

SSC CGL 2025 | SPECIAL MOCK TEST – 39 : SOLUTIONS

A-GENERAL INTELLIGENCE & REASONING

1. (a) JPPJPJP

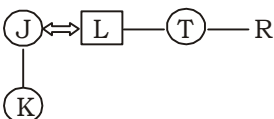
2. (d)

3. (c) 16

4. (c) U V X W
21 22 24 23
+1 +2 -1

5. (b) 12

6. (b)

7. (a) 

S, J is the Wife of L.

8. (b) $6 \div 8 - 91 \times 13 + 30 = ?$

After interchanging the signs then:

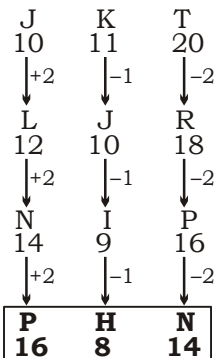
$$\Rightarrow 6 \times 8 + 91 \div 13 - 30 = ?$$

$$\Rightarrow ? = 6 \times 8 + 7 - 30$$

$$\Rightarrow ? = 48 + 7 - 30$$

$$\Rightarrow ? = 55 - 30 = 25$$

9. (b)

10. (d) 

11. (d) Meek is the opposite of Bold

Similarly,

Spend is the opposite of Hoard

12. (a) $99 \div 41 + 208 \times 2 - 35 = ?$

After interchanging the signs then:

$$\Rightarrow 99 \times 41 - 208 \div 2 + 35 = ?$$

$$\Rightarrow ? = 99 \times 41 - 104 + 35$$

$$\Rightarrow ? = 4059 - 104 + 35$$

$$\Rightarrow ? = 4094 - 104 = 3990$$

13. (d)

14. (b) (54, 65, 76)

$$\Rightarrow (54 + 76) \div 2 = 130 \div 2 = 65$$

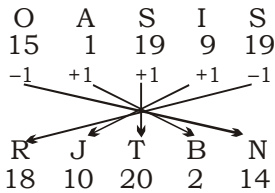
(48, 59, 70)

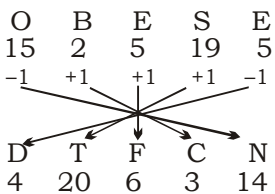
$$\Rightarrow (48 + 70) \div 2 = 118 \div 2 = 59$$

Similarly,

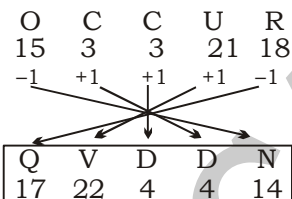
(38, 49, 60)

$$\Rightarrow (38 + 60) \div 2 = 98 \div 2 = 49$$

15. (d) 



Similarly,

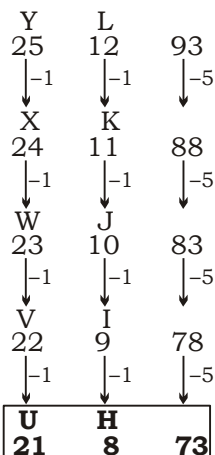


16. (b)



17. (a)

Original Alphabets	M	U	S	I	C	A	L
Alphabetical order	A	C	I	L	M	S	U

18. (d) 

19. (a) a) $86 - 41 - 38 \rightarrow (86 + 38) / 3 = 124 / 3 = 41.3$

b) $118 - 93 - 161 \rightarrow (118 + 161) / 3 = 279 / 3 = 93$

c) $33 - 15 - 12 \rightarrow (33 + 12) / 3 = 45 / 3 = 15$

d) $52 - 36 - 56 \rightarrow (52 + 56) / 3 = 108 / 3 = 36$

20. (d) (23, 230, 5):

$$\Rightarrow (23 \times 5) \times 2$$

$$\Rightarrow 115 \times 2 = 230$$

(17, 272, 8)

$$\Rightarrow (17 \times 8) \times 2$$

$$\Rightarrow 136 \times 2 = 272$$

Similarly

(19, 304, 8):

$$\Rightarrow (19 \times 8) \times 2$$

$$\Rightarrow 152 \times 2 = 304$$

21. (b) 17 : 67

$$\Rightarrow (17 \times 3) + 16 = 51 + 16 = 67$$

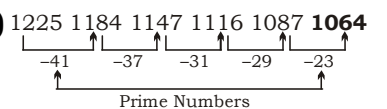
21 : 79

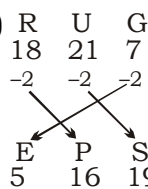
$$\Rightarrow (21 \times 3) + 16 = 63 + 16 = 79$$

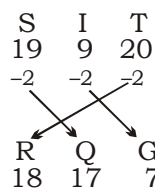
Similarly,

34 : 118

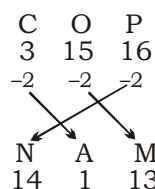
$$\Rightarrow (34 \times 3) + 16 = 102 + 16 = 118$$

22. (d) 

23. (c) 



Similarly,



24. (c) Mouth

25. (a)

B-GENERAL AWARENESS

26. (c) The harmika is the square railing structure that sits atop the dome (anda) of the stupa. Symbolically, it represents the heavenly palace or the abode of the gods. Relics of Buddha were kept in Stupa not harmika./ हर्मिका, स्तूप के गुंबद (अंडा) के ऊपर स्थित चौकोर रेलिंग संरचना है। प्रतीकात्मक रूप से, यह स्वर्गीय महल या देवताओं के निवास का प्रतिनिधित्व करता है। बुद्ध के अवशेष हर्मिका में नहीं, बल्कि स्तूप में रखे गए थे।

27. (d) During his initial campaigns into the Indian subcontinent, Babur first conquered the town of Bhira (now Bhera in modern-day Pakistan) in 1519. This was his first successful incursion into the region, preceding his major later battles like the First Battle of Panipat./ भारतीय उपमहाद्वीप में अपने शुरुआती अभियानों के दौरान, बाबर ने सबसे पहले 1519 में भीरा (जो अब आधुनिक पाकिस्तान में भेरा है) शहर पर विजय प्राप्त की। यह इस क्षेत्र में उसका पहला सफल आक्रमण था, जो पानीपत के प्रथम युद्ध जैसी उसकी बाद की प्रमुख लड़ाइयों से पहले हुआ था।

28. (c) Raja Rammohan Roy's key methods were intellectual, persuasive, and political in nature. Engaging in Debates, Campaigning with Literature (sambad kaumudi) Petitions and Political Pressure being prominent among them./ राजा राममोहन राय की प्रमुख विधियाँ बौद्धिक, प्रेरक और राजनीतिक प्रकृति की थीं। वाद-विवाद में भाग लेना, साहित्य के साथ प्रचार करना (संवाद कौमुदी), याचिकाएँ और राजनीतिक दबाव उनमें प्रमुख थे।

29. (b) Salt Satyagraha was specifically aimed at defying the British Salt Act, which gave the British government

a complete monopoly over the production and sale of salt. Gandhi chose the salt tax because it affected every section of Indian society, making the protest a powerful symbol of British oppression./ नमक सत्याग्रह का मुख्य उद्देश्य ब्रिटिश नमक अधिनियम का विरोध करना था, जो ब्रिटिश सरकार को नमक के उत्पादन और बिक्री पर पूर्ण एकाधिकार प्रदान करता था। गांधीजी ने नमक कर इसलिए चुना क्योंकि यह भारतीय समाज के हर वर्ग को प्रभावित करता था, जिससे यह विरोध ब्रिटिश उत्पीड़न का एक शक्तिशाली प्रतीक बन गया।

30. (c) The primary cause of convectional rainfall is the heating of air that rises and cools. Specifically, the Earth's surface is intensely heated by the sun, causing the air above it to warm, expand, and rise. As this warm air ascends, it cools, leading to condensation and eventual rainfall./ संवहनीय वर्षा का मुख्य कारण ऊपर उठने वाली और ठंडी होने वाली हवा का गर्म होना है। विशेष रूप से, पृथ्वी की सतह सूर्य द्वारा अत्यधिक गर्म होती है, जिससे उसके ऊपर की हवा गर्म होती है, फैलती है और ऊपर उठती है। जैसे-जैसे यह गर्म हवा ऊपर उठती है, ठंडी होती जाती है, जिससे संघनन होता है और अंततः वर्षा होती है।

31. (c) The presence of valuable mineral resources acts as a magnet for mining and processing industries. The establishment of these industries generates a large number of employment opportunities. This availability of work acts as a major pull factor, causing people to migrate to the area, resulting in a higher population density around the mineral deposits./ बहुमूल्य खनिज संसाधनों की उपस्थिति खनन और प्रसंस्करण उद्योगों के लिए एक

आकर्षण का केंद्र होती है। इन उद्योगों की स्थापना से बड़ी संख्या में रोजगार के अवसर पैदा होते हैं। काम की यह उपलब्धता एक प्रमुख आकर्षण कारक के रूप में कार्य करती है, जिससे लोग इस क्षेत्र की ओर पलायन करते हैं, जिसके परिणामस्वरूप खनिज भंडारों के आसपास जनसंख्या घनत्व बढ़ जाता है।

32. (b) Article 262 of the Indian Constitution grants Parliament the authority to legislate for the adjudication of any dispute or complaint relating to the use, distribution, or control of waters of inter-State rivers or river valleys. This ensures that water disputes are settled through a centralized, expert-driven process rather than judicial intervention./ भारतीय संविधान का अनुच्छेद 262 संसद को अंतर-राज्यीय नदियों या नदी घाटियों के जल के उपयोग, वितरण या नियंत्रण से संबंधित किसी भी विवाद या शिकायत के निपटारे के लिए कानून बनाने का अधिकार देता है। यह सुनिश्चित करता है कि जल विवादों का निपटारा न्यायिक हस्तक्षेप के बजाय एक केंद्रीकृत, विशेषज्ञ-संचालित प्रक्रिया के माध्यम से किया जाए।

33. (c) Theft committed by a gang among these options only qualifies for organised petty crime whereas others fall under severe grievous offence./ इन विकल्पों में से किसी गिरोह द्वारा की गई चोरी केवल संगठित छोटे अपराध की श्रेणी में आती है, जबकि अन्य गंभीर अपराध की श्रेणी में आते हैं।

34. (c) The 11th edition of the India-Bangladesh joint military exercise, SAMPRITI-XI, was conducted in Umroi, Meghalaya, in October 2023. It aimed to enhance interoperability and share tactical expertise between the two armies while conducting Sub-Conventional Operations under the UN mandate.

भारत-बांग्लादेश संयुक्त सैन्य अभ्यास, सम्प्रीति-XI का 11वां संस्करण, अक्टूबर 2023 में मेघालय के उमरोई में आयोजित किया गया था। इसका उद्देश्य संयुक्त राष्ट्र अधिदेश के तहत उप-पारंपरिक अभियानों का संचालन करते हुए दोनों सेनाओं के बीच अंतर-संचालन क्षमता को बढ़ाना और सामरिक विशेषज्ञता साझा करना था।

35. (a) The National Single Window System (NSWS) is an online digital platform launched by the Government of India to serve as a one-stop solution for investors to identify and obtain necessary approvals and clearances from various Central and State/UT Ministries/Departments./राष्ट्रीय एकल खिड़की प्रणाली (NSWS) भारत सरकार द्वारा शुरू किया गया एक ऑनलाइन डिजिटल प्लेटफॉर्म है जो निवेशकों के लिए विभिन्न केंद्रीय और राज्य/संघ राज्य क्षेत्र मंत्रालयों/विभागों की पहचान करने और उनसे आवश्यक अनुमोदन और मंजूरी प्राप्त करने हेतु वन-स्टॉप समाधान के रूप में कार्य करता है।

The NSWS is an online digital portal and a technology-based mechanism, not a separate ministry. Its function is to integrate services from various existing Ministries and Departments, not replace them or operate as a standalone government division./NSWS एक ऑनलाइन डिजिटल पोर्टल और प्रौद्योगिकी-आधारित तंत्र है, न कि एक अलग मंत्रालय। इसका कार्य विभिन्न मौजूदा मंत्रालयों और विभागों की सेवाओं को एकीकृत करना है, न कि उन्हें प्रतिस्थापित करना या एक स्वतंत्र सरकारी प्रभाग के रूप में कार्य करना।

36. (c) Under Article 110(3) of the Indian Constitution, if any question arises whether a Bill is a Money Bill or not, the decision of the Speaker

of the Lok Sabha is final. The Speaker's decision is considered conclusive and cannot be challenged in any court or in either House of Parliament./भारतीय संविधान के अनुच्छेद 110(3) के तहत, यदि कोई प्रश्न उठता है कि कोई विधेयक धन विधेयक है या नहीं, तो लोकसभा अध्यक्ष का निर्णय अंतिम होता है। अध्यक्ष का निर्णय निर्णायक माना जाता है और इसे किसी भी न्यायालय या संसद के किसी भी सदन में चुनौती नहीं दी जा सकती है।

37. (c) The change in the perceived pitch (frequency) of a train's whistle as it approaches and then moves away from a person standing on the platform is the classic demonstration of the Doppler Effect. The Doppler Effect is the change in frequency or wavelength of a wave (sound or light) in relation to an observer who is moving relative to the wave source./प्लेटफॉर्म पर खड़े व्यक्ति के पास आने और फिर उससे दूर जाने पर ट्रेन की सीटी की अनुभूत पिच (आवृत्ति) में परिवर्तन डॉप्लर प्रभाव का उत्कृष्ट उदाहरण है। डॉप्लर प्रभाव तरंग स्रोत के सापेक्ष गतिमान एक प्रेक्षक के संबंध में तरंग (ध्वनि या प्रकाश) की आवृत्ति या तरंगदैर्घ्य में परिवर्तन है।

38. (a) The primary form of readily available energy storage in animal bodies is the complex carbohydrate glycogen. Glycogen is a polysaccharide (a branched chain of glucose units) primarily stored in the liver and muscle cells of animals, including humans. It acts as a quick reserve: when the body needs energy, glycogen is rapidly broken down into glucose./जंतुओं के शरीर में आसानी से उपलब्ध ऊर्जा भंडारण का प्राथमिक रूप जटिल कार्बोहाइड्रेट ग्लाइकोजन है। ग्लाइकोजन एक पॉलीसैकराइड (ग्लूकोज इकाइयों की एक

शाखित श्रृंखला) है जो मुख्य रूप से मनुष्यों सहित जंतुओं के यकृत और पेशी कोशिकाओं में संग्रहित होता है। यह एक त्वरित भंडार के रूप में कार्य करता है: जब शरीर को ऊर्जा की आवश्यकता होती है, तो ग्लाइकोजन तेजी से ग्लूकोज में टूट जाता है।

39. (b) Glycolysis occurs in the cytoplasm (or cytosol) not mitochondria./ग्लाइकोलाइसिस कोशिकाद्रव्य (या साइटोसोल) में होता है, माइटोकॉन्ड्रिया में नहीं।

The Krebs cycle (or Citric Acid Cycle) takes place within the fluid-filled matrix of the mitochondria./क्रेब चक्र (या साइट्रिक अम्ल चक्र) माइटोकॉन्ड्रिया के द्रव-भरे मैट्रिक्स के भीतर होता है। Oxygen (O_2) is the terminal (final) electron acceptor in the Electron Transport Chain (ETC), which is the final stage of aerobic respiration. It combines with electrons and hydrogen ions to form water./ऑक्सीजन (O_2) इलेक्ट्रॉन परिवहन श्रृंखला (ETC) में अंतिम इलेक्ट्रॉन स्वीकर्ता है, जो वायवीय श्वसन का अंतिम चरण है। यह इलेक्ट्रॉनों और हाइड्रोजन आयनों के साथ मिलकर जल बनाता है।

40. (c) The neck is joined to the head by the pivotal joint (atlanto-axial joint), allowing rotational movement (e.g., turning the head). Ball and socket joints (e.g., shoulder) allow multi-directional movement, hinge joints (e.g., elbow) allow bending, and fixed joints (e.g., skull sutures) are immovable./गर्दन सिर से धुरी जोड़ (एटलैंटो-अक्षीय जोड़) द्वारा जुड़ी होती है, जो घूर्णन गति (जैसे, सिर को घुमाना) की अनुमति देता है। बॉल और सॉकेट जोड़ (जैसे, कंधा) बहु-दिशात्मक गति की अनुमति देते हैं, हिंज जोड़ (जैसे, कोहनी) झुकने की अनुमति देते हैं, और स्थिर जोड़ (जैसे, खोपड़ी के सिक्की) अचल होते हैं।

41. (a) Sarsai Nawar Wetland in Uttar Pradesh is known for being a major habitat for the Sarus Crane and has been recently designated as a Ramsar Site. It hosts the largest population of this vulnerable species in India, underscoring its ecological significance./उत्तर प्रदेश में सरसई नवार आर्द्रभूमि सारस क्रेन के लिए एक प्रमुख आवास के रूप में जानी जाती है और इसे हाल ही में रामसर स्थल के रूप में नामित किया गया है। यह भारत में इस संवेदनशील प्रजाति की सबसे बड़ी आबादी का घर है, जो इसके पारिस्थितिक महत्व को रेखांकित करता है।

42. (c) The World Economic Forum publishes this annual index to track and rank countries on their progress toward secure, affordable, and sustainable energy systems globally. The 2025 edition assesses performance across energy security, sustainability, and equity, alongside readiness factors like innovation, infrastructure, and finance./विश्व आर्थिक मंच वैश्विक स्तर पर सुरक्षित, सस्ती और टिकाऊ ऊर्जा प्रणालियों की दिशा में देशों की प्रगति को ट्रैक करने और रैंक करने के लिए यह वार्षिक सूचकांक प्रकाशित करता है। 2025 का संस्करण ऊर्जा सुरक्षा, स्थिरता और समानता के साथ-साथ नवाचार, बुनियादी ढांचे और वित्त जैसे तत्परता कारकों में प्रदर्शन का आकलन करता है।

43. (a) The Koli dance is a lively folk dance of the Koli community, who are traditionally fishermen. This dance reflects their close relationship with the sea and their daily fishing life. It is characterized by energetic movements that mimic fishing activities and is an important part of the

cultural heritage of the Koli fisherfolk in Maharashtra and coastal regions./कोली नृत्य कोली समुदाय का एक जीवंत लोक नृत्य है, जो पारंपरिक रूप से मछुआरे हैं। यह नृत्य समुद्र के साथ उनके घनिष्ठ संबंध और उनके दैनिक मछली पकड़ने के जीवन को दर्शाता है। यह ऊर्जावान आंदोलनों की विशेषता है जो मछली पकड़ने की गतिविधियों की नकल करते हैं और महाराष्ट्र और तटीय क्षेत्रों में कोली मछुआरों की सांस्कृतिक विरासत का एक महत्वपूर्ण हिस्सा है।

44. (c) The National Green Hydrogen Mission aims to reduce dependency on fossil fuels. However, the mission is implemented by the Ministry of New and Renewable Energy (MNRE), not the Ministry of Environment, Forest and Climate Change (MOEFCC)./राष्ट्रीय हरित हाइड्रोजन मिशन का उद्देश्य जीवाश्म ईंधन पर निर्भरता को कम करना है। हालाँकि, इस मिशन का क्रियान्वयन नवीन एवं नवीकरणीय ऊर्जा मंत्रालय (एमएनआरई) द्वारा किया जाता है, न कि पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय (एमओईएफसीसी) द्वारा।

45. (a) Gokul Chandra Das - Folk Music; Farooq Ahmad Mir - Art; Geeta Devi - Literature and Education/गोकुल चंद्र दास - लोक संगीत; फारूक अहमद मीर - कला; गीता देवी - साहित्य एवं शिक्षा

46. (c) The National Institute of Sports, established in 1961 within the former Palace of the Maharaja of Patiala, was later renamed as the Netaji Subhas National Institute of Sports (NSNIS) on 23rd January 1973. This renaming was done to honour Netaji Subhas Chandra Bose. The institute remains Asia's largest sports institute, located in Patiala, Punjab./पटियाला के महाराजा के पूर्व महल में 1961 में स्थापित राष्ट्रीय

खेल संस्थान का नाम बाद में 23 जनवरी 1973 को नेताजी सुभाष राष्ट्रीय खेल संस्थान (NSNIS) कर दिया गया। यह नामकरण नेताजी सुभाष चंद्र बोस के सम्मान में किया गया था। यह संस्थान पंजाब के पटियाला में स्थित, एशिया का सबसे बड़ा खेल संस्थान बना हुआ है।

47. (b) ISRO's Bahubali rocket (LVM3-M5) successfully launched CMS-03, India's heaviest communication satellite (approximately 4,410 kg) into GTO, marking a major milestone in India's space capabilities and showcasing self-reliance in deploying heavy payloads for strategic applications./इसरो के बाहुबली रॉकेट (LVM3-M5) ने भारत के सबसे भारी संचार उपग्रह (लगभग 4,410 किलोग्राम) CMS-03 को GTO में सफलतापूर्वक प्रक्षेपित किया, जिसने भारत की अंतरिक्ष क्षमताओं में एक प्रमुख मील का पत्थर चिह्नित किया और रणनीतिक अनुप्रयोगों के लिए भारी पेलोड तैनात करने में आत्मनिर्भरता का प्रदर्शन किया।

48. (a) Kerala's Chief Minister Pinarayi Vijayan made the announcement on November 1, 2025, declaring it the first state in India to achieve this milestone. The programme was executed with the help of various local bodies and organisations like Kudumbashree, providing benefits such as free cooked meals, health assistance, livelihood support, and housing construction under schemes like the LIFE Mission./केरल के मुख्यमंत्री पिनाराई विजयन ने 1 नवंबर, 2025 को घोषणा की यह कार्यक्रम विभिन्न स्थानीय निकायों और कुदुम्बश्री जैसे संगठनों की मदद से क्रियान्वित किया गया, जिसमें LIFE मिशन जैसी योजनाओं के तहत मुफ्त पका हुआ भोजन, स्वास्थ्य सहायता, आजीविका सहायता और आवास निर्माण जैसे लाभ प्रदान किए गए।

49.(c) India's first indigenous Photonic Radar was developed by the DRDO. Photonic Radar leverages light-based (photonic) technology using components like lasers and optical fibres for signal generation and processing. भारत का पहला स्वदेशी फोटोनिक रडार DRDO द्वारा विकसित किया गया था। फोटोनिक रडार सिग्नल निर्माण और प्रसंस्करण के लिए लेजर और ऑप्टिकल फाइबर जैसे घटकों का उपयोग करके प्रकाश-आधारित (फोटोनिक) तकनीक का लाभ उठाता है।

50.(c) Lucknow was added to the UNESCO Creative Cities Network (UCCN) in the category of Gastronomy for its rich culinary heritage, particularly the Awadhi cuisine. With this designation, Lucknow becomes the second Indian city to be named a Creative City of Gastronomy, following Hyderabad. लखनऊ को अपनी समृद्ध पाक विरासत, विशेष रूप से अवधी व्यंजनों के लिए गैस्ट्रोनॉमी की श्रेणी में यूनेस्को क्रिएटिव सिटीज नेटवर्क (UCCN) में जोड़ा गया था। इस पदनाम के साथ, लखनऊ हैदराबाद के बाद गैस्ट्रोनॉमी (पाक) का रचनात्मक शहर नामित होने वाला दूसरा भारतीय शहर बन गया।

C - QUANTITATIVE APTITUDE

51.(b) Dimension of the cuboidal box are:
Length = 1.2cm
Breadth 1.3 cm
Height = 1.5 cm
Length of the longest diagonal of a cuboid,

$$d = \sqrt{l^2 + b^2 + h^2}$$

$$\Rightarrow d = \sqrt{(1.2)^2 + (1.3)^2 + (1.5)^2}$$

$$\Rightarrow d = \sqrt{1.44 + 1.69 + 2.25}$$

$$\Rightarrow d = \sqrt{5.38}$$

$$\Rightarrow d = 2.32 \text{ cm}$$

52.(b) x is an integer, and

$$x + \frac{1}{x} = \frac{65}{8}$$

We need to find the value of:

$$x - \frac{1}{x}$$

If $a = x + \frac{1}{x}$ and $b = x - \frac{1}{x}$ then:

Step 1: Find the value of a^2 :

$$a = x + \frac{1}{x} = \frac{65}{8}$$

$$a^2 = \left(\frac{65}{8}\right)^2 = \frac{4225}{64}$$

Step 2: Use the formula $a^2 - b^2 = 4$

$$\frac{4225}{64} - b^2 = 4$$

$$b^2 = \frac{4225}{64} - \frac{256}{64}$$

$$b^2 = \frac{4225 - 256}{64}$$

$$b^2 = \frac{3969}{64}$$

Step 3: Find the value of b:

$$b = \sqrt{\frac{3969}{64}}$$

$$b = \frac{\sqrt{3969}}{\sqrt{64}}$$

$$b = \frac{63}{8}$$

The value of $x - \frac{1}{x}$ is $\frac{63}{8}$.

53.(c) Lengths of sides in a triangle: 6 units, 12 units, and x units.

Triangle Inequality Theorem: The sum of the lengths of any two sides of a triangle must be greater than the length of the third side. Using the Triangle Inequality Theorem:

$$6 + 12 > x$$

$$6 + x > 12$$

$$12 + x > 6$$

From the first Inequality:

$$x < 18$$

From the second Inequality:

$$x > 6$$

From the third Inequality:

This condition is always true

since x is a positive integer and $12 + x > 6$ will always hold.

Combining the inequalities: $6 < x < 18$

Possible integer values for x: 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17

Number of possible integer values: 11.

54.(c) Length of the circular track = 210m

Time taken by Arvind to complete one round = 180 seconds

Time taken by Chetan to complete one round = 420 seconds.

Time to meet at the starting point for the first time = LCM of the time taken by both.

Find the LCM of 180 and 420
Prime factorization of 180 = $2^2 \times 3^2 \times 5$

Prime factorization of 420 = $2^2 \times 3 \times 5 \times 7$

$$\text{LCM} = 2^2 \times 3^2 \times 5 \times 7$$

$$\Rightarrow \text{LCM} = 4 \times 9 \times 5 \times 7$$

$$\Rightarrow 1260 \text{ seconds}$$

Convert 1260 seconds to minutes:

$$\Rightarrow \frac{1260}{60} = 21 \text{ minutes}$$

55.(c) Step 1: Calculate the average of the low rates for company C:

Low rates: Hyderabad = 175, Mumbai = 180, Bengaluru = 185.

$$\text{Average} = \frac{175 + 180 + 185}{3}$$

$$= \frac{540}{3} = 180.$$

Step 2: Compare the low rates with the average:

Hyderabad Low: 175 (less than 180).

Mumbai Low: 180 (equal to 180).

Bengaluru Low: 185 (greater than 180).

The low rates of shares for company C are less than the average in the Hyderabad stock exchange.

56.(a) P is a digit such that 6954P is divisible by 11.

A number is divisible by 11 if the difference between the sum of the digits in odd positions and the sum of the digits in even positions is either 0 or a multiple of 11.
Sum of digits at odd positions (from left): $6 + 5 + P$

Sum of digits at even positions (from left): $9 + 4$

Sum of digits at odd positions = $6 + 5 + P = 11 + P$

Sum of digits at even positions = $9 + 4 = 13$

For 6954P to be divisible by 11:

$11 + P - 13 = 0$ or multiple of 11

$$\Rightarrow P - 2 = 0$$

$$\Rightarrow P = 2$$

57.(c) The bank earns ₹ 30,000 for every ₹ 3,00,000 invested in the stock market.

Interest rate given by the bank = 6%

Interest earned by the depositors = Principal amount $\times$ Interest rate

Profit earned from the stock market = (Total amount deposited / Amount for which profit is known) $\times$ Profit for that amount

Total earning of the bank = Profit earned from the stock market - Interest paid to depositors.

Interest earned by the depositors:

$$\Rightarrow ₹ 60,00,000 \times 0.06$$

$$\Rightarrow ₹ 3,60,000$$

Profit earned from the stock market:

$$\Rightarrow (\text{₹ } 60,00,000 / \text{₹ } 3,00,000) \times \text{₹ } 30,000$$

$$\Rightarrow 20 \times \text{₹ } 30,000$$

$$\Rightarrow \text{₹ } 6,00,000$$

Total earning of the bank:

$$\Rightarrow \text{₹ } 6,00,000 - \text{₹ } 3,60,000$$

$$\Rightarrow \text{₹ } 2,40,000$$

58.(c) Average expenditure = (Total expenditure) / (Number of years).

Step 1: Calculate the total

expenditure on transport:

Total transport expenditure

$$= 38 + 45 + 57 + 63$$

$$\text{Total} = 203 \text{ ₹ lakh.}$$

Step 2: Calculate the average:

Average expenditure = Total expenditure / Number of years

$$\text{Average} = \frac{203}{4}$$

$$\text{Average} = 50.75 \text{ ₹ lakh.}$$

59.(b) Step 1: Find $\sin x$ and $\cos x$:

$$\text{Given } \operatorname{cosec} x = \frac{5}{4}, \text{ so } \sin x$$

$$= \frac{4}{5}$$

$$\text{Using } \sin^2 x + \cos^2 x = 1$$

$$\left(\frac{4}{5}\right)^2 + \cos^2 x = 1$$

$$\frac{16}{25} + \cos^2 x = 1$$

$$\cos^2 x = 1 - \frac{16}{25} = \frac{9}{25}$$

$$\cos x = \frac{3}{5}$$

Step 2 : Find $\cot x$ and $\tan x$:

$$\cot x = \frac{\cos x}{\sin x} = \frac{\frac{3}{5}}{\frac{4}{5}} = \frac{3}{4}$$

$$\tan x = \frac{\sin x}{\cos x} = \frac{\frac{4}{5}}{\frac{3}{5}} = \frac{4}{3}$$

Step 3: Substitute values into the expression:

$$\text{Numerator} = 5\sin^2 x + 8\cot^2 x$$

$$= 5\left(\frac{4}{5}\right)^2 + 8\left(\frac{3}{4}\right)^2$$

$$= 5\left(\frac{16}{25}\right) + 8\left(\frac{9}{16}\right)$$

$$= \frac{16}{5} + \frac{72}{16}$$

$$= \frac{16}{5} + \frac{9}{2} \quad (\text{Convert to common denominator})$$

$$= \frac{(32 + 45)}{10} = \frac{77}{10}$$

$$\text{Denominator} = 27\tan^2 x - 125\cos^2 x$$

$$= 27\left(\frac{4}{3}\right)^2 - 125\left(\frac{3}{5}\right)^2$$

$$= 27\left(\frac{16}{9}\right) - 125\left(\frac{9}{25}\right)$$

$$= 48 - 45 = 3$$

$$\frac{5\sin^2 x + 8\cot^2 x}{27\tan^2 x - 125\cos^2 x} = \frac{\frac{77}{10}}{3}$$

$$\frac{5\sin^2 x + 8\cot^2 x}{27\tan^2 x - 125\cos^2 x}$$

$$= \frac{77}{10 \times 3} = \frac{77}{30}$$

60.(d) 42 litres of milk at ₹ 25 per litre.

28 litres of milk at ₹ 40 per litre.

Average price of the mixture = (Total cost of milk) / (Total quantity of milk)

Total cost of 42 litres of milk = 42×25

Total cost of 28 litres of milk = 28×40

Total cost of milk = $(42 \times 25) + (28 \times 40)$

Total quantity of milk = $42 + 28$

Total cost of milk = 1050 + 1120

Total cost of milk = 2170

Total quantity of milk = 70

Average price of the mixture

$$= \frac{2170}{70}$$

Average price of the mixture = 31

61.(a) In triangle ABC, D is the mid-point of BC.

$DL \perp AB$ and $DM \perp AC$

$DL = DM$

In a triangle, if the perpendiculars drawn from the mid-point of one side to the other two sides are equal, then the triangle is isosceles.

Given $DL = DM$ and D is the mid-point of BC , it implies that triangle ABD is congruent to triangle ACD by RHS (Right angle-Hypotenuse-Side) congruence.

Since triangle $ABD \cong$ triangle ACD , it implies that $AB = AC$. Hence, triangle ABC is an isosceles triangle.

62. (d) Marked price of the TV = ₹ 18,500

First discount = 20%

Second discount = 5%

Final Price = Marked Price $\times$ $(1 - \text{Discount}_1) \times (1 - \text{Discount}_2)$

First discount = 20% of ₹ 18,500

First discounted price = ₹

$$18,500 \times \frac{1 - 20}{100}$$

$\Rightarrow$ First discounted price = ₹ $18,500 \times 0.80$

$\Rightarrow$ First discounted price = ₹ 14,800

Second discount = 5% of ₹ 14,800

Second discounted price = ₹

$$14,800 \times \frac{1 - 5}{100}$$

$\Rightarrow$ Second discounted price = ₹ $14,800 \times 0.95$

$\Rightarrow$ Second discounted price = ₹ 14,060

The TV is available for ₹ 14,060.

63. (d) Ajay spends $66\frac{2}{3}\%$ of his

income on household items.

Income increases by 25%.

Expenditure increases by 20%.

Savings = Income - Expenditure

Let initial income be 100.

Initial expenditure = $66\frac{2}{3}\%$

of 100 = 66.67

Initial savings = $100 - 66.67 = 33.33$

New income = $100 \times 1.25 =$

125

New expenditure = $66.67 \times 1.20 = 80$

New savings = $125 - 80 = 45$

Effect on savings = New savings - Initial savings

Effect on savings = $45 - 33.33 = 11.67$

Effect on savings in

$$\text{percentage} = \frac{11.67}{33.33} \times 100$$

Effect on savings in percentage = 35%

64. (a) For $x = 0$ and $y = 1$, $f = 15$

For $x = 1$ and $y = 15$, $f = 2$

F is directly proportional to x ,

i.e. $f \propto x$

$$\Rightarrow f = ax$$

Again, F is inversely proportional to y ,

$$\text{i.e. } f \propto \frac{1}{y}$$

$$\Rightarrow f = \frac{b}{y}$$

So, function : $f(x, y) = ax + \frac{b}{y}$

$$\frac{b}{y}$$

According to the question, $x = 0$ and $y = 1$, $f = 15$

$$f(x, y) = ax + \frac{b}{y}$$

$$\Rightarrow 15 = a(0) + \frac{b}{1}$$

$$\Rightarrow 15 = b$$

$x = 1$ and $y = 15$, $f = 2$

$$f(x, y) = ax + \frac{b}{y}$$

$$\Rightarrow 2 = a(1) + \frac{15}{15}$$

$$\Rightarrow 2 = a + 1$$

$$\Rightarrow a = 2 - 1 = 1$$

$$\text{So, } f(x = 5, y = 3) = ax + \frac{b}{y} =$$

$$1(5) + \frac{15}{3} = 5 + 5 = 10$$

65. (b) Principal amount (P) = ₹7,200

Amount (A) = ₹ 8,928

Rate of Interest (R) = 8% per annum

Simple Interest (SI) =

$$\frac{P \times R \times T}{100}$$

Amount (A) = Principal (P) + Simple Interest (SI)

Simple Interest (SI) = Amount (A) - Principal (P)

$$\Rightarrow \text{SI} = ₹ 8,928 - ₹ 7,200$$

$$\Rightarrow \text{SI} = ₹ 1,728$$

Using the formula for Simple Interest:

$$\text{SI} = \frac{P \times R \times T}{100}$$

$$\Rightarrow 1,728 = \frac{7,200 \times 8 \times T}{100}$$

$$\Rightarrow 1,728 = 576 \times T$$

$$\Rightarrow T = \frac{1,728}{576}$$

$$\Rightarrow T = 3 \text{ years}$$

66. (a) $\tan(A) = \frac{3}{5}$

We need to find the value of $\cos(A)$.

Step 1: Use the definition of $\tan(A)$:

$$\tan(A) = \frac{\text{opposite}}{\text{adjacent}} = \frac{3}{5}$$

So, the opposite side = 3 and the adjacent side = 5.

Step 2: Use the Pythagorean theorem to find the hypotenuse:

$$\text{Hypotenuse}^2 = (\text{opposite})^2 + (\text{adjacent})^2$$

$$\text{Hypotenuse}^2 = 3^2 + 5^2 = 9 + 25 = 34$$

$$\text{Hypotenuse} = \sqrt{34}$$

Step 3: Use the definition of $\cos(A)$:

$$\cos(A) = \frac{\text{adjacent}}{\text{hypotenuse}}$$

$$\cos(A) = \frac{5\sqrt{34}}{34}$$

Step 4: Rationalize the denominator (if required):

$$\cos(A) = \frac{5\sqrt{34}}{34} = \frac{5}{\sqrt{34}}$$

67.(b) Step 1: Calculate the total sales of manufacturer Q:
Total sales of Q = 280 + 290 + 310 + 310 + 330
Total sales of Q = 1,520 thousand.

Step 2: Calculate the total sales of manufacturer S:
Total sales of S = 400 + 420 + 430 + 440 + 450
Total sales of S = 2,140 thousand.

Step 3: Find the ratio:
Ratio = Total sales of Q : Total sales of S
Ratio = 1,520 : 2,140
Divide both terms by 20:
Ratio = 76 : 107.
The ratio of the total sales of manufacturer Q to manufacturer S is 76 : 107.

68.(b) $\sin \theta + \cos \theta = \sqrt{3} \cos \theta$
We need to find the value of $\cot \theta$.

Step 1: Rearrange the given equation:

$$\sin \theta + \cos \theta = \sqrt{3} \cos \theta$$

Rearranging gives:

$$\sin \theta = \sqrt{3} \cos \theta - \cos \theta$$

$$\sin \theta = \cos \theta (\sqrt{3} - 1)$$

Step 2: Use the definition of $\cot \theta$:

$$\cot \theta = \frac{\cos \theta}{\sin \theta}$$

Substitute $\sin \theta = \cos \theta (\sqrt{3} - 1)$:

$$\cot \theta = \frac{\cos \theta}{\cos \theta (\sqrt{3} - 1)}$$

Cancel $\cos \theta$ from numerator and denominator:

$$\cot \theta = \frac{1}{\sqrt{3} - 1}$$

Step 3: Rationalize the denominator:

$$\cot \theta = \frac{1}{\sqrt{3} - 1} \times \frac{\sqrt{3} + 1}{\sqrt{3} + 1}$$

$$\cot \theta = \frac{\sqrt{3} + 1}{3 - 1}$$

$$\cot \theta = \frac{\sqrt{3} + 1}{2}$$

$$\mathbf{69.(a)} \quad -\frac{7}{6} + \frac{4}{9} \div \frac{5}{3} \times \frac{1}{16}$$

$$\Rightarrow -\frac{7}{6} + \frac{4}{9} \times \frac{3}{5} \times \frac{1}{16}$$

$$\Rightarrow -\frac{7}{6} + \frac{1}{3} \times \frac{1}{5} \times \frac{1}{4}$$

$$\Rightarrow -\frac{7}{6} + \frac{1}{60}$$

$$\Rightarrow \frac{(-7 + 1)}{60} = \frac{-6}{60} = -\frac{1}{10}$$

70.(d) Angle at the center, $\theta = 15^\circ$

Radius of the circular arc, $r = 14$ cm

$$\pi = 3.14$$

Perimeter of the sector = $2r + r\theta$ (in radians)

First, convert the angle from degrees to radians:

$$\theta \text{ (radians)} = \theta \text{ (degrees)} \times \frac{\pi}{180}$$

$$\frac{\pi}{180}$$

$$\theta \text{ (radians)} = 15 \times \frac{3.14}{180}$$

$$\theta \text{ (radians)} = 0.2618$$

Now, calculate the perimeter:

$$\text{Perimeter} = 2r + r\theta$$

$$\Rightarrow \text{Perimeter} = 2 \times 14 + 14 \times 0.2618$$

$$\Rightarrow \text{Perimeter} = 28 + 3.6652$$

$$\Rightarrow \text{Perimeter} = 31.6652 \text{ cm}$$

$$\Rightarrow \text{Perimeter} \approx 31.66 \text{ cm} \text{ (correct up to two decimal places)}$$

71.(d) $f(m) = m^5 + 5m^4 - 3m + 7$

Remainder when $f(m)$ is divided by $(m - a)$ is $f(a)$

We need to find the remainder when $f(m)$ is divided by $(m - 2)$

Substitute $m = 2$ in $f(m)$

$$f(2) = 2^5 + 5(2^4) - 3(2) + 7$$

$$\Rightarrow f(2) = 32 + 5(16) - 6 + 7$$

$$\Rightarrow f(2) = 32 + 80 - 6 + 7$$

$$\Rightarrow f(2) = 113$$

The remainder when $f(m)$ is divided by $(m - 2)$ is 113.

72.(b) From the first equation:

$$0.18y + 0.24b = 30$$

Multiplying both sides by 100:

$$18y + 24b = 3000$$

Dividing both sides by 6:

$$\Rightarrow 3y + 4b = 500$$

From the second equation:

$$3y - 2b = 200$$

Now, we have the system of equations:

$$1) 3y + 4b = 500$$

$$2) 3y - 2b = 200$$

Subtracting equation 2 from equation 1:

$$(3y + 4b) - (3y - 2b) = 500 - 200$$

$$6b = 300$$

$$\Rightarrow b = 50$$

Substituting $b = 50$ into equation 2:

$$3y - 2(50) = 200$$

$$3y - 100 = 200$$

$$\Rightarrow 3y = 300$$

$$\Rightarrow y = 100$$

The ratio of y^2 to b^2 :

$$\Rightarrow \frac{y^2}{b^2} = \frac{100^2}{50^2}$$

$$\Rightarrow \frac{10000}{2500} = 4$$

$$\Rightarrow 4 : 1$$

73.(a) The perimeter of the triangle is 52 units.

We need to determine the maximum possible length of any side of the triangle.

Step 1: Use the triangle inequality:

For any triangle, the sum of the lengths of any two sides must be greater than the third side.

If the sides are a , b , and c (where $a \leq b \leq c$), then:

$$a + b > c$$

Substituting the perimeter condition:

$$a + b + c = 52$$

$$\text{This implies } a + b = 52 - c.$$

$$\text{Thus, } 52 - c > c$$

Step 2: Solve for c :

$$52 > 2c$$

$$c < 26$$

The length of any side of the triangle is less than 26 units.

74.(c) 2018 = 140
2019 = 180
We need to calculate the percentage increase in the number of students in 2019 over 2018.

$$\text{Percentage Increase} = \frac{\text{Increase in Value}}{\text{Original Value}} \times 100$$

Step 1: Calculate the increase in the number of students:

$$\text{Increase} = 2019 \text{ value} - 2018 \text{ value}$$

$$\text{Increase} = 180 - 140 = 40.$$

Step 2: Apply the formula:

$$\text{Percentage Increase} = \frac{40}{140} \times 100$$

$$\text{Percentage Increase} = \frac{4000}{140}$$

$$= 28.57$$

(rounded off to two decimal places).

75.(d) Pipe A fills tank in 12 hours
Pipe B fills tank in 18 hours
Pipe C empties tank in 8 hours

$$\text{LCM} = \text{total work}$$

$$\text{Efficiency} = \text{LCM} \div \text{time}$$

$$\text{Net work rate} = (A + B - C)$$

$$\Rightarrow \text{LCM}(12, 18, 8) = 72 \text{ take total work} = 72 \text{ units}$$

$$\Rightarrow A = 72 \div 12 = 6 \text{ units/hour}$$

$$\Rightarrow B = 72 \div 18 = 4 \text{ units/hour}$$

$$\Rightarrow C \text{ (emptying)} = 72 \div 8 = 9 \text{ units/hour}$$

$$\Rightarrow \text{Net rate} = 6 + 4 - 9 = 1 \text{ unit/hour}$$

$$\Rightarrow \text{Time to finish} = 72 \div 1 = 72 \text{ hours}$$

D-ENGLISH COMPREHENSION

76.(a) "The" is used before *famous poem* because it refers to a **specific, well-known poem**. "The" is also used before *Romantic poet John Keats* because it identifies a **specific person** known for

belonging to a particular group (the Romantic poets).

77.(b) "as if" introduces a **hypothetical or imaginary** situation.

When expressing something *unreal or contrary to fact*, we use **subjunctive mood**, where "were" replaces "was."

Structure Pattern: **as if / as though + subject + were**

78.(a) The sentence requires the **possessive form** of the pronoun "it," which is "Its" (without an apostrophe), because the location belongs to it (the conference venue).

79.(b) **Explicit** – clearly and directly expressed (स्पष्ट / प्रत्यक्ष). Opposite is **Implicit** – implied or understood without being directly stated (अप्रत्यक्ष / निहित).

Drastic – extreme or severe in effect (कठोर / तीव्र).

Ordinary – common or usual (सामान्य).

Plain – simple or clear (सादा / स्पष्ट).

80.(c) **Truncated** – shortened by cutting off a part; made briefer (संक्षिप्त / काटकर छोटा किया हुआ). Similar to **Shortened** – made smaller in length or duration (छोटा किया हुआ).

Lengthened – made longer (लंबा किया हुआ).

Extended – stretched or expanded (विस्तारित).

Complicated – made complex or difficult (जटिल).

81.(a) **Make a clean breast of it** – to admit something honestly or confess the truth (ईमानदारी से स्वीकार करना या सच्चाई बताना).

82.(a) The correct question tag for "She has a car" is "doesn't

she?" because "has" (in this context) is used as a main verb (not as an auxiliary), so the question tag Must be **negative** and use the auxiliary **does** (because *has* here is the main verb, not an auxiliary).

83.(d) **Pulled a few strings** – means to use one's **influence or connections to get something done**, often discreetly or unofficially. (अपने प्रभाव या संबंधों का उपयोग करके कुछ हासिल करना).

84.(a) **Correct order is QPSR.**

Q: Introduces the topic – Enjoyment and health benefits of sports.

P: First benefit – Improves fitness and strength.

S: Second benefit – Builds teamwork and discipline.

R: Final point – Relieves stress and relaxes.

85.(b) **Torpor** – a state of physical or mental inactivity; sluggishness (सुस्ती / निष्क्रियता). Opposite is **Liveliness** – energy, enthusiasm, or activity (चुस्ती / जीवंतता).

Stupor – a state of near-unconsciousness (अचेतन अवस्था).

Sluggishness – lack of energy (सुस्ती).

Inertia – resistance to movement or change (जड़ता).

86.(c) **Active Voice Structure:** **Subject + had + past participle (Vf) + object + (by + agent)**

They had sent the invitations by courier.

Passive Voice Structure: **Object (becomes subject) + had been + past participle (Vf) + (by + agent)**

The invitations had been sent by courier.

- 87.(c) Direct Speech Structure:**
Subject + reporting verb (said) + object + comma + "Question word + subject + modal verb + verb + object"
 He said to me, "What can I do for you, dear?"
Indirect Speech Structure:
Subject + reporting verb (asked) + object + adverb (affectionately) + question word + subject + modal verb (backshifted) + verb + object
 He asked me affectionately what he could do for me.
- 88.(a)** The correct spelling is **Obfuscation** means *the act of making something unclear or confusing* (किसी बात को जानबूझकर उलझा देना या अस्पष्ट बनाना).
- 89.(b)** The correct phrasal verb is **"arrive at an agreement"**, meaning *to reach or come to a decision or understanding after discussion* (किसी निर्णय या समझौते पर पहुँचना).
- 90.(a) Conflagration** – a large, destructive fire (भीषण आग / विनाशकारी अग्निकांड). Similar to **Fire** – flames that burn and cause destruction (आग / दहन).
Explosion – a violent burst or blast (विस्फोट).
Storm – violent weather with strong winds and rain (तूफान).
Flood – overflowing of water onto land (बाढ़).

- 91.(b)** Correct spelling is **Pensive** means *deeply thoughtful, often with a touch of sadness or melancholy* (गंभीर या उदास चिंतनशील).
- 92.(d) Agoraphobia** – fear of open or public spaces (खुले या सार्वजनिक स्थानों का डर).
Xenophobia – fear or dislike of foreigners or strangers (विदेशियों या अजनबियों का डर).
Claustrophobia – fear of confined or closed spaces (बंद स्थानों का डर).
Acrophobia – fear of heights (ऊँचाई का डर).
- 93.(a) Correct order is 1-3-2-4.**
1: Introduces the idea – Gravitational waves were long theorized.
3: Event – Observed by LIGO in 2015.
2: Significance – Confirmed Einstein's prediction.
4: Outcome – Opened new avenues in astrophysics.
- 94.(a)** The superlative **"the most effective"** is used because the book is being compared to **all other resources** for mastering syntactic nuance. A superlative adjective must be preceded by the definite article "the".
- 95.(c) Incipient** – beginning to exist or appear; in an early stage (आरंभिक / प्रारंभिक).
Opposite is Advanced – fully developed or at a later stage (उन्नत / विकसित).

Nascent – just coming into existence (नवोदित).
Developing – growing or progressing (विकसित हो रहा).
Budding – showing signs of future development (अंकुरित / उभरता हुआ).

- 96.(b)**
97.(c)
98.(c)
99.(b)
100.(c)

ANSWER KEY

- | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|
| 1. | (a) | 21. | (b) | 41. | (a) | 61. | (a) | 81. | (a) |
| 2. | (d) | 22. | (d) | 42. | (c) | 62. | (d) | 82. | (a) |
| 3. | (c) | 23. | (c) | 43. | (a) | 63. | (d) | 83. | (d) |
| 4. | (c) | 24. | (c) | 44. | (c) | 64. | (a) | 84. | (a) |
| 5. | (b) | 25. | (a) | 45. | (a) | 65. | (b) | 85. | (b) |
| 6. | (b) | 26. | (c) | 46. | (c) | 66. | (a) | 86. | (c) |
| 7. | (a) | 27. | (d) | 47. | (b) | 67. | (b) | 87. | (c) |
| 8. | (b) | 28. | (c) | 48. | (a) | 68. | (b) | 88. | (a) |
| 9. | (b) | 29. | (b) | 49. | (c) | 69. | (a) | 89. | (b) |
| 10. | (d) | 30. | (c) | 50. | (c) | 70. | (d) | 90. | (a) |
| 11. | (d) | 31. | (c) | 51. | (b) | 71. | (d) | 91. | (b) |
| 12. | (a) | 32. | (b) | 52. | (b) | 72. | (b) | 92. | (d) |
| 13. | (d) | 33. | (c) | 53. | (c) | 73. | (a) | 93. | (a) |
| 14. | (b) | 34. | (c) | 54. | (c) | 74. | (c) | 94. | (a) |
| 15. | (d) | 35. | (a) | 55. | (c) | 75. | (d) | 95. | (c) |
| 16. | (b) | 36. | (c) | 56. | (a) | 76. | (a) | 96. | (b) |
| 17. | (a) | 37. | (c) | 57. | (c) | 77. | (b) | 97. | (c) |
| 18. | (d) | 38. | (a) | 58. | (c) | 78. | (a) | 98. | (c) |
| 19. | (a) | 39. | (b) | 59. | (b) | 79. | (b) | 99. | (b) |
| 20. | (d) | 40. | (c) | 60. | (d) | 80. | (c) | 100. | (c) |