Pacific plate, and South American plate are the major plates.
- 73. Option (2) is correct.**
A sarangi is a skin-covered resonator bowed stringed instrument. During the first half of the twentieth century, Ustad Binda Khan was born in Delhi to a musical family. Ustad Sultan Khan was a Sarangi player from India. Ustad Sultan Khan was also a Sikar Gharana classical vocalist. In 2010, he was awarded the Padma Bhushan.
- 74. Option (2) is correct.**
The National Investment Fund was established in 2005 to channel funds received from PSU disinvestment proceeds. The Government of India established the NIF in November 2005. It was established to channel the proceeds of the disinvestment of Central Public Sector Enterprises into it. The NIF corpus is permanent. The money in the NIF is permanent, and it is professionally managed to provide returns to the government while not depleting its value. To provide sustainable returns to the government without depleting the corpus, the NIF is professionally managed by some selected Public Sector Mutual Funds (such as UTI Asset Management Company Ltd., SBI Funds Management Private Ltd., and LIC Mutual Fund Asset Management Company Ltd.).
- 75. Option (4) is correct.**
Modernization is demonstrated by the adoption of new technology, which increases the production of goods and services. The adoption of new technologies is expected to boost production, productivity, and farm income. Major technologies that can help in this sector include digital employees, the Internet of Things, artificial intelligence, virtual and augmented reality, blockchain, 3D printing, drones, robotics, and automation.
- 76. Option (4) is correct.**
The Kadamba Dynasty was a historic royal dynasty in modern-day Karnataka., of the, of the family, of the family, of the family, of the family, of the family, of the family, of the family. The capital of the Kadambas dynasty was Banavasi.
- 77. Option (3) is correct.**
The second Five-Year Plan (1956 to 1961) was developed in an environment of economic stability. Agriculture was thought to be a lower priority. The second five-year plan prioritized industries. The emphasis was primarily on heavy industries. The Indian government increased industrial goods manufacturing in the country. This was done primarily to help the public sector development. The Plan is centered on rapid industrialization in heavy and basic industries. Large imports via foreign loans were advocated. As a result, during the second five-year plan, the Indian government adopted a mixed economy.

- 78. Option (2) is correct.**
Smita Vadnerkar, Artistic Director of Nupur Arts, has been named the recipient of the One Dance UK Lifetime Achievement Award in South Asian Dance for 2021. She is being recognized for her more than 30 years of dedication, hard work, and contribution to South Asian arts in the UK.
- 79. Option (3) is correct.**
The Indian Constitution incorporates the judicial review system of the United States of America. The Supreme Court declared the power of judicial review to be part of the fundamental structure of the Indian Constitution in the Indira Gandhi vs Raj Narain Case in 1975. The process of scrutinizing any decision or law made by the government by the country's courts is known as judicial review. The term "judicial review" is not mentioned in India's constitution. Judicial Review is governed by the principle of "lawful procedure," as stated in Article 21 of the Indian Constitution.
- 80. Option (2) is correct.**
Mrinalini Sarabhai was the first woman to learn the all-male Kathakali style and the founder of the Darpana Academy Of Performing Arts, which teaches dance, music, drama, and puppetry. Mrinalini Sarabhai was a choreographer and classical dancer from India. She married the well-known scientist Vikram Sarabhai. Mrinalini Sarabhai was awarded the Padma Shri and the Padma Bhushan in 1965. (1992). In 1994, she was also awarded the prestigious Sangeet Natak Akademi Fellowship in New Delhi. Her most significant contribution to the field of dance is the Darpana Academy of Performing Arts, which she founded in Ahmedabad with her husband in 1949.
- 81. Option (1) is correct.**
Lord Wellesley was the first to implement the policy of a subsidiary alliance. The ruler of the allying Indian State was forced to accept the permanent stationing of a British force within his territory and pay a subsidy for its maintenance under the subsidiary alliance system. The Nizam of Hyderabad was the first to participate in the Subsidiary Alliance System. Tipu Sultan of Mysore refused to join this alliance, but following the British victory in the Fourth Anglo-Mysore War, they were forced to join a subsidiary alliance, and Mysore became a subsidiary state. In 1801, the Nawab of Awadh accepted the Subsidiary Alliance.
- 82. Option (4) is correct.**
The state of Assam receives the most rainfall. The Indian state of Assam is divided into two hill districts and twenty-one plain districts. During the monsoon season, moisture-laden southerly or south-westerly winds from the Bay of Bengal in the south strike the east-west oriented mountain ranges. Rainfall is higher in Arunachal Pradesh, Assam, and Meghalaya than in other northeastern states.
- 83. Option (2) is correct.**
The Swadeshi Movement was declared on August 7, 1905, at the Calcutta Town Hall in Bengal. In July 1905, when Lord Curzon, then Viceroy of India, announced the partition of Bengal, the Indian National Congress launched the Swadeshi movement in Bengal. The Swadeshi movement began as a protest movement, paving the way for the country's Boycott movement. The Swadeshi movement is led by Bal Gangadhar Tilak, Bipin Chandra Pal, and Lala Lajpat Rai. The resolution of Swadeshi was adopted at the 1906 Calcutta session, presided over by Dada Bhai Naoroji.
- 84. Option (2) is correct.**
Wimbledon Open organizers did not allow players from two countries to compete in Wimbledon 2022. Russia was one of them, and Belarus was the other. The ITF, on the other hand, has barred Russia and Belarus from competing in the Davis Cup and the Billie Jean King Cup. Wimbledon Championships is the world's oldest tennis tournament. Since the tournament's inception in 1877, it has been held at the All-England Club in Wimbledon, London. Wimbledon is the only Grand Slam tournament held on grass.
- 85. Option (4) is correct.**
Halogen is a chemical element that produces salt when it reacts with a metal. The Halogen group is represented by group number 17. Fluorine (F), atomic number 9, is one of the five natural halogen elements. Chlorine (Cl) has the atomic number 17. The element bromine (Br) has the atomic number 35. Iodine (I) has the atomic number 53. The element astatine (At) has the atomic number 85. Tennessine (Ts) is also a halogen element, but it is synthesized. Ts has the atomic number 117. Fluorine is the most electronegative of all the halogens. $F > Cl > B > I > At > Ts$ is the descending order of electronegativity in the halogens. Electronegativity is defined as an atom's ability to attract a shared electron to itself in a chemical compound.
- 86. Option (4) is correct.**
Freshwater makes up 2.7 percent of the world's water. Only 2.5% of this water is fresh water, with the remaining 98.8% in ice (except ice in clouds) and groundwater. Less than 0.3% of all freshwater is in rivers, lakes, and the atmosphere, and an even smaller percentage (0.003%) is in biological bodies and manufactured products. The majority of the water on Earth (more than 97%) is in the form of seas and oceans and is referred to as saline water. The remainder of the water is referred to as freshwater. The proportion of freshwater in various forms is listed in decreasing order as follows: groundwater > freshwater lakes > atmosphere > rivers > snow caps, icebergs, and glaciers.
- 87. Option (3) is correct.**
Prarthana Samaj: In 1867, the Prarthana Samaj was founded. Atmaram Pandurang founded it. Prarthana Samaj was a pivotal figure in the Maharashtra Renaissance. It was primarily concerned with religious and social reform in Maharashtra. The Prarthana Samaj was in charge of the 'Subodh-Patrika' mouthpiece. Telugu reformer Veeresalingam Pantulu was a supporter of the Prarthana Samaj in South India.
- 88. Option (2) is correct.**
Carbohydrates, also known as carbs, are sugar molecules. Carbohydrates, along with proteins and fats, are one of the three main nutrients found in foods and beverages. Carbohydrates are converted into glucose by your body. Glucose, also known as blood sugar, is the primary energy source for your body's cells, tissues, and organs. Carbohydrates can be found in a variety of foods, both healthy and unhealthy. Bread, beans, milk, popcorn, potatoes, cookies, spaghetti, soft drinks, corn, and cherry pie are some of the items available. Sugars, fibers, and starches are the most common and abundant forms.
- 89. Option (2) is correct.**
Teejanbai, a well-known Pandavani music artist, was awarded the Padma Vibhushan in 2019. Teejan Bai is a supporter of Pandavani, a traditional art form from Chhattisgarh, in which she approves of Mahabharata stories with a musical background. The Mahabharata is one of ancient India's two major Sanskrit sagas, the other being the Ramayana. It tells the story of the Kurukshetra war between two groups of cousins, as well as the fate of the Kaurava and Pandava princes and their beneficiaries. It also includes philosophical and devotional material, such as a discussion of the four "life goals" or Purushartha.

90. Option (3) is correct.

Ruskin Bond is a British-born Indian author. In 1992, he was awarded the Sahitya Akademi Award for his novel *Our Trees Still Grow in Dehra*. Some of his best-known works include *The Blue Umbrella*, *The Room on the Roof*, *Roads to Mussoorie*, and *Cherry Tree*. Salman Rushdie's 1981 novel *Midnight's Children* is about India's transition from British colonial rule to independence and partition. *Midnight's Child* by Salman Rushdie is a harsh critique of postcolonial Indian society's gender-related power struggles. Sir Ahmed Salman Rushdie is a British-American novelist of Indian origin. *Shame*, *The Satanic Verses*, *Haroun and the Sea of Stories*, *The Moor's Last Sigh*, *The Ground Beneath Her Feet*, *Fury*, *Shalimar the Clown*, and other works are notable.

91. Option (2) is correct.

Ustad Bade Ghulam Ali Khan was a Patiala Gharana Hindustani classical vocalist. The most common epithet used to describe Ustad Ghulam Ali Khan is 'Tansen of the 20th century'. To distinguish him from other maestros of the same name, he is often referred to as Bade (older) Ghulam Ali Khan. The brilliant musician was a legendary thumri vocalist who represented the Patiala Gharana. Bade Ghulam Ali Khan was born on April 2, 1902, in Kasur (now in Pakistan) into a musical family. Ustad Bade Ghulam Ali Khan died on April 25, 1968, at Hyderabad's Basheerbagh Palace, after receiving the Sangeet Natak Akademi Award and the Padma Bhushan in 1962.

92. Option (2) is correct.

Pandit Birju Maharaj, a world-renowned Kathak dancer, was the face of Lucknow's Kalka Bindadin gharana. Wajid Ali Shah, the last Nawab of Oudh, supported the establishment of the Lucknow Gharana. It emphasizes Bhava, the expression of moods and emotions. Purab Gharana is another name for 'Lucknow Gharana - a style of dance and music. A Gharana is a system of social organization in the Indian subcontinent that connects musicians or dancers through lineage or apprenticeship and adherence to a specific musical style. The Lucknow Gharana, also known as the Purab Gharana, is one of the six major Gharanas or styles of Tabla.

93. Option (1) is correct.

The interior of India is distinguished by more remarkable seasonal contrasts. The southwest monsoon winds are largely responsible for India's rainfall. The monsoon season lasts between 100 and 120 days. The majority of the country's rainfall falls over a few months. India's total coastline includes both the mainland coastline and the coastline of the Indian islands. The mainland coastline is 5422.6 km long, and the island's coastline is 1197 km long. Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha, and West Bengal are the nine states that make up the mainland coastline. The mainland coastline also includes two union territories, Daman and Diu and Puducherry. An island in any sea can be divided into two types: continental islands and oceanic islands. There are 1208 islands in India, but this figure includes all of the country's uninhabited islands.

94. Option (2) is correct.

The constitution took 2 years, 11 months, and 18 days to complete. During its meeting on December 11, 1946, Rajendra Prasad was appointed as the permanent President. While drafting the constitution, Dr. B. R. Ambedkar researched the constitutions of approximately 60 countries. He was chairman of the drafting committee and is recognized as the "Father of the Indian Constitution". Following India's partition, the Constituent Assembly had 299 members, 284 of whom were present on November 26, 1949, and signed the final approved Constitution of the Indian Assembly,

which had been elected for undivided India.

95. Option (2) is correct.

"The Question Hour" is held during the first hour of each parliamentary sitting. During this time, members ask questions, and ministers usually respond. There are three types of questions: Starred question: It requires an oral answer and hence any supplementary questions can follow. Unstarred question: It needs a written answer, for this reason, supplementary questions cannot follow. Short notice question: It is a type of question that is asked by giving a notice of fewer than ten days. It is answered orally, not requiring any written answer. Therefore, the Long Notice Question is not a kind of parliamentary question.

96. Option (2) is correct.

According to Alfred Werner's theory, ions/groups bonded to metals via secondary bonding have spatial arrangements that correspond to different characteristics of coordination numbers. He was a Swiss chemist who received the Nobel Prize in Chemistry in 1913 for his work on coordination compound structure.

97. Option (4) is correct.

Northern India's cold weather season begins in mid-November and lasts until February. The coldest months in northern India are December and January. The northeast trade winds dominate the country during this season. They blow from land to sea, resulting in a dry season for the majority of the country. These winds cause some rainfall along the Tamil Nadu coast because they blow from sea to land.

98. Option (2) is correct.

Thiruvathira is a Kerala cultural festival. Kaikottikali, another name for Thiruvathirakali, refers to the clapping of hands performed by dancers during a Thiruvathirakali recital. It is a unique dance performed in Kerala on the auspicious day of Thiruvathira, Lord Shiva's birthday. It is carried out by women seeking blessings for eternal marital bliss. It occurs during the Malayalam month of Dhanu (December-January).

99. Option (2) is correct.

The monument is located in New Delhi, and the name 'Jantar Mantar' means a measuring instrument for the harmony of the heavens. It was built in 1724 by Maharaja Jai Singh II of Jaipur and stands 723 meters tall. It isn't a UNESCO World Heritage Site. The Jantar Mantar is an instrument that can precisely measure the time of day as well as the decline of the Sun and other celestial bodies. There were originally five Jantar Mantar (Delhi, Ujjain, Mathura, Varanasi, and Jaipur), but only four remain today. The Mathura Jantar Mantar was demolished shortly before the 1857 Revolt. The largest Jantar Mantar is located in Jaipur and is a UNESCO World Heritage Site.

100. Option (1) is correct.

The Gandak River, also known as the Narayani River, is a river in central Nepal and northern India. It is formed by the confluence of the Kali and Trisuli rivers, which rise in Nepal's Great Himalaya Range; the river is known as the Narayani from this point to the Indian border. It flows southwest into India before turning southeast along the state border of Uttar Pradesh and Bihar and across the Indo-Gangetic Plain. After 475 miles of winding, it enters the Ganges (Ganga) River opposite Patna (765 km). In an old channel, the Burhi ("Old") Gandak flows parallel to and east of the Gandak River. It merges with the Ganges northeast of Munger.

101. Option (2) is correct.

We know that $\tan x = \frac{\text{perpendicular}}{\text{Base}} = 5 = \frac{5}{1}$.

Now we also know that $\text{hypotenuse}^2 = \text{Base}^2 + \text{Perpendicular}^2$

$$\text{hypotenuse}^2 = 1^2 + 5^2$$

$$\text{hypotenuse}^2 = \sqrt{26}$$

$$\sin x = \frac{\text{perpendicular}}{\text{hypotenuse}} = \frac{5}{\sqrt{26}}$$

Hence, $\frac{5}{\sqrt{26}}$ is the correct answer.

102. Option (2) is correct.

$$\text{Speed of downstream} = \frac{104}{8} = 13$$

We know that $B + S = 13$ $(B \rightarrow \text{Speed of Boat}; S \rightarrow \text{Speed of Stream})$

$$\text{Now, } B + 2 = 13$$

$$B = 11$$

$$\text{Now, speed of Upstream} = B - S = 11 - 2 = 9$$

$$\text{Time taken} = \frac{13}{9} = 1\frac{4}{9} \text{ hours}$$

Hence, $1\frac{4}{9}$ hours is the correct Answer.

103. Option (3) is correct.

$$\frac{72}{8} \times [\{(57 - 49) \div 2\} + \{(85 - 60) \div 5\} - \{(28 - 19) \div 3\}]$$

$$= \frac{72}{8} \times [\{(8) \div 2\} + \{(25) \div 5\} - \{(9) \div 3\}]$$

$$= \frac{72}{8} \times [\{4\} + \{5\} - \{3\}] = \frac{72}{8} \times [4 + 5 - 3]$$

$$= \frac{72}{8} \times [6] = 54$$

Hence, 54 is the correct answer.

104. Option (3) is correct.

We know that $AB^2 = AD \times AC$

$$64 = AD \times 17$$

$$AD = \frac{64}{17} = 3.76$$

Hence, 3.76 is the correct Answer.

105. Option (2) is correct.

We know that Distance = Speed \times Time

$$\text{Relative Speed} = 85 + 67 = 152 \text{ km}$$

$$\text{Now, Time} = 8.5 \text{ hours}$$

$$\text{Distance} = 8.5 \times 152 = 1292 \text{ km}$$

Hence, 1292 km is the correct Answer.

106. Option (2) is correct.

We know that,

$$(a + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$$

$$48 + 2ab + 2bc + 2ca = 100$$

$$2ab + 2bc + 2ca = 52$$

$$ab + bc + ca = 26$$

Hence, 26 is the correct answer.

107. Option (1) is correct.

$$\text{Total contribution} = 433.57$$

$$\text{Rakesh Contribution} = 75$$

$$\text{Therefore, Rakesh Percentage} = \frac{75}{433.57} \times 100 = 17.30\%$$

Hence, 17.30% is the correct Answer.

108. Option (2) is correct.

$$1801 \times 1801 = (1800 + 1)(1800 + 1)$$

$$= 1800^2 + 1^2 + 2(1)(1800) = 3243601$$

Hence, 3243601 is the correct Answer.

109. Option (2) is correct.

$$\text{Total wheat production} = 411$$

$$\text{Wheat produced by State P} = 113$$

$$\text{Therefore Percentage} = \frac{113}{411} \times 100 = 27.50\%$$

Hence, 27.50% is the correct Answer.

110. Option (3) is correct.

$$\text{Relative Speed} = 2 \text{ m/s}$$

$$\text{Time taken by police to caught the thief} = \frac{150}{2} = 75 \text{ s.}$$

$$\text{The distance covered by the thief} = 75 \times 5 = 375 \text{ m}$$

Hence, 375 m is the correct Answer.

111. Option (4) is correct.

The given number is 647592.

After arranging the number in ascending order, we get 245679.

Now, we know this number is not divisible by even number. So, the only option left is 03.

Hence, 03 is the correct answer.

112. Option (1) is correct.

$$\text{The costs price is } 554400 \times \frac{100}{(100 - 12)} = 630000$$

Now cost price for Aman is

$$630000 \times \frac{100}{(100 - 10)} = 700000$$

Hence, 700000 is the correct Answer.

113. Option (2) is correct.

$$A \rightarrow 10 \xrightarrow{1} 10 \text{ [L.C.M. (10, 5/2)]}$$

$$A + B \rightarrow \frac{5}{2} \xrightarrow{4}$$

The efficiency of B is $4 - 1 = 3$

$$\text{Days taken by B alone} = \frac{10}{3} \text{ Days}$$

Hence, $\frac{10}{3}$ Days is the correct answer.

114. Option (4) is correct.

$$\text{The highest score of Accounts and Business studies} = 96 + 96 = 192.$$

$$\text{The Highest score of Economics and English} = 100 + 100 = 200.$$

Therefore, the highest score of economics and English is exceeded by 8.

Hence, Economics and English by 8 is the correct answer.

115. Option (1) is correct.

$$\text{Population of State B} = 3000$$

$$\text{Population Below Poverty line in B} = 60\% \text{ of } 3000 = 1800$$

The number of girls below poverty line

$$= \frac{4}{6} \times 1800 = 1200$$

Hence, 1200 is the correct answer.

116. Option (4) is correct.

$$\frac{\sin 8\theta \cos \theta - \sin 6\theta \cos 3\theta}{\cos 2\theta \cos \theta - \sin 3\theta \sin 4\theta}$$

$$= \frac{\frac{1}{2}(\sin(9\theta) + \sin 7\theta) - \frac{1}{2}(\sin 9\theta + \sin 3\theta)}{\cos 2\theta \cos \theta - \sin 3\theta \sin 4\theta}$$

$$= \frac{\frac{1}{2}(\cos 3\theta + \cos \theta) - \frac{1}{2}(\cos(\theta) - \cos 7\theta)}{\cos 2\theta \cos \theta - \sin 3\theta \sin 4\theta}$$

$$\begin{aligned}
 &= \frac{\sin 9\theta + \sin 7\theta - \sin 9\theta - \sin 3\theta}{\cos 3\theta + \cos \theta - \cos \theta + \cos 7\theta} \\
 &= \frac{\sin 7\theta - \sin 3\theta}{\cos 3\theta + \cos 7\theta} = \frac{\sin 7\theta + \sin(-3\theta)}{\cos 3\theta + \cos 7\theta} \\
 &= \frac{2 \sin\left(\frac{4\theta}{2}\right) \cos\left(\frac{10\theta}{2}\right)}{2 \cos\left(\frac{10\theta}{2}\right) \cos\left(\frac{4\theta}{2}\right)} = \frac{\sin 2\theta}{\cos 2\theta} = \tan 2\theta
 \end{aligned}$$

Hence, $\tan 2\theta$ is the correct Answer.

117. Option (4) is correct.

The difference is 1% of $60k = 600$
Hence, 600 is the correct Answer.

118. Option (4) is correct.

We know that volume of hemisphere is $\frac{2}{3}\pi r^3$.

$$\text{So, volume} = \frac{2}{3} \times \frac{22}{7} \times 21 \times 21 \times 21$$

$$= 19404 \text{ cm}^3$$

Hence, 19404 cm^3 is the correct Answer.

119. Option (2) is correct.

$$\text{The population one year ago was} = \frac{100}{120} \times 30942 = 25785$$

Hence, 25785 is the correct answer.

120. Option (3) is correct.

Let total income = 100

Total spending on Kid's education and food = 15% + 20% = 35%.

Remaining = 100% - 35% = 65%

$$\text{Now amount spending on sports} = \frac{40}{100} \times 65 = 26\%$$

$$\text{Now 30% of 65 she spent on transport} = \frac{30}{100} \times 65 = 19.5\%$$

Total spending = 35% + 26% + 19.5% = 80.5%

Saving = 100% - 80.5% = 19.5%

Now 19.5% → 10257

$$\text{So, } 100\% \rightarrow \frac{10257}{19.5} \times 100 = 52,600$$

Hence, 52600 is the correct answer.

121. Option (2) is correct.

Ratio of Income is 4:5 and ratio of Saving is 7:9.

Now, it is given the saving is same so we will make ratio so that saving becomes same which is incomes 4 : 5 ($\times 2$ by the difference of 2nd ratio which $9 - 7 = 2$)

Expenditure 7 : 9 ($\times 1$ by the difference of 1st ratio which is $5 - 4 = 1$)

Now new ratio, becomes Income 8 : 10

Expenditure 7 : 9

Saving 1 : 1

Now 1 → 50, 8 → 400 and 10 → 500

Hence, 400 and 500 are the correct Answer.

122. Option (2) is correct.

We know that bases are same power are added we have,

$$\{(5^6)^5 \times (5^5)^8\} \div (5)^2 = (625)^a$$

$$\Rightarrow 5^{30} \times 5^{40} \div 5^2 = 5^{4a} \Rightarrow 5^{30+40-2} = 5^{4a}$$

$$\Rightarrow 5^{68} = 5^{4a} \Rightarrow 4a = 68 \Rightarrow a = \frac{68}{4} = 17$$

Hence, 17 is the correct Answer.

123. Option (3) is correct.

We know that $156 = 13 \times 12$

Now the number which is divisible by 156 must be divisible by 13 also.

Or

$$\frac{312}{156} = 2, \frac{620}{156} = 3.97, \frac{936}{156} = 6, \frac{1402}{156} = 8.98,$$

$$\frac{1872}{156} = 12, \frac{3216}{156} = 20.61, \frac{7176}{156} = 46, \frac{8108}{156} = 51.97$$

Hence, 4 is the correct Answer.

124. Option (3) is correct.

$$\text{Given } \frac{(x-y)^3 + (y-z)^3 + (z-x)^3}{(x^2-y^2)^3 + (y^2-z^2)^3 + (z^2-x^2)^3}$$

$$= \frac{3(x-y)(y-z)(z-x)}{3(x^2-y^2)(y^2-z^2)(z^2-x^2)}$$

$$= \frac{(x-y)(y-z)(z-x)}{(x-y)(x+y)(y-z)(y+z)(z-x)(z+x)}$$

$$= \frac{1}{(x+y)(y+z)(z+x)}$$

Hence, $\frac{1}{(x+y)(y+z)(z+x)}$ is the correct Answer.

125. Option (1) is correct.

$$(\sin^4 45^\circ + \cos^4 60^\circ) + (\tan^4 45^\circ + \cot^4 45^\circ)$$

$$= \frac{1}{(\sqrt{2})^4} + \frac{1}{(2)^4} + (1+1)$$

$$= \frac{1}{4} + \frac{1}{16} + 2 = \frac{4+1+32}{16} = \frac{37}{16}$$

Hence, $\frac{37}{16}$ is the correct Answer.

126. Option (2) is correct.

Population of A in 2018 = 12381

Population of A in 2021 = 13256

$$\text{Percentage increase} = \frac{13256 - 12381}{12381} \times 100 = 7.07\%$$

Hence, 7.07% is the correct Answer.

127. Option (2) is correct.

Volume of frustum of right circular cone

$$= \frac{\pi h}{3} (R^2 + Rr + r^2)$$

$$= \frac{3.14 \times 18}{3} (25^2 + 25 \times 20 + 20^2)$$

$$= 3.14 \times 6(625 + 500 + 400)$$

$$= 3.14 \times 6(1525) = 28731 \text{ cm}^3$$

$$\text{Volume of sphere} = \frac{4}{3} \pi r^3$$

$$\text{Volume of sphere} = \frac{4}{3} \times 3.14 \times 1^3 = 4.19 \text{ cm}^3.$$

$$\frac{\text{Number of spheres will be}}{\frac{\text{volume frustum of right circular cone}}{\text{volume of sphere}}} = \frac{28731}{4.19} = 6862$$

Hence, 6862 is the correct Answer.

128. Option (3) is correct.

$$\text{The customer has to pay only } 3600 \times \frac{85}{100} \times \frac{90}{100} = ₹ 2754$$

Hence, 2754 is the correct answer.

129. Option (2) is correct.

$$12 \text{ Men} = 20 \text{ Boys}$$

$$\Rightarrow 3 \text{ Men} = 5 \text{ Boys}$$

$$\Rightarrow \frac{\text{Men}}{\text{Boys}} = \frac{5}{3}$$

$$\Rightarrow \text{Total work} = 12 \times 5 \times 10$$

$$4 \text{ Men and 4 boys in 4 days} = [(4 \times 5) + (4 \times 3)] \times 4 = 128$$

$$\text{The part of work done} = \frac{128}{600} = \frac{16}{75}$$

Hence, $\frac{16}{75}$ is the correct answer.

130. Option (2) is correct.

7% for 3 years at simple interest = 21%.

$$\text{Compound interest for 2 years will be } 7 + 7 + \frac{7 \times 7}{100}$$

$$\times 7 = 14.49\%$$

$$\text{And for third year} = 14.49 + 7 + \frac{7}{100} \times 14.49 = 21.49$$

$$+ 1.01 = 22.50\%$$

So, compound interest for 3 years at 7% will be 22.50%

$$\text{Difference} = 22.50\% - 21\% = 1.50\%$$

$$\text{So, } 1.50\% \text{ of } 6500 = 97.5$$

Hence, 97.78 is the correct Answer.

131. Option (3) is correct.

$$a + b + c = 10$$

$$a^2 + b^2 + c^2 + 2(ab + bc + ac) = 100$$

$$38 + 2(ab + bc + ac) = 100$$

$$\Rightarrow ab + bc + ca = \frac{162}{2} = 81$$

$$\text{Now consider } (a - b)^2 + (b - c)^2 + (c - a)^2$$

$$= a^2 + b^2 - 2ab + b^2 + c^2 - 2bc + c^2 + a^2 - 2ca$$

$$= 2(a^2 + b^2 + c^2) - 2(ab + bc + ca) = 2(38) - 2(81) = 2(7) = 14$$

Hence, 14 is the correct Answer.

132. Option (2) is correct.

$$\text{Total production from 2014 to 2016 by A} = 1350 + 570 + 420 = 2340$$

$$\text{Total production from 2014 to 2016 by D} = 810 + 990 + 580 = 2380$$

$$\text{Total production from 2014 to 2016 by B} = 750 + 520 + 1170 = 2440$$

$$\text{Total production from 2014 to 2016 by C} = 630 + 1280 + 650 = 2560$$

$$\text{Total of A + D} = 4720 \text{ And Total of B + C} = 5000$$

The difference is 280.

Hence, 280 is the correct Answer.

133. Option (1) is correct.

$$\text{Distance} = \text{speed} \times \text{Time} = 3 \times 54 = 162$$

$$\text{Now, new speed is } 54 + 27 = 81 \text{ km/h}$$

$$\text{Now, time} = \frac{162}{81} = 2 \text{ hours.}$$

Hence, 2 hour is the correct answer.

134. Option (2) is correct.

$$\text{Sum of score} = 30 \times 95 + 10 \times 85 = 2850 + 850 = 3700$$

$$\text{Average of all students} = \frac{3700}{40} = 92.5$$

Hence, 92.5 is the correct answer.

135. Option (1) is correct.

$$\text{Average speed} = \frac{\text{Total distance}}{\text{Total Time}}$$

$$\text{Total distance} = 114 + 84 + 230 = 428$$

$$\text{Total time taken} = \frac{114}{38} + \frac{84}{42} + \frac{230}{46} = 3 + 2 + 5 = 10$$

$$\text{Therefore, Average speed} = \frac{428}{10} = 42.8 \text{ km/hr}$$

Hence, 42.8 km/hr is the correct answer.

136. Option (1) is correct.

OM ⊥ PQ and ON ⊥ RS

$$\text{PM} = \text{MQ} = \frac{48}{2} = 24 \text{ and}$$

$$\Rightarrow \text{PN} = \text{SN} = \frac{40}{2} = 20$$

$$\text{MN} = 22$$

$$\text{Let } \text{OM} = x \text{ then } \text{ON} = 22 - x$$

In triangle PMO we have

$$\Rightarrow \text{PO}^2 = \text{PM}^2 + \text{OM}^2$$

$$\Rightarrow \text{PO}^2 = 24^2 + x^2$$

$$\Rightarrow \text{PO}^2 = 576 + x^2$$

In triangle RNO we have

$$\Rightarrow \text{RO}^2 = \text{ON}^2 + \text{RN}^2$$

$$\Rightarrow \text{RO}^2 = (22 - x)^2 + 20^2$$

Now we know that Radius of circle are equal then PO = RO

$$576 + x^2 = (22 - x)^2 + 20^2$$

$$\Rightarrow 576 + x^2 = 484 + x^2 - 44x + 400$$

$$\Rightarrow 44x = 884 - 576 \Rightarrow 44x = 308 \Rightarrow x = 7$$

$$\text{Now } \text{PO}^2 = 576 + 49 \Rightarrow \text{PO}^2 = 625 \Rightarrow \text{PO} = 25$$

Hence, the radius of the circle is 25.

137. Option (3) is correct.

$$\text{Total} = 10.4 + 13 + 15.6 + 21.6 + 18.8 = 79.4$$

$$\text{Average} = \frac{79.4}{5} = 15.88$$

Hence, 15.88 is the correct answer.

138. Option (4) is correct.

We know that Ratios of areas two triangles = (Ratio of sides of triangle)²

$$\frac{64}{144} = \frac{24}{x^2}$$

$$\Rightarrow 64x^2 = 144 \times 24 \Rightarrow x^2 = \frac{144 \times 24}{64} \Rightarrow x = 36$$

Hence, 36 is the correct Answer.

139. Option (4) is correct.

$$\text{Volume of cylinder} = \pi r^2 h$$

$$\text{Height} = 18 \times \frac{5}{18} = 5$$

$$\text{Volume of water flowing in pipe} = \pi r^2 h$$

$$\Rightarrow \frac{22}{7} \times \frac{49}{4} \times 5 = 192.5$$

$$\text{Total water flow will be } 30 \times 60 \times 192.5 = 346500 \text{ m}^3.$$

Hence, 346500 m³ is the correct Answer.

140. Option (1) is correct.

Given $x + y = 1224$ and both must be divisible by 68 because HCF is 68.

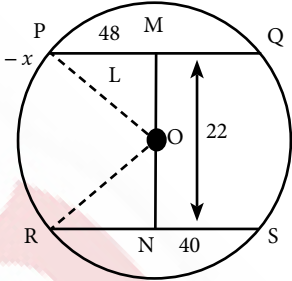
$$\Rightarrow 68x + 68y = 1224$$

$$\Rightarrow 68(x + y) = 1224$$

$$\Rightarrow x + y = \frac{1224}{68} = 18$$

Therefore, number can be (1, 17), (5, 13), (7, 11).

Hence, 3 is the correct Answer.



141. Option (4) is correct.

Factors of 196 which are divisible by 4 = 196, 98, 4.
Hence, 3 is the correct Answer.

142. Option (1) is correct.

$$\begin{aligned} & \left(1 + \frac{\cos A}{\sin A} - \frac{1}{\sin A}\right) \left(1 + \frac{\sin A}{\cos A} + \frac{1}{\cos A}\right) - 1 \\ &= \left(\frac{\sin A + \cos A - 1}{\sin A}\right) \left(\frac{\cos A + \sin A + 1}{\cos A}\right) - 1 \\ &= \frac{(\sin A + \cos A)^2 - 1}{\sin A \cdot \cos A} \\ &= \frac{\sin^2 A + \cos^2 A + 2 \sin A \cdot \cos A - 1}{\sin A \cdot \cos A} - 1 \\ &= \frac{(\sin^2 A + \cos^2 A - 1)}{\sin A \cdot \cos A} - 1 = \frac{2 \sin A \cdot \cos A}{\sin A \cdot \cos A} - 1 \\ &= 2 - 1 = 1 \end{aligned}$$

Hence, 1 is the correct Answer.

143. Option (3) is correct.

Given that the ratio of two numbers = 4 : 5 and HCF = 3
Then, the numbers are 4 × 3 and 5 × 3.
So, their LCM = 4 × 5 × 3
= 60

144. Option (1) is correct.

The overall discounted price is $100 \times \frac{85}{100} \times \frac{90}{100} = 76.5$

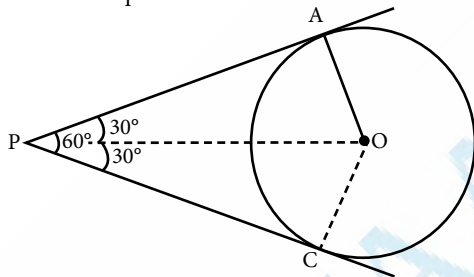
MRP = 100 and SP = 75.5

Discount = 100 - 75.5 = 23.5.

Hence, 23.5 is the correct answer.

145. Option (2) is correct.

Let P be external point.



Radius = 3 cm.

$\angle APO = \angle CPO = 30^\circ$.

$OA \perp AP$

In right Angled triangle OAP

$$\tan 30^\circ = \frac{OA}{AP} = \frac{3}{AP} \Rightarrow \frac{1}{\sqrt{3}} = \frac{3}{AP}$$

$$\Rightarrow AP = 3\sqrt{3}$$

$$AP = CP = 3\sqrt{3}.$$

Hence, $3\sqrt{3}$ is the correct Answer.

146. Option (4) is correct.

The overall gain is $\frac{1000}{800} \times \frac{110}{100} = \frac{110}{80}$

Therefore, CP = 80 and SP = 110

$$\text{Therefore, gain} = \frac{30}{80} \times 100 = 37.5\%$$

Hence, 37.5% is the correct answer.

147. Option (4) is correct.

Income = 16500 and Expenditure = 10500

Saving = 16500 - 10500 = 6000

$$\text{Now, new income} = 16500 \times \frac{125}{100} = 20625$$

New expenditure = 12495

New saving = 8130

$$\text{Increase in saving} = \frac{8130 - 6000}{6000} \times 100 = 35.5\%$$

Hence, 35.5% is the correct answer.

148. Option (3) is correct.

Total students appeared in 1991 from semi urban = 8562

And total students appeared in 1992 from semi urban = 8139

$$\text{Percentage drop} = \frac{8562 - 8139}{8562} \times 100 = 4.94 = 5\%$$

Hence, 5% is the correct answer.

149. Option (1) is correct.

Given diameter is 42 cm. Radius = 21 cm

Curved surface area of hemisphere = $2\pi r^2$.

$$= 2 \times \frac{22}{7} \times 21 \times 21 = 2772 \text{ cm}^2$$

We know total surface area of hemisphere = $3\pi r^2$.

$$= 3 \times \frac{22}{7} \times 21 \times 21 = 4158 \text{ cm}^2$$

Hence, 2772 cm² and 4158 cm² is the correct Answer.

150. Option (1) is correct.

Let numbers are 1x, 3x and 7x

Then Their LCM = 1 × 3 × 7 = 21x

$$\Rightarrow 21x = 336 \Rightarrow x = 16$$

Hence, 16 is the highest factor and is correct Answer also.

151. Option (4) is correct.

This question tests a student's understanding of phrases and idioms. Being on the breadline means being impoverished. People who are living on the breadline are extremely poor. Example: Too many men have children and then forget about them, leaving the children and the mothers living on the breadlines.

152. Option (2) is correct.

This question tests a student's vocabulary. The incorrectly spelled word is "Aclaim" It should be "acclaim," which means to welcome with applause or great praise.

153. Option (2) is correct.

The sentence has an error in tense consistency. It is a conversation where one says that Ms. Pooja is busy. Since, the statement is in the present tense, its answer should be in the present tense only. So, the use of the past perfect continuous tense is incorrect.

154. Option (3) is correct.

This question tests a student's understanding of phrases and idioms. Run down means to hit a person or animal and knock them to the ground, run into means to meet someone by chance, run out means to become no longer valid, run up to means to move towards and stop directly in front of some person, place, or thing very quickly, as by running. In the given context of the sentence, the best-fit phrase is "run out."

155. Option (1) is correct.

This question tests a student's vocabulary. The incorrectly spelled word is "Illicite". It should be Illicit.

156. Option (3) is correct.

This question tests a student's vocabulary. The meaning of "radiant" is sending out light; shining or glowing brightly. Example: "A bird with radiant green and red plumage." Dismal is causing a mood of gloom or depression; depressing; dreary. Example: "The dismal weather made the late afternoon seem like evening." Frowning is bringing your eyebrows together so that

there are lines on your face above your eyes to show that you are annoyed or worried. Example: She frowned at me, clearly annoyed. Depressing means causing or resulting in a feeling of miserable dejection. Example: "The mortgage rate increase will have a depressing effect on the housing market." The antonym of 'radiant' is 'glowing.'

157. Option (4) is correct.

This question tests a student's vocabulary. The meaning of "delicate" is very fine in texture or structure, easily broken or damaged; fragile. Example: "The delicate cycle of a washing machine amazed us." The synonym for delicate is fragile. Crude means constructed in a rudimentary or makeshift way; coarse. Example: "The inspectors dismissed the documents as crude forgeries."

158. Option (4) is correct.

This question tests a student's vocabulary. The meaning of "annoy" is to irritate someone. Example: "He was annoyed at being woken up so early." The antonym of annoyed is "satisfied", which means to meet the expectations, needs, or desires of (someone). "Graze" means to break the surface of the skin by rubbing against something rough: He fell down and grazed his knee. "Mystify" means utterly bewilder or perplex (someone). Example: "There are so many maladies that have mystified and alarmed researchers for over a decade." Employ means to give work to (someone) and pay them for it, or to make use of it. Example: "The methods they have employed to collect the data are amazing."

159. Option (2) is correct.

When the subject performs the action, it is in active voice, and when the subject receives the action, it is in passive voice. The subject of the verb in the active voice (they) becomes the object in passive voice sentences. It is a thumb rule that passive voice phrases, as a rule, always use the third form of the verb, also known as the past participle form of the verb. The structure of a simple past sentence in passive voice is: subject + be + past participle + by + object. The passive voice of the given sentence is: The candles on the cake were blown by her.

160. Option (3) is correct.

This question tests a student's vocabulary. The meaning of "assiduous" is showing great care and perseverance; it means diligent. Example: She was assiduous in pointing out every feature." The antonym of assiduous is Lazy or idle. Example: "He did not want to waste valuable time in idle chatter." The meaning of "belligerent" is "quarrelsome". Meticulous is someone who is careful and hardworking. "Idyllic" means extremely happy, peaceful, or picturesque. Example: "An attractive hotel in an idyllic setting."

161. Option (1) is correct.

The incorrectly spelled word is "panick". It should be Panicky. It means feeling or being characterised by uncontrollable fear or anxiety. Example: "He's getting increasingly panicky over the lack of cash."

162. Option (1) is correct.

This question tests a student's vocabulary. The meaning of "Stupendous" is extremely impressive or astonishing. Example: The effect of this global rise in temperature is stupendous. The antonym of stupendous is terrible.

163. Option (4) is correct.

This question tests a student's grammar. The sentence compares the famine with all other famines of that decade, so the superlative adjective should be used. The sentence uses a comparative adjective in this sentence, which is incorrect. Change "the worse" to "the worst."

164. Option (3) is correct.

This question tests a student's vocabulary. The one word that can be used in place of cause to continue,

keep up, preserve (a state of affairs, an activity, etc.) is: maintain. Mainstay means a person or thing on which something else is based or depends. Example: "Farming is the mainstay of the rural economy." Maintop means a platform around the head of the lower section of a sailing ship's mainmast.

165. Option (3) is correct.

This question tests a student's vocabulary. A person who introduces the performers or contestants in a variety show is called a compere. A calligrapher is a person who is skilled at the art of producing decorative handwriting or lettering with a pen or brush. Compeer means a person of equal rank, status, or ability. A cypher is a message written in a secret code.

166. Option (2) is correct.

This question tests a student's vocabulary. The word "obstruct" means to prevent or create obstacles in some work. The antonym of obstruct is "assist", which means helping with some work. Repress means to suppress.

167. Option (3) is correct.

This question tests a student's understanding of idioms and phrases. Crying wolf means to seek help when it is not needed, with the effect that one is not believed when one really does need help. Example: "He accused her of crying wolf."

168. Option (3) is correct.

This question tests a student's vocabulary. Glee is great delight and mirth. Example: "His face lit up with impish glee." Abhorrence means a feeling of repulsion; disgusted loathing. Anxiety is an uncomfortable feeling of nervousness or worry about something that is happening or might happen in the future. Distress means extreme anxiety, sorrow, or pain.

169. Option (1) is correct.

This question tests a student's vocabulary. In the given sentence the incorrectly spelled word is "inflammatory". It should be inflammatory.

170. Option (3) is correct.

A belly laugh is a loud, unrestrained laugh. Example: Her mutter of amusement blossomed into an enormous belly laugh."

171. Option (1) is correct.

This question tests a student's vocabulary. Mindful is a person who takes heed or care of things or consequences. Mindless means acting or doing something without justification or concern for the consequences. A mindset is a set of beliefs that shape how one makes sense of the world and oneself.

172. Option (2) is correct.

This question tests a student's understanding of idioms and phrases. Chip off the old block refers to someone who resembles one's parents in appearance, actions, and behaviour.

173. Option (2) is correct.

The given statement mentions habitual action. Habitual actions, universal actions, etc. are expressed in the simple present tense. Hence, the given statement is correct, and no change is needed.

174. Option (3) is correct.

This question tests a student's vocabulary. A prodigal is one who spends a lot, is a squanderer, and is extravagant. Example: "He hated rich prodigals who lived useless, imprudent lives." Scrimping means to be thrifty or parsimonious; economise.

175. Option (3) is correct.

This question tests a student's vocabulary. The incorrectly spelled word is "destress". It should be distress.

176. Option (3) is correct.

This question tests a student's understanding of idioms

and phrases. A mare's nest is a complex and difficult situation—a muddle. Example: "Your desk is usually a mare's nest."

177. **Option (1) is correct.**
This question tests a student's understanding of idioms and phrases. Beside oneself means overcome with worry or anger; distraught. Example: She was beside herself when her cat got out.
178. **Option (2) is correct.**
This question tests a student's vocabulary. Plain sailing is used to describe a process or activity that goes well and is easy and uncomplicated. Example: "He is pleased to report that the tour has been plain sailing."
179. **Option (3) is correct.**
The sentence compares two people. It mentions "former" and "latter" to refer to them, which is grammatically correct. Hence, no change is required in the sentence.
180. **Option (1) is correct.**
This question tests a student's vocabulary. The scientific study of worms and insects is called "etymology". Anatomy is the branch of science concerned with the bodily structure of humans, animals, and other living organisms, especially as revealed by dissection and the separation of parts. Zoology is study of animals. Anemology is the study of the movements of the winds.
181. **Option (1) is correct.**
This question tests a student's vocabulary. Populous means densely populated or having a large population. The synonym of populous is crowded.
182. **Option (1) is correct.**
This question tests a student's vocabulary. Consummate means showing a high degree of skill and flair; complete or perfect. Example: "She dressed with consummate elegance." The antonym of consummate is inept or not skilled.
183. **Option (3) is correct.**
This question tests a student's vocabulary. The word lethargy refers to feelings of fatigue as well as a lack of mental or physical motivation. Example: "She might have sunk into a lethargy." Eagerness, enthusiasm, and vigour are antonyms of lethargy. Hebetude is a synonym for lethargy.
184. **Option (3) is correct.**
The sentence is grammatically correct.
185. **Option (2) is correct.**
This question tests a student's vocabulary. The quality of being honest and having strong moral principles is known as integrity. Stuck up means staying aloof from others because one thinks one is superior. Uptight is anxious or angry in a tense and overly controlled way. Ridicule means the subjection of someone or something to contemptuous and dismissive language or behavior.
186. **Option (2) is correct.**
This question tests a student's vocabulary. The one who makes maps and charts is called a cartographer. A geographer is an expert in the study of the physical features of the earth and its atmosphere, and of human activity as it affects and is affected by these. A sculptor is an artist who makes sculptures.
187. **Option (2) is correct.**
This question tests a student's vocabulary. Reluctant means unwilling, hesitant; disinclined. Example: "She seemed reluctant to discuss the matter." The synonym for reluctant is hesitant. Indiscreet means having, showing, or proceeding from too great a readiness to reveal things that should remain secret or private.
188. **Option (2) is correct.**
This question tests a student's understanding of phrases and idioms. As cool as ice can be replaced with as cool as a cucumber.
189. **Option (1) is correct.**
This question tests a student's understanding of phrases and idioms. To give someone the cold shoulder means to intentionally ignore someone or treat someone in an unfriendly way. Example: I thought she really liked me, but the next day she gave me the cold shoulder.
190. **Option (3) is correct.**
This question tests a student's understanding of phrases and idioms. True colours mean to reveal what one is really like, to uncover one's actual character or nature, to betray someone, or to reveal one's real personality or intentions. Example: I trusted her blindly, but when I was in too much need and called her for help, she showed her true colours.
191. **Option (3) is correct.**
The passage is about an albino whale called Migaloo. The passage describes its first sighting, its last sighting, its fan following, etc. Hence, the suitable title is "The Sighting of Migaloo."
192. **Option (3) is correct.**
Refer to the line from the last paragraph: "To make things more confusing, regular-looking humpbacks can trick whale watchers when they flip upside down, due to their white bellies." This makes it clear that regular-looking humpbacks trick whale watchers by showing their white bellies.
193. **Option (2) is correct.**
From the third paragraph's first line (He was first discovered in 1991 off Byron Bay, Australia,..), it can be inferred that it was first seen in Australia.
194. **Option (2) is correct.**
From the last line, we can infer that the word used to express 'turn over with a sudden quick movement' is "flip".
195. **Option (2) is correct.**
The passage is about an albino whale called Migaloo. The passage describes its first sighting, its last sighting, its fan following, etc. Hence, the tone of the passage is descriptive. "Cynical" is one who believes that people are motivated purely by self-interest; distrustful of human sincerity or integrity. Melancholy means a feeling of pensive sadness, typically with no obvious cause. Pessimistic means tending to see the worst aspects of things or believing that the worst will happen.
196. **Option (1) is correct.**
The correct idiomatic express is: on the way.
197. **Option (4) is correct.**
The blank needs a word that refers to the place where Shiela found something stuck in her shoes. The apt word in this context is "there".
198. **Option (2) is correct.**
The blank needs a word that expresses "guess or speculation," because the next sentence mentions that the person speculates that the thing stuck on the shoes must be chewing gum. The apt word in this context is "felt".
199. **Option (2) is correct.**
The correct word to fill in this blank is pieces," because the sentence talks about pieces of chewing gum.
200. **Option (4) is correct.**
The apt word is "bent" in this sentence because the sentence mentions that the person stoops down to clean the stuff that got stuck in her shoes.