

All India Mock for IBPS SO Prelims 2023 (16-17 December)

Directions (1-10): In each of the questions given below a sentence is given which is divided into 5 parts. The first part has been numbered as (1) and is grammatically correct. You have to find the error in other parts of the sentence and if you find the error in any other parts of the sentence then that part of the sentence is the correct choice for the given question. If all the parts are

grammatically correct choose option (E) as your choice.	
Q1. (1) The President was / (A) offended when its ambassad	or / (B) decided to shun his advice / (C) or
how to interact /(D) with the French Prime Minister. / (E) No e	
(a) A	
(b) B	
(c) C	
(d) D	
(e) No error	
Q2. (1) The politician figured that / (A) he could always	apologize / (B) the budgeting error,/ (C)
claiming that it / (D) was merely an oversight. /(E) No error.	
(a) A	
(b) B	
(c) C	
(d) D	
(e) No error	
Q3. (1) Ted knew that / (A) he would have no problem / (B) speakin <mark>g in</mark> pu <mark>bl</mark> ic / (C) if he would only
overcome his fears / (D) instead of running away from them./	(E) No error.
(a) A	
(b) B	
(c) C	
(d) D	A
(e) No error	IBPS SO
Q4. (1) Voters disagree / (A) about the extent / (B) to which	



president / (C) must demonstrated / (D) moral leadership. / (E) No

(e) No error

error. (a) A (b) B (c) C (d) D

Q5. (1) The quality of / (A) the thermos bottle was much / (B) better than the other containers / (C) that did not / (D) kept my drink warm. / (E) No error. (a) A (b) B (c) C (d) D (e) No error
Q6. (1) My mother/ (A) complained that / (B) she called my name / (C) umpteen times, / (D) but I never answered her/ (E) No error. (a) A (b) B (c) C (d) D (e) No error
Q7. (1) While he never intended / (A) his remark to impertinent, / (B) he found that / (C) a lot of people had been / (D) offended by what he said. / (E) No error. (a) A (b) B (c) C (d) D (e) No error
Q8. (1) The soldiers in that particular/ (A) battle were thought of as heroes,/ (B) but it was really obstinacy/(C) that kept them fighting / (D) for such impossible odds./ (E) No error. (a) A (b) B (c) C (d) D (e) No error
Q9. (1) Nature has/ (A) gifted us over / (B) many remedies in the/ (C) form of foods that heal/ (D) and cure our skin./ (E) No error. (a) A (b) B (c) C (d) D (e) No error
Q10. (1) When they found/ (A) the runner had used / (B) illegal drugs, the committee members / (C)/decided to disqualify/ (D) him from the race. / (E) No error. (a) A (b) B (c) C (d) D (e) No error

Directions (11-15): In the following questions two columns are given containing three sentences/phrases each. In first column, sentences/phrases are A, B and C and in the second column the sentences/phrases are D, E and F. A sentence/phrase from the first column may or may not connect with another sentence/phrase from the second column to make a grammatically and contextually correct sentence. Each question has five options, four of which display the sequence(s) in which the sentences/phrases can be joined to form a grammatically and contextually correct sentence. If none of the options given forms a correct sentence after combination, mark (E), i.e. "None of these" as your answer.

Q11. Column (1)

- (A)having developed an interest in native varieties
- (B) Farmers will not spend on fertilizers or pesticides and the price realisation
- (C) The foundation plans to promote native varieties of paddy ${\bf r}$

Column (2)

- (D) for these varieties were not available locally
- (E) by identifying interested farmers and expanding area under these.
- (F)he went on a quest for almost a year looking for such paddy varieties
- (a) C-E and B-F
- (b) A-F
- (c) C-E
- (d) both (b) and (c)
- (e) None of these

Q12. Column (1)

- (A)the apprehension was that this would bar a successful businessperson
- (B)about 50% of the ailing group's assets were already on the block
- (C)merely because two persons are brothers or relatives you can't be disqualified Column (2)
- (D) differentiated from other similar animal species due to many years of isolation on the island.
- (E) of it comes from statutory functions it has to perform as a regulator.
- (F) differentiate his compositions from other works of late 18th century music.
- (a) C-E and B-F
- (b) A-F
- (c) C-E
- (d) both (b) and (c)
- (e) None of these

Q13. Column (1)

- (A)While lifting the restrictions on the State-run lenders
- (B) The two banks have also made the necessary disclosures
- (C)RBI will continuously monitor the performance of

Column (2)

- (D)RBI said the Board for Financial Supervision (BFS) reviewed the performance of the banks under prompt and corrective action
- (E) indicate that Vox could have a significant presence in the next parliament and be in a position to play kingmaker

 (F) her advisors who couldn't believe she had written 60 scholarly pages so quickly. (a) C-F (b) B-F (c) A-D (d) C-E (e) None of these
Q14. Column (1) (A)They were not a group by stylistic affinity (B)The idea was not to overwhelm the viewer (C) his meticulous curation merges with an aesthetic unravelling Column (2) (D) remind one of the familiar images of horse-drawn carriages from mythological television shows said the excavators. (E) is shocking to find such antique from ancient civilization in this area (F) physically but allow an intimate engagement with the works (a) C-F (b) B-F (c) A-D (d) C-E (e) None of these
Q15. Column (1) (A) WHO compels Parties to consider taking legislative action (B) cigarettes butts have escaped the regulations and have not yet (C) The fact, however, is that cellulose acetate fibres used as Column (2) (D) not yet satisfied (E) atoned for by the literary value of the work. (F) to address the issue of industry liability for the adverse consequences of tobacco use. (a) C-F (b) B-F (c) A-F (d) C-E (e) None of these
Directions (16-20): Following are the sentences given with a phrase in bold and a blank. There might be a grammatical error in the bold phrase. Given below are the options with a phrase and a word which might replace the bold phrase and fill the blank, contextually and grammatically correct, respectively. Find out the most appropriate option. If there is no option providing the correct phrase and the word to be filled in the blank, choose (E), i.e. 'none of these' as you answer.
Q16. Often, we think that great leaders are those who are, always in the middle of a large group of people; yet, as Mahatma Gandhi and many others have shown us, leaders could have also been introvert. (a) disagreeable, leaders can also be (b) gregarious, leaders can also be (c) reserved, leaders can also be (d) gregarious, leaders can also be (e) No improvement required

Q17. While Martha always swooned over the hunky,types in romantic comedies, her boyfriends inevitable were very talkative—and not very hunky. (a) garrulous, her boyfriends inevitably was very talkative (b) verbose, her boyfriends inevitably were very talkative (c) laconic, her boyfriends inevitably were very talkative (d) verbose, her boyfriends inevitable and were very talkative (e) No improvement required
Q18. The fact that Ella's moods were asas the weather was problematic for her relationships—it didn't help that she were living in Chicago. (a) mutable, it was not help that she lived (b) mercurial, it didn't help that she lived (c) stable, it didn't help that she lived (d) mercurial, it couldn't been help that she lived (e) No improvement required
Q19. Despite an beginning, Mike's road trip became a series of mishaps, and he went to soor stranded and penniless, leaning against his wrecked automobile. (a) auspicious, and he was soon stranded and penniless (b) propitious, and he begin stranded and penniless (c) infelicitous, and he was soon stranded and penniless (d) untoward, and he was soon stranded and penniless (e) No improvement required Q20. The between the president and vice-president sent a clear signal to voters: the health of the current administration had endangered. (a) acrimony, health of the current administration being endangered
(b) hostility, health of the current administration being endangered (c) benevolence, health of the current administration was endangered (d) acrimony, health of the current administration was endangered (e) No improvement required

Directions (21-26): Read the following passage and answer the following questions based on the given passage.

<u>Paragraph 1</u> The enumeration exercise by the colonial ethnographic state since the late 19th century brought to the fore the politics of 'numbers', thereby reshaping society into the binary of 'minority-majority' along caste, religion and ethnic lines. By the 1920s, the political discourse in India, barring that of the Indian National Congress, *inhaled the politics of 'numbers'*, which seamlessly metamorphosed into the politics of 'othering'. This took various forms under parties such as the All-India Muslim League, the Akhil Bharat Hindu Mahasabha, the Justice Party, etc.

<u>Paragraph 2</u> By the 1950s, against the backdrop of the domineering discourse of Congressism, which was a politics without 'othering', India witnessed the emergence of four dominant political threads: Lohiaite, Ambedkarite, Hindutva and Dravidian, championing the fault-lines of caste, religion and ethnicity, thereby practising the politics of 'numbers and othering'. The constitution of the 'other' happened at three levels. First, at the symbolic level, wherein the founding fathers were pitted against each other. Second, at the societal level, wherein the socio-economic interest of one section was shown as being unaligned with that of sections signifying the 'other'. Third, at the political level, wherein idiom, metaphor, popular slogan and appeal were deliberately sectarian, exhibiting a 'friend-enemy' simile.

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Paragraph 3 It was argued that popular politics was about speaking for different shades of subalterns, who constituted the majority, thereby projecting the politics of 'numbers and othering' as necessary to serve the ideals of equality and freedom. However, this mode of politics infused a great deal of bitterness in the societal realm by treating the ideals of 'fraternity' as subservient to 'equality and freedom'. The manifestation of this three-fold othering was seen in the political culture across India since 1990s in an entrenched way. The popularity of slogans in Uttar Pradesh and Bihar, emanating from Ambedkarite and Lohiaite discourse, while championing an egalitarian quest took recourse to caste-based 'othering' that competed with the religious 'othering' of Hindutva.

Paragraph 4 This entrenchment of 'othering' could be seen most clearly in post-2000 Uttar Pradesh when the acidic political rivalry between the Bahujan Samaj Party (BSP) and the Samajwadi Party (SP) manifested itself in their governments' policies as they pitted two social justice icons, R.M. Lohia and B.R. Ambedkar, against each other. For instance, the BSP government by 2012 had brought almost 19,000 most backward villages under the Ambedkar Village Scheme. The official signboard designated them as 'Ambedkar villages' qualified for special developmental funds. However, when the SP government came to power in 2012, it selected another set of villages under a new village development scheme, Ram Manohar Lohia Samagra Gram Vikas Yojana, and officially labelled them as 'Lohia villages'. The replacing of Ambedkar by Lohia had another dimension. While the Ambedkar villages were inhabited by significantly large numbers of Dalits, the Lohia villages had a majority of non-Dalits, particularly the Other Backward Classes.

Q21. What does the author want to convey through the phrase 'inhaled the politics of numbers' given in the first paragraph?

- (a) a mode of politics without any minority groups
- (b) except Indian National Congress other political parties representing the minority came up
- (c) parties were formed on the basis of religion, caste and ethnicities
- (d) Both (a) and (b)
- (e) Both (b) and (c)

Q22. Which of the following statement is false as per the passage given above?

- (a) This entrenchment of 'othering' could be seen most clearly in post-2000 Uttar Pradesh
- (b) Politics of othering took various forms under parties like All-India Muslim League
- (c) Congressism was the politics of othering
- (d) Constitution of 'others' was formed at various levels
- (e) None of the above

Q23. According to the passage given above, which was not among the various levels of constitution of 'others'?

- (a) founding fathers pitted against each other
- (b) socio-economic interest of one section was shown as being unaligned with that of the the minorities
- (c) idiom, metaphor, popular slogan and appeal were deliberately sectarian
- (d) championing of egalitarian quest
- (e) None of the above

Q24. How has the politics of 'othering' been witnessed in Uttar Pradesh post 2000?

- (a) acidic political rivalry between the Bahujan Samaj Party (BSP) and the Samajwadi Party (SP)
- (b) pitting of two different social justice icons
- (c) 'Ambedkar villages' did not qualify for special developmental funds.
- (d) Both (a) and (b)
- (e) All of the above

Q25. According to the passage given below, which of the following are not true in context of 'popular politics'?

- (a) speaking for different shades of those who constituted majority
- (b) politics of 'numbers and othering' does not serves the ideals of equality and freedom.
- (c) the ideals of 'fraternity' are subservient to 'equality and freedom'
- (d) it has infused bitterness in social realm
- (e) All of the above are correct

Q26. What can be the appropriate theme of the given passage?

- (a) the return of Congressism
- (b) the politics of othering
- (c) changing political landscape before the campaign
- (d) the emerging trend of parties
- (e) none of the above

Q27. In the following questions read each of the following four sentences to find out whether there is any grammatical mistake/error in it. Choose the sentence which has a grammatical error, as your answer. If all the given sentences are grammatically correct, choose (E) i.e., "None of these" as an answer.

- (a) Assam Finance Minister Himanta Biswa Sarma had in 2017 said that a law would be introduced to ensure parents are cared for.
- (b) Justice S.A. Bobde explained that the mediation, if undertaken, would be confidential and court-monitored and would last eight weeks.
- (c) As he is usually busy, he has to travel by a car everywhere.
- (d) Mr. Shah said he had decided to launch the campaign from Ghazipur as it was the land of Suheldev and Abdul Hamid.
- (e) None of these

Q28. In the following questions read each of the following four sentences to find out whether there is any grammatical mistake/error in it. Choose the sentence which has a grammatical error, as your answer. If all the given sentences are grammatically correct, choose (E) i.e., "None of these" as an answer.

- (a) The Nagaland Assembly has passed a resolution rejecting the contentious Citizenship (Amendment) Bill.
- (b) Gauri was shot dead in broad daylight in front of her Bengaluru residence.
- (c) In the buffer zone, the fire destroyed nearly 50 acres in Bokkapuram and Singara.
- (d) It is appearing that the two countries are plotting against the regional super power.
- (e) None of these

Q29. In the following questions read each of the following four sentences to find out whether there is any grammatical mistake/error in it. Choose the sentence which has a grammatical error, as your answer. If all the given sentences are grammatically correct, choose (E) i.e., "None of these" as an answer.

- (a) Armed men looted ₹2.5 lakh from a petrol pump in Gomati district.
- (b) A predicted 70% decline in summer rains by 2050 would devastate Indian agriculture.
- (c) The police held a foreign national after he breached the high security gates of the Israeli Embassy.
- (d) He was much more surprised than me to see him at the restaurant.
- (e) None of these

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Q30. In the following questions read each of the following four sentences to find out whether there is any grammatical mistake/error in it. Choose the sentence which has a grammatical error, as your answer. If all the given sentences are grammatically correct, choose (E) i.e., "None of these" as an

- (a) The country has over 120 million hectares suffering from some form of degradation.
- (b) He is almost quite competent to deal with this situation and lead the country to its ultimate goal.
- (c) Teams were expected to be disruptive in their outlook and challenge the status quo.
- (d) Security forces continued to patrol sensitive areas to check potential troublemakers.
- (e) None of these
- Q31. In the following questions read each of the following four sentences to find out whether there is any grammatical mistake/error in it. Choose the sentence which has a grammatical error, as your answer. If all the given sentences are grammatically correct, choose (E) i.e., "None of these" as an answer.
- (a) The police verified his credentials before initiating any legal action
- (b) The two missiles were tested for different altitudes and conditions.
- (c) The survey shows that 85% of Indian corporate houses are hiring gig workers
- (d) The company's last-mile delivery model, was born out of the efforts of a four-member cross-functional team.
- (e) None of these

Directions (32-35): Select the phrase/connector (STARTERS) from the given three options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences.

Q32. (A) Mr. Srivastava dismissed repo	rts and said that	wildlife had taken she	lter in safer areas
(B) Mr. Srivastava said not even a singl	le wild animal has	died in the MTR.	

•	,				•	,	
(i)	Dismissing	the repor	ts,	Mr.Srivast	ava	ı	

- (ii) Although the reports were dismissed
- (iii) Though not even a single wild animal
- (a) Only (iii)
- (b) Only (i)
- (c) Only (ii)
- (d) Both (i) and (iii)
- (e) Both (i) and (ii)

Q33. (A) He continues to be critical of state government.

- (B) He has not been able to make up his mind about joining any other party.
- (i) Although he continues to be critical
- (ii) Although he has not been able to
- (iii) Inspite being critical of
- (a) Only (i)
- (b) Both (i) and (iii)
- (c) Both (i) and (ii)
- (d) Only (ii)
- (e) Only (iii)

Q34. (A) The structures of old Arab world have been shaken (B) The domestic politics in Arab countries has not been fundamentally altered. (i) Despite fundamentally altering (ii) Without fundamentally altering (iii) Inspite fundamentally altering (a) Only (iii) (b) Only (ii) (c) Both (i) and (ii) (d) Both (i) and (iii) (e) Both (ii) and (iii) Q35. (A) The real attraction is the drink menu.

((\mathbf{B})	It features traditiona	l Brazilian cai	pirinha and	freshly so	jueezed i	uices.

- (i) Yet the real attraction
- (ii) However, the real attraction is
- (iii) Despite traditional Brazilian caipirinha
- (a) Only (i)
- (b) Only (ii)
- (c) Only (iii)
- (d) Both (i) and (ii)
- (e) Both (ii) and (iii)

Directions (36-45): Read the following passage and answer the following questions given below. Some words are given in bold to help you answer some of the questions given below.

Global energy transition is on a fast track and India is not far behind. India's absolute commitment towards carbon neutral economy is well appreciated. Prime Minister Narendra Modi is one of the biggest supporters of expanding green and sustainable sources of energy, thereby mitigating risks of damaging the environment. With reference to energy transition, countries like Iceland, Costa Rica, Nicaragua, United Kingdom, Sweden Germany, Morocco, Denmark, China and United States are setting benchmarks for the rest of the world. Noticeably strong policy interventions along with heightened investment in sustainable energy remain the major catalysts of energy transition in these countries.

India's rise to the occasion is noteworthy and quite exciting for local and global stakeholders. Not long ago, coal was considered the 'backbone' of India's power sector, but today renewable sources like solar and wind are well placed to change that narrative. Currently, grid-connected renewable installation capacity driven by wind and solar exceeds 75 gw. Solar with 26 gw is strongly poised to surpass wind (35 gw) as the largest renewable source within a couple of years. During April-December 2018, India added 4,374 mw of grid connected solar power against the target of 11,000 mw for the financial year.

By the virtue of expanding domestic solar market base and greater emphasis on 'Make in India', domestic manufacturers are becoming competitive to counter Chinese import threat. Interestingly, India's average monthly solar component import reduced from \$349 million in 2017-18 to \$193 million during April-December 2018. In the context of coal-fired plants being the biggest and cheapest suppliers of power to grid, renewable sources desperately wanted "grid parity".

No longer do solar and wind power face the burden of high tariff. Near monopoly of coal as a cheaper source of power is under severe threat—even long term existence of coal power is a big question. Marketdiscovered pricing and mega scale installations of renewable projects has brought down tariff of renewable power below the so-called conventional 'grid-party'. Through the auction process, the Solar Energy Corporation of India and Gujarat Urja Vikas Nigam Ltd discovered solar and wind tariff of Rs 2.44/kWh and Rs 2.43/kWh respectively.

As the coal and renewable story unfolds, coal -- the **frugal** source of power - loses the coveted tag of the 'cheapest' but retains the undesirable tag of 'dirtiest' power. Despite renewables making significant inroads in the direction of price rationalisation, other factors like long- term price sustainability and efficiency are under relentless scrutiny. Industry analysts pose relevant questions: Are the renewable producers playing to win bids? Will they be able to sustain the low prices? The renewable power industry is at the growth stage and within the next five years, the real battle might unravel true survivors. The emerging competition, market structure and customer preferences will decide the winner between the 'cheapest' and 'finest'. It may so happen that the 'finest' would be one amongst the cheapest; then, what would happen to the rest?

Till 2022, the domestic renewable market will remain buoyant, subject to continued thrust of *government* at the helm of affairs. Beyond 2022, many renewable firms may face financial stress; therefore a phase of consolidation is natural. In India's energy transition, road transport deserves utmost attention. Policy makers are clearly pushing for much greener and cleaner technologies.

Lately, electric vehicles (EV) have received government thrust, investors' interest and consumer acceptance. For the last couple of years, many stakeholders have backed electric cars, which called for a reality check as limiting factors outstripped the enablers.

However, mid-course corrections and reactive measures are being undertaken to strengthen EV transition. The two wheeler segment that was not on the immediate radar, started to gain attention.

Faster adoption of EV could be achieved through advancement in storage technology, reducing cost of EV **acquisition**, creating adequate charging infrastructure and offering convenient charging facilities.

Q36. What are the definite factors responsible to determine the winner among the surviving renewable resources?

- (I) Emerging competition
- (II) Efficiency
- (III) Market structure
- (IV) Customer preferences
- (a) Only (I)
- (b) Both (II) and (III)
- (c) Only (I) (III) and (IV)
- (d) Only (III)
- (e) All (I) (II) (III) and (IV)

Q37. What are the approaches that could be adopted to promote electric vehicles?

- (I) Electric two wheeler segment has started to become popular.
- (II) Storage technology should be improved and enhanced.
- (III) Dropping of costs of electric vehicle
- (IV) Offering convenient charging infrastructure and facilities to charge electric vehicles.
- (a) Only (I)
- (b) Both (II) and (III)
- (c) Only (III)
- (d) Only (II) (III) and (IV)
- (e) All (I) (II) (III) and (IV)

Q38. What is the major cause that has led to the drop in the imports of the solar component?

- (a) Cheap sources are available to replace solar component.
- (b) Domestic manufacturers have become competitive due to the greater emphasis on 'Make in India'.
- (c) Prices of solar components have dropped globally
- (d) India became self-sufficient and started exporting solar components in the international market.
- (e) None of these

Q39. Which of the following approaches has strengthened the energy transition in China?

- (I) Strong policy intervention and profound investment in sustainable energy.
- (II) Probing alternative resources for renewable energy sources.
- (III) Investment in advancement of solar energy infrastructure.
- (a) Only (I)
- (b) Both (II) and (III)
- (c) Only (III)
- (d) Both (I) and (II)
- (e) All (I) (II) and (III)

Q40. Which of the following precisely depicts the meaning of the phrase "government at the helm of affairs" from the passage?

- (a) government to participate in affairs
- (b) government at the bottom of the occurring affairs
- (c) government control over affairs
- (d) government as a follower of affairs
- (e) None of these

Directions (41-42): Choose the word which is most similar in the meaning of the word given in bold.

Q41. Frugal

- (a) deluge
- (b) economical
- (c) liberal
- (d) profuse
- (e) opulent

042. Tariff

- (a) rate
- (b) ability
- (c) course
- (d) fund
- (e) source

Q43. Acquisition

- (a) accord
- (b) evident
- (c) scarce
- (d) possession
- (e) grant





Directions (44-45): Choose the word which is most opposite of the word given in bold. Q44. Threat (a) weapon (b) persist (c) ultimatum (d) secure (e) contempt Q45. Mitigating (a) allay (b) aggravate (c) mollify (d) attribute (e) pacify Directions (46-50): Answer the following questions after rearranging the following sentences into a coherent paragraph and identify the sentence that doesn't fit into the context of the paragraph. (A) Over the last decade, many of Bundelkhand's villages have faced significant depopulation. (B) Moreover, adaptation is hard, with farmers varying and mixing crops across seasons, along with heavy investments in borewells, tractors and threshers. (C) Famous of late for farmer protests, the region, which occupies parts of Uttar Pradesh and Madhya Pradesh, has been adversely impacted by climate change. (D) With rains patchy, crop failures become common. There is hardly any greenery in many villages, making it difficult for farmers to even maintain cattle. (E) Wildlife tourism must also be encouraged, particularly through public-private partnerships, to help increase conserved areas while making a difference to backward districts. (F) It was once blessed with over 800-900 mm rainfall annually, but over the last seven years, it has seen this halved, with rainy days reported to be down to just 24 on average in the monsoon period. Q46. Considering statement (A) "Over the last decade, many of Bundelkhand's villages have faced significant depopulation" as the first sentence of the rearranged paragraph, then which among the following fails to become a part of the coherent paragraph? (a) B (b) C (c) D (d) E (e) F Q47. Among the following pairs which one of them is formed with two consecutive statements after the rearrangement (excluding the incoherent sentence)? (a) D - C (b) E - B (c) A - E

(d) C - B (e) C - F

Q48. Considering statement (A) "Over the last decade, many of Bundelkhand's villages have faced significant depopulation" as the first sentence of the rearranged paragraph, identify the correct sequence of the sentences to form a coherent paragraph (excluding the incoherent one). (a) ACFDB (b) ADEFB (c) ACDEF (d) ABCDE (e) ADBFC
Q49. Considering statement (A) "Over the last decade, many of Bundelkhand's villages have faced significant depopulation" as the first sentence of the rearranged paragraph, which of the following statement should FOURTH sentence after the rearrangement? (Excluding the incoherent sentence) (a) B (b) C (c) E (d) D (e) F
Q50. Considering statement (A) "Over the last decade, many of Bundelkhand's villages have faced significant depopulation" as the first sentence of the rearranged paragraph, which of the following statement should SECOND sentence after the rearrangement? (Excluding the incoherent sentence) (a) B (b) C (c) E (d) D (e) F
Directions (51-55): Study the given information carefully and answer the questions below: Ten persons T, R, E, W, Q, L, K, J, H and G sit around a pentagon table (but not necessarily in the same order) in such a way that five persons sit at five corners and rest five persons sit at middle of each side of the table. All the persons face outside the table. Q sits third to the right of W. H does not sit at any corner of the table. T sits second to the left of H. T is not an immediate neighbour of Q and W. G sits immediate to the right of L. G does not sit opposite to T and W. Three persons sit between L and R. J is one of the immediate neighbours of R and sits fourth to the right of K.
Q51. Who among the following sits immediate left of E? (a) L (b) T (c) Q (d) H (e) None of these
Q52. Who among the following sits opposite to R? (a) H (b) G (c) W (d) K (e) None of these

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Q53. How many persons sit between K and E, when counted to the left of K?
(a) One
(b) Four
(c) Two
(d) Three
(e) None of these
Q54. What is the position of K with respect to H?
(a) Immediate left
(b) Fifth to the left
(c) Immediate right
(d) Second to the right
(e) Second to the left
Q55. If G and E interchange their positions, then who among the following sits third to the right of
G?
(a) R
(b) T
(c) H
(d) Q
(e) None of these
Q56. In the question given below, some statements are followed by some conclusions. You have t
take the given statements to be true even if they seem to be at variance with commonly known facts
Read all the conclusions and then decide which of the given conclusions logically follows from th
given statements disregarding commonly known facts.
Statements:
No free is ace.
Only a few ace is dice.
All dice are brick.
Only brick is box.
Conclusion:
I. Some box can be dice.
II. Some ace is not brick.
III. No free can be box.
IV. All free can be brick.
(a) Only II, III and IV are true
(b) Only I is true
(c) Either III or IV are true
(d) Both II and III are true
(e) Only IV are true

Q57. Five persons A, B, G, F and C stand in a row according to their height in descending order from
left. B is shorter to A. F is shorter to A but taller to C. A is not the tallest among all. F is not just shorter
to A. Find who among the following is just shorter to G?
(a) B
(b) A
(c) F
(d) C
(e) Either B or A
Directions (58-62): Study the following information and answer the questions given below:
Eight persons A, B, C, D, E, F, G and H sit in a row but not necessarily in the same order. All the persons face
north.
B sits fourth to the left of A. G sits second to the right of B. More than three persons sits to the left of G. Two

persons sit between D and F. F is the immediate neighbour of H. H and E does not sit adjacent to B.

Q58. Who among the following sits immediate right of E?

- (a) A
- (b) G
- (c) B
- (d) F
- (e) None of these

Q59. How many persons sit to the left of C?

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

Q60. What is the position of D with respect to H?

- (a) Fourth to the left
- (b) Third to the left
- (c) Immediate right
- (d) Fourth to the right
- (e) Second to the left

Q61. Who among the following sits immediate right of G?

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

Q62. The number of persons sit between C and E is same as the number of persons sit to the right of

- (a) C
- (b) G
- (c) B
- (d) D
- (e) None of these

Directions (63-66): A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input: group 73 gap 19 stop 71 element bullet 55 46

Step I: 17 group 73 19 stop element bullet 55 46 gap

Step II: 17 37 group 19 stop bullet 55 46 element gap

Step III: 17 37 55 19 stop bullet 46 group element gap

Step IV: 1737 55 64 19 bullet stop group element gap

Step V: 17 37 55 64 91 bullet stop group element gap

Step V is the final step of the rearrangement. As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.

Input: 58 air 71 review 27 69 tourist ratio execute 43

Q63. What is the position of '85' in the last but one step?

- (a) Sixth from right end
- (b) Fourth from left end
- (c) Third from left end
- (d) Second from left end
- (e) Fourth from right end

Q64. How many elements are there between '34' and 'air' in step V?

- (a) Four
- (b) Five
- (c) Three
- (d) Two
- (e) None of these

Q65. Which among the following is the penultimate step?

- (a) Step VI
- (b) Step II
- (c) Step III
- (d) Step V
- (e) Step IV

Q66. How many steps are required to arrange the given input?

- (a) Eight
- (b) Four
- (c) Seven
- (d) Six
- (e) None of these



Directions (67-71): Study the following information carefully to answer the questions given:

Eight boxes are placed one above the other in a stack. K is placed three places above B. Two boxes are placed between K and G. T is placed below K but not adjacent to B. Z is placed above T and just below E. M is placed above N. N is not placed at the bottommost position.

Q67. Which among the following box is placed just above N?

- (a) E
- (b) B
- (c) G
- (d) T
- (e) None of these

Q68. Which among the following box is placed at the topmost position?

- (a) M
- (b) T
- (c) K
- (d) G
- (e) None of these

Q69. What is the position of Z in the stack?

- (a) Fourth from top
- (b) Sixth from bottom
- (c) Second from top
- (d) Third from bottom
- (e) None of these

Q70. How many boxes are placed between G and T?

- (a) Three
- (b) Two
- (c) One
- (d) None
- (e) More than three



Q71. How many boxes are placed below E?

- (a) Six
- (b) Five
- (c) Four
- (d) Three
- (e) None of these

Directions (72-75): Study the given information to answer the questions below: 972483494743779536849348429548

Q72. How many even numbers are immediately followed by an odd number?

- (a) Five
- (b) Four
- (c) Six
- (d) Seven
- (e) None of these

Q73. Which among the following number is 15th to the right of seventh number from left end? (a) 4 (b) 3 (c) 8 (d) 9 (e) None of these Q74. How many numbers are there in the series which are immediately preceded by the cube of a number? (a) Three
(b) Four (c) Five
(d) Two (e) None of these
Q75. How many odd numbers are immediately followed and immediately preceded by an even number? (a) One (b) Five (c) Four (d) Two (e) Three
Q76. How many pair of letters are there in the word 'EXAMINATION', each of which have as many letters between them (both forward and backward direction) in the word as they have between them according to English alphabetical order? (a) One (b) Two (c) Three (d) None (e) More than three
Directions (77-81): Study the given information carefully and answer the questions below: Seven persons R, F, G, V, D, E and B visit a temple (but not necessarily in the same order) on different days of a week starting from Sunday. B visits either on Tuesday or Friday. Three persons visit between B and E. D visits after B but not on Thursday. G visits three days before D. F visits just before R.
Q77. V visits on which among the following days? (a) Sunday (b) Monday (c) Friday (d) Thursday (e) None of these

Q78. How many persons visit after D?
(a) One
(b) Two
(c) Three
(d) Four
(e) None of these
070. Who among the following visits on Sunday?
Q79. Who among the following visits on Sunday?
(a) D (b) G
(b) G (c) V
(d) E
(e) None of these
(e) None of these
Q80. Who among the following visits just after R?
(a) E
(b) B
(c) G
(d) D
(e) None of these
Q81. Four among the following five are alike in a certain way and related to a group, which among the following does not belong to that group? (a) D-F (b) B-D (c) G-V (d) F-E (e) R-E Directions (82-83): Study the given information and answer the questions given below:
A person starts walking from P towards north, walks 10m and reached at Q. From Q, he turns left, covers
9m, now reached at R. Now, he takes two consecutive right turns of 8m and 13m to reach at S and T
respectively. From T, he covers 5m towards south to reach V. At last, he covers 5m towards east from V to
reach D.
Q82. What is the direction of S with respect to P?
(a) South-west
(b) South-east
(c) North-west
(d) North-east
(e) None of these
002. Dig in which direction with respect to D2
Q83. D is in which direction with respect to R?
(a) South-east (b) West
(c) East
(d) North-west
(e) None of these
(c) none of these

Directions (84-88): Study the given information carefully to answer the following questions:

Eight persons visit Udaipur on 14th and 19th of four different months i.e., March, June, September and October. H visits in the month having even number of days. Two persons visit between H and A. D and A visit in the same month. The number of persons visit between D and H is same as the number of persons visit between H and K. K and G visit on the same date. Three persons visit between S and F who does not visit after H. More than one person visits between S and L.

Q84. Who among the following visits on 14 October?

- (a) L
- (b) D
- (c) S
- (d) F
- (e) None of these

Q85. S visits on which among the following date?

- (a) 14 September
- (b) 14 March
- (c) 19 June
- (d) 19 September
- (e) None of these

Q86. How many persons visit between G and K?

- (a) Three
- (b) Four
- (c) Five
- (d) Two
- (e) None of these

Q87. How many persons visit before D?

- (a) None
- (b) One
- (c) Two
- (d) Three
- (e) More than three

Q88. Four among the following five are same in a certain way and related to a group. Which among the following does not belong to the group?

- (a) F
- (b) S
- (c) A
- (d) H
- (e) L

Directions (89-90): Study the given information and answer the questions below:

There are seven persons W, S, P, D, E, I and N in a family of three generations. N is the mother of three children. S is the paternal aunt of P. E is the mother of P who is the grandson of N. E has no sibling. N has one brother. D is the only brother of W. P is the nephew of W who is the niece of I.

Q89. What is the relation of E with respect to W?

- (a) Daughter
- (b) Sister-in-law
- (c) Sister
- (d) Can't be determined
- (e) None of these

Q90. Who among the following is the nephew of I?

- (a) S
- (b) Either D or P
- (c) D
- (d) P
- (e) None of these

Directions (91-94): Study the given information carefully and answer the following questions:

In a certain code language

'Premium Indian festival' is coded as 'ko co ao'

'Gold season festival duration' is coded as 'jo ko ro xo'

'Premium water season' is coded as 'ao jo wo'

Q91. Which among the following is the code for 'gold'?

- (a) ro
- (b) ko
- (c) jo
- (d) xo
- (e) Either ro or xo

Q92. 'wo' is the code for which among the following?

- (a) Season
- (b) Can't be determined
- (c) Premium
- (d) Water
- (e) None of these

Q93. What will be the code for 'Indian season' in the given code language?

- (a) ro jo
- (b) co jo
- (c) ko co
- (d) ko ro
- (e) None of these

Q94. The code 'xo ao jo' will be the code for which among the following?

- (a) Gold premium season
- (b) Gold duration season
- (c) Indian water duration
- (d) Gold duration premium
- (e) Indian festival water

Directions (95-98): In each of the questions below are given some statements followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions



and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Q95. Statements:

99% rain is water.

All water are air.

Only a few air is element.

Conclusion:

- I. Some air is not element
- II. All rain can be air
- (a) If only conclusion I follows.
- (b) If only conclusion II follows.
- (c) If either conclusion I or II follows.
- (d) If neither conclusion I nor II follows.
- (e) If both conclusion I and II follow.

Q96. Statements:

No play is game.

No search is ground.

Some game is search.

Conclusion:

- I. Some play is ground
- II. No play is ground
- (a) If only conclusion I follows.
- (b) If only conclusion II follows.
- (c) If either conclusion I or II follows.
- (d) If neither conclusion I nor II follows.
- (e) If both conclusion I and II follow.

Some report is launch.

All launch is year.

No year is leave.

Conclusion:

- I. No launch is leave
- II. Some report is not leave is a possibility.
- (a) If only conclusion I follows.
- (b) If only conclusion II follows.
- (c) If either conclusion I or II follows.
- (d) If neither conclusion I nor II follows.
- (e) If both conclusion I and II follow.

Q98. Statements:

Only dell is step.

Some dell is level.

All level is device.

Conclusion:

I. All step can be level

II. Some device is not dell

- (a) If only conclusion I follows.
- (b) If only conclusion II follows.
- (c) If either conclusion I or II follows.
- (d) If neither conclusion I nor II follows.
- (e) If both conclusion I and II follow.

Q99. In the number '71639583254', if all the digits are arranged in ascending order from right within the number, then what will be the resultant when third digit from right end and sixth digit from left end are added in the new number formed after rearrangement?

- (a) 8
- (b) 12
- (c) 10
- (d) 11
- (e) None of these

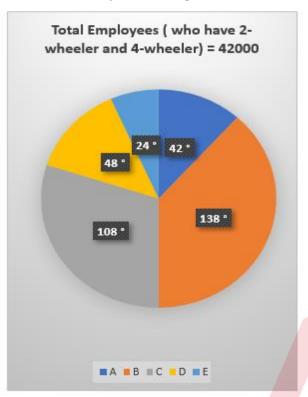
Q100. Fives sticks are arranged in a row according to their length in descending order from left. V is shorter to B but longer to P. B is shorter to H. The number of sticks longer to Z is same as the number of sticks shorter to Z. Which among the following is just longer to Z?

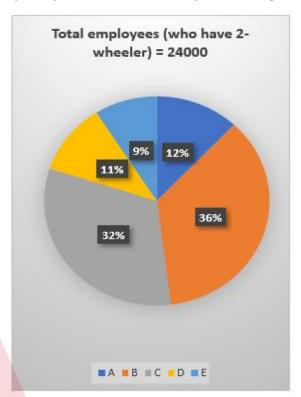
- (a) H
- (b) V
- (c) B
- (d) P
- (e) Can't be determined

Directions (101-105): Read the data carefully and answer the following questions.

first pie chart shows distribution of total employees (who have 2 wheeler and 4 wheeler) in 5 different departments and second pie chart shows distribution of total employees (who have 2-wheeler) in given 5 departments.

Note:- employees (who have 4-wheeler) in a particular department = total employees (who have 2wheeler and 4-wheeler) in that department – total employees (who have 2-wheeler) in that department.





Q101. What is the average of total employees (who have 4-wheeler) in A,B and C?

- (a) 4200
- (b) 4500
- (c) 4900
- (d) 3200
- (e) 4800

Q102. What is the ratio of total employees (who have 2-wheelers) in A and C together to total employees (who have 4-wheelers) in B and D together?

- (a) 528:521
- (b) 525:521
- (c) 528:523
- (d) 528:519
- (e) 524:521

Q103. Find the difference between total employees (who have 4-wheeler) in B, D and E together and total employees (who have 2-wheeler and 4-wheeler) in A and C together?

- (a) 6220
- (b) 6440
- (c) 6550
- (d) 6180
- (e) 6760

Q104. In which department the difference between employees (who have 2-wheeler) and employees (who have 4-wheeler) is third highest?
(a) D
(b) B
(c) E
(d) A
(e) C
Q105. Total Employees (who have 2-wheeler) in B and D together is approximately
what percent more/less than total employees (who have 2-wheeler and 4-wheeler) in A and C together?
(a) 32.54 %
(b) 37.54 %
(c) 30.54%
(d) 35.54%
(e) 28.54%
Q106. Average of runs scored by Virat in x innings is 57.5. In next 4 innings, he scored 'y' runs and his average increases by 2.5 runs. If Virat had scored 210 runs less in these 4 innings, then his average would
have remained 57.5. Find x?
(a) 70
(b) 60
(c) 65
(d) 75
(e) 80
Q107. An insurance agent gets a commission of (y-6) % on a sale of upto Rs. 25000 and he gets
commission of y% on a sale of above Rs.25000. If his total commission is Rs.6060 on the sale of
Rs.42000, find y?
(a) 18%
(b) 15%
(c) 12%
(d) 11%
(e) 10%
Q108. 8 men can complete a piece of work in 5 days while 15 women can finish the same work in 4
days. 12 children can finish the same work in 8 days. In how many days will 1 man, 1 woman and 2
children finish the work?
(a) 14 days
(b) 18 days
(c) 20 days
(d) 16 days
(e) None of these

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Q109. A bag consists of 5 red balls and 4 black balls. If three balls are drawn at random from the bag, then what is the probability that at most two balls are black out of drawn balls? (a) 17/21 (b) 20/23 (c) 16/21 (d) 20/21 (e) 19/23
Q110. Area of a rectangle is $168 \mathrm{m}^2$ and its length is 17 cm more than its breadth. Find the volume of a cone whose diameter is 21 cm and height of cone is equal to diagonal of the rectangle? (a) $2887.5 \mathrm{cm}^3$ (b) $2696.5 \mathrm{cm}^3$ (c) $2700.5 \mathrm{cm}^3$ (d) $2180.5 \mathrm{cm}^3$ (e) $2481.5 \mathrm{cm}^3$
Q111. Three pipes A, B and C together can fill a tank in $8\frac{4}{13}$ hours while B alone can fill the same tank
in 27 hours. If A and B operates at half of their efficiency while efficiency of C remain unchanged then the tank will be filled in 27/2 hours. What time will A alone take to fill the tank? (a)15 hours (b)18 hours (c)21 hours (d)24 hours (e)27 hours
Q112. The ratio of three liquids A, B and C in a jar is 3:2:5. If $66\frac{2}{3}\%$ of A, 75% of B and 30% of C is taken out from the jar and is replaced with 'y' litre of A and '2y' litre of B in the jar, then final quantity of A in jar is $15\frac{5}{13}\%$ less than that of B. Find 'y' if sum of final quantity of B and C is 102 litres?
(a) 18 litres (b) 12 litres (c) 25 litres (d) 15 litres (e) None of these
Q113. Ratio of speed of scooty and that of car is 5:9. Ram can cover a distance of 41 kms in '2T' hours by scooty and he can cover 184.5 kms in '4T+2' hours by car. What is the difference between speed of car and speed of scooty? (in km/h) (a) 8.2 (b) 7.6 (c) 6.5 (d) 2.4 (e) 9.8

Q114. P, Q and R enter into a partnership with Rs. 'A', Rs. 'A+1000' and Rs. 'A+2000' initially. After 6 months, P withdraws half of his money while Q and R both added Rs. 2000 each in their initial investment. If at the end of 1 year, the ratio of profit share of P to R is 2:3 then what is the average of initial investment of P,Q and R?

- (a) 20000
- (b) 22000
- (c) 24000
- (d) 25000
- (e) 27000

Q115. Perimeter of a square is 176 cm and side of the square is equal to half of circumference of a circle. Find the total surface area of cylinder whose radius and height are in ratio 7:11 and radius of cylinder is equal to the radius of circle?

- (a) 3168 cm²
- (b) 2772cm²
- (c) 3267cm²
- (d) 3003cm²
- (e) 3124cm²

Q116.The total time taken by a boat to travel 126 km downstream and 70 km upstream is 'T' hours. The same boat travels 14.4 km downstream in 24 min and 16 km upstream in 48 min. Find the distance traveled by boat in still water in 'T+3' hours if the speed of boat in still water increases by 40%?

- (a) 406 km
- (b) 420 km
- (c) 392 km
- (d) 357 km
- (e) 280 km

Directions (117-120): What will come in place of question mark (?) in the following series.

Q117. 1444, 1544, 1688, 1884, ?, 2464

- (a) 2140
- (b) 2109
- (c) 2197
- (d) 2150
- (e) 2160

Q118. 1089, 1225, 1369, 1521, ?, 1849

- (a) 1671
- (b) 1681
- (c) 1661
- (d) 1651
- (e) 1691

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Q119. 893, ?, 1091, 1289, 1553, 1883

(a) 958

(b) 957

(c) 959

(d) 960

(e) 961

Q120. 10, 20, 60, 300, ?, 23100

(a) 2500

(b) 2300

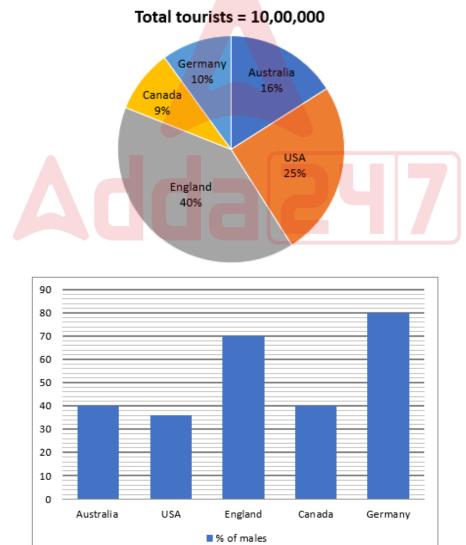
(c) 2000

(d) 2200

(e) 2100

Directions (121-125): Study the charts given below and answer the following questions.

Pie chart shows the percentage distribution of tourists from 5 different countries (Australia, USA, England, Canada & Germany) who visited India and Bar chart shows the percentage of male tourists out of total tourists from each of these 5 countries who visited India.



Q121. Male tourists from Australia and Canada together who visited India are what percent more or less than total tourists from England who visited India? (a) 60% (b) 75% (c) 45% (d) 90% (e) 30%
Q122. Find ratio of male tourists from England and Germany together who visited India to female tourists from Australia and Canada together who visited India. (a) 7:4 (b) 5:3 (c) 12:5 (d) 14:11 (e) None of the above.
Q123. Find average number of tourists who visited India from USA, England and Germany. (a) 240000 (b) 200000 (c) 180000 (d) 160000 (e) 250000
Q124. Female tourists who visited India from USA and Germany together are what percent of tota tourists who visited India from Australia and Canada together? (a) 50% (b) 64% (c) 56% (d) 72% (e) 60%
Q125. Male tourists who visited India from USA are how much more or less than female tourists who visited India from England? (a) 30000 (b) 40000 (c) 56000 (d) 25000 (e) 48000
Directions (126-129): The following questions are accompanied by two statements, I and II. You have to determine which statements(s) is/are sufficient/necessary to answer the questions.
Q126. What is the perimeter of square? I. A circle is inscribed in a square. Area of circle is 42 cm² less than the area of square. II. Perimeter of square is equal to the perimeter of rectangle whose length and breadth are in ratio of 4:3. (a) either I alone or II alone (b) Only I (c) only II (d) neither I nor II (e) both I and II together

0127.

What is the difference between P and S?

I. P is $66\frac{2}{3}$ % more than Q. R is 25% less than S. Q is 50% more than S.

II. Average of P,Q and R is $\frac{70}{3}$ while average of Q,R and S is 17. Q and R are equal. Q is $37\frac{1}{2}\% \ of \ P$.

- (a) either I alone or II alone
- (b) Only I
- (c) only II
- (d) neither I nor II
- (e) both I and II together

Q128. A shopkeeper sold 3 toaster and 4 watches. What is overall profit earned by him?

I. Total SP of these toaster and watches together is 80% of their total MRP. MRP of a toaster and a watch is 150 rupees and 250 rupees respectively.

II. Profit percent on each toaster is 10% while profit on each watch is 30 rupees.

- (a) either I alone or II alone
- (b) Only I
- (c) only II
- (d) neither I nor II
- (e) both I and II together

Q129. What is the speed of boat in still water?

I. The boat takes total time of 9 hours to cover a distance of 60 km downstream and 45 km upstream.

II. The difference between downstream speed and upstream speed is 6 kmph

- (a) either I alone or II alone
- (b) Only I
- (c) only II
- (d) neither I nor II
- (e) both I and II together

Directions (130-135): Find the approximate value of (?) in the following questions.

$$0130.15.98 \times 49.98 - 18.03 \times 32.01 + (14.01)^2 = ?$$

- (a) 400
- (b) 450
- (c)350
- (d) 380
- (e) 420

0131.
$$13.99 \times ? +695.01 = 36.03\% \ of \ 2399.98 + 754.99$$

- (a) 72
- (b) 66
- (c)75
- (d) 80
- (e) 62

Q132. 17.99% of 199.98 + ?% of 600.01 = 39.99% of 750.01

- (a) 48
- (b) 44
- (c) 50
- (d) 30
- (e)38

0133.339.01 + 211.01 - 380.01 = ? -320.01

- (a) 490
- (b) 440
- (c)380
- (d) 520
- (e) 550

Q134. 54.01% of 7000.03 - 78.02% of $3999 + (3.99)^2 = ?^2$

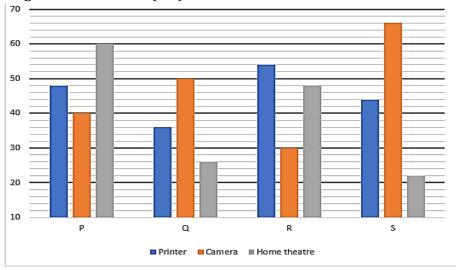
- (a) 24
- (b) 36
- (c) 34
- (d) 26
- (e) 32

0135. ? % of 549.99 + 20.03 % of 649.99 = 349.99

- (a) 36%
- (b) 24%
- (c) 20%
- (d) 30%
- (e) 40%

Directions (136-141): Bar graph shows number of printers, cameras and home theatres sold by four companies (P,Q, R and S). Read the data carefully and answer the following questions.

Note: All numbers are given in hundreds ('00).



Q136. Ratio of marked price to cost of a printer is 8:5 and discount given on the printer is 20%. What is the total profit earned by company P and Q after selling their printers? (it is given that discount given on a printer is Rs.32). (It is given that cost price, selling price and marked price of the printer for both the companies P and Q is same). (a) Rs. 235200 (b) Rs. 192000 (c) Rs. 240000 (d) Rs. 300000 (e) Rs. 278000
Q137. What is the difference between average of total camera sold by all companies and average of total home theatre sold by all companies? (a) 950 (b) 850 (c) 1000 (d) 700 (e) 750
Q138. If camera is sold at 10% profit and home theatre is sold at $11\frac{1}{9}\%$ profit, then what is the overall profit or loss of company R by selling its all cameras and all home theatres? (It is given that SP of a camera and SP of a home theatre are same for company R, and CP of a camera is Rs.100) (a) Rs. 56800 (b) Rs. 82800 (c) Rs. 72600 (d) Rs. 77000 (e) Rs. 80000
Q139. Printer sold by Q and R together are what percent of home theatre sold by Q , R and S together? (a) 96.25% (b) 87.5% (c) 93.75% (d) none of these (e) 90%
Q140. What is the ratio of total products sold by P to that of by S? (a) 33:37 (b) 1:1 (c) 33:28 (d) 37:33 (e) 28:33
Q141. What is the sum of camera sold by (P+Q) and home theatre sold by (R+S)? (a) 18000 (b) 17000 (c) 14000 (d) 15000 (e) 16000

Directions (142-145): In each of these questions, two equation (I) and (II) are given. You have to solve both the equations and give answer.

0142.

$$I. 2x^2 - 19x + 42 = 0$$

II.
$$y^2 - 14y + 49 = 0$$

- (a) If x>y
- (b) If x≥y
- (c) If x < y
- (d) If x≤y
- (e) If x = y or no relation can be established between x and y

0143.

$$I. 3x^2 - 37x + 110 = 0$$

II.
$$y^2 - 4y - 5 = 0$$

- (a) If x>y
- (b) If x≥y
- (c) If x < y
- (d) If x≤y
- (e) If x = y or no relation can be established between x and y

0144.

$$I. x^2 - 10x + 24 = 0$$

II.
$$5y^2 + 16y + 3 = 0$$

- (a) If x>y
- (b) If x≥y
- (c) If x < y
- (d) If x≤y
- (e) If x = y or no relation can be established between x and y

0145.

$$I. x^2 + 10x - 56 = 0$$

II.
$$y^2 + 24y + 143 = 0$$

- (a) If x>y
- (b) If x≥y
- (c) If x < y
- (d) If x≤y
- (e) If x = y or no relation can be established between x and y

Directions (146-150): Read the information carefully and answer the questions.

There are 900 employees in a company and there are two tower A & B in the company. There are three teams in each building i.e., Operation, Technical & Accounts. $\frac{75}{4}$ % of total employee in A are in Accounts and $\frac{200}{7}$ % of total employee in B are in Technical. Sum of total employee in Accounts in A & total employee in Technical in B is 210. $\frac{400}{21}$ % of total employee in B are in Accounts and 50% of total employee in A are in Operation.

Q146. Total employee in Oper	ration in A is what percent more than that in Technical in B.
(a) 25%	
(b) 100%	
(c) 50%	
(d) 75%	
(e) 125%	
Q147. Find the ratio of total e	mployee in Accounts in B to total employee in Technical in A.
(a) 8: 11	
(b) 8: 15	
(c) 8: 17	
(d) 8: 9	
(e) 8: 7	
Q148. If in other building C, to	otal employees are 360 and total employee in Technical in C are 25%
more than total employee in	Accounts in B, then find total employee in Operation & Accounts in C
is how much less than total er	nployee in Operat <mark>ion</mark> & Accounts in A.
(a) 10	
(b) 50	
(c) 100	
(d) 70	
(e) 40	
Q149. Find the average numb	er of employees in Technical in A & B?
(a) 110	
(b) 135	
(c) 86	
(d) 52	
(e) 75	
Q150. If out of total employe	ee in Operation in A & B, ratio of male to female is 5 : 3 and 7 : 4
respectively, then find total m	nale in Operation from both buildings?

- (a) 290
- (b) 240
- (c) 210
- (d) 220
- (e) 250



Solutions

S1. Ans.(a)

Sol. The error lies in part (A) of the sentence. It should be noted that "his, her, its, one's, and their" are the singular and plural third-person possessive determiners. However, 'Its' is the possessive form of it, meaning 'of it' (an object); while 'his' is a possessive determiner of 'he' (a person). Therefore, to form the grammatically correct sentence 'its' should be replaced by 'his'. Hence, option (a) is the most suitable answer choice.

S2. Ans.(e)

Sol. Along with the highlighted part, all the other parts of the sentence are grammatically correct and contextually meaningless. Hence, option (e) is the most suitable answer choice.

S3. Ans.(c)

Sol. The error lies in part (*C*) of the sentence. It is to be noted Third conditional sentences are used to explain that present circumstances would be different if something different had happened in the past. When using the third conditional, we use the past perfect (i.e., had + past participle) in the if-clause. The modal auxiliary (would, could, shoud, etc.) + have + past participle in the main clause expresses the theoretical situation that could have happened. Therefore the correct part should be *if he had only overcome his fears.* All the other parts of the sentence are correct. Hence, option (c) is the most suitable answer choice.

S4. Ans.(c)

Sol. The error lies in part (C) of the sentence. In order to correct the sentence replace 'demonstrated' by 'demonstrate' as 'must' is a modal auxiliary which should be followed by a verb in its base form. All the other parts of the sentence are correct. Hence, option (c) is the most suitable answer choice.

S5. Ans.(d)

Sol. The error lies in part (D) of the sentence. The auxiliary verb (did) is marked for past tense, but the main verb is not. It appears in its base form. A helpful way to remember this is that when there is an auxiliary verb, the main verb does not need to be marked for tense, because the tense is shown in the auxiliary. However, in a sentence about the past without an auxiliary verb, the main verb does need to be in the past tense form. Therefore, 'kept' should be replaced by 'keep' to form a grammatical sentence. Hence, option (d) is the most suitable answer choice.

S6. Ans.(b)

Sol. The error lies in part (B) of the sentence. The Past Perfect Tense refers to something that occurred in the past, before another action in the past. In other words, it expresses one event that was completed before another past event. Therefore the part 'she called my name' should be replaced by 'she had called my name'. All the other parts of the sentence are correct. Hence, option (b) is the most suitable answer choice.

S7. Ans.(a)

Sol. The error lies in part (A) of the sentence. To correct part (A) of the given sentence, replace it with "his remark *to be* impertinent". All the other parts of the sentence are correct. Hence, option (a) is the most suitable answer choice.

S8. Ans.(d)

Sol. The error lies in part (D) of the sentence. The preposition 'for' should be replaced by 'against' to frame a grammatically viable sentence. All the other parts of the sentence are correct. Hence, option (d) is the most suitable answer choice.

S9. Ans.(a)

Sol. The error lies in part (A) of the sentence. The verb gifted should be followed by the preposition 'with' instead of 'over'. All the other parts of the sentence are correct. Hence, option (a) is the most suitable answer choice.

S10. Ans.(e)

Sol. Along with the highlighted part, all the other parts of the sentence are grammatically correct and contextually meaningless. Hence, option (e) is the most suitable answer choice.

S11. Ans.(d)

Sol. In option (b), 'interest in native varieties' and 'looking for such paddy varieties' together make a sense thus we can assume option (b) to be a correct match.

Quest- a long or arduous search for something.

time. Similarly, C and E makes a perfect match. Hence option (d) is the correct answer choice.

S12. Ans.(e)

Sol. None of the part of the sentences given among the options makes a match with any other part of the sentence contextually hence there is no option which is giving the correct match of the given parts of the sentences. Hence option (e) is the correct answer choice.

S13. Ans.(c)

Sol. Only sentence (A) and (D) makes a perfect match.

'lifting the restrictions' and 'reviewed the performance' together make a sense thus making (A) and (D) a perfect match. All other given parts either don't fit contextually or fail to give a grammatically and contextually correct sentence. Hence option (c) is the correct answer choice.

S14. Ans.(b)

Sol. Only sentence (B) and (F) makes a perfect match.

'overwhelm the viewer physically' and 'but allow an intimate engagement' together makes a sense hence making option (b) a viable answer choice all other given parts either don't fit contextually or fail to give a grammatically correct sentence. Hence option (b) is the correct answer choice.

S15. Ans.(c)

Sol. Only sentence (A) and (F) makes a perfect match.

None of the two sentences make the meaningful coherent sense except (A) and (F). hence option (c) is the correct answer choice.

S16. Ans.(d)

Sol. The correct answer choice is option (d).

Gregarious- willing to talk and engage in activities with other people; friendly.

The line succeeding the blank conveys the meaning of the word that must filled the blank i.e. the one who can be find always in the middle of a large group of people that means a person with good sociable skills. Option (b) can be omitted as an answer the later part of the phrase is giving a grammatically incorrect option as the sentence is conveying the sense in the 'present tense.'

Hence, option (d) will be the correct choice.

S17. Ans.(c)

Sol. The correct answer choice is option (c).

Laconic- (of a person, speech, or style of writing) using very few words.

Inevitably (verb)- unavoidably

There is a comparison between Martha and her boyfriends in a sense of talkative and reserved (using less words in conversation), hence in blank a word must be filled conveying the meaning opposite to 'talkative,' which is 'laconic.'

Hence, option (c) will be the correct choice.

S18. Ans.(b)

Sol. The correct answer choice is option (b).

Mercurial- subject to sudden or unpredictable changes of mood or mind.

Hence, option (b) will be the correct choice.

\$19. Ans.(a)

Sol. The correct answer choice is option (a).

Stranded- left without the means to move from somewhere.

The sentence is conveying that though Mike has started his trip auspiciously but due to some mishaps in the middle of the trip he was left without any means to move.

Auspicious- conducive to success; favourable.

Hence, option (a) will be the correct choice.

S20. Ans.(d)

Sol. The correct answer choice is option (d).

Acrimony- bitterness or ill feeling.

Hence, option (d) will be the correct choice.

S21. Ans.(e)

Sol. The answer can be concluded from the first paragraph, where the writer mentions "thereby reshaping society into the binary of 'minority-majority' along caste, religion and ethnic lines. By the 1920s, the political discourse in India, barring that of the Indian National Congress, *inhaled the politics of 'numbers'*, which seamlessly **metamorphosed** into the politics of 'othering'. This took various forms under parties such as the All-India Muslim League, the Akhil Bharat Hindu Mahasabha, the Justice Party, etc." From these lines we can conclude that both options (b) and (c) are correct.

Hence, option (e) is the correct answer.

S22. Ans.(c)

Sol. All the given options except option (c) are true as per the passage given above. Option (c) is incorrect because from 'barring that of the Indian National Congress, *inhaled the politics of 'numbers'*, which seamlessly metamorphosed into the politics of 'othering', we can infer that Congressism was not the politics of othering.

S23. Ans.(d)

Sol. We get to know about the various levels of constitution of 'others' from the second paragraph which mentions, the three levels. "First, at the symbolic level, wherein the founding fathers were pitted against each other. Second, at the societal level, wherein the socio-economic interest of one section was shown as being unaligned with that of sections signifying the 'other'. Third, at the political level, wherein idiom, metaphor, popular slogan and appeal were deliberately sectarian, exhibiting a 'friend-enemy' simile." As there is no mention of the option (d) in the given lines, we can conclude that it is not among the levels of constitution of 'others'.

Hence, option (d) is the correct answer.

S24. Ans.(d)

Sol. From the Paragraph 4, " in post-2000 Uttar Pradesh when the acidic political rivalry between the Bahujan Samaj Party (BSP) and the Samajwadi Party (SP) manifested itself in their governments' policies as they pitted two social justice icons, R.M. Lohia and B.R. Ambedkar, against each other', we can conclude that options (a) and (b) are correct. Also, the passage states that " The official signboard designated them as 'Ambedkar villages' qualified for special developmental funds', thus option (c) is incorrect. Hence, option (d) is the correct answer.

S25. Ans.(b)

Sol. We can conclude from the line given in Paragraph 3, "It was argued that popular politics was about speaking for different shades of subalterns, who constituted the majority, thereby projecting the politics of 'numbers and othering' as necessary to serve the ideals of equality and freedom" that option (b) is not true in context of popular politics.

Hence, option (b) is the correct answer.

S26. Ans.(b)

Sol. Option (b) is the correct answer as the passage is based on the concept of politics of othering rather than any on any specific political, because of which we can omit option (a). Other options seem to be out of context and thus can be ruled out.

\$27. Ans.(c)

Sol. Here, 'a' will not be used with 'by car'. In case of any mention about a specific car, we will use article but as the sentence mentions a general mode of transport, we will omit any article before car. Hence, option (c) is the correct answer.

S28. Ans.(d)

Sol. Here, we will replace 'it is appearing' with 'it appears'. When we use 'appear' to convey the meaning similar to 'seem', we will use it as present indefinite tense. Hence, option (d) is the correct answer.

S29. Ans.(d)

Sol. Here, 'me' will be replaced by 'I' because in case of comparison between two subjects, 'than' will be followed by pronoun of normative case. Hence, option (d) is the correct answer.

\$30. Ans.(b)

Sol. Here, we will omit 'almost' because using any adverb before 'quite' makes the sentence grammatically incorrect. Hence, option (b) is the correct choice.

S31. Ans.(e)

Sol. All the given statements are grammatically correct and require no correction. Hence, option (e) is correct answer.

S32. Ans.(b)

Sol. Among the given options, (b) is the correct choice. The sentence as a whole can be written as: "Dismissing the reports, Mr. Srivastava said that wildlife had taken shelter in safer areas and not even a

"Dismissing the reports, Mr. Srivastava said that wildlife had taken shelter in safer areas and not even a single wild animal has died in the MTR."

S33. Ans.(c)

Sol. Among the given options, (c) is the correct choice. The sentences as a whole can be written as:

"Although he continues to be critical of the State government, yet he has not been able to make up his mind about joining any other party till date."

AND "Although he has not been able to make up his mind about joining any other party, yet he continues to be critical of state government."

S34. Ans.(b)

Sol. Among the given options, (b) is the correct choice. The sentences as a whole can be written as: "Without fundamentally altering the domestic politics, the structures of old Arab world have been shaken."

S35. Ans.(b)

Sol. Among the given options, (b) is the correct choice. The sentence as a whole can be written as: "However, the real attraction is the drink menu that features a traditional Brazilian caipirinha and freshly squeezed juices."

S36. Ans.(c)

Sol. To validate the answer refer to the 7th sentence of 5th paragraph "The emerging competition, market structure and customer preferences will decide the winner between the 'cheapest' and 'finest'." Hence, option (c) is the most suitable answer choice.

S37. Ans.(d)

Sol. The answer can be validated by going through the last paragraph of the passage "Faster adoption of EV could be achieved through advancement in storage technology, reducing cost of EV acquisition, creating adequate charging infrastructure and offering convenient charging facilities." It is to be noted that alternative is an outcome of the measures adopted rather than a measure itself. Hence, option (d) is the most suitable answer choice.

\$38. Ans.(b)

Sol. Refer to the third paragraph first lines "By the virtue of expanding domestic solar market base and greater emphasis on 'Make in India', domestic manufacturers are becoming competitive to counter Chinese import threat. Interestingly, India's average monthly solar component import reduced from \$349 million in 2017-18 to \$193 million during April-December 2018." All the other alternatives are irrelevant. Hence, option (b) is the most suitable answer choice.

S39. Ans.(a)

Sol. The answer can be justified by referring the last line of the first paragraph "Noticeably strong policy interventions along with heightened investment in sustainable energy remain the major catalysts of energy transition in these countries." All the other alternatives are irrelevant. Hence, option (a) is the most suitable answer choice.

\$40. Ans.(c)

Sol. "At the helm (of something)" means in charge or in the position of a leader. All the other alternatives are irrelevant. Hence, option (c) is the most suitable answer choice.

S41. Ans.(b)

Sol. Frugal means sparing or economical as regards money or food. Economical means giving good value or return in relation to the money, time, or effort expended. Since they both are synonymous to each other, option (b) is the most suitable answer choice.

Deluge means inundate with a great quantity of something.

Liberal means given, used, or occurring in generous amounts.

Profuse me**Ans.**(especially of something offered or discharged) very plentiful; abundant.

Opulent means ostentatiously costly and luxurious.

S42. Ans.(a)

Sol. Tariff means a tax or duty to be paid on a particular class of imports or exports. Rate means a fixed price paid or charged for something. Since they both are synonymous to each other, option (a) is the most suitable answer choice.

\$43. Ans.(d)

Sol. Acquisition means an asset or object bought or obtained, typically by a library or museum. Accession means the state of having, owning, or controlling something. Since they both are synonymous to each other, option (d) is the most suitable answer choice.

S44. Ans.(d)

Sol. Threat means a person or thing likely to cause damage or danger. Secure means certain to remain safe and unthreatened. Since they both are antonyms of each other, option (d) is the most suitable answer choice.

S45. Ans.(b)

Sol. Mitigating means having the effect of making something bad less severe, serious, or painful. Aggravate means make (a problem, injury, or offence) worse or more serious. Since they both are antonyms of each other, option (b) is the most suitable answer choice.

Allay means diminish or put at rest (fear, suspicion, or worry).

Mollify means appease the anger or anxiety of (someone).

S46. Ans.(d)

Sol. Statement (A), which is the first sentence of the rearranged paragraph, helps to derive the theme of the paragraph which is about migrating population from Bundelkhand's villages. Further the paragraph has mentioned climate change as one of the major causes that has led to the migration of people. Statement (C) should follow statement (A) as it has further mentioned "the region" mentioned in statement (A). Statements (C) and (F) form a coherent pair as statement (C) mentions about the adverse impacts of climate change in this region while statement (F) has provided a comparison of a healthy rainfall which has been reduced to its half. The hint can be received from the pronoun "it" mentioned in statement (F) which is used to denote "the region" mentioned in statement (C). Statement (D) should be placed in fourth position as it coherently connects with the previous statement by mentioning the impacts of the declined rainfall. By providing the concluding statement, statement (B) should connect logically. Statement (E) fails to connect coherently with the given theme of the paragraph. Thus, excluding the incoherent sentence, the logical sequence of the sentences formed is ACFDB. Hence, option (d) is the most suitable answer choice.

S47. Ans.(e)

Sol. Statement (A), which is the first sentence of the rearranged paragraph, helps to derive the theme of the paragraph which is about migrating population from Bundelkhand's villages. Further the paragraph has mentioned climate change as one of the major causes that has led to the migration of people. Statement (C) should follow statement (A) as it has further mentioned "the region" mentioned in statement (A). Statements (C) and (F) form a coherent pair as statement (C) mentions about the adverse impacts of climate change in this region while statement (F) has provided a comparison of a healthy rainfall which has been reduced to its half. The hint can be received from the pronoun "it" mentioned in statement (F) which is used to denote "the region" mentioned in statement (C). Thus, excluding the incoherent sentence, the logical sequence of the sentences formed is ACFDB. Hence, option (e) is the most suitable answer choice.

S48. Ans.(a)

Sol. Statement (A), which is the first sentence of the rearranged paragraph, helps to derive the theme of the paragraph which is about migrating population from Bundelkhand's villages. Further the paragraph has mentioned climate change as one of the major causes that has led to the migration of people. Statement (C) should follow statement (A) as it has further mentioned "the region" mentioned in statement (A). Statements (C) and (F) form a coherent pair as statement (C) mentions about the adverse impacts of climate change in this region while statement (F) has provided a comparison of a healthy rainfall which has been reduced to its half. The hint can be received from the pronoun "it" mentioned in statement (F) which is used to denote "the region" mentioned in statement (C). Statement (D) should be placed in fourth position as it coherently connects with the previous statement by mentioning the impacts of the declined rainfall. By providing the concluding statement, statement (B) should connect logically. Statement (E) fails to connect coherently with the given theme of the paragraph. Thus, excluding the incoherent sentence, the logical sequence of the sentences formed is ACFDB. Hence, option (a) is the most suitable answer choice.

S49. Ans.(d)

Sol. Statement (A), which is the first sentence of the rearranged paragraph, helps to derive the theme of the paragraph which is about migrating population from Bundelkhand's villages. Further the paragraph has mentioned climate change as one of the major causes that has led to the migration of people. Statement (C) should follow statement (A) as it has further mentioned "the region" mentioned in statement (A). Statements (C) and (F) form a coherent pair as statement (C) mentions about the adverse impacts of climate change in this region while statement (F) has provided a comparison of a healthy rainfall which has been reduced to its half. The hint can be received from the pronoun "it" mentioned in statement (F) which is used to denote "the region" mentioned in statement (C). Statement (D) should be placed in fourth

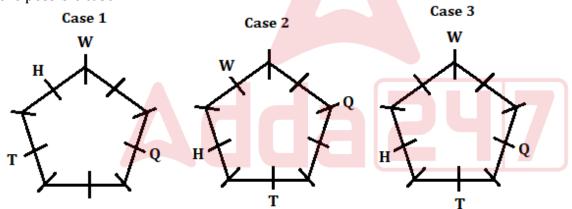
position as it coherently connects with the previous statement by mentioning the impacts of the declined rainfall. By providing the concluding statement, statement (B) should connect logically. Statement (E) fails to connect coherently with the given theme of the paragraph. Thus, excluding the incoherent sentence, the logical sequence of the sentences formed is ACFDB. Hence, option (d) is the most suitable answer choice.

S50. Ans.(b)

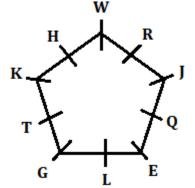
Sol. Statement (A), which is the first sentence of the rearranged paragraph, helps to derive the theme of the paragraph which is about migrating population from Bundelkhand's villages. Further the paragraph has mentioned climate change as one of the major causes that has led to the migration of people. Statement (C) should follow statement (A) as it has further mentioned "the region" mentioned in statement (A). Statements (C) and (F) form a coherent pair as statement (C) mentions about the adverse impacts of climate change in this region while statement (F) has provided a comparison of a healthy rainfall which has been reduced to its half. The hint can be received from the pronoun "it" mentioned in statement (F) which is used to denote "the region" mentioned in statement (C). Statement (D) should be placed in fourth position as it coherently connects with the previous statement by mentioning the impacts of the declined rainfall. By providing the concluding statement, statement (B) should connect logically. Statement (E) fails to connect coherently with the given theme of the paragraph. Thus, excluding the incoherent sentence, the logical sequence of the sentences formed is ACFDB. Hence, option (b) is the most suitable answer choice.

S51. Ans.(c)

Sol. From the statement, Q sits third to the right of W. There are two possible cases. H does not sit at any corner of the table. T sits second to the left of H. T is not an immediate neighbour of Q and W. There is one more possible case.

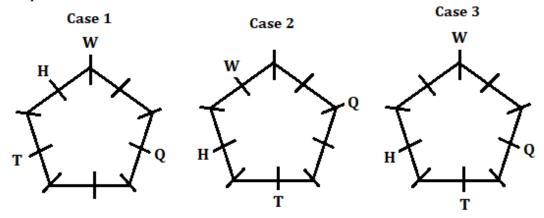


G sits immediate to the right of L. G does not sit opposite to T and W. Three persons sit between L and R. J. is one of the immediate neighbours of R and sits fourth to the right of K. Case 2 and Case 3 will eliminate here. So, the final arrangement is:



S52. Ans.(b)

Sol. From the statement, Q sits third to the right of W. There are two possible cases. H does not sit at any corner of the table. T sits second to the left of H. T is not an immediate neighbour of Q and W. There is one more possible case.

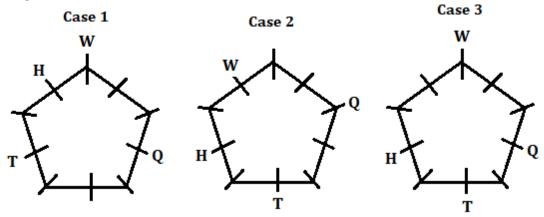


G sits immediate to the right of L. G does not sit opposite to T and W. Three persons sit between L and R. J is one of the immediate neighbours of R and sits fourth to the right of K. Case 2 and Case 3 will eliminate here. So, the final arrangement is:

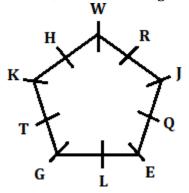


\$53. Ans.(d)

Sol. From the statement, Q sits third to the right of W. There are two possible cases. H does not sit at any corner of the table. T sits second to the left of H. T is not an immediate neighbour of Q and W. There is one more possible case.

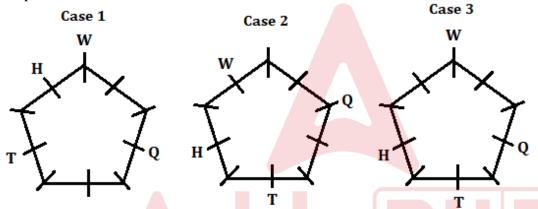


G sits immediate to the right of L. G does not sit opposite to T and W. Three persons sit between L and R. J is one of the immediate neighbours of R and sits fourth to the right of K. Case 2 and Case 3 will eliminate here. So, the final arrangement is:

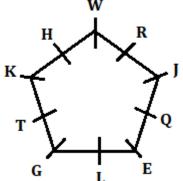


S54. Ans.(a)

Sol. From the statement, Q sits third to the right of W. There are two possible cases. H does not sit at any corner of the table. T sits second to the left of H. T is not an immediate neighbour of Q and W. There is one more possible case.



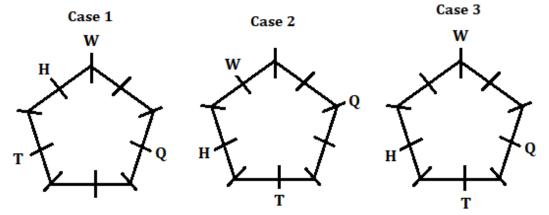
G sits immediate to the right of L. G does not sit opposite to T and W. Three persons sit between L and R. J is one of the immediate neighbours of R and sits fourth to the right of K. Case 2 and Case 3 will eliminate here. So, the final arrangement is:



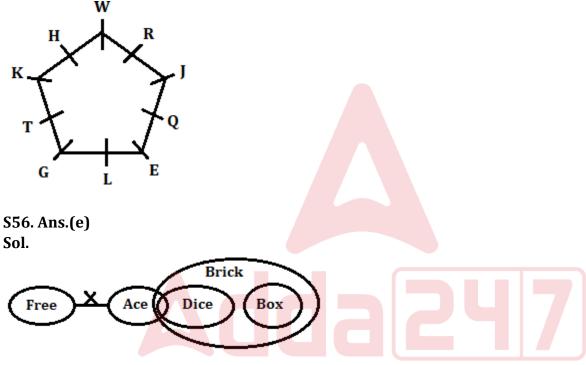
S55. Ans.(b)

44

Sol. From the statement, Q sits third to the right of W. There are two possible cases. H does not sit at any corner of the table. T sits second to the left of H. T is not an immediate neighbour of Q and W. There is one more possible case.



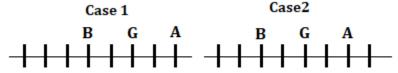
G sits immediate to the right of L. G does not sit opposite to T and W. Three persons sit between L and R. J is one of the immediate neighbours of R and sits fourth to the right of K. Case 2 and Case 3 will eliminate here. So, the final arrangement is:



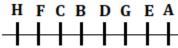
\$57. Ans.(b) **Sol.** G > A > B > F > C

\$58. Ans.(a)

Sol. B sits fourth to the left of A. G sits second to the right of B. More than three persons sits to the left of G. There are two possible cases.

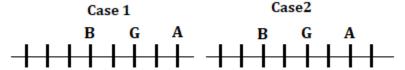


Two persons sit between D and F. F is the immediate neighbour of H. H and E does not sit adjacent to B. Case 2 will eliminate here. So, the final arrangement is:

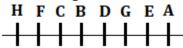


\$59. Ans.(b)

Sol. B sits fourth to the left of A. G sits second to the right of B. More than three persons sits to the left of G. There are two possible cases.



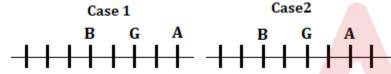
Two persons sit between D and F. F is the immediate neighbour of H. H and E does not sit adjacent to B. Case 2 will eliminate here. So, the final arrangement is:



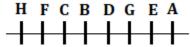


S60. Ans.(d)

Sol. B sits fourth to the left of A. G sits second to the right of B. More than three persons sits to the left of G. There are two possible cases.

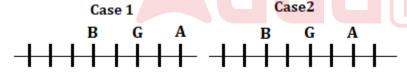


Two persons sit between D and F. F is the immediate neighbour of H. H and E does not sit adjacent to B. Case 2 will eliminate here. So, the final arrangement is:

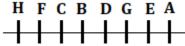


S61. Ans.(c)

Sol. B sits fourth to the left of A. G sits second to the right of B. More than three persons sits to the left of G. There are two possible cases.

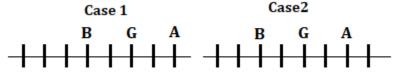


Two persons sit between D and F. F is the immediate neighbour of H. H and E does not sit adjacent to B. Case 2 will eliminate here. So, the final arrangement is:

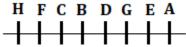


S62. Ans.(d)

Sol. B sits fourth to the left of A. G sits second to the right of B. More than three persons sits to the left of G. There are two possible cases.



Two persons sit between D and F. F is the immediate neighbour of H. H and E does not sit adjacent to B. Case 2 will eliminate here. So, the final arrangement is:



S63. Ans.(b)

Sol. Logic- Both words and numbers are arranged in each step.

Words- Word are arranged in alphabetical order from right end according to their second letter from left end.

Numbers- Firstly, interchange the places of both the digits within the number (Ex- 53 will become 35). Then, arrange the new numbers in ascending order from left end.

Input: 58 air 71 review 27 69 tourist ratio execute 43

Step I: 17 58 air review 27 69 tourist execute 43 ratio

Step II: 17 34 58 air 27 69 tourist execute review ratio

Step III: 17 34 72 58 69 tourist execute air review ratio

Step IV: 17 34 72 85 69 execute tourist air review ratio

Step V: 17 34 72 85 96 execute tourist air review ratio

Step V is the last step of the given rearrangement.

S64. Ans.(b)

Sol. Logic- Both words and numbers are arranged in each step.

Words- Word are arranged in alphabetical order from right end according to their second letter from left end.

Numbers- Firstly, interchange the places of both the digits within the number (Ex- 53 will become 35). Then, arrange the new numbers in ascending order from left end.

Input: 58 air 71 review 27 69 tourist ratio execute 43

Step I: 17 58 air review 27 69 tourist execute 43 ratio

Step II: 17 34 58 air 27 69 tourist execute review ratio

Step III: 17 34 72 58 69 tourist execute air review ratio

Step IV: 17 34 72 85 69 execute tourist air review ratio

Step V: 17 34 72 85 96 execute tourist air review ratio

Step V is the last step of the given rearrangement.



S65. Ans.(e)

Sol. Logic- Both words and numbers are arranged in each step.

Words- Word are arranged in alphabetical order from right end according to their second letter from left end.

Numbers- Firstly, interchange the places of both the digits within the number (Ex- 53 will become 35). Then, arrange the new numbers in ascending order from left end.

Input: 58 air 71 review 27 69 tourist ratio execute 43

Step I: 17 58 air review 27 69 tourist execute 43 ratio

Step II: 17 34 58 air 27 69 tourist execute review ratio

Step III: 17 34 72 58 69 tourist execute air review ratio

Step IV: 17 34 72 85 69 execute tourist air review ratio

Step V: 17 34 72 85 96 execute tourist air review ratio

Step V is the last step of the given rearrangement.

S66. Ans.(e)

Sol. Logic- Both words and numbers are arranged in each step.

Words- Word are arranged in alphabetical order from right end according to their second letter from left end.

Numbers- Firstly, interchange the places of both the digits within the number (Ex- 53 will become 35). Then, arrange the new numbers in ascending order from left end.

Input: 58 air 71 review 27 69 tourist ratio execute 43 **Step I:** 17 58 air review 27 69 tourist execute 43 ratio **Step II:** 17 34 58 air 27 69 tourist execute review ratio **Step III:** 17 34 72 58 69 tourist execute air review ratio **Step IV:** 17 34 72 85 69 execute tourist air review ratio **Step V:** 17 34 72 85 96 execute tourist air review ratio Step V is the last step of the given rearrangement.

S67. Ans.(d)

Sol. K is placed three places above B. Two boxes are placed between K and G. There are two possible cases. T is placed below K but not adjacent to B.

Boxes	
Case 1	Case 2
	G
G	
	K
K	T
T	
	В
В	

Z is placed above T and just below E. M is placed above N. N is not placed at the bottommost position. Case 2 will eliminate here. So, the final arrangement is:

Boxes	
M	
G	
Е	
Z	
K	
T	
N	
В	



S68. Ans.(a)

Sol. K is placed three places above B. Two boxes are placed between K and G. There are two possible cases. T is placed below K but not adjacent to B.

Boxes		
Case 1	Case 2	
	G	
G		
	K	
K	T	
T		
	В	
В		

Z is placed above T and just below E. M is placed above N. N is not placed at the bottommost position. Case 2 will eliminate here. So, the final arrangement is:

Boxes	
M	
G	
Е	
Z	
K	
T	
N	
В	

S69. Ans.(a)

Sol. K is placed three places above B. Two boxes are placed between K and G. There are two possible cases. T is placed below K but not adjacent to B.

Boxes		
Case 1	Case 2	
	G	
G		
	K	
K	T	
T		
	В	
В		

Z is placed above T and just below E. M is placed above N. N is not placed at the bottommost position. Case 2 will eliminate here. So, the final arrangement is:

Boxes	
M	
G	
E	
Z	
K	
Т	
N	
В	



\$70. Ans.(a)

Sol. K is placed three places above B. Two boxes are placed between K and G. There are two possible cases. T is placed below K but not adjacent to B.

_ 1	-	
Boxes		
Case 1	Case 2	
	G	
G		
	K	
K	T	
T		
	В	
В		

Z is placed above T and just below E. M is placed above N. N is not placed at the bottommost position. Case 2 will eliminate here. So, the final arrangement is:

Boxes
M
G
E
Z
K
T
N
В

S71. Ans.(b)

Sol. K is placed three places above B. Two boxes are placed between K and G. There are two possible cases. T is placed below K but not adjacent to B.

Boxes		
Case 1	Case 2	
	G	
G		
	K	
K	T	
T		
	В	
В		

Z is placed above T and just below E. M is placed above N. N is not placed at the bottommost position. Case 2 will eliminate here. So, the final arrangement is:

Boxes	
M	
G	
Е	
Z	
K	
T	
N	
В	



S72. Ans.(c)

Sol. 8 3, 4 9, 4 7, 4 3, 4 9, 2 9

S73. Ans.(b)

Sol. Seventh from left end= 4, 15th to the right of 4= 3

S74. Ans.(a)

Sol. 8 3, 8 4, 8 4

\$75. Ans.(e)

Sol. 8 3 4, 4 9 4, 4 7 4

\$76. Ans.(b)

Sol.

\$77. Ans.(b)

Sol. From the given statements, B visits either on Tuesday or Friday. There are two possible cases. Three persons visit between B and E. D visits after B but not on Thursday.

Days	Pers	ons
	Case 1	Case 2
Sunday		
Monday		E
Tuesday	В	
Wednesday	D/	
Thursday		
Friday	D/	В
Saturday	E	D

G visits three days before D. F visits just before R. Case 2 will eliminate here. So, the final arrangement is:

Days	Persons
Sunday	G
Monday	V
Tuesday	В
Wednesday	D
Thursday	F
Friday	R
Saturday	Е

S78. Ans.(c)

Sol. From the given statements, B visits either on Tuesday or Friday. There are two possible cases. Three persons visit between B and E. D visits after B but not on Thursday.

Days	Persons		
	Case 1	Case 2	
Sunday			
Monday		E	
Tuesday	В		
Wednesday	D/		
Thursday			
Friday	D/	В	
Saturday	Е	D	



G visits three days before D. F visits just before R. Case 2 will eliminate here. So, the final arrangement is:

Days	Persons
Sunday	G
Monday	V
Tuesday	В
Wednesday	D
Thursday	F
Friday	R
Saturday	Е

\$79. Ans.(b)

Sol. From the given statements, B visits either on Tuesday or Friday. There are two possible cases. Three persons visit between B and E. D visits after B but not on Thursday.

Days	Persons		
	Case 1	Case 2	
Sunday			
Monday		E	
Tuesday	В		
Wednesday	D/		
Thursday			
Friday	D/	В	
Saturday	E	D	

G visits three days before D. F visits just before R. Case 2 will eliminate here. So, the final arrangement is:

Days	Persons
Sunday	G
Monday	V
Tuesday	В
Wednesday	D
Thursday	F
Friday	R
Saturday	E

\$80. Ans.(a)

Sol. From the given statements, B visits either on Tuesday or Friday. There are two possible cases. Three persons visit between B and E. D visits after B but not on Thursday.

Days	Persons		
	Case 1	Case 2	
Sunday			
Monday		E	
Tuesday	В		
Wednesday	D/		
Thursday			
Friday	D/	В	
Saturday	E D		

G visits three days before D. F visits just before R. Case 2 will eliminate here. So, the final arrangement is:

Days	Persons
Sunday	G
Monday	V
Tuesday	В
Wednesday	D
Thursday	F
Friday	R
Saturday	Е

S81. Ans.(d)

Sol. From the given statements, B visits either on Tuesday or Friday. There are two possible cases. Three persons visit between B and E. D visits after B but not on Thursday.

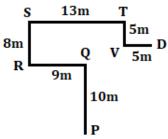
Days	Persons		
	Case 1	Case 2	
Sunday			
Monday		E	
Tuesday	В		
Wednesday	D/		
Thursday			
Friday	D/	В	
Saturday	E	D	

G visits three days before D. F visits just before R. Case 2 will eliminate here. So, the final arrangement is:

Days	Persons
Sunday	G
Monday	V
Tuesday	В
Wednesday	D
Thursday	F
Friday	R
Saturday	Е

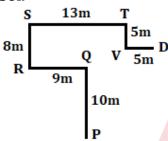
S82. Ans.(c)





\$83. Ans.(e)





S84. Ans.(a)

Sol. From the statement, H visits in the month having even number of days. There are four possible cases. Two persons visit between H and A. D and A visit in the same month. The number of persons visit between D and H is same as the number of persons visit between H and K.

Months	Dates	Persons			
		Case 1	Case 2	Case 3	Case 4
March	14	K	A		
	19		D		
June	14	Н		K	A
	19		Н		D
September	14	D		Н	
	19	A	K		Н
October	14			D	
	19			A	K

K and G visit on the same date. Three persons visit between S and F who does not visit after H. Case 1 will eliminate here. More than one person visit between S and L. Case 2 and Case 3 will also eliminate here. So, the final arrangement is:

Months	Dates	Persons
March	14	S
	19	G
June	14	A
	19	D
September	14	F
	19	Н
October	14	L
	19	K

S85. Ans.(b)

Sol. From the statement, H visits in the month having even number of days. There are four possible cases. Two persons visit between H and A. D and A visit in the same month. The number of persons visit between D and H is same as the number of persons visit between H and K.

Months	Dates	Persons			
		Case 1	Case 2	Case 3	Case 4
March	14	K	A		
	19		D		
June	14	Н		K	A
	19		Н		D
September	14	D		Н	
	19	A	K		Н
October	14			D	
	19			A	K

K and G visit on the same date. Three persons visit between S and F who does not visit after H. Case 1 will eliminate here. More than one person visit between S and L. Case 2 and Case 3 will also eliminate here. So, the final arrangement is:

Months	Dates Persons		
March	14	S	
	19	G	
June	14	A	
	19	D	
September	14	F	
	19	Н	
October	14	L	
	19	K	



\$86. Ans.(c)

Sol. From the statement, H visits in the month having even number of days. There are four possible cases. Two persons visit between H and A. D and A visit in the same month. The number of persons visit between D and H is same as the number of persons visit between H and K.

Months	Dates	Persons			
		Case 1	Case 2	Case 3	Case 4
March	14	K	A		
	19		D		
June	14	Н		K	A
	19		Н		D
September	14	D		Н	
	19	A	K		Н
October	14			D	
	19			A	K

K and G visit on the same date. Three persons visit between S and F who does not visit after H. Case 1 will eliminate here. More than one person visit between S and L. Case 2 and Case 3 will also eliminate here. So, the final arrangement is:

Months	Dates	Persons
March	14	S
	19	G
June	14	A
	19	D
September	14	F
	19	Н
October	14	L
	19	K

S87. Ans.(d)

Sol. From the statement, H visits in the month having even number of days. There are four possible cases. Two persons visit between H and A. D and A visit in the same month. The number of persons visit between D and H is same as the number of persons visit between H and K.

Months	Dates	Persons			
		Case 1	Case 2	Case 3	Case 4
March	14	K	A		
	19		D		
June	14	Н		K	A
	19		Н		D
September	14	D		Н	
	19	A	K		Н
October	14			D	
	19			A	K

K and G visit on the same date. Three persons visit between S and F who does not visit after H. Case 1 will eliminate here. More than one person visit between S and L. Case 2 and Case 3 will also eliminate here. So, the final arrangement is:

Months	Dates	Persons
March	14	S
	19	G
June	14	A
_	19	D
September	14	F
	19	Н
October	14	L
	19	K



S88. Ans.(d)

Sol. From the statement, H visits in the month having even number of days. There are four possible cases. Two persons visit between H and A. D and A visit in the same month. The number of persons visit between D and H is same as the number of persons visit between H and K.

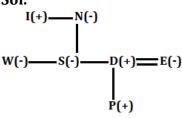
Months	Dates	Persons			
		Case 1	Case 2	Case 3	Case 4
March	14	K	A		
	19		D		
June	14	Н		K	A
	19		Н		D
September	14	D		Н	
	19	A	K		Н
October	14			D	
	19			A	K

K and G visit on the same date. Three persons visit between S and F who does not visit after H. Case 1 will eliminate here. More than one person visit between S and L. Case 2 and Case 3 will also eliminate here. So, the final arrangement is:

Months	Dates	Persons
March	14	S
	19	G
June	14	A
_	19	D
September	14	F
	19	Н
October	14	L
	19	K

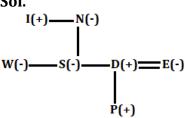
S89. Ans.(b)

Sol.



S90. Ans.(c)

Sol.



S91. Ans.(e)

Sol.

Words	Codes
Premium	ao
Indian	со
Festival	ko
Duration/ Gold	ro/xo
Water	wo
Season	jo

S92. Ans.(d)

Sol.

Words	Codes	
Premium	ao	
Indian	со	
Festival	ko	
Duration/ Gold	ro/xo	
Water	wo	
Season	jo	



S93. Ans.(b)

Sol.

Words	Codes	
Premium	ao	
Indian	со	
Festival	ko	
Duration/ Gold	ro/xo	
Water	wo	
Season	jo	

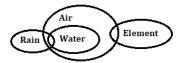
S94. Ans.(a)

Sol.

Words	Codes
Premium	ao
Indian	со
Festival	ko
Duration/ Gold	ro/xo
Water	wo
Season	jo

S95. Ans.(e)

Sol.



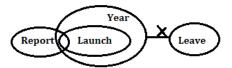
S96. Ans.(c)

Sol.



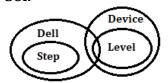
S97. Ans.(a)

Sol.



S98. Ans.(d)

Sol.



S99. Ans.(a)

Sol. Original number= 71639583254

New number= 98765**5**43**3**21; Sum= 5+3=8

S100. Ans.(c)

Sol. H > B > Z > V > P

S101. Ans.(e)

Sol.

Department	Total employees(who	Employees (who have 2-	Employees (who have
	have 2-wheeler and 4-	wheelers	4-wheeler)
	wheeler)		
A	$\frac{42}{360} \times 42000 = 4900$	$\frac{12}{100} \times 24000 = 2880$	4900 - 2880 = 2020
В	$\frac{138}{360} \times 42000 = 16100$	$\frac{36}{100} \times 24000 = 8640$	16100 - 8640 = 7460
С	$\frac{108}{360} \times 42000 = 12600$	$\frac{32}{100} \times 24000 = 7680$	12600 - 7680 = 4920
D	$\frac{48}{360} \times 42000 = 5600$	$\frac{11}{100} \times 24000 = 2640$	5600 - 2640 = 2960
Е	$\frac{24}{360} \times 42000 = 2800$	$\frac{9}{100} \times 24000 = 2160$	2800 - 2160 = 640

Required Average =
$$\frac{2020+7460+4920}{3}$$
 = 4800

S102. Ans.(a)

Sol.

Department	Total employees(who	Employees (who have 2-	Employees (who have
	have 2-wheeler and 4-	wheelers	4-wheeler)
	wheeler)		
A	$\frac{42}{360} \times 42000 = 4900$	$\frac{12}{100} \times 24000 = 2880$	4900 - 2880 = 2020
В	$\frac{138}{360} \times 42000 = 16100$	$\frac{36}{100} \times 24000 = 8640$	16100 - 8640 = 7460
С	$\frac{108}{360} \times 42000 = 12600$	$\frac{32}{100} \times 24000 = 7680$	12600 - 7680 = 4920
D	$\frac{48}{360} \times 42000 = 5600$	$\frac{11}{100} \times 24000 = 2640$	5600 - 2640 = 2960
Е	$\frac{24}{360} \times 42000 = 2800$	$\frac{9}{100} \times 24000 = 2160$	2800 - 2160 = 640

Required ratio = $\frac{(2880+7680)}{(7460+2960)}$ = 528 : 521

S103. Ans.(b)

Sol.

Department	Total employees(who have 2-wheeler and 4- wheeler)	Employees (who have 2- wheelers	Employees (who have 4-wheeler)
A	$\frac{42}{360} \times 42000 = 4900$	$\frac{12}{100} \times 24000 = 2880$	4900 - 2880 = 2020
В	$\frac{138}{360} \times 42000 = 16100$	$\frac{36}{100} \times 24000 = 8640$	16100 - 8640 = 7460
С	$\frac{108}{360} \times 42000 = 12600$	$\frac{32}{100} \times 24000 = 7680$	12600 - 7680 = 4920
D	$\frac{48}{360} \times 42000 = 5600$	$\frac{11}{100} \times 24000 = 2640$	5600 - 2640 = 2960
Е	$\frac{24}{360} \times 42000 = 2800$	$\frac{9}{100} \times 24000 = 2160$	2800 - 2160 = 640

Total employees (who have 4-wheeler) in B, D and E together = 7460+2960+640=11060 Total employees (who have 2-wheeler and 4-wheeler) in A and C together = 4900+12600=17500 Required difference = 17500-11060=6440

S104. Ans.(b) Sol.

Department	Total employees(who	Employees (who have 2-	Employees (who have
Department		1	
	have 2-wheeler and 4-	wheelers	4-wheeler)
	wheeler)		
A	42	12	4900 - 2880 = 2020
	${360} \times 42000 = 4900$	${100} \times 24000 = 2880$	
В	138	36	16100 - 8640 = 7460
	$\frac{360}{360} \times 42000 = 16100$	${100} \times 24000 = 8640$	
С	108	32	12600 - 7680 = 4920
	${360} \times 42000 = 12600$	$\frac{100}{100} \times 24000 = 7680$	
D	48	11	5600 - 2640 = 2960
	${360} \times 42000 = 5600$	${100} \times 24000 = 2640$	
Е		9	2800 - 2160 = 640
	$\frac{24}{360} \times 42000 = 2800$	$\frac{100}{100} \times 24000 = 2160$	

Difference between employees (who have 2-wheeler) and employees (who have 4-wheeler) in A = 2880-2020=860

Difference between employees (who have 2-wheeler) and employees (who have 4-wheeler) in B = 8640-7460=1180

Difference between employees (who have 2-wheeler) and employees (who have 4-wheeler) in C = 7680-4920=2760

Difference between employees (who have 2-wheeler) and employees (who have 4-wheeler) in D = 2960-2640=320

Difference between employees (who have 2-wheeler) and employees (who have 4-wheeler) in E=2160-640=1520

Clearly, we can see that the 3rd highest difference is in department B.

S105. Ans.(d) Sol.

59

Department	Total employees(who	Employees (who have 2-	Employees (who have
	have 2-wheeler and 4-	wheelers	4-wheeler)
	wheeler)		
A	$\frac{42}{360} \times 42000 = 4900$	$\frac{12}{100} \times 24000 = 2880$	4900 - 2880 = 2020
В	$\frac{138}{360} \times 42000 = 16100$	$\frac{36}{100} \times 24000 = 8640$	16100 - 8640 = 7460
С	$\frac{108}{360} \times 42000 = 12600$	$\frac{32}{100} \times 24000 = 7680$	12600 - 7680 = 4920
D	$\frac{48}{360} \times 42000 = 5600$	$\frac{11}{100} \times 24000 = 2640$	5600 - 2640 = 2960
Е	$\frac{24}{360} \times 42000 = 2800$	$\frac{9}{100} \times 24000 = 2160$	2800 - 2160 = 640

Employees (who have 2-wheelers) in B and D together = 8640+2640=11280 Employees (who have 2-wheeler and 4-wheeler) in A and C together = 17500 Required % = $\frac{17500-11280}{17500} \times 100 = 35.54\%$

\$106. Ans.(e)

Sol.

$$57.5 \times x + y = (x+4) \times 60$$

$$2.5x = y - 240....(i)$$

If he had scored 210 runs less,

Then
$$57.5 \times (x + 4) - 57.5 \times x = y - 210$$

$$230 + 210 = y$$

$$y = 440$$

Putting value of y in (i)

$$x = \frac{200}{2.5} = 80$$

\$107. Ans.(a)

Sol.

$$25000 \times \frac{y-6}{100} + 17000 \times \frac{y}{100} = 6060$$

$$250y - 1500 + 170y = 6060$$

$$420y = 7560$$

$$y = 18 \%$$

S108. Ans.(d)

Sol.

Let the efficiency of 1 man, 1 woman and 1 child be M, W and C respectively.

ATQ

$$8M \times 5 = 15W \times 4 = 12C \times 8$$

$$M:W:C = 12:8:5$$

Required days =
$$\frac{12\times8\times5}{12+8+2\times5}$$
 = 16 days

S109. Ans.(d)

Sol.

Required probability =
$$\frac{4c_2 \times 5c_1 + 4c_1 \times 5c_2 + 5c_8}{9c_2} = \frac{30 + 40 + 10}{84} = \frac{20}{21}$$

\$110. Ans.(a)

Sol.

Let the breadth of rectangle be $x \ cm$ and its length is $(x + 17) \ cm$

Area of rectangle =
$$x \times (x + 17) = 168$$

$$x^2 + 17x - 168 = 0$$

On solving

$$x = 7 cm and (x + 17) = 24 cm$$

Diagonal of rectangle = height of cone =
$$\sqrt{7^2 + 24^2} = \sqrt{625} = 25$$
 cm

Volume of cone =
$$\frac{1}{3} \times \frac{22}{7} \times \frac{21}{2} \times \frac{21}{2} \times 25 = 2887.5 \text{ cm}^3$$

S111. Ans.(b)

Sol.

Let pipe A alone and pipe C alone fill the tank in x hours and z hours respectively.

$$\frac{1}{x} + \frac{1}{27} + \frac{1}{z} = \frac{13}{108}$$

$$\frac{1}{x} + \frac{1}{z} = \frac{13}{108} - \frac{1}{27}$$

$$\frac{1}{x} + \frac{1}{z} = \frac{1}{12}$$
.....(i)

Also, when A and B operates at half of their efficiency,

$$\frac{1}{2x} + \frac{1}{54} + \frac{1}{z} = \frac{2}{27}$$

$$\frac{1}{2x} + \frac{1}{z} = \frac{1}{18}$$
.....(ii)

On solving (i) and(ii)

$$\frac{1}{2x} = \frac{1}{36}$$

x = 18 hours

S112. Ans.(d)

Sol.

Let the initial quantity of A, B and C be 3x, 2x and 5x litres respectively.

Quantity of A left after replacement = $\frac{1}{2} \times 3x = x$

Quantity of B left after replacement = $\frac{1}{4} \times 2x = \frac{x}{2}$

Quantity of C left after replacement = $\frac{7}{10} \times 5x = \frac{7x}{2}$

ATQ

$$\frac{x+y}{\frac{x}{2} + 2y} = \frac{11}{13}$$

$$5x = 6y \dots (i)$$

$$\frac{x}{2} + 2y + \frac{7x}{2} = 102$$

$$2x + y = 51 \dots (ii)$$

On solving (i) and (ii)

x = 18 litres and y = 15 litres

S113. Ans.(a)

Sol.

Speed of scooty =
$$\frac{41}{2T}$$
 kmph

Speed of car =
$$\frac{184.5}{4T+2}$$
 kmph

ATQ,

$$\frac{\frac{41}{2T}}{\frac{184.5}{4T+2}} = \frac{5}{9}$$

$$\Rightarrow T = 2$$

Speed of scooty = $\frac{41}{4}$ = 10.25 kmph

Speed of car =
$$\frac{184.5}{10}$$
 = 18.45 kmph

Required difference = 18.45 - 10.25 = 8.2 kmph

\$114. Ans.(d)

Sol.

Initial Investment of P, Q and R are Rs. A, Rs. 'A+1000' and Rs. 'A+2000'

P' Profit
$$\rightarrow 6A + \frac{6A}{2} = 9A$$

Q' Profit
$$\rightarrow$$
 (A+1000) \times 6 + (A+1000+2000) \times 6 = 12A + 24000

R' Profit
$$\rightarrow$$
 (A+2000) × 6 + (A +2000+2000) × 6 = 12A + 36000

Ratio of profit share $\rightarrow P : Q : R = 9A : 12A + 24000 : 12A + 36000$

$$\frac{9A}{12A + 36000} = \frac{2}{3}$$

$$\Rightarrow A = 24000$$

So, Initial investment of P, Q, R are Rs. 24000, Rs. 25000, Rs. 26000

Required Average = $\frac{24000+25000+26000}{3}$ = 25000 Rs.

S115. Ans.(a)

Sol.

Side of square =
$$\frac{176}{4}$$
 = 44 cm

Radius of cylinder = radius of circle =
$$\frac{44 \times 7 \times 2}{22 \times 2}$$
 = 14 cm

Height of cylinder =
$$\frac{11}{7} \times 14 = 22$$
 cm

Total surface area of cylinder = $2 \times \frac{22}{7} \times 14 \times (14 + 22) = 3168 \text{ cm}^2$

S116. Ans.(c)

Sol.

Downstream speed =
$$\frac{14.4}{24} \times 60 = 36$$
 kmph

Upstream speed =
$$\frac{16}{48} \times 60 = 20$$
 kmph

Speed of boat in still water =
$$\frac{36+20}{2}$$
 = 28 kmph.

Now,
$$T = \frac{126}{36} + \frac{70}{20} = 3.5 + 3.5 = 7$$
 hours.

Required Distance = $28 \times \frac{140}{100} \times (7 + 3) = 392$ km

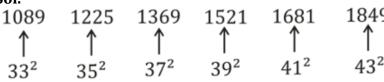
S117. Ans.(a)

Sol.

Hence, missing term is 2140.

S118. Ans.(b)

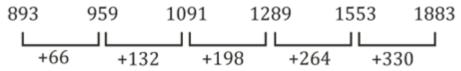
Sol.



Hence, missing term is 1681.

S119. Ans.(c)

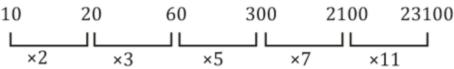
Sol.



Hence, missing term is 959.

\$120. Ans.(e)

Sol.



Hence, missing term is 2100.

S121. Ans.(b)

Sol.

Male tourists from Australia and Canada who visited India

$$= 1000000 \left[\left(\frac{16}{100} \times \frac{40}{100} \right) + \left(\frac{9}{100} \times \frac{40}{100} \right) \right] = 100000$$

Total tourists from England who visited India = $1000000 \times \frac{40}{100} = 400000$

Required% =
$$\frac{400000-100000}{400000} \times 100 = 75\%$$

S122. Ans.(c)

Sol.

Male tourists from England and Germany together who visited India =

$$= 1000000 \left[\left(\frac{40}{100} \times \frac{70}{100} \right) + \left(\frac{10}{100} \times \frac{80}{100} \right) \right] = 360000$$

Female tourists from Australia and Canada together who visited India =
$$1000000 \left[\left(\frac{16}{100} \times \frac{100-40}{100} \right) + \left(\frac{9}{100} \times \frac{100-40}{100} \right) \right] = 150000$$

Required ratio = $\frac{360000}{150000} = 12:5$

\$123. Ans.(e)

Required average =
$$\frac{1}{3} \times 1000000 \times \left(\frac{25+40+10}{100}\right) = 250000$$

\$124. Ans.(d)

Sol.

Female tourists who visited India from USA and Germany together

$$= 1000000 \left[\left(\frac{25}{100} \times \frac{100-36}{100} \right) + \left(\frac{10}{100} \times \frac{100-80}{100} \right) \right] = 180000$$

Total tourists who visited India from Australia and Canada together

$$= 1000000 \times \left(\frac{16+9}{100}\right) = 250000$$

=
$$1000000 \times \left(\frac{16+9}{100}\right) = 250000$$

Required % = $\frac{180000}{250000} \times 100 = 72\%$

\$125. Ans.(a)

Sol.

Male tourists who visited India from USA = $1000000 \times \frac{25}{100} \times \frac{36}{100} = 90000$ Female tourists who visited India form England = $1000000 \times \frac{40}{100} \times \frac{100 - 70}{100} = 120000$

Required difference = 120000 - 90000 = 30000

S126. Ans.(b)

Sol.

I. circle is inscribed in square.

Hence side of square is diameter of circle.

$$a^2 - \pi \left(\frac{a}{2}\right)^2 = 42$$

$$\frac{6}{28} a^2 = 42$$

Perimeter of square = 56 cm

II. Since dimensions of rectangle are not clearly

mentioned, we can't calculate perimeter of square.

Hence, only I is sufficient

S127. Ans.(c)

Sol.

We cannot find the difference using the given data.

II. P+Q+R=70, Q+R+S=51, Q=R=
$$\frac{3}{8}$$
P

Solving above equations, we get P=40, Q=R=15, S=21

Required difference= 19

Hence, only II is sufficient.

\$128. Ans.(d)

Sol. I. Total MRP=
$$3 \times 150 + 4 \times 250 = 1450$$
 Rs,

Total SP= 80% of 1450= 1160 Rs.

II. Total profit on watches= 120 Rs.

Since no information about CP of toaster and watch is given, we cannot find overall profit.

Hence both the statements together are not sufficient to answer the question

S129. Ans.(e)

Let speed of boat in still water and speed of stream be x kmph and y kmph respectively.

From I,

$$\frac{60}{x+y} + \frac{45}{x-y} = 9$$

$$(x+y) - (x-y) = 6$$

y= 3 kmph

From I and II together,

$$\frac{60}{x+3} + \frac{45}{x-3} = 9$$

So, x=12 kmph

Hence both I and II together are necessary

\$130. Ans.(e)

Sol.

$$16 \times 50 - 18 \times 32 + 196 = ?$$

$$? = 800 - 576 + 196$$

? = 420

S131. Ans.(b)

Sol.

$$? \times 14 + 695 = \frac{36}{100} \times 2400 + 755$$

$$? \times 14 = 864 + 755 - 695$$

$$? = \frac{924}{14}$$

? = 66

S132. Ans.(b)

Sol.

$$\frac{18}{100} \times 200 + \frac{?}{100} \times 600 = \frac{40}{100} \times 750$$

$$? \times 6 = 300 - 36$$

$$? = \frac{264}{6}$$

? = 44

\$133. Ans.(a)

Sol.

$$339 + 211 - 380 = ? - 320$$

$$? = 170 + 320$$

? = 490

S134. Ans.(d)

Sol.

$$\frac{54}{100} \times 7000 - \frac{78}{100} \times 4000 + 16 = ?^2$$

$$?^2 = 3780 - 3120 + 16$$

$$?^2 = 676$$

? = 26

S135. Ans.(e)

Sol.

$$\frac{?}{100} \times 550 + \frac{20}{100} \times 650 = 350$$

$$\frac{?}{100} \times 550 = 350 - 130$$

$$? = \frac{220 \times 100}{550} = 40\%$$



\$136. Ans.(a)

Sol.

Company	Printer	Camera	Home theatre	Total
P	4800	4000	6000	14800
Q	3600	5000	2600	11200
R	5400	3000	4800	13200
S	4400	6600	2200	13200
Total	18200	18600	15600	

MRP of printer = $\frac{32}{20} \times 100 = 160 \, Rs$.

So, CP and SP of a printer are Rs.100 and Rs. 128 respectively.

Total profit earned by company P and Q together = (4800+3600) × (128-100) = 8400 × 28 = 235200 Rs.

\$137. Ans.(e) Sol.

Company	Printer	Camera	Home theatre	Total
P	4800	4000	6000	14800
Q	3600	5000	2600	11200
R	5400	3000	4800	13200
S	4400	6600	2200	13200
Total	18200	18600	15600	

average of camera sold by all companies = $\frac{18600}{4} = 4650$

average of home theatre sold by all companies = $\frac{15600}{4}$ = 3900

Required difference = 4650 - 3900 = 750

S138. Ans.(b)

Sol.

Company	Printer	Camera	Home theatre	Total
P	4800	4000	6000	14800
Q	3600	5000	2600	11200
R	5400	3000	4800	13200
S	4400	6600	2200	13200
Total	18200	18600	15600	

SP of a camera = SP of a home theatre = 110 Rs.

CP of a home theatre = $\frac{9}{10} \times 110 = 99$ Rs.

Profit earned on a camera = 10 Rs.

Profit earned on a home theatre = 11 Rs.

Net profit of company R = $3000 \times 10 + 4800 \times 11 = 82800 \, Rs$.

S139. Ans.(c)

Sol.

Company	Printer	Camera	Home theatre	Total
P	4800	4000	6000	14800
Q	3600	5000	2600	11200
R	5400	3000	4800	13200
S	4400	6600	2200	13200
Total	18200	18600	15600	

Printer sold by Q and R together = 3600+5400=9000home theatre sold by Q , R and S together = 2600+4800+2200=9600Required % = $\frac{9000}{9600} \times 100 = \frac{375}{4} = 93.75\%$

S140. Ans.(d)

Sol.

Company	Printer	Camera	Home theatre	Total
P	4800	4000	6000	14800
Q	3600	5000	2600	11200
R	5400	3000	4800	13200
S	4400	6600	2200	13200
Total	18200	18600	15600	

Total products sold by P = 14800

Total products sold by S = 13200

Required ratio = $\frac{14800}{13200}$ = 37:33

S141. Ans.(e)

Sol.

Company	Printer	Camera	Home theatre	Total
P	4800	4000	6000	14800
Q	3600	5000	2600	11200
R	5400	3000	4800	13200
S	4400	6600	2200	13200
Total	18200	18600	15600	

Camera sold by P and Q together = 4000 + 5000 = 9000

Home theatre sold by R and S together = 4800 +2200 = 7000

Required sum = 9000 + 7000 = 16000

S142. Ans.(c)

Sol.

I.
$$2x^2-19x+42=0$$

$$2x^2-12x-7x+42=0$$

$$2x(x-6)-7(x-6)=0$$

$$(2x-7)(x-6)=0$$

$$x = 3.5, 6$$

II.
$$y^2 - 14y + 49 = 0$$

$$y^2 - 7y - 7y + 49 = 0$$

 $y(y-7) - 7(y-7) = 0$

$$(y-7)(y-7)=0$$

$$y = 7, 7$$

So, x<y

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S143. Ans.(b)

Sol.

I.
$$3x^2 - 37x + 110 = 0$$

 $3x^2 - 15x - 22x + 110 = 0$
 $3x(x-5) - 22(x-5) = 0$
 $(x-5)(3x-22) = 0$
 $x = 5, \frac{22}{3}$
II. $y^2 - 4y - 5 = 0$
 $y^2 - 5y + y - 5 = 0$
 $y(y-5) + 1(y-5) = 0$
 $(y+1)(y-5) = 0$
 $y = -1, 5$
So, $x \ge y$

S144. Ans.(a)

Sol.

I.
$$x^2-10x+24=0$$

 $x^2-6x-4x+24=0$
 $x(x-6)-4(x-6)=0$
 $(x-6)(x-4)=0$
 $x=4,6$
II. $5y^2+16y+3=0$
 $5y^2+1y+15y+3=0$
 $y(5y+1)+3(5y+1)=0$
 $y=-3,-1/5$
So, $x>y$

S145. Ans.(e)

Sol.

I.
$$x^2 + 10x - 56 = 0$$

 $x^2 + 14x - 4x - 56 = 0$
 $x(x + 14) - 4(x + 14) = 0$
 $(x - 4)(x + 14) = 0$
 $x = 4, -14$
II. $y^2 + 24y + 143 = 0$
 $y^2 + 13y + 11y + 143 = 0$
 $y(y + 13) + 11(y + 13) = 0$
 $(y+13)(y+11) = 0$
 $y = -13, -11$

So, no relation can be established between x and y.

S146. Ans.(b)

Sol.

Let total employee in A = x

And, total employee in B = y

Total employee in Accounts in A = $x \times \frac{75}{4} \times \frac{1}{100} = \frac{3x}{16}$ Total employee in Technical in B = $y \times \frac{200}{7} \times \frac{1}{100} = \frac{2y}{7}$

Given,
$$\frac{3x}{16} + \frac{2y}{7} = 210$$
 ---- (i)

And
$$x + y = 900$$
 -----(ii)

So, from (i) and (ii),

Total employee in A = x = 480

Total employee in B = y = 420

Total employee in Accounts in B = $\frac{400}{21} \times \frac{1}{100} \times 420 = 80$

Total employee in Operation in A = $\frac{1}{2} \times 480 = 240$

Total employee in Accounts in A = $\frac{3 \times 480}{16}$ = 90 Total employee in Technical in B = $\frac{2 \times 420}{7}$ = 120

Now, total employee in Technical in A = 480 - 240 - 90 = 150

And total employee in Operation in B = 420 - 120 - 80 = 220

Teams	A	В
Operation	240	220
Technical	150	120
Accounts	90	80
Total	480	420

Req.
$$\% = \frac{240 - 120}{120} \times 100 = 100\%$$

\$147. Ans.(b)

Sol.

Let total employee in A = x

And, total employee in B = y

Total employee in Accounts in A = $x \times \frac{75}{4} \times \frac{1}{100} = \frac{3x}{16}$ Total employee in Technical in B = $y \times \frac{200}{7} \times \frac{1}{100} = \frac{2y}{7}$

Given,
$$\frac{3x}{16} + \frac{2y}{7} = 210$$
 ---- (i)

And
$$x + y = 900$$
 -----(ii)

So, from (i) and (ii),

Total employee in A = x = 480

Total employee in B = y = 420

Total employee in Accounts in B = $\frac{400}{21} \times \frac{1}{100} \times 420 = 80$

Total employee in Operation in A = $\frac{1}{2} \times 480 = 240$

Total employee in Accounts in A = $\frac{3\times480}{16}$ = 90 Total employee in Technical in B = $=\frac{2\times420}{7}$ = 120

Now, total employee in Technical in A = 480 - 240 - 90 = 150

And total employee in Operation in B = 420 - 120 - 80 = 220

Teams	A	В
Operation	240	220
Technical	150	120
Accounts	90	80
Total	480	420

Req. ratio =
$$\frac{80}{150}$$
 = 8: 15

\$148. Ans.(d)

Sol.

Let total employee in A = x

And, total employee in B = y

Total employee in Accounts in A = $x \times \frac{75}{4} \times \frac{1}{100} = \frac{3x}{16}$ Total employee in Technical in B = $y \times \frac{200}{7} \times \frac{1}{100} = \frac{2y}{7}$

Given,
$$\frac{3x}{16} + \frac{2y}{7} = 210$$
(i)

And
$$x + y = 900$$
 ----(ii)

So, from (i) and (ii),

Total employee in A = x = 480

Total employee in B = y = 420

Total employee in Accounts in B = $\frac{400}{21} \times \frac{1}{100} \times 420 = 80$

Total employee in Operation in A = $\frac{1}{2}$ × 480 = 240

Total employee in Accounts in A = $\frac{3\times480}{16}$ = 90

Total employee in Technical in B = $\frac{2 \times 420}{7}$ = 120

Now, total employee in Technical in A = 480 - 240 - 90 = 150

And total employee in Operation in B = 420 - 120 - 80 = 220

Teams	A	В
Operation	240	220
Technical	150	120
Accounts	90	80
Total	480	420

Total employee in Technical in C = $80 \times \frac{125}{100} = 100$ Total employee in Operation & Accounts in C = 360- 100 = 260 Req. difference = (240 + 90) - 260 = 70

S149. Ans.(b)

Sol.

Let total employee in A = x

And, total employee in B = y

Total employee in Accounts in A =
$$x \times \frac{75}{4} \times \frac{1}{100} = \frac{3x}{16}$$

Total employee in Accounts in A =
$$x \times \frac{75}{4} \times \frac{1}{100} = \frac{3x}{16}$$

Total employee in Technical in B = $y \times \frac{200}{7} \times \frac{1}{100} = \frac{2y}{7}$

Given,
$$\frac{3x}{16} + \frac{2y}{7} = 210$$
(i)
And $x + y = 900$ (ii)

And
$$x + y = 900$$
 -----(ii)

So, from (i) and (ii),

Total employee in A = x = 480

Total employee in B = y = 420

Total employee in Accounts in B =
$$\frac{400}{21} \times \frac{1}{100} \times 420 = 80$$

Total employee in Operation in A =
$$\frac{1}{2} \times 480 = 240$$

Total employee in Accounts in A =
$$\frac{3 \times 480}{16}$$
 = 90

Total employee in Accounts in A =
$$\frac{2}{3\times480} = 90$$

Total employee in Technical in B = $\frac{2\times420}{7} = 120$

Now, total employee in Technical in A =
$$480 - 240 - 90 = 150$$

And total employee in Operation in
$$B = 420 - 120 - 80 = 220$$

Teams	A	В
Operation	240	220
Technical	150	120
Accounts	90	80
Total	480	420

Req. average =
$$\frac{150 + 120}{2}$$
 = 135

\$150. Ans.(a)

Sol.

Let total employee in A = x

And, total employee in B = y

Total employee in Accounts in A = $x \times \frac{75}{4} \times \frac{1}{100} = \frac{3x}{16}$ Total employee in Technical in B = $y \times \frac{200}{7} \times \frac{1}{100} = \frac{2y}{7}$

Given,
$$\frac{3x}{16} + \frac{2y}{7} = 210$$
 ---- (i)

And
$$x + y = 900$$
 -----(ii)

So, from (i) and (ii),

Total employee in A = x = 480

Total employee in B = y = 420

Total employee in Accounts in B = $\frac{400}{21} \times \frac{1}{100} \times 420 = 80$

Total employee in Operation in A = $\frac{1}{2}$ × 480 = 240

Total employee in Accounts in A = $\frac{3 \times 480}{16}$ = 90 Total employee in Technical in B = $=\frac{2 \times 420}{7}$ = 120

Now, total employee in Technical in A = 480 - 240 - 90 = 150

And total employee in Operation in B = 420 - 120 - 80 = 220

Teams	A	В
Operation	240	220
Technical	150	120
Accounts	90	80
Total	480	420

Total males in Operation from both towers = $240 \times \frac{5}{8} + 220 \times \frac{7}{11}$ = 150 + 140 = 290

