IBPS PO 2025 Shift 2 Paper Memory Based Paper

SECTION I: REASONING ABILITY (Questions 1–35)

Directions (1–5): Read the information carefully and answer the questions given below:

Ten persons – P, Q, R, S, T, U, V, W, X and Y live in a five-storey building numbered 1 to 5 from bottom to top. Each floor has two flats – Flat-L (left) and Flat-R (right). Flat-L is to the west of Flat-R on every floor. No two persons share a flat. The following conditions apply:
P lives on an even-numbered floor. Q lives directly above R and both are in the same flat type. S lives in Flat-L of floor 3. T lives two floors above U. V lives in Flat-R of the topmost floor. W lives immediately below X, and both live in Flat-R. Y lives on floor 1. P lives to the east of S. Q does not live on floor 5. The number of floors between P and T is one.

Q1. Who among the following lives in Flat-L of floor 5?

(a) P
(b) T
(c) U
(d) W
(e) None of these

Q2. How many persons live between Q and V (counting floors)?

(a) One
(b) Two
(c) Three
(d) Four
(e) None

Q3. Which of the following pairs lives on the same floor?

(a) P and Q
(b) S and W
(c) T and V
(d) U and Y
(e) R and X

Q4. Who lives immediately above U?

(a) T
(b) W
(c) P
(d) Q
(e) Cannot be determined

Q5. Four of the following five form a group. Find the odd one out.

(a) P – Flat-R
(b) V – Flat-R
(c) S – Flat-L
(d) W – Flat-R
(e) Y – Flat-L

Directions (6–10): Study the following information carefully and answer the questions.

Eight employees – A, B, C, D, E, F, G and H – are scheduled for performance reviews on eight consecutive working days starting from Monday to Monday of the next week (Mon–Tue–Wed–Thu–Fri–Sat–Sun–Mon). Each person is reviewed exactly once. The following conditions apply:
B's review is on Thursday. Exactly two persons are reviewed between A and B. C is reviewed immediately after D. E is reviewed on a day before F, with exactly one person between them. G is reviewed on Sunday. H is not reviewed on Monday. A is reviewed before B. F is reviewed after B. C is not reviewed on Saturday.

Q6. On which day is A reviewed?

(a) Monday
(b) Tuesday
(c) Wednesday
(d) Friday

(e) Saturday

Q7. How many persons are reviewed between D and G?

(a) One
(b) Two
(c) Three
(d) Four
(e) None

Q8. Who is reviewed on Saturday?

(a) C
(b) F
(c) H
(d) E
(e) None of these

Q9. Which of the following is TRUE?

(a) C is reviewed on Friday
(b) E is reviewed before A
(c) H is reviewed on Tuesday
(d) F is reviewed on Monday (next week)
(e) None of these

Q10. If E and H swap their days, who is reviewed on Wednesday?

(a) E
(b) H
(c) A
(d) D
(e) Cannot be determined

Directions (11–13): In each question, some statements are given followed by two conclusions I and II. Assume the statements to be true and decide which conclusion(s) logically follow.

Q11. Statements: All books are pens. Some pens are erasers. No eraser is a scale. Conclusions: I. Some books are erasers. II. No scale is a pen.

(a) Only I follows
(b) Only II follows
(c) Either I or II follows
(d) Neither I nor II follows
(e) Both I and II follow

Q12. Statements: Only a few stars are planets. All planets are satellites. No satellite is a comet. Conclusions: I. Some stars are satellites. II. No planet is a comet.

(a) Only I follows
(b) Only II follows
(c) Either I or II follows
(d) Neither I nor II follows
(e) Both I and II follow

Q13. Statements: All rivers are oceans. Some oceans are lakes. Only a few lakes are ponds. Conclusions: I. All rivers being lakes is a possibility. II. Some ponds are oceans.

(a) Only I follows
(b) Only II follows
(c) Either I or II follows
(d) Neither I nor II follows
(e) Both I and II follow

Directions (14–16): Study the following information carefully and answer the questions.

In a family of eight members spread over three generations: A, B, C, D, E, F, G and H. B is the mother of D. A is the father of C. D is married to E. F is the son of E. G is the sister of A. H is the maternal grandmother of F. B and H are sisters-in-law. C is unmarried. A has no brother.

Q14. How is G related to F?

(a) Grandmother
(b) Grand-aunt
(c) Aunt
(d) Mother
(e) Cannot be determined

Q15. How is C related to E?

(a) Brother-in-law
(b) Sister-in-law
(c) Nephew
(d) Cousin
(e) None of these

Q16. How many female members are there in the family?

(a) 3
(b) 4
(c) 5
(d) 2
(e) Cannot be determined

Directions (17–19): Study the following information carefully and answer the questions.

Karan starts from point A facing north and walks 12 m to reach point B. He turns right and walks 8 m to reach C. He turns right again and walks 5 m to reach D. From D, he turns left and walks 10 m to reach E. From E, he turns left and walks 6 m to reach F. From F, he turns right and walks 3 m to reach G.

Q17. What is the shortest distance between point A and point G?

(a) √261 m
(b) √325 m
(c) 18 m
(d) √289 m
(e) √200 m

Q18. In which direction is point E with respect to point B?

(a) North-east
(b) South-east
(c) South-west
(d) North-west
(e) East

Q19. What is the shortest distance between C and F?

(a) 8 m
(b) 10 m
(c) √164 m
(d) √125 m
(e) 13 m

Directions (20–22): Read the following information carefully and answer the questions.

Six students — Anil, Bela, Charu, Dev, Esha and Farhan — scored different marks in a test. Bela scored more than Dev but less than Anil. Charu scored more than Farhan. Esha scored less than Dev but more than Farhan. Charu scored less than Anil. Dev scored more than Charu.

Q20. Who scored the highest marks?

(a) Anil
(b) Bela
(c) Dev
(d) Charu
(e) Cannot be determined

Q21. Who scored the third highest marks?

(a) Bela
(b) Dev
(c) Charu
(d) Esha
(e) Farhan

Q22. How many students scored more than Esha?

(a) Two
(b) Three
(c) Four
(d) One
(e) Five

Directions (23–27): Study the following information carefully.

Eight employees — J, K, L, M, N, O, P and Q — are distributed across three departments: Operations, Finance and Marketing. Each department has at least two employees. Each employee likes a different sport: Cricket, Tennis, Football, Badminton, Hockey, Chess, Swimming and Cycling.

J and K work in different departments. L works in Operations. M likes Cricket and works in Finance. N likes Hockey and does not work in Marketing. O works in the same department as J. P likes Swimming and works in Marketing. Q likes Cycling and works with L. K does not like Badminton. The one who likes Chess works in Finance. J does not like Tennis. N works in Operations. The one who likes Football works in Marketing. O does not like Football. K works in Finance.

Q23. Who among the following works in Marketing?

(a) J
(b) N
(c) O
(d) Both P and one more
(e) None of these

Q24. Which sport does K like?

(a) Tennis
(b) Chess
(c) Football
(d) Cycling
(e) Cricket

Q25. Who likes Chess?

(a) K
(b) J
(c) O
(d) M
(e) Cannot be determined

Q26. How many persons work in Operations?

(a) Two
(b) Three
(c) Four
(d) One
(e) Five

Q27. Which of the following combinations is CORRECT?

(a) J – Marketing – Tennis
(b) O – Operations – Football
(c) K – Finance – Chess
(d) N – Operations – Hockey
(e) Q – Finance – Cycling

Directions (28–30): Find the number of pairs in the given number that have as many digits between them (both forward and backward) as in the natural number series.

Q28. How many such pairs exist in: 7 4 1 9 3 6 5 2 8?

(a) One
(b) Two
(c) Three
(d) Four
(e) More than four

Q29. Find the odd one out: ACF, BDG, CEH, DFI, EGK

(a) ACF
(b) BDG
(c) CEH
(d) DFI
(e) EGK

Q30. If in the word 'DESTINATION', the 2nd, 5th, 8th and 11th letters are picked and rearranged to form a meaningful word, the third letter from the left of that word is:

(a) E
(b) S
(c) T
(d) I
(e) No meaningful word

Directions (31–35): Study the designation hierarchy carefully.

Nine employees — A through I — hold nine different designations in decreasing seniority: CMD, MD, ED, GM, DGM, AGM, SM, Manager and Officer. A is four designations senior to B. C is immediately junior to D. E holds the designation of GM. F is two designations junior to E. G is the seniormost. H is designated Officer. I is immediately senior to B. D is two designations junior to G. C is senior to F.

Q31. What is B's designation?

(a) SM
(b) Manager
(c) Officer
(d) AGM
(e) DGM

Q32. How many persons are designated between C and F?

(a) None
(b) One
(c) Two
(d) Three
(e) Four

Q33. Who holds the designation of DGM?

(a) A
(b) C
(c) D
(d) I
(e) F

Q34. What is the designation of A?

(a) CMD
(b) MD
(c) ED
(d) GM
(e) DGM

Q35. If C is related to AGM and F is related to Manager, then D is related to whom?

(a) ED
(b) GM
(c) DGM
(d) MD
(e) CMD

SECTION II: ENGLISH LANGUAGE (Questions 36–65)

Directions (36–43): Read the following passage carefully and answer the questions given below.

The global semiconductor industry stands at a pivotal juncture. For decades, the relentless miniaturisation of transistors — a phenomenon elegantly captured by Moore's Law — has been the engine of technological progress. However, physicists and engineers now concede that this trajectory is approaching its physical limits. As transistors shrink to just a few nanometres, quantum effects such as electron tunnelling become unavoidable, causing chips to malfunction unpredictably.

In response, the industry is pivoting toward architectural innovation rather than purely dimensional scaling. Three-dimensional chip stacking, chiplet-based design and heterogeneous integration are increasingly being adopted as alternative paths to performance enhancement. These approaches allow designers to combine specialised dies — each optimised for a specific task — into a single package, yielding gains in both performance and energy efficiency without demanding ever-smaller feature sizes.

Geopolitically, the semiconductor supply chain has emerged as a critical fault line. The concentration of advanced fabrication capacity in Taiwan — home to TSMC, which manufactures chips for Apple, Nvidia and AMD among others — has prompted governments worldwide to reassess strategic vulnerabilities. The United States, the European Union and India have each announced substantial subsidies to attract domestic chip manufacturing. China, meanwhile, is accelerating self-sufficiency programmes, though it remains technologically behind the cutting edge by at least two generations.

Critics of industrial policy argue that state-directed investments in semiconductors risk distorting markets, duplicating capacity and ultimately burdening taxpayers without commensurate returns. Proponents counter that national security imperatives and the lesson of pandemic-era supply disruptions justify a degree of strategic redundancy. The debate mirrors older arguments about infant-industry protection, now refracted through the lens of twenty-first-century technological rivalry.

Q36. What is the central theme of the passage?

(a) The history of Moore's Law and its mathematical elegance
(b) The technological and geopolitical challenges facing the semiconductor industry
(c) How TSMC became the world's largest chipmaker
(d) The environmental impact of miniaturising transistors
(e) The dominance of the United States in the global chip market

Q37. According to the passage, what makes quantum tunnelling problematic for chip manufacturers?

(a) It increases the cost of fabrication exponentially
(b) It causes chips to behave unpredictably at nanometre scales
(c) It makes three-dimensional stacking technically impossible
(d) It limits the speed at which transistors switch
(e) It prevents heterogeneous integration of chiplets

Q38. Which of the following CANNOT be inferred from the passage?

(a) TSMC is a Taiwanese company
(b) Chiplet-based design is one response to the physical limits of miniaturisation
(c) India has announced subsidies for domestic chip manufacturing
(d) China currently manufactures chips at the same technology node as TSMC
(e) Moore's Law is no longer a reliable guide to performance gains

Q39. The phrase 'strategic redundancy' in the final paragraph most nearly means:

(a) wasteful duplication of resources without economic benefit
(b) deliberate backup capacity maintained for security reasons
(c) over-investment in outdated manufacturing technology
(d) the geopolitical rivalry between China and the United States
(e) the tendency of state subsidies to crowd out private investment

Q40. Which of the following statements is TRUE according to the passage?

(a) Moore's Law predicts that quantum effects will become manageable with time
(b) Chiplet architecture eliminates the need for specialised dies
(c) The EU has announced subsidies to build domestic semiconductor capacity
(d) China is technologically ahead of TSMC by two generations
(e) Critics support industrial policy for its national security benefits

Q41. The author's tone toward the debate on industrial policy can best be described as:

(a) strongly supportive of government subsidies
(b) openly critical of free-market ideology

(c) balanced, presenting both sides without taking a firm stance
(d) dismissive of national security concerns
(e) nostalgic for the era of unfettered globalisation

Q42. Which word in the passage is closest in meaning to 'pivoting'?

(a) Accelerating
(b) Shifting
(c) Abandoning
(d) Reinforcing
(e) Restricting

Q43. What does the author imply by saying the debate 'mirrors older arguments about infant-industry protection'?

(a) That the semiconductor debate is entirely unprecedented in economic history
(b) That current semiconductor policy debates echo historical disputes about protecting nascent industries
(c) That infant industries should always receive state protection
(d) That the semiconductor industry is still in its infancy
(e) That free trade has always been the dominant economic philosophy

Directions (44–47): Rearrange the following sentences to form a coherent paragraph.

Q44. (A) This has led to a dramatic fall in renewable energy costs over the past decade. (B) As a result, solar and wind are now the cheapest sources of new electricity in most of the world. (C) Governments and private investors have poured trillions of dollars into clean energy infrastructure. (D) The urgency of climate change has fundamentally altered global energy investment patterns. (E) However, the pace of transition still falls short of what scientists say is required to limit warming.

(a) D – C – A – B – E
(b) A – D – C – B – E
(c) C – D – A – B – E
(d) D – A – C – B – E
(e) No rearrangement required

Q45. (A) Microplastics have now been detected in human blood, lung tissue and even placental cells. (B) Plastic pollution has transcended oceanic ecosystems to infiltrate the human body itself. (C) While the long-term health implications remain under investigation, early findings are alarming. (D) Researchers estimate that an average person ingests roughly a credit card's worth of plastic every week. (E) Regulatory responses have so far been fragmented, with no global treaty addressing microplastic contamination.

(a) A – B – D – C – E
(b) B – A – D – C – E
(c) D – B – A – C – E
(d) B – D – A – C – E
(e) No rearrangement required

Q46. (A) This allowed the emergence of complex, multi-cellular life over billions of years. (B) Early Earth was a hostile, oxygen-free environment dominated by simple microbes. (C) The Great Oxidation Event, approximately 2.4 billion years ago, transformed the planet's atmosphere. (D) Cyanobacteria began releasing oxygen as a by-product of photosynthesis. (E) Without this transformation, human existence would have been biologically impossible.

(a) C – B – D – A – E
(b) B – D – C – A – E
(c) B – C – D – A – E
(d) D – C – B – A – E
(e) No rearrangement required

Q47. (A) Urban heat islands occur when cities absorb and retain more heat than surrounding rural areas. (B) Dark surfaces such as asphalt and concrete replace vegetation, reducing evaporative cooling. (C) Mitigation strategies include green roofs, urban forests and reflective pavements. (D) This temperature differential can exceed 5°C and exacerbates heat-related health risks. (E) Waste heat from vehicles, industry and air conditioners further intensifies the effect.

(a) A – B – E – D – C
(b) B – A – D – E – C
(c) A – D – B – E – C
(d) A – B – D – E – C
(e) No rearrangement required

Directions (48–52): In the passage below, five blanks are given. For each blank, choose the most appropriate word.

Central banks across the world are navigating an unusually _____(48) landscape. Having raised interest rates aggressively to _____(49) inflation that surged after the pandemic, policymakers now face the delicate task of easing monetary conditions without _____(50) a resurgence in prices. The risk of cutting rates too soon is that inflation becomes _____(51) again,

eroding purchasing power and destabilising wage negotiations. Conversely, keeping rates elevated for too long _____(52) growth and increases the probability of recession.

Q48. Blank (48):

(a) tranquil
(b) treacherous
(c) predictable
(d) obsolete
(e) redundant

Q49. Blank (49):

(a) stimulate
(b) aggravate
(c) tame
(d) replicate
(e) overlook

Q50. Blank (50):

(a) ensuring
(b) forestalling
(c) igniting
(d) curtailing
(e) applauding

Q51. Blank (51):

(a) subdued
(b) entrenched
(c) peripheral
(d) negligible
(e) seamless

Q52. Blank (52):

(a) boosts
(b) propels
(c) suppresses
(d) validates
(e) accelerates

Directions (53–56): One sentence in each question is error-free. Identify it. If all sentences have errors, choose option (e).

Q53.

(a) The committee have submitted their report to the Ministry last Tuesday.
(b) Neither the manager nor the employees was informed about the merger.
(c) The data suggests that consumer confidence has improved significantly.
(d) One of the project milestones were missed due to supply chain disruptions.
(e) None of these are correct

Q54.

(a) Artificial intelligence are transforming the way businesses operate globally.
(b) The number of applicants for the scheme have exceeded all expectations.
(c) Quantum computing holds enormous promise for cryptographic applications.
(d) Each of the proposals submitted by the team were evaluated carefully.
(e) None of these are correct

Q55.

(a) The reserve bank hiked the repo rate to curbing inflationary pressures.
(b) A large amount of counterfeit notes were seized during the raid.
(c) The Parliament session was adjourned sine die after passing the budget.
(d) He insisted on to revise the contract terms before the signing ceremony.
(e) None of these are correct

Q56.

(a) The archipelago comprise over seven thousand islands scattered across the Pacific.
(b) Green hydrogen is increasingly viewed as a cornerstone of decarbonisation strategies.
(c) A bevy of recommendations were made by the expert committee on urban flooding.
(d) The merger was called off owing to a dispute on the valuation methodology.
(e) None of these are correct

Directions (57–60): In each sentence, four words are bold. These words may be out of position. Find the pair(s) that need to be swapped to make the sentence correct.

Q57. The unprecedented (A) rise in non-performing assets has compelled (B) regulators to introduce (C) stringent (D) provisioning norms.

(a) A–D
(b) B–C
(c) A–B & C–D
(d) C–D
(e) No interchange required

Q58. Fiscal consolidation (A) requires the government to balance (B) short-term stimulus (C) needs against long-term debt sustainability (D).

(a) A–C
(b) B–D
(c) A–B & C–D
(d) A–D & B–C
(e) No interchange required

Q59. The bilateral (A) trade agreement is expected to catalyse (B) investment flows and reduce (C) tariff (D) barriers between the two nations.

(a) A–B
(b) C–D
(c) A–C & B–D
(d) B–D
(e) No interchange required

Q60. The erratic (A) monsoon pattern has severely (B) affected agricultural (C) output and strained (D) rural incomes.

(a) A–D
(b) B–C
(c) C–D
(d) A–C
(e) No interchange required

Directions (61–63): Identify the sentence(s) in which the given phrasal verb has been used correctly.

Q61. Phrasal Verb: 'Call off' (I) The summit was called off due to deteriorating weather conditions. (II) The manager called off the new intern for her exceptional presentation skills. (III) Negotiators called off talks after a breakdown in communication.

(a) Only I
(b) Only II
(c) Both I and II
(d) Both I and III
(e) All I, II and III

Q62. Phrasal Verb: 'Set aside' (I) The court set aside the lower tribunal's ruling on procedural grounds. (II) She set aside Rs 5,000 each month toward her emergency fund. (III) The chairman set aside the CEO's proposal by promoting it at the board meeting.

(a) Only I
(b) Only II
(c) Both I and II
(d) Both I and III
(e) All I, II and III

Q63. Phrasal Verb: 'Bear out' (I) The forensic evidence bore out the witness's testimony in every detail. (II) She could barely bear out the extreme cold during the mountain expedition. (III) Subsequent data have borne out the central bank's forecast of declining inflation.

(a) Only I
(b) Only III
(c) Both I and II
(d) Both I and III
(e) All I, II and III

Directions (64–65): Match phrases from Column I with Column II to form meaningful sentences.

Q64. Column I: (A) The proliferation of misinformation on social media (B) Advances in gene-editing technology (C) The transition to electric mobility Column II: (D) has raised profound ethical questions about designer organisms (E) threatens democratic discourse by undermining trust in institutions (F) poses significant challenges for battery raw material supply chains

(a) A–E, B–D, C–F
(b) A–D, B–E, C–F

(c) A–F, B–D, C–E

(d) A–E, B–F, C–D

(e) None of the above

Q65. Column I: (A) In the shadow of fiscal tightening, (B) Despite repeated warnings from climate scientists, (C) Amid slowing global trade, Column II: (D) governments continue to subsidise fossil fuels at record levels (E) emerging economies are diversifying into services to sustain growth (F) social spending programmes face the sharpest cuts in a generation

(a) A–F, B–D, C–E

(b) A–D, B–F, C–E

(c) A–E, B–D, C–F

(d) A–F, B–E, C–D

(e) None of the above

SECTION III: QUANTITATIVE APTITUDE (Questions 66–100)

Directions (66–70): Study the table below carefully and answer the questions.

The table shows the number of applicants and selected candidates for five government posts (I–V) across two years (2023 and 2024).

Post	Applicants 2023	Selected 2023	Applicants 2024	Selected 2024
I	48000	240	54000	270
II	72000	360	66000	396
III	36000	180	45000	225
IV	90000	450	81000	486
V	60000	300	75000	375

Q66. The selection ratio (selected/applicants × 100) for Post III in 2024 is what percentage more/less than that of Post I in 2023?

(a) Equal
(b) 0.1% more
(c) 0.1% less
(d) 0.5% more
(e) None of these

Q67. What is the average number of selected candidates across all five posts in 2024?

(a) 340
(b) 350.4
(c) 355
(d) 360
(e) 345.2

Q68. The total applicants for Posts II and IV combined in 2023 is what fraction of the total applicants for Posts I and V combined in 2024?

(a) 12:13
(b) 162:129
(c) 27:22
(d) 18:13
(e) None of these

Q69. If 15% of the selected candidates for Post V in 2024 are female, how many male candidates were selected?

(a) 300
(b) 318.75
(c) 319
(d) 56
(e) None of these

Q70. In 2024, if the total number of applicants for Post III increases by 20% over 2024 figures to give 2025 numbers, while the selection ratio remains the same as 2024, how many candidates will be selected in 2025?

(a) 270
(b) 250
(c) 255
(d) 260
(e) None of these

Directions (71–75): The bar chart below shows Revenue and Expenditure (in ■ crore) of five companies A–E in FY 2024–25.

Company	Revenue (■ Cr)	Expenditure (■ Cr)	Profit (■ Cr)
A	480	336	144
B	620	496	124
C	540	378	162
D	750	600	150
E	420	315	105

Q71. What is the profit percentage of Company C?

(a) 28%
(b) 30%
(c) 42.86%
(d) 33.33%
(e) None of these

Q72. The total expenditure of companies A and B together is what percentage of total revenue of companies D and E together?

(a) 71.35%
(b) 70.72%
(c) 72%
(d) 69.5%
(e) None of these

Q73. If Company D's revenue increases by 20% and expenditure increases by 15% in FY 2025–26, what will be the new profit?

(a) ■210 Cr
(b) ■210.5 Cr
(c) ■90 Cr
(d) ■270 Cr
(e) None of these

Q74. What is the ratio of average profit of companies A, C and E to average profit of companies B and D?

(a) 137:137
(b) 137:274
(c) 411:274
(d) 3:2
(e) None of these

Q75. If Company B's expenditure rises by 25% while revenue remains unchanged, what is the new profit/loss?

(a) Profit of ■4 Cr
(b) Loss of ■4 Cr
(c) Profit of ■4.5 Cr
(d) Loss of ■0 Cr
(e) None of these

Directions (76–80): In each series, one term is WRONG. Find the wrong term.

Q76. 5, 7, 16, 57, 244, 1245, 7506

(a) 7
(b) 16
(c) 57
(d) 244
(e) 1245

Q77. 3, 5, 13, 43, 177, 885, 5311

(a) 5
(b) 13
(c) 43
(d) 177
(e) 885

Q78. 4, 9, 25, 49, 121, 169, 289, 361

(a) 9
(b) 25
(c) 49
(d) 289
(e) None — all correct

Q79. 2, 6, 24, 96, 384, 1540, 6144

(a) 6
(b) 96
(c) 384
(d) 1540
(e) 6144

Q80. 1000, 995, 975, 930, 854, 741, 584

(a) 995
(b) 975
(c) 930
(d) 741
(e) 584

Directions (81–85): Find the approximate value of (?) in each question.

Q81. $\sqrt{(5624.97)} \times 3.98 + 12.03 \times 6.99 = ?$

(a) 382
(b) 375
(c) 384
(d) 367
(e) 391

Q82. $4896.06 \div 24.01 + 17.98^2 - \sqrt{899.92} = ?$

(a) 520
(b) 494
(c) 477
(d) 505
(e) 512

Q83. (48.93% of 7200) – (34.02% of 4500) + 119.99 = ?

(a) 2214
(b) 2168
(c) 2235
(d) 2187
(e) 2246

Q84. $7.01^3 - 6.99^2 + 4.98 \times 9.02 = ?$

(a) 340
(b) 330
(c) 353
(d) 344
(e) 361

Q85. $(2511.97 - 1987.03) \div 24.99 + 8.01^2 = ?$

(a) 84
(b) 85
(c) 86
(d) 83
(e) 88

Directions (86–100): Solve the following problems.

Q86. A trader marks up goods by 40% above cost price and offers a discount of 15%. He further gives an additional discount of 10% on the discounted price. Find the net profit/loss percentage.

(a) 6.7% profit
(b) 6.3% loss
(c) 7.2% profit
(d) 5.7% loss
(e) None of these

Q87. Pipe A alone can fill a tank in 18 hours. Pipe B alone can empty it in 24 hours. Pipe C alone can fill it in 12 hours. If all three are opened simultaneously, in how many hours will the tank be filled (starting empty)?

(a) 14.4 hours
(b) 16 hours
(c) 18 hours
(d) 12 hours
(e) None of these

Q88. A sum of ■15,000 is invested partly at 8% p.a. simple interest and the rest at 12% p.a. compound interest for 2 years. If the total interest earned is ■3,312, how much was invested at compound interest?

(a) ■6,000
(b) ■7,500
(c) ■9,000
(d) ■10,000
(e) ■8,000

Q89. A boat whose speed in still water is 20 km/h takes 3 hours to travel upstream and 2 hours for the same distance downstream. What is the speed of the stream?

(a) 2 km/h
(b) 4 km/h
(c) 5 km/h
(d) 3 km/h
(e) None of these

Q90. In an examination, the average marks of 40 students is 72. If the marks of the top 5 students are excluded, the average of the remaining drops to 68. What is the average marks of the top 5 students?

(a) 100
(b) 104
(c) 96
(d) 102
(e) None of these

Q91. A started a business with ■24,000. After 4 months B joined with ■36,000. After another 2 months C joined with ■48,000. At the end of the year, total profit was ■97,200. Find C's share.

(a) ■21,600
(b) ■28,800
(c) ■18,000
(d) ■24,000
(e) None of these

Q92. The length of a rectangle is increased by 25% and its breadth is decreased by 20%. What is the percentage change in its area?

(a) 5% increase
(b) 5% decrease
(c) No change
(d) 10% increase
(e) 10% decrease

Q93. A mixture contains milk and water in the ratio 7:3. 20 litres of the mixture is removed and replaced with water. If the new ratio of milk to water is 5:4, what was the original quantity of the mixture?

(a) 90 litres
(b) 80 litres
(c) 100 litres
(d) 70 litres
(e) None of these

Q94. A alone can do a work in 20 days. B is 25% more efficient than A. C is 20% less efficient than B. How many days will A, B and C together take to complete the work?

(a) 20/3 days
(b) 80/17 days
(c) 7 days
(d) 100/19 days
(e) None of these

Q95. In what ratio must a shopkeeper mix two varieties of rice costing ■45/kg and ■65/kg so that by selling the mixture at ■60/kg, he gains 20%?

(a) 3:1
(b) 1:3
(c) 2:3
(d) 3:2
(e) None of these

Q96. The present ages of X and Y are in the ratio 4:5. Ten years hence, the ratio will be 6:7. What is the present age of Y?

(a) 20 years
(b) 25 years
(c) 30 years
(d) 35 years
(e) None of these

Q97. Quantity I: Simple Interest on ■20,000 at 12% p.a. for 3 years. Quantity II: Compound Interest on ■18,000 at 10% p.a. for 2 years.

(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I = Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I ≥ Quantity II

Q98. Quantity I: A train 240 m long crosses a platform 360 m long in 30 seconds. Find the speed of the train in m/s. Quantity II: Speed of a boat in still water is 15 km/h and stream speed is 3 km/h. Find upstream speed in m/s.

(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I = Quantity II
(d) Cannot be determined
(e) Quantity I ≤ Quantity II

Q99. Quantity I: A can complete 60% of a project in 9 days. Find the time taken by A alone to complete the full project. Quantity II: B and C together can complete a project in 10 days; B alone in 15 days. Find C's time alone.

(a) Quantity I > Quantity II

(b) Quantity I < Quantity II

(c) Quantity I = Quantity II

(d) Quantity I ≥ Quantity II

(e) Quantity I ≤ Quantity II

Q100. A shopkeeper sells an article at a loss of 8%. Had he sold it for ■336 more, he would have gained 12%. Find the cost price.

(a) ■1,680

(b) ■1,500

(c) ■1,750

(d) ■1,600

(e) None of these

ANSWER KEY

Q No.	Ans	Q No.	Ans	Q No.	Ans	Q No.	Ans	Q No.	Ans
1	E	21	B	41	C	61	D	81	C
2	B	22	B	42	B	62	C	82	D
3	D	23	D	43	B	63	D	83	A
4	A	24	B	44	A	64	A	84	D
5	C	25	A	45	B	65	A	85	C
6	B	26	B	46	B	66	A	86	A
7	C	27	D	47	A	67	B	87	A
8	C	28	C	48	B	68	B	88	A
9	D	29	E	49	C	69	C	89	B
10	B	30	A	50	C	70	A	90	B
11	D	31	B	51	B	71	B	91	A
12	E	32	B	52	C	72	B	92	A
13	A	33	D	53	C	73	A	93	A
14	B	34	C	54	C	74	C	94	B
15	A	35	A	55	C	75	B	95	A
16	B	36	B	56	B	76	E	96	B
17	A	37	B	57	E	77	C	97	A
18	B	38	D	58	E	78	E	98	A
19	C	39	B	59	E	79	D	99	C
20	A	40	C	60	E	80	C	100	A