Thinkoraa
Think big, Achieve bigger

CMAT 2025

Previous Year Question Paper · Slot 1

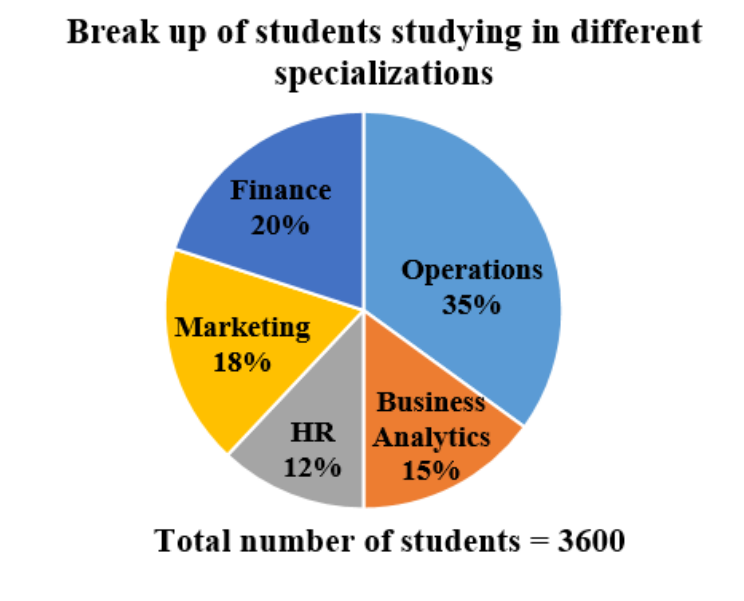
100 Questions · Quantitative Techniques & DI · Logical Reasoning · Language Comprehension · General Awareness · Innovation & Entrepreneurship

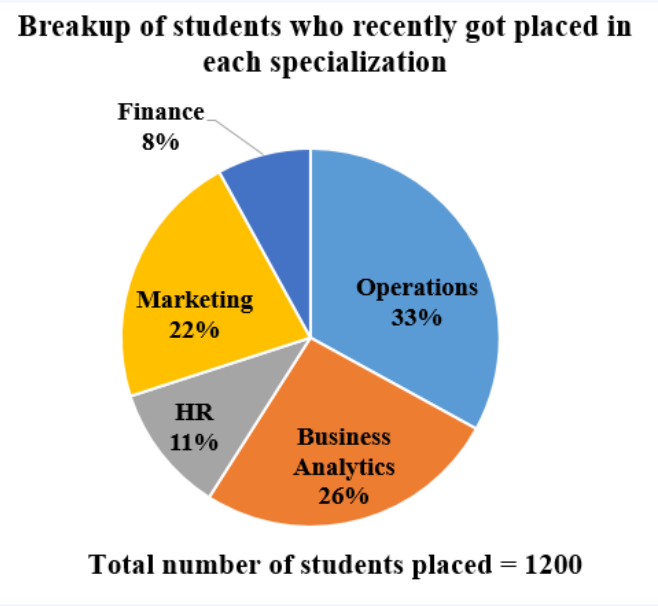
Prepared by Thinkoraa for practice. Answer key and step-by-step solutions are at the end of this booklet.

Quantitative Techniques and Data Interpretation

Questions 1 – 3

Study the given pie charts carefully to answer the questions that follows.
Break up of number of students studying in different specialization of management college and the number of students who recently got placed in each specialization.





1 The total number of students who got placed from all the specialization together was what percentage of total number of students pursuing specialization in operations, marketing and finance collectively?

A 43.21%

B 44.89%

C 45.66%

D 46.22%

2 What is the difference between the total number of students pursuing specialization in Business Analytics and HR combined and the number of student who got placed from marketing specialization and finance specialization combined?

A 812
B 972
C 582
D 612

3 The number of students who got placed from the HR specialization was what percent of the total number of students studying in that specialization?

A 36.18%
B 30.56%
C 47.22%
D 28.16%

4 Arrange the following in descending order
(A) $3^{3^{3^3}}$
(B) $3^{(33)^3}$
(C) $(3^3)^{33}$
(D) 3^{333}
Choose the correct answer from the options given below :

A $A > B > D > C$
B $B = C > A > D$
C $B > A > D > C$
D $A > C = D > B$

5 In a circus there were a leopard and a tiger walking in the two different rings having same radii. It was observed that when leopard moved 3 steps, tiger moved 5 steps in the same time, but the distance traversed by leopard in 5 steps is equal to the distance traversed by tiger in 4 steps. How many rounds that a leopard made till when tiger completed 100 rounds?

A 36
B 75
C 48
D 100

6 There are three bottles of mixture of syrup and water in the ratios 2 : 3, 3 : 4 and 7 : 5. 10 litres of first and 21 litres of second bottles are taken. How much quantity of mixtures from third bottle is to be taken so that the final syrup and water ratio of mixture from three bottles will be 1 : 1 if the final mixture from all the three bottles is added and mixed in a big container?

A 20 litres
B 25 litres
C 30 litres
D 35 litres

7 A vegetable vendor by means of his false balance defrauds to the extent of 10% in buying goods and also defrauds to 10% in selling, then the gain percent is

A $11\frac{1}{9}\%$
B 10%
C $22\frac{2}{9}\%$
D 20%

8 If $x^2 = y + z$, $y^2 = z + x$ and $z^2 = x + y$, then the value of $\frac{1}{x+1} + \frac{1}{y+1} + \frac{1}{z+1}$ is

A -1
B 1
C 2
D 4

9 20 girls, among whom are A and B sit down at a round table. The probability that there are 4 girls between A and B is

A $\frac{2}{19}$ **B** $\frac{6}{19}$

C $\frac{13}{19}$ **D** $\frac{17}{19}$

10 Reema had 'n' chocolates. She distributed them among 4 children in the ratio of $\frac{1}{2} : \frac{1}{3} : \frac{1}{5} : \frac{1}{8}$. If she gave them each one a complete chocolate, the minimum number of chocolates she had distributed.

A 120 **B** 139

C 240 **D** 278

11 Alpha and Beta are two chemical fertilizers. Alpha consists of N, P, K and Beta consists of N and P. A mixture of Alpha and Beta is prepared in which the ratio of N, P and K is 26%, 68% and 6%. The ratio of N, P, K in Alpha is 20%, 70% and 10%. What is the ratio of N and P in Beta?

A 27% and 73% **B** 33% and 67%

C 35% and 65% **D** 30% and 70%

12 A man takes 4 hours 20 minutes in walking to a certain place and riding back. If he walks on both sides, he loses 1 hour. The time he would take by riding both ways is

A 2 hours 20 min **B** 2 hours

C 3 hours 20 min **D** 4 hours 40 min

13 In a race A, B and C take part A beats B by 30 meters, B beats C by 20 meters and A beats C by 48 meters. Given below are two statements:
Statement I : The length of the race is 300 meters.
Statement II : The speed of A, B and C are in the ratio 50 : 45 : 40.
In the light of the above statements, choose the correct answer from the options given below:

A Both Statement I and Statement II are true **B** Both Statement I and Statement II are false

C Statement I is true but Statement II is false **D** Statement I is false but Statement II is true

14 Anand's income is ₹ 140 more than Biren's income and Chandu's income is ₹ 80 more than Deepak's. If the ratio of Anand's & Chandu's income is 2 : 3 and the ratio of Biren's and Deepak's income is 1 : 2 , then the incomes of Anand, Biren, Chandu and Deepak are respectively:

A ₹260, ₹120, ₹320 and ₹240 **B** ₹300, ₹160, ₹600 and ₹520

C ₹400, ₹260, ₹600 and ₹520 **D** ₹320, ₹180, ₹480 and ₹360

15 Arrange the following in descending order.
(A) $\sqrt{3}-\sqrt{2}$
(B) $\sqrt{4}-\sqrt{3}$
(C) $\sqrt{5}-\sqrt{4}$
(D) $\sqrt{2}-1$
Choose the correct answer from the options given below :

A $A > B > C > D$
B $D > C > B > A$
C $D > A > B > C$
D $A > C > B > D$

16 A fair coin is tossed repeatedly. If tail appears on first four tosses, then the probability of head appearing on fifth toss equals.

A $\frac{5}{12}$
B $\frac{1}{2}$
C $\frac{5}{6}$
D $\frac{1}{6}$

17 Equal amounts of each ₹ 1,000 is lent to two persons for 3 years one @ 30% simple interest and second at 30% compound interest annually. By how much percent is the compound interest greater than the simple interest received in this 3 years duration.

A 23%
B 33%
C 33.33%
D 30%

18 A merchant earns 25% profit in general. Once his 25% consignment was abducted forever by some thieves. Trying to compensate for his loss he sold the rest of his consignment by increasing his selling price by 20%. What is the new percentage profit or loss?

A 10% loss
B 12.5% loss
C 12.5% profit
D 10% profit

19 Given below are two statements :
Statement I : The perimeter of a triangle is greater than the sum of its three medians.
Statement II : In any triangle ABC, if D is any point on BC, then AB + BC + CA > 2AD.
In the light of the above statements, choose the correct answer from the options given below :

A Both Statement I and Statement II are true
B Both Statement I and Statement II are false
C Statement I is true but Statement II is false
D Statement I is false but Statement II is true

20 Match List I with List II :

List I (Quadratic equations)	List II (Roots)
$(A)\ 12x^2 - 7x + 1 = 0$	$(I)\ (-13, -4)$
$(B)\ 20x^2 - 9x + 1 = 0$	$(II)\ \left(\frac{1}{3}, \frac{1}{4}\right)$
$(C)\ x^2 + 17x + 52 = 0$	$(III)\ \left(-4, \frac{-3}{2}\right)$
$(D)\ 2x^2 + 11x + 12 = 0$	$(IV)\ \left(\frac{1}{5}, \frac{1}{4}\right)$

Choose the correct answer from the options given below :

A (A)-(II), (B)-(I), (C)-(III), (D)-(IV)

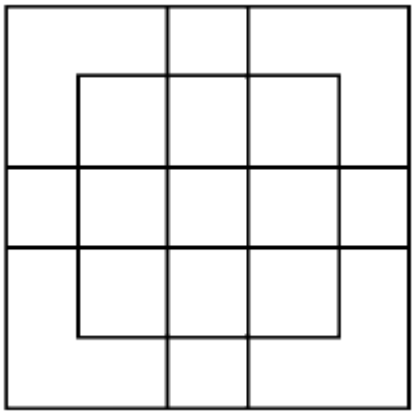
B (A)-(II), (B)-(III), (C)-(IV), (D)-(I)

C (A)-(II), (B)-(IV), (C)-(III), (D)-(I)

D (A)-(II), (B)-(IV), (C)-(I), (D)-(III)

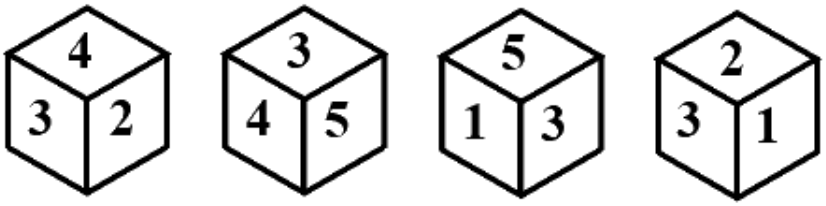
Logical Reasoning

21 How many square does the following figure have?



A 24
B 23
C 25
D 27

22 Four different positions of the same dice are shown below. Find the number on the face opposite the face showing 4.

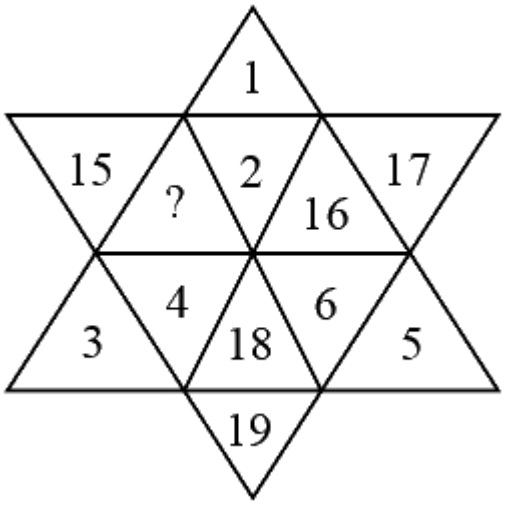


A 6
B 5
C 2
D 1

23 A clock is set right at 8 am. The clock gains 8 minutes in a day. What will be the true time when the watch indicates 11 am the next day?

A 50 minutes past 10 am
B 49 minutes past 10 am
C 48 minutes past 11 am
D 51 minutes past 10 am

24 Find the missing number in the following figure.



A 14
B 13
C 20
D 21

25 Seven persons A, B, C, D, E, F and G are sitting in a straight line (not necessarily in the same order) fa cing North. Only two persons sit between F and G and G sits second to the left of B. D sits third to the left of C. E sits exactly between G and B and B sits at the extreme right end of row. Which of the following statements are correct?
(A) 'F' sits at the extreme left of the line.
(B) Two persons sit between 'E' and 'F'.
(C) 'C' sits exactly in the middle of the line.
(D) 'E' sits third to the right of 'A'.
Choose the most appropriate answer from the options given below :

A (A), (B) and (C) only
B (B), (C) and (D) only
C (C) and (D) only
D (A) and (C) only

26 The following question consists of a statement and two arguments I and II. Choose the best option. Statement : Should India make efforts to harness solar energy to fulfil its energy requirements.
Arguments I : Yes. Most of the energy sources used at present are exhaustible.
Argument II : No. Harnessing solar energy requires a lot of capital, which India lacks in.

A Only Argument I is strong
B Only Argument II is strong
C Neither Argument I nor II is strong
D Both Arguments I and II are strong

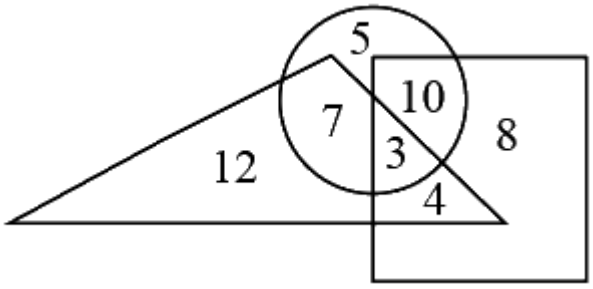
27 A cube is painted red on two adjacent faces and on one opposite sides face, yellow on two opposite faces and green on the remaining face. It is then cut into 64 equal cubes. How many cubes have one red coloured face only?

A 16
B 18
C 12
D 20

28 A person walked 40 metres towards Nort h, took a left turn and walked 20 metres. He again took a left turn and walked 40 metres. How far and in which di rection is he from the starting point?

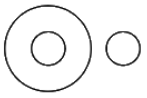
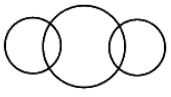
A 28 metres South
B 20 metres North
C 30 metres East
D 20 metres West

29 In the following diagram, the square represents women, triangle represents corporate managers and circle represents MBAs. Which numbered part represents - women who are corporate managers and has done MBA as well?



A 4
B 3
C 10
D 5

30 Match List I with List II :

List I (Classes)	List II (Diagrams)
(A) Potato, Meat, Vegetable	
(B) Law Student, Management Student, Men	
(C) Wheat, Grains, Maize	
(D) Oil, Fruit, Sugar	

Choose the correct answer from the opt ions given below :

A (A)-(IV), (B)-(I), (C)-(II), (D)-(III)
B (A)-(IV), (B)-(II), (C)-(I), (D)-(III)
C (A)-(II), (B)-(IV), (C)-(I), (D)-(III)
D (A)-(II), (B)-(IV), (C)-(III), (D)-(I)

31 Arrange the following words in a meaningful sequence and choose the most appropriate sequence from the given alternatives.
(A) Police (B) Punishment (C) Crime (D) Court (E) Judgement
Choose the correct answer from the options given below :

A A, C, B, E, D
B E, A, B, D, C
C C, A, B, D, E
D C, A, D, E, B

32 Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R). Assertion (A) : Cotton is grown in alluvial soils.
Reason (R) : Alluvial soils are very fertile.
In the light of the above statements, choose the correct answer from the options given below :

A Both (A) and (R) are true and (R) is the correct explanation of (A)
B Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
C (A) is true but (R) is false
D (A) is false but (R) is true

33 How many such pairs of digits are there in the number 95137248 each of which has as many digits between them in the number as when they are arranged in the ascending order?

A Two
B Three
C Four
D Five

34 Choose the correct word from the given alternatives which bears the same relationship to the third word as the first two.
Chair: Furniture: : Shoe: ?

A Socks
B Footwear
C Leather
D Cobbler

35 Consider the statements given below, followed by two assumptions, and decide which of the assumptions is/ are implicit in the statement.
Statement: "We must introduce objective-type tests to improve our examinations for admission to MBA". - The chairman of the admission committee tells the committee.
Assumptions: I. The admission at present is directly through the interview.
II. The admission committee is desirous of improving the admission examinations.

A Only Assumption I is implicit
B Only Assumption II is implicit
C Neither Assumption I nor II is implicit
D Both Assumptions I and II are implicit

36 Arjun said to Nitin, "that boy playing hockey is the younger of the two brothers of the daughter of my father's wife". How is the boy playing hockey related to Arjun?

A Nephew
B Maternal Uncle
C Brother in law
D Brother

37 Choose the correct alternative that will continue the same pattern and replace the question mark (?) in the series 7, 27, 107, 427, ?

A 1262
B 1707
C 827
D 2107

38 Choose the odd one among the following:

A Flood
B Hurricane
C Earthquake
D Bomb blast

39 Consider the statement given below, followed by two conclusions I and II. Decide which of the conclusions logically follows from the information given in the statement.
Statement: Fashion is a form of ugliness so intolerable that we have to alter it every six months.
Conclusion I: Fashion designers do not understand the public mind very well.
Conclusion II: The public by and large is highly susceptible to novelty.

A Only conclusion I follows
B Only conclusion II follows
C Either I or II follows
D Neither I nor II fol lows

40 Atal Academy focuses on the performing arts. In the current batch, 40 students can sing, 60 students can dance and 24 students can act. No student is a triple threat (some one who can sing, dance and act). However, 16 students can sing as well as dance, 12 students can dance and act and 8 students can sing and act. How many students have only one performnig talent?

A 44
B 52
C 60
D 66

Language Comprehension

41 Read the following sentence and identify its correct passive form from the given options
My school bag contains ten books.

A Ten books are contained in my school bag.
B Ten books are contained by my school bag.
C Ten books are contained with my school bag.
D Ten books are contained to my school bag.

42 Choose the odd one out

A Edmund Spenser wrote a letter to Sir Walter Raleigh.
B The Paradise Lost was composed by John Milton.
C The Ramcharita Manas was written by Tulasi Das.
D The Mahabharat was written by Vedvyasa.

43 Which of the following is grammatically correct?

A Lakshman said to Sita, "Do not cross the Lakshman Line".
B Lakshman told to Sita not to cross the Lakshman Line.
C Lakshman said Sita, "Do not cross the Lakshman Line"
D Lakshman told to Sita, "Do not cross the Lakshman Line".

44 Which one of the following is grammatically correct?

A I could recognise his voice in once.
B The family members of the patient had a anxious hour.
C We should not inculcate the habit of finding fault with others.
D A drowning man catches straw.

45 Pick the correct option to complete the following sentence.
The officer was pleased ----- the work his subordinate did.

A at
B with
C on
D upon

46 Choose the alternative which best expresses the meaning of the underlined phrase in the following sentence.
A good sportsman cannot afford to have a fit of the blues before the game.

A Stimulants
B Entertainment
C Steroids or drugs
D Depression

Questions 47 – 49

In the below passage, there are blanks, each of which has been numbered. Find out the appropriate option in each case to replace the given numbers.
"Although Babur and Humayun, __(i)__the Delhi Sultanate that ruled previously, had considered Delhi to be their capital, Akbar had shifted it to Agra. Forts, palaces and mausoleums of peerless grandeur came up in just a few years. Jahangir and in the early part of his reign, Shahjahan, continued to __(ii)__ Akbarabad. But now, the Emperor wanted to build a fine new city for his __{iii)__, which would bear his name and outstretch the creation of his grandfather, in both splendour and scale".

47 Pick the appropriate replacement for (iii)

A entertainment and sport
B capital
C grandfather
D court

48 Pick the appropriate replacement for (ii)

A look down
B look for
C look upon
D look in

49 Pick the appropriate replacement for (i)

A following the example of
B executing the orders in
C implementing the rules as
D reading the Delhi Sultanate history

50 Read the following sentences and choose the ones written in incorrect English.
(A) The lion is king of beasts.
(B) The rose is queen of flowers.
(C) The pen is mightier than the sword.
(D) This is a boy I told you about.
Choose the correct answer from the options given below :

A (A), (B) and (C) only
B (B), (C) and (D) only
C (A), (C) and (D) only
D (A), (B) and (D) only

51 Given below are two sentences :
Sentence I : I am to see him tomorrow.
Sentence II : We are to be married next month.
In the light of the above statements, choose the correct answer from the options given below :

A Both Sentence I and Sentence II are correct
B Both Sentence I and Sentence II are wrong
C Sentence I is correct but Sentence II is wrong
D Sentence I is wrong but Sentence II is correct

52 Read the following sentences and choose the ones belonging to the domain of compound sentences. (A) Her fear is that she may fall ill.
(B) Sheela is clever, still she does not do well in her studies.
(C) Noel was caught stealing, therefore he was punished.
(D) That animal is either a fish or a serpant.
Choose the correct answer from the options given below :

A (A), (B) and (C) only
B (B), (C) and (D) only
C (A), (C) and (D) only
D (A), (B) and (D) only

53 Rearrange the following components to get a meaningful sentence.
(A) of an old and infirm sanyasi (B) Ravana came in the form (C) and lifting Sita along with (D) put her on his chariot (E) the piece of ground on which she stood
Choose the correct answer from the options given below :

A B, A, C, E, D
B D, E, C, A, B
C A, B, C, D, E
D E, D, C, B, A

54 Match List I with List II :

List I (Sentence)	List II (Type of noun)
(A) Shri Rama killed Ravana.	(I) Abstract noun
(B) The jury found the prisoner guilty.	(II) Common noun
(C) Honesty is the best policy.	(III) Collective noun
(D) Cow gives us milk.	(IV) Proper noun

Choose the correct answer from the optiions given below :

A (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
B (A)-(II), (B)-(IV), (C)-(I), (D)-(III)
C (A)-(IV), (B)-(III), (C)-(I), (D)-(II)
D (A)-(III), (B)-(I), (C)-(IV), (D)-(II)

55 Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R). Assertion (A) : Articles are very important words in English and so is their knowledge.
Reasons (R) : Two or more pronouns joined by "and" require a plural verb.
In the light of the above statements, choose the correct answer from the options given below:

A Both (A) and (R) are true and (R) is the correct explanation of (A)
B Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
C (A) is true but (R) is false
D (A) is false but (R) is true

56 Match List I with List II :

List I	List II
(A) Amicable	(I) Destitution
(B) Penuary	(II) Deception
(C) Imposture	(III) Anxious
(D) Solicitous	(IV) Harmonious

Choose the correct answer from the options given below :

A (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

B (A)-(III), (B)-(II), (C)-(I), (D)-(IV)

C (A)-(I), (B)-(IV), (C)-(II), (D)-(III)

D (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

57 Choose the alternative which best expresses the opposite meaning of the underlined phrase in the following sentence.
You should not look down upon those who are financially weak.

A abhor

B be unsympathetic to

C love

D hate

58 Arrange the following in correct order (A) It saw the arrest of some major politicians for corruption and as usual saw selfserving coalitions between political parties.
(B) In short, it had enough for Khushwant Singh to give his opinion on a range of topics.
(C) It also saw some sex-scandals as well as deaths of a few famous people.
(D) The year 2009 saw the national elections as well as elections to a few state assemblies.
Choose the correct answer from the options given below :

A D, A, C, B

B B, A, D, C

C C, B, D, A

D A, B, C, D

Questions 59 – 60

Read the following passage and answer the questions that follow.
"Everyone in the fort was watching the action below with bated breath. Shivaji dismounted at the first gate and ran up the steps. The cannons were waiting for his signal and everyone was watching him wide-eyed. His white kurta was torn at the back and was blowing in the wind. The front was drenched in blood and his hair was disheveled".

59 What is the background of the actions taking place in the given passage

A Battlefield

B Celebration

C Physical exercise practice

D Religious rituals

60 Identify the narrative viewpoint employed in the above passage.

A First person narrative

B Second person narrative

C Third person narrative

D Mixed narrative

General Awareness

61 Given below are two statements :
Statement I: Insulin was discovered by Banting and Best in 1921.
Statement II: Insulin controls the process of making glycogen from glucose.
In light of the above statements, choose the most appropriate answer from the options given below:

A Both Statement I and Statement II are correct
B Both Statement I and Statement II are incorrect
C Statement I is correct but Statement II is incorrect
D Statement I is incorrect but Statement II is correct

62 Read the following statements carefully.
(A) Allauddin Khilji was the founder of the Khilji dynasty of India.
(B) Allauddin Khilji introduced the system of Dagh (The branding of a horse).
(C) Allauddin Khilji created a post called "Mustakharaj".
(D) Amir Khusrau was the favourite court poet of Allauddin Khilji.
(E) Allauddin Khilji died in the year 1320.
Choose the correct answer from the options given below :

A (A), (B) and (C} only are correct statements.
B (B) and (D) only are correct statements.
C (B), (C) and (D) only are correct statements.
D (D) and (E) only are correct statements.

63 The Biosphere Reserve 'Simlipal' is situated in _____

A West Bengal
B Andhra Pradesh
C Odisha
D Jharkhand

64 Who has been the Vice President of India?
(A) Mr. B.D. Jatti (B) Mr. Krishnakant (C) Giani Zail Singh (D) Mr. Venkaiya Naidu
Choose the most appropriate answer from the optlions given below :

A (A) and (C) only
B (A), (B) and (D) only
C (B) and (C) only
D (A), (B), and (C) on!ly

65 Given below are a few statements. Please read them carefully and respond to the question, followed by these statements.
(A) The study of the universe is known as Cosmology.
(B) The study of dreams is known as Oneirology.
(C) The study of the beauty of humans is known as Osteology.
(D) The study of cells is known as Arthrology.
(E) The study of blood is known as Hepatology.
Choose the correct answer from the options given below :

A (A) and (B) only are correct statements.
B (B) and (C) only are correct statements.
C (C) and (DJ only are correct statements.
D (D) and (E) only are correct statements.

66 Given below are two statements :
Statement I : State Legislatures do not take part in the election of Vice-President.
Statement II : The electoral college for Vice-President consist of the members of both houses of Parliament.
In the light of the above statements, choose the most appropriate answer from the options given below :

A Both Statement I and Statement II are correct
B Both Statement I and Statement II are incorrect
C Statement I is correct but Statement II is incorrect
D Statement I is incorrect but Statement II is correct

67 The Famous Books, 'Ain-I-Akbari' and 'Akbarnama', were written by -

A Firadausi
B Al Beruni
C Malik Mohammed Jayasi
D Abul Fazal

68 Dassiyattam is the old name of which famous Indian dance form?

A Kathakali
B Mohiniyattam
C Bharatanatyam
D Kuchupudi

69 The Olympics in 2028 will be held at?

A Los Angeles (USA)
B London (UK)
C Beijing (China)
D Melbourne (Australia)

70 Cricket is the National Game of which country?

A India
B Russia
C Australia
D China

71 Given below are 4 statements (A), (B), (C) and (D). Please read them carefully and respond to the question given after these statements.
(A) The crust of the Earth comprises rocks rich in silica and aluminium.
(B) The core of the earth consists of metals in liquid stat e of high temperature and pressure.
(C) Magnesium and Phosphorus are dominant in the core of the Earth.
(D) The Hydrosphere covers approximately 71 % of the total surface area of the Earth.
Choose the correct answer from the options given below :

A (A) and (B) only are correct statements.
B (A) and (D) only are correct statements.
C (B), (C) and (D) only are correct statements.
D (A), (B) and (D) only are correct statements.

72 Given below are four dist inct statements. Please read them carefully and respond to the question that is given thereafter.
(A) Bandipur National Park is located in Kerala.
(B) Jim Corbett National Park is located in Uttarakhand.
(C) Dudhwa National Park is located in U.P.
(D) Gir National Park is located in Rajasthan.
Choose the most appropriate answer from the options given below :

A (A) and (B) only are correct statements.
B (B) and (C) only are correct statements.
C (A) and (C) only are correct statements.
D (C) and (D) only are correct statements

73 Wankhede Cricket Stadium is situated in?

A Delhi
B Chennai
C Kolkata
D Mumbai

74 The blue colour of sky is due to?

A Interference of light
B Diffraction of light
C Scattering of light
D Polarisation of light

75 Match List I with List II :

(A) Article 14	(I) Protection of life and personal liberty
(B) Article 21	(II) Prohibition of employment of children in factories
(C) Article 24	(III) Equality before law
(D) Article 50	(IV) Separation of judiciary from executive

Choose the correct answer from the options given below:

A (A)-(I), (B)-(III), (C)-(II), (D)-(IV)
B (A)- (III), (B)-(I), (C)-(II), (D)-(IV)
C (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
D (A)-(I), (B)-(II), (C)-(IV), (D)-(III)

76 Match List I with List II :

(A) Electrical Energy into mechanical energy	(I) Dynamo
(B) Electrical Energy into Light energy	(II) Tube light
(C) Mechanical Energy into Electrical Energy	(III) Electric motor
(D) Solar energy into electrical energy	(IV) Solar cell

Choose the correct answer from the options given below :

A (A)-(I), (B)-(II), (C)-(IV), (D)-(III)
B (A)-(III), (B) -(II), (C)-(I), (D)-(IV)
C (A)-(III), (B)-(I), (C)-(II), (D)-(IV)
D (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

77 Given below are four distinct statements. Please read them carefully and respond to the question that is given thereafter.
(A) White Revolution is related to Milk production.
(B) Black Revolution is related to Honey production.
(C) Blue Revolution is related to leather production.
(D) The Yellow Revolution is related to oilseed production.
Choose the most appropriate answer from the options given below :

A (A) and (B) only are correct statements.
B (B) and (D) only are correct statements.
C (A) and (D) only are correct statements.
D (C) and (D) only are correct statements.

78 Which of the following soils is formed by the weathering of a crystalline and metamorphic mixture of clay and sand?

A Alluvial soils
B Red soils
C Black soils
D Laterite soils

79 Match List I with List II :

List I	List II
(A) Temperature	(I) Kilogram (kg)
(B) Mass	(II) Meter (m)
(C) Electric current	(III) Kelvin (K)
(D) Length	(IV) Ampere (A)

Choose the correct answer from the options given below :

A (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
B (A)-(III), (B)-(II), (C)-(IV), (D)-(I)
C (A)-(I), (B)-(III), (C)-(IV), (D)-(II)
D (A)-(III), (B)-(I), (C)-(IV), (D)-(II)

80 The first 'Chief of Defence staff' of our country who died in a helicopter crash in 2021

A General P.N. Thapar
B General VX Singh
C General Bipin Rawat
D General B.C. Joshi

Innovation and Entrepreneurship

81 Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R). Assertion (A): The management of technological innovation is usually required under circumstances with increased vagueness, uncertainty and risk, and companies are giving importance to it.
Reasons (R): Given that technological innovation is for many companies a primary way of competition in the twenty-first century, its management is an activity of vital importance.
In light of the above statements, choose the most appropriate answer from the options given below:

A Both (A) and (R) are correct, and (R) is the correct explanation of (A).

B Both (A) and (R) are correct, but (R) is NOT the correct explanation of (A).

C (A) is correct, but (R) is not correct.

D (A) is not correct, but (R) is correct.

82 Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R). Assertion (A): Bootstrapping entrepreneurship is one of the most adopted forms of entrepreneurship in India.
Reasons (R): Managing a business through one's own financial resources is the first and easiest option available for the entrepreneur to start a business.
In light of the above statements, choose the most appropriate answer from the options given below :

A Both (A) and (R) are correct and (R) is the correct explanation of (A)

B Both (A) and (R) are correct but (R) is NOT the correct explanation of (A)

C (A) is correct but (R) is not correct

D (A) is not correct but (R) is correct

83 Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R). Assertion (A): As India moves progressively towards becoming a global knowledge economy, it must meet the rising aspirations of its youth. This can be partially achieved through a focus on the advancement of skills that are relevant to the emerging economic environment.
Reason (R): 62% of India's population is in the working age group (15-59 years), and more than 54% of the total population is below 25 years of age. Our country presently faces a dual challenge of paucity of a highly trained workforce as well as non-employability of the large workforce of the conventionally educated youth. In light of the above statements, choose the correct answer from the options given below :

A Both (A) and (R) are correct, and (R) is the correct explanation of (A).

B Both (A) and (R) are correct, but (R) is NOT the correct explanation of (A).

C (A) is correct, but (R) is not correct.

D (A) is not correct, but (R) is correct.

84 The 'Stand up India Scheme' focuses on providing financial support for:
(A) Innovators for rural and semi-urban areas.
(B) Women entrepreneurs.
(C) Scheduled Caste (SC) entrepreneurs.
(D) Scheduled Tribes (ST) entrepreneurs.
Choose the most appropriate answer from the options given below:

A (A) and (D) only
B (B) and (C) only
C (B), (C) and (D) only
D (B) and (D) only

85 Given below are two statements :
Statement I: An intrapreneur operates within a large organisation to drive innovation.
Statement II: An intrapreneur is the same as an entrepreneur, working independently to start a new business.
In light of the above statements, choose the most appropriate answer from the options given below :

A Both Statement I and Statement II are correct
B Both Statement I and Statement II are incorrect
C Statement I is correct but Statement II is incorrect
D Statement I is incorrect but Statement II is correct

86 A word, symbol, name or device that a business uses to identify its goods and distinguish itself from competitors is known as:

A Patent
B Copyright
C Trademark
D Trade secret

87 Financial Institutions are not merely transactional entities but key architects of economic progress. Their roles also span:
(A) Capital formation (BJ Risk management (C) Inclusive finance (D) Arbitration (E) Consultation in project report preparation to intern during their internship program.
Choose the correct answer from the options given below:

A (A) and (B) only
B (A), (B), and (C) only
C (B), (C), and (D) only
D (B), (C), (D), and (E) only

88 Match List I with List II :

List I	List II
(A) Intrapreneur	(I) Value addition in supply chain
(B) Entrepreneur	(II) Funding start up
(C) Venture capitalist	(III) Risk taking in an organisational role as an employee
(D) Distributor	(IV) Calculated risk taking

Choose the correct answer from the opt ions given below :

A (A)-(III), (B)-(II), (C)-(I), (D)-(IV)

B (A)-(III), (B)-(II), (C)-(IV), (D)-(I)

C (A)-(III), (B)-(IV), (C)-(II), (D)-(I)

D (A)-(III), (B)-(I), (C)-(II), (D)-(IV)

89 Match List I with List II :

List I	List II
(A) Revenue model	(I) Startup Nurturing System
(B) Market segmentation	(II) Critical evaluation method
(C) SWOT analysis	(III) Dividing total population in homogeneous groups
(D) Business Incubator	(IV) Return on investment plan

Choose the correct answer from the opt ions given below :

A (A)-(I), (B)-(III), (C)-(II), (D)-(IV)

B (A)-(II), (B)-(III), (C)-(I), (D)-(IV)

C (A)-(II), (B)-(III), (C)-(IV), (D)-(I)

D (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

90 Given below are two statements:
Statement I: A startup's valuation is usually lower during the seed funding stage compared to later stages. Statement II: Venture capital is typically the first source of funding for most startups.
In light of the above statements, choose the correct answer from the options given below:

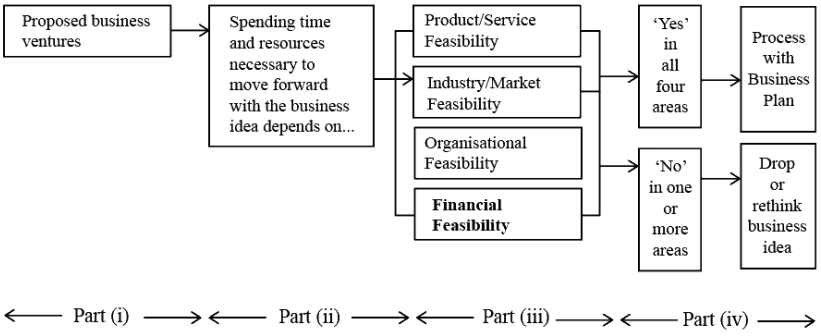
A Both Statement I and Statement II are true.

B Both Statement I and Statement II are false.

C Statement I is true but Statement II is false.

D Statement I is false but Statement II is true.

91 Feasibility analysis may be processed as follows.



A Only part (iii) is correct

B Only part (i), (ii) and (iv) correct

C Only part (i), (ii), (iii) and (iv) correct

D Only part (ii) is correct

92 Venture Capital financing is _____ (A) Type of financing by venture capital.
(B) It is private equity capital provided as seed funding to early-stage.
(C) Investment in blue-chip companies for an assured return.
(D) It is a high-risk investment made with the intention of creating high returns.
(E) Done in technology projects only.
Choose the correct answer from the options given below :

A (A), (B), (D) and (E) only are correct statements.

B (A), (B) and (D) only are correct statements.

C (A), (B) and (E) only are correct statements.

D (C), (D) and (E) only are correct statements.

93 An entrepreneur is a person who

A moderately takes calculated risk.

B only follow instructions as a subordinate.

C works as an employee in a firm or company.

D manage the given task professionally as a manager of a firm or company.

94 Match List I with List II :

List I	List II
(A) Equity financing	(I) No profit No loss
(B) Strategic Alliance	(II) Selling ownership shares
(C) Entrepreneurial Mindset	(III) Partnership for mutual benefit
(D) Break even point	(IV) Innovative thinking

Choose the correct answer from the options given below :

A (A)-(III), (B)-(II), (C)-(IV), (D)-(I)

B (A)-(III), (B)-(IV), (C)-(II), (D)-(I)

C (A)-(II), (B)-(III), (C)-(IV), (D)-(I)

D (A)-(IV), (8)-(II), (C)-(III), (D)-(I)

95 Given below are two statements:
Statement I: Lean start-up methodology prioritises extensive market research before any product. Statement II: Lean start-up methodology focuses on creating a Minimal Viable Product (MVP) to test hypotheses.
In light of the above statements, choose the correct answer from the options given below :

A Both Statement I and Statement II are true
B Both Statement I and Statement II are false
C Statement I is true but Statement II is false
D Statement I is false but Statement II is true

96 Which of the following funding sources is specifically aimed at helping early-stage startups?

A Series funding
B Angel investment
C Corporate bonds
D Initial Public Offering (IPO)

97 Given below are two statements:
Statement I: Cost-Benefit Analysis (CBA) measures a project's societal effects and does a cost-benefit comparison in monetary terms.
Statement II: CBA is the most widely applied tool for the appraisal of transport projects.
In light of the above statements, choose the correct answer from the options given below:

A Both Statement I and Statement II are true.
B Both Statement I and Statement II are false.
C Statement I is true but Statement II is false.
D Statement I is false but Statement II is true.

98 'Feasibility analysis' is described as follows:
(A) It is the process of assessing whether the business idea is viable.
(B) It is the preliminary evaluation of a business idea done for the purpose of determining whether the idea is worth pursuing.
(C) It is to guess the time span in which the investment made in the project can be recovered.
(D) It is to find whether the technology adopted will work correctly.
(E) It is to estimate demand and to plan supply accordingly.
Choose the correct answer from the options given below :

A Only (A) is correct statement
B Only (B) is correct statement
C Only (A) and (B) are correct statements
D Only (C), (D) and (A) are correct statements

99 Given below are two statements:
Statement I: Creativity is a function of novel, useful, and potentially valuable ideas.
Statement II: Creativity is a complicated and multidimensional concept with many components, such as knowledge, cognition, personality, intelligence and motivation.
In light of the above statements, choose the correct answer from the options given below:

A Both Statement I and Statement II are true.
B Both Statement I and Statement II are false.
C Statement I is true but Statement II is false.
D Statement I is false but Statement II is true.

100 Who is a Fabian Entrepreneur?

A Innovators who rapidly adopt changes.

B Entrepreneurs who cannot adopt to changes and prefer old fashioned business practices.

C Entrepreneurs who copy ideas from others.

D Entrepreneurs who take significant risk.

Thinkoraa
Think big, Achieve bigger

Answer Key

Quantitative Techniques and Data Interpretation

1 **C**	2 **D**	3 **B**	4 **A**	5 **C**	6 **C**	7 **C**	8 **B**	9 **A**	10 **B**
11 **C**	12 **C**	13 **C**	14 **C**	15 **C**	16 **B**	17 **B**	18 **C**	19 **A**	20 **D**

Logical Reasoning

21 **D**	22 **D**	23 **D**	24 **A**	25 **C**	26 **A**	27 **C**	28 **D**	29 **B**	30 **C**
31 **D**	32 **D**	33 **B**	34 **B**	35 **B**	36 **D**	37 **B**	38 **D**	39 **B**	40 **B**

Language Comprehension

41 **A**	42 **A**	43 **A**	44 **C**	45 **B**	46 **D**	47 **B**	48 **C**	49 **A**	50 **D**
51 **A**	52 **B**	53 **A**	54 **C**	55 **B**	56 **D**	57 **C**	58 **A**	59 **A**	60 **C**

General Awareness

61 **A**	62 **C**	63 **C**	64 **B**	65 **A**	66 **A**	67 **D**	68 **C**	69 **A**	70 **C**
71 **D**	72 **B**	73 **D**	74 **C**	75 **B**	76 **B**	77 **C**	78 **B**	79 **D**	80 **C**

Innovation and Entrepreneurship

81 **A**	82 **A**	83 **A**	84 **C**	85 **C**	86 **C**	87 **B**	88 **C**	89 **D**	90 **C**
91 **C**	92 **B**	93 **A**	94 **C**	95 **D**	96 **B**	97 **A**	98 **C**	99 **A**	100 **B**

Solutions

Quantitative Techniques and Data Interpretation

1 **Answer: C**

Placed students = 1200. Operations + Marketing + Finance $= (35 + 18 + 20)$.
frac{1200}{2628} imes100approx **45.66%**.

2 **Answer: D**

BA + HR students $= 27$. Placed from Marketing + Finance $= 30$. Difference $=$ **612**.

3 **Answer: B**

HR placed $= 11$; HR students $= 12$. frac{132}{432} imes100approx **30.56%**.

4 **Answer: A**

Compare exponents of 3: A has $3^{27} \approx 7.6 \times 10^{12}$; B has $33^3 = 35937$; C has $3 \times 33 = 99$; D has 333.
So **A > B > D > C**.

5 **Answer: C**

5 leopard steps = 4 tiger steps, so a leopard step = 0.8 tiger step. In the same time the leopard covers 3 × 0.8 = 2.4 tiger-steps while the tiger covers 5. Distance ratio = 12 : 25.
When the tiger finishes 100 rounds, the leopard completes 100 imesfrac{12}{25}= **48**.

6 **Answer: C**

From bottle 1: syrup 4, water 6. From bottle 2: syrup 9, water 12. Total so far: syrup 13, water 18.
Take x litres of bottle 3: 13+frac{7x}{12}=18+frac{5x}{12}Rightarrowfrac{2x}{12}=5Rightarrow x= **30 litres**.

7 **Answer: C**

He gets 110 units for the price of 100 and gives 90 units for the price of 100. Gain $= \frac{110}{90} - 1 = \frac{2}{9} = \mathbf{22\frac{2}{9}\%}$.

8 **Answer: B**

Let $S = x + y + z$. Then $x^2 + x = S$, so $x + 1 = \frac{S}{x}$ and $\frac{1}{x+1} = \frac{x}{S}$. Similarly for y and z.
Sum $= \frac{x + y + z}{S} =$ **1**.

9 **Answer: A**

Fix A's seat; B can take any of the other 19 seats. Exactly 4 girls between them happens in 2 seats (one on each side). Probability = **2/19**.

10 **Answer: B**

Multiply the ratio by LCM(2, 3, 5, 8) = 120: 60 : 40 : 24 : 15. Minimum total = **139**.

11 **Answer: C**

K comes only from Alpha: 10% of Alpha's share = 6%, so Alpha is 60% of the mix and Beta 40%.
N: $0.2times0.6+0.4n=0.26Rightarrown=0.35$. Beta is **35% N and 65% P**.

12 **Answer: C**

Walk + ride = 4 h 20 min; walk + walk = 5 h 20 min, so walking one way = 2 h 40 min and riding = 1 h 40 min. Riding both ways = **3 h 20 min**.

13 **Answer: C**

If the race is L m: $\frac{L-30}{L}\cdot\frac{L-20}{L}=\frac{L-48}{L}\Rightarrow L^2-50L+600=L^2-48L\Rightarrow L=300$ — Statement I is true.
Speeds: A 300, B 270, C $270\times\frac{280}{300}=252$, i.e. 50 : 45 : 42, not 50 : 45 : 40. **I true, II false.**

14 **Answer: C**

Check option C: 400 − 260 = 140 ✓, 600 − 520 = 80 ✓, 400 : 600 = 2 : 3 ✓, 260 : 520 = 1 : 2 ✓.
Answer: **₹400, ₹260, ₹600, ₹520**.

15 **Answer: C**

$\sqrt{n+1}-\sqrt{n}=\frac{1}{\sqrt{n+1}+\sqrt{n}}$ falls as n rises. With n = 1, 2, 3, 4 for D, A, B, C: **D > A > B > C**.

16 **Answer: B**

Tosses are independent; earlier tails do not matter. P(head) = **1/2**.

17 **Answer: B**

SI $=1000\times0.3\times3=900$. CI $=1000(1.3^3-1)=1197$.
$\frac{1197-900}{900}\times100=$ **33%**.

18 **Answer: C**

Take 100 units costing ₹1 each (₹100); normal price ₹1.25. 75 units are left and sold at ₹1.50: ₹112.50. Profit = **12.5%**.

19 **Answer: A**

The sum of the medians of a triangle is always less than its perimeter — I is true. For D on BC: AB + BD > AD and AC + DC > AD; adding gives AB + BC + CA > 2AD — II is true. **Both true.**

20 **Answer: D**

(A) $(3x-1)(4x-1)$ → $\frac{1}{3}, \frac{1}{4}$ (II). (B) $(4x-1)(5x-1)$ → $\frac{1}{5}, \frac{1}{4}$ (IV). (C) $(x+13)(x+4)$ → −13, −4 (I). (D) $(2x+3)(x+4)$ → −4, $-\frac{3}{2}$ (III).

Thinkoraa
Think big, Achieve bigger

Logical Reasoning

21 **Answer: D**

Count squares of each size separately — the smallest unit squares, then 2×2 groups, the squares formed by the inner square's lines and the outer square. The total is **27**.

22 **Answer: D**

3 is seen next to 4, 2, 5 and 1, so 6 is opposite 3. 4 is seen next to 3, 2 and 5; of the remaining numbers 1 and 6, 6 is already opposite 3. So **1** is opposite 4.

23 **Answer: D**

The clock shows 24 h 8 min for every 24 true hours. From 8 am to 11 am next day the clock shows 27 h = 1620 min.

True time elapsed $= 1620 \times \frac{1440}{1448} \approx 1611$ min = 26 h 51 min → **10:51 am**.

24 **Answer: A**

The inner triangles opposite each other add to 20: 2 + 18 = 20, 16 + 4 = 20, so ? + 6 = 20 → **14**.

25 **Answer: C**

B is at the right end (7), G at 5, E at 6, F at 2 (two people between F and G), D at 1, C at 4 and A at 3: D F A C G E B.

(A) false — D is at the left end. (B) false — three people sit between E and F. (C) true. (D) true — E is third to the right of A. Answer: **(C) and (D) only**.

26 **Answer: A**

I is strong: conventional sources are exhaustible. II is weak: capital limits are a reason to plan funding, not to avoid solar energy. **Only I is strong.**

27 **Answer: C**

Three faces are red. On a 4×4×4 cut, each face has 4 central cubes with that face's colour only. Cubes with a single red face = 3 × 4 = **12**.

28 **Answer: D**

40 m North, left → 20 m West, left → 40 m South. He ends **20 m West** of the start.

29 **Answer: B**

Women who are corporate managers and MBAs lie inside the square, the triangle and the circle together: region **3**.

30 **Answer: C**

Potato is a vegetable and meat is separate → one circle inside another with a separate circle. Wheat and maize are both grains → two separate circles inside a larger one. Law students and management students are separate groups that each overlap with men → a chain of overlapping circles. Oil, fruit and sugar are unrelated → three separate circles. Matching these to the diagram numbers of the original paper gives **(A)-(II), (B)-(IV), (C)-(I), (D)-(III)**.

31 **Answer: D**

Crime → Police → Court → Judgement → Punishment: **C, A, D, E, B**.

32 **Answer: D**

Cotton grows best in black (regur) soil, so A is false. Alluvial soils are indeed very fertile, so R is true. **A false, R true.**

33 **Answer: B**

In ascending order the digits are 1 2 3 4 5 7 8 9. Pairs with the same gap in the number and in that order: 5 and 3, 7 and 4, 3 and 8. **Three** pairs.

34 **Answer: B**

A chair is a type of furniture; a shoe is a type of **footwear**.

35 **Answer: B**

Wanting to improve the exam shows the committee wants better admission tests (II). Nothing says admission is now by interview only (I). **Only II** is implicit.

36 **Answer: D**

The daughter of my father's wife is my sister; her two brothers are Arjun and the boy. The boy is Arjun's **brother**.

37 **Answer: B**

Each term is ×4 − 1: 7 → 27 → 107 → 427 → **1707**.

38 **Answer: D**

Flood, hurricane and earthquake are natural disasters; a bomb blast is man-made. Odd one: **bomb blast**.

39 **Answer: B**

If fashion must change every six months, people clearly crave novelty (II). Nothing is said about designers' understanding (I). **Only II follows.**

40 **Answer: B**

With no one in all three: sing only $= 40 - 16 - 8 = 16$; dance only $= 60 - 16 - 12 = 32$; act only $= 24 - 12 - 8 = 4$. Total $=$ **52**.

Thinkoraa
Think big, Achieve bigger

Language Comprehension

41 **Answer: A**

"Contain" takes "in" in the passive: **Ten books are contained in my school bag.**

42 **Answer: A**

B, C and D are in the passive voice; A is in the active voice. Odd one: **A**.

43 **Answer: A**

"Said to" is used with direct speech: **Lakshman said to Sita, "Do not cross the Lakshman Line".** "Told" never takes "to" before the listener.

44 **Answer: C**

C is correct. A should be "at once", B "an anxious hour", D "catches at a straw".

45 **Answer: B**

We are pleased **with** a piece of work (pleased at an event, with a person or thing).

46 **Answer: D**

"A fit of the blues" is a spell of sadness — **depression**.

47 **Answer: B**

The emperor wanted a new city as his **capital**, bearing his name.

48 **Answer: C**

"Look upon" means to regard: they continued to **look upon** Akbarabad (Agra) as the capital.

49 **Answer: A**

Babur and Humayun treated Delhi as their capital **following the example of** the earlier Delhi Sultanate.

50 **Answer: D**

A and B need "the" before the noun (the king of beasts, the queen of flowers), and D needs "the boy". C is correct. Incorrect: **(A), (B) and (D)**.

51 **Answer: A**

"Be + to-infinitive" expresses an arrangement or plan, so both sentences are correct.

52 **Answer: B**

B and C each join two independent clauses ("still", "therefore"). A is complex (noun clause). The only option without A is **(B), (C) and (D)**; D links two alternatives with "either ... or".

53 **Answer: A**

"Ravana came in the form (B) of an old and infirm sanyasi (A) and lifting Sita along with (C) the piece of ground on which she stood (E) put her on his chariot (D)." Order: **B, A, C, E, D**.

54 **Answer: C**

Shri Rama – proper (IV); the jury – collective (III); honesty – abstract (I); cow – common (II).

55 **Answer: B**

Both statements are true grammar facts, but the rule about pronouns joined by "and" has nothing to do with the importance of articles. **Both true; R does not explain A.**

56 **Answer: D**

Amicable – harmonious (IV); penury – destitution (I); imposture – deception (II); solicitous – anxious (III).

57 **Answer: C**

To "look down upon" is to treat with contempt; of the options, the best opposite is **love**.

58 **Answer: A**

D introduces the year 2009, A and C list its events ("It saw…", "It also saw…"), and B sums up ("In short…"). Order: **D, A, C, B**.

59 **Answer: A**

Cannons, a bloodied and torn kurta, and people watching tensely point to a **battlefield**.

60 **Answer: C**

The narrator describes Shivaji from outside using "he/his" — **third person**.

General Awareness

61 **Answer: A**

Banting and Best discovered insulin in 1921, and insulin promotes the conversion of glucose into glycogen. **Both correct.**

62 **Answer: C**

A is false — Jalaluddin Khilji founded the dynasty. B, C and D are true. E is false — Alauddin died in 1316. Answer: **(B), (C) and (D)**.

63 **Answer: C**

Simlipal Biosphere Reserve is in **Odisha** (Mayurbhanj district).

64 **Answer: B**

B.D. Jatti, Krishan Kant and M. Venkaiah Naidu were Vice Presidents. Giani Zail Singh was President, not Vice President. Answer: **(A), (B) and (D)**.

65 **Answer: A**

Cosmology – the universe ✓; oneirology – dreams ✓. Osteology is bones, cytology is cells, haematology is blood. Answer: **(A) and (B) only**.

66 **Answer: A**

The Vice President is elected only by members of both Houses of Parliament; State Legislatures play no part. **Both correct.**

67 **Answer: D**

Ain-i-Akbari and Akbarnama were written by **Abul Fazl**, Akbar's court historian.

68 **Answer: C**

"Dasiattam" (Sadir) is the old name of **Bharatanatyam**.

69 **Answer: A**

The 2028 Summer Olympics will be held in **Los Angeles**, USA.

70 **Answer: C**

Cricket is listed as the national sport of **Australia** (among the given options).

71 **Answer: D**

A (sial crust), B (molten metallic outer core) and D (71% water cover) are correct. C is wrong — the core is mainly nickel and iron. Answer: **(A), (B) and (D)**.

72 **Answer: B**

Bandipur is in Karnataka and Gir in Gujarat. Corbett (Uttarakhand) and Dudhwa (UP) are correct: **(B) and (C) only**.

73 **Answer: D**

Wankhede Stadium is in **Mumbai**.

74 **Answer: C**

Air molecules scatter short (blue) wavelengths far more than red: **scattering of light**.

75 **Answer: B**

Article 14 – equality before law (III); 21 – life and personal liberty (I); 24 – no child labour in factories (II); 50 – separation of judiciary from executive (IV).

76 **Answer: B**

Electric motor: electrical → mechanical (A-III); tube light: electrical → light (B-II); dynamo: mechanical → electrical (C-I); solar cell: solar → electrical (D-IV).

77 **Answer: C**

White Revolution – milk ✓; Yellow Revolution – oilseeds ✓. Black Revolution is petroleum and Blue Revolution is fisheries. Answer: **(A) and (D) only**.

78 **Answer: B**

Red soils form from weathered crystalline and metamorphic rocks.

79 **Answer: D**

Temperature – kelvin (III); mass – kilogram (I); electric current – ampere (IV); length – metre (II).

80 **Answer: C**

General Bipin Rawat, India's first Chief of Defence Staff, died in a helicopter crash in December 2021.

Innovation and Entrepreneurship

81 **Answer: A**

Innovation management is vital because innovation is a primary way companies compete — R explains why companies prioritise it despite uncertainty. **Both correct; R explains A.**

82 **Answer: A**

Self-funding is the first and easiest route, which is why bootstrapping is so common in India. **Both correct; R explains A.**

83 **Answer: A**

India's large young population and its skill gap (R) explain why skill development is needed to meet youth aspirations (A). **Both correct; R explains A.**

84 **Answer: C**

Stand-Up India supports SC, ST and women entrepreneurs: **(B), (C) and (D)**.

85 **Answer: C**

An intrapreneur innovates inside an existing organisation (I true); they are not independent founders (II false).

86 **Answer: C**

A **trademark** identifies a firm's goods and distinguishes it from competitors.

87 **Answer: B**

Financial institutions help in capital formation, risk management and financial inclusion. Arbitration and intern project consultation are not their core roles. Answer: **(A), (B) and (C)**.

88 **Answer: C**

Intrapreneur – risk-taking as an employee (III); entrepreneur – calculated risk (IV); venture capitalist – funding startups (II); distributor – value addition in the supply chain (I).

89 **Answer: D**

Revenue model – return-on-investment plan (IV); market segmentation – homogeneous groups (III); SWOT – critical evaluation (II); incubator – startup nurturing (I).

90 **Answer: C**

Seed-stage valuations are usually lower (I true). Most startups first use their own money, friends and family or angels, not VC (II false).

91 **Answer: C**

The diagram correctly shows the whole process: proposed idea (i), the decision depending on (ii) the four feasibility areas (iii), and go / rethink outcomes (iv). **All four parts are correct.**

92 **Answer: B**

VC financing is private equity for early-stage, high-risk, high-return ventures (A, B, D). It is not for blue-chip firms (C) and not only for tech (E). Answer: **(A), (B) and (D)**.

93 **Answer: A**

An entrepreneur is a person who takes **moderate, calculated risks**.

94 **Answer: C**

Equity financing – selling ownership shares (II); strategic alliance – partnership for mutual benefit (III); entrepreneurial mindset – innovative thinking (IV); break-even point – no profit, no loss (I).

95 **Answer: D**

Lean startup avoids long upfront research (I false) and tests hypotheses with an MVP (II true).

96 **Answer: B**

Angel investment is aimed at early-stage startups.

97 **Answer: A**

CBA compares a project's social costs and benefits in money terms, and it is the most widely used appraisal tool for transport projects. **Both true.**

98 **Answer: C**

Feasibility analysis is the preliminary check of whether a business idea is viable and worth pursuing: **(A) and (B)**. C, D and E describe narrower tasks (payback, technical testing, demand planning).

99 **Answer: A**

Both describe creativity correctly: novel, useful ideas (I), arising from knowledge, cognition, personality, intelligence and motivation (II).

100 **Answer: B**

Fabian entrepreneurs are cautious and sceptical; they resist change and prefer old practices.