
LIC HFL Assistant Memory Based Paper 2019 - Solution PDF

S1. Ans.(e)

Sol Refer to paragraph 1 of the passage, it is clearly mentioned that people in China have technology at their fingertips, they can do so many things like-message their friends, send money, read the news, play games, hail a taxi, pay off utility bills, and more through a single app like WeChat. But their each action is tracked down by the government so they don't have the luxury of living life without any interference.

S2. Ans.(d)

Sol Read the passage carefully, it can be easily inferred that We Chat serves wide number of purposes of people in China on daily basis, in fact people are accustomed to use We Chat from morning till evening, so it has captured the mind of the common man in China. Hence it can be called as lifeline.

S3. Ans.(d)

Sol From the paragraph 3 of the passage we can easily conclude that the government in China has decided to create a "social credit" rating system which will keep track of an individual's social, financial, and political behaviors. So the government authority will have a database comprising details of each individual accordingly.

S4. Ans.(d)

Sol Refer to paragraph 4 of the passage, it is evident that dang'an, or personal file, contains an individual's grades, employment record, and reports on how they interact with others, their religious affiliations, psychological problems, and potential political liabilities. Further the government is planning to keep track over online shopping and search history of the common people of China which will definitely kill their privacy.

S5. Ans.(e)

Sol. Read paragraph 4 of the passage carefully, it can be easily concluded that all the statements are completely true with reference to the passage, hence option (e) will be the correct choice.

S6. Ans.(b)

Sol In context of the passage, as compared to other options, option (b) seems to be the most appropriate title for the given passage.

S7. Ans.(a)

Sol Deliberately has the same meaning as voluntarily
Admonitorily means giving or conveying a warning or reprimand

S8. Ans.(a)

Sol Interdiction means the action of prohibiting or forbidding something
Accretion means growth or increase by the gradual accumulation of additional layers or matter
Impregnation means to make pregnant, get with child or young

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S9. Ans.(b)

Sol Meticulously means in a way that shows great attention to detail; very thoroughly

Sloppily means in a messy or careless way

Statutorily means of relating to, or of the nature of a statute

Hence, Sloppily will be the exact opposite of meticulously

S10. Ans.(c)

Sol Quintessential means representing the most perfect or typical example of a quality or class

Circumstantial means pointing indirectly towards someone's guilt but not conclusively proving it

Anodyne means not likely to cause offence or disagreement and somewhat dull

Bicentennial means relating to a two-hundredth anniversary

Here, anodyne will be the exact opposite of controversial

S11. Ans.(e)

Sol. The Sequence of sentences after rearrangement is **CEAFBD**.

S12. Ans.(a)

Sol. The Sequence of sentences after rearrangement is **CEAFBD**.

S13. Ans.(a)

Sol. The Sequence of sentences after rearrangement is **CEAFBD**.

S14. Ans.(a)

Sol. The Sequence of sentences after rearrangement is **CEAFBD**.

S15. Ans.(e)

Sol. The Sequence of sentences after rearrangement is **CEAFBD**.

S16. Ans.(a)

Sol. 'Why do we not' will come in place of 'why we do not' as the sentence is in interrogative form.

S17. Ans.(c)

Sol. In place of 'he will have', 'he would have been' will be used.

With Had+ subject + been + V3, Subject + would + have + been + V3 is used.

Ex. **Had** he **been taken** to hospital, he **would have been** saved.

S18. Ans.(b)

Sol. Replace 'with' by 'in' as "take delight in something" is the correct usage.

e.g. She **takes delight in** dancing.

S19. Ans.(b)

Sol. 'hard' will be used in place of 'hardly' as 'hardly' is used to depict 'rarely' or 'scarcely' whereas here

S20. Ans.(e)

Sol. The sentence is grammatically correct

S21. Ans.(b)

Sol. Use 'of' in place of 'for' as preposition 'of' is used after 'warn'.

S22. Ans.(c)

Sol. 'purchased' will be used in place of 'purchase' as after 'have' or any other form of 'have' (have, has, had), third form of verb is used.

Ex. I have/ had read this book.

S23. Ans.(e)

Sol. The sentence is grammatically correct.

S24. Ans.(a)

Sol. 'neither' will be used in place of 'none' as 'neither' is used for two persons or things while 'none' is used for more than two persons or things.

Ex. (i) Neither of these two pens.

(ii) None of the three pens.

S25. Ans.(a)

Sol. Use 'one's' in place of 'his' as if 'one' is used for 'anybody', then its possessive form is 'one's'.

Ex. One should be loyal to one's country. (= Anybody should be loyal to his country.)

S26. Ans.(d)

Sol. 'generously' is the correct word to make the sentence meaningful.

'grudgingly' means in a reluctant manner.

'lavishly' means in a luxurious manner.

S27. Ans.(a)

Sol. 'grumbling' is the correct word to make the sentence meaningful.

'grumbling' means complaining.

'perverting' means distort.

'nagging' means persistently painful or worrying.

'vexing' means annoying.

S128. Ans.(e)

Sol. No improvement is required here.

S29. Ans.(c)

Sol. 'pace' is the correct word to make the sentence meaningful.

S30. Ans.(b)

Sol. 'justifies is the correct word to make the sentence meaningful.

Assert means declare.

S31. Ans.(e)

Sol. Option(e) is correct i.e there is no need for improvement as the given sentence is correct.

The subject (people, which is plural) must agree with the verb (were, which is plural).

The two verbs (were and crafted) should be in the same tense since both happened at the same time in the past.

S32. Ans.(a)

Sol. Option(a) is correct

"Whether" is correct because the question concerns a choice not a condition. With the expression "the number of" a singular verb is needed and hence "was" is correct. "Liable" is used in expressions such as "liable to prosecution" and not for expressions of possibility.

S33. Ans.(d)**S34. Ans.(b)**

Sol. Option (b) is correct

As the superlative form most scary must be used instead of the comparative form more scary since the author is indicating that among all the threats, a specific threat is the most scary.

S35. Ans.(d)

Sol. In (d), the correct answer, 'inspired' is correctly parallel to 'broke', and 'attempt to overcome' is idiomatic.

S36. Ans.(a)

Sol. 'It was not until many years' is the correct use.

S37. Ans.(b)

Sol. 'worse than I had expected' is the correct use.

S38. Ans.(a)

Sol. 'to make both ends meet' is the correct use.

S39. Ans.(d)

Sol. 'having admitted' is the correct use.

S40. Ans.(c)

Sol. Auxiliary verb is used before subject in the sentences starting from No sooner, hardly, scarcely, rarely,

S41. Ans.(b)

Sol. As the given sentence is talking about the balance in the use of technology for tracking malicious activities and online privacy of the users, so, on the basis of this information the correct arrangement of the words would be DCBA.

S42. Ans.(d)

Sol. In the given sentence decision of nine-judge bench which ruled out that privacy is a fundamental right under Article 21 of constitution, is mentioned. So, on the basis of this it can be seen that the correct arrangement of the words would be ADCB.

S43. Ans.(b)

Sol. Given sentence is stating the statement made by External Affairs Minister on National Register of Citizen. So, on the basis of this information, the correct arrangement would be DBAC.

S44. Ans.(d)

Sol. Given sentence is talking about the petitions filed against Facebook in different High Courts regarding its misuse. So, on the basis of this information, it can be seen that correct arrangement would be CBDA.

S45. Ans.(c)

Sol. In the given sentence, 'operations' and 'planned' are incorrectly place as the given sentence is talking about the steps taken by ISRO's Mission complex to put Chandrayaan-2 in it planned orbit. So, the correct arrangement would be ADCB.

S46. Ans.(b)

Sol. From the given sentence, we can infer that the portal will give a push to (advance) transparency with the governmental setup. Among the given options, we will omit 'risk' because transparency cannot be a risk in the context of the sentence. Also, 'release of transparency' makes the statement contextually incorrect. Here, transparency can be qualified as an 'objective'. Hence, option (b) is the most suitable answer choice.

Risk: a situation involving exposure to danger

Objective: a thing aimed at or sought; a goal.

Remains: the parts left over after other parts have been removed, used, or destroyed

Release: allow or enable to escape from confinement; set free.

S47. Ans.(d)

Sol. From the given statement, we can get the idea that the economic progress has increased as get be indicated from the phrase 'remains weak even with'. Here, 'even with' symbolizes contradiction similar to that indicated by 'despite, inspite of, etc.' Here, 'robust' perfectly contradicts 'weak'. Hence, option (d) is the most suitable answer choice.

Robust: strong and healthy; vigorous.

Regressive: returning to a former or less developed state; characterized by regression

Forgotten: fail to remember.

Abandoned: having been deserted or left.

S48. Ans.(c)

Sol. The statement mentions the failure of lander to touchdown. Here, 'unfortunate' can perfectly qualify the event. Hence, option (c) is the most suitable answer choice.

Unfortunate: having or marked by bad fortune; unlucky.

Extended: made larger; enlarged.

Accomplished: highly trained or skilled in a particular activity.

Predetermined: established or decided in advance.

Explored: inquire into or discuss (a subject) in detail.

S49. Ans.(c)

Sol. The statement mentions introduction a new policy by Mr. Xi which will target China's progress. Here, only 'embarked' can fit in the blank, considering the preposition that follows the blank. Hence, option (c) is the most suitable answer choice.

Embarked: begin (a course of action).

Underscored: emphasize.

Prolonged: continuing for a long time or longer than usual; lengthy.

Alleged: said, without proof, to have taken place or to have a specified illegal or undesirable quality

Dithered: be indecisive.

S50. Ans.(b)

Sol. Here, the statement mentions the work that has been done on Jammu related to its communication networks. Here, the blank will be filled in with the word that could qualify the restoration work done. We will omit 'morally' as it will make the statement contextually incorrect. Similar is the case with 'nationally'. Here, 'substantially restored' is the most suitable phrase which will symbolize almost complete restoration of networks. Hence, option (b) is the most suitable answer choice.

Substantially: to a great or significant extent

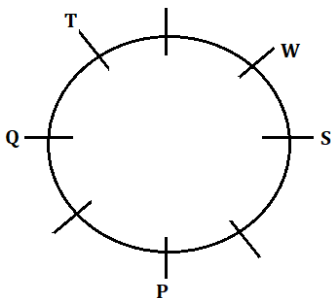
Ironically: in an ironic manner.

Severely: to an undesirably great or intense degree

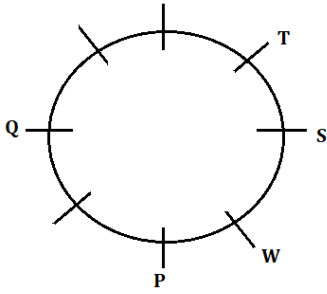
Solutions (51-55)

Two persons sit between P and T from here we have two cases i.e. case 1 and case 2. W sits second to the right of T. Both Q and S are sitting opposite to each other. Both W and Q are not adjacent to each other.

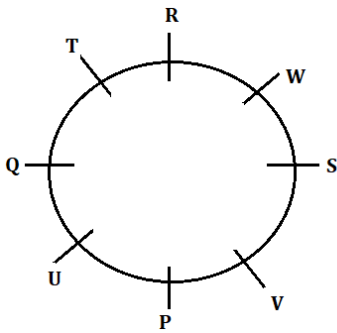
Case 1



Case 2



V sits immediate left of P and from here our case 2 get eliminated and we have case 1. R is not sit opposite to W.



S51. Ans.(e)

S52. Ans.(a)

S53. Ans.(d)

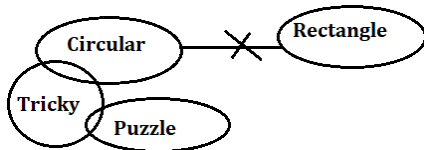
S54. Ans.(b)

S55. Ans.(b)

Solutions (56-60)

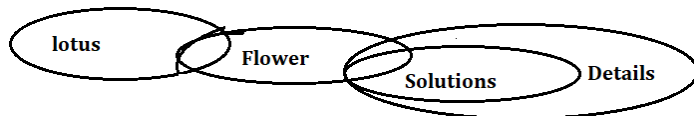
S56. Ans.(e)

Sol.



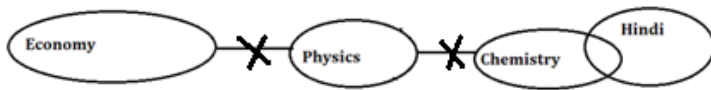
S57. Ans.(a)

Sol.



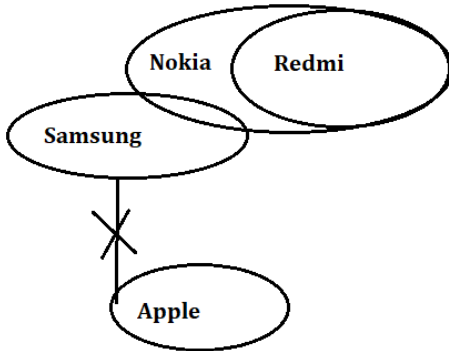
S58. Ans.(b)

Sol.



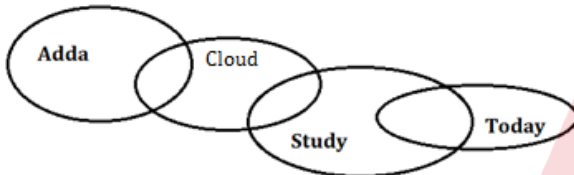
S59. Ans.(d)

Sol.



S60. Ans.(c)

Sol.



Solutions (61-65)

S61. Ans.(d)

Sol. 12P, 34S, 57E

S62. Ans.(c)

Sol. 2

S63. Ans.(b)

Sol. K

S64. Ans.(a)

Sol. O1, R3, X2

S65. Ans.(a)

Sol. W

Solution (66-70):

S66. Ans.(d)

Sol. I: $P > N$ (False) **II:** $N \geq R$ (False)

S67. Ans.(b)

Sol. I: $Q \geq F$ (False) **II:** $E > M$ (True)

S68. Ans.(d)

Sol. I: $Z > E$ (False) **II:** $V \geq J$ (False)

S69. Ans.(a)

Sol. I: $E > V$ (True) **II:** $V \geq Q$ (False)

S70. Ans.(d)

Sol. I: $Z > R$ (False) **II:** $D \geq K$ (False)

Solution (71-75):

From the given statements, C goes to Zoo before Wednesday. Only two persons are going to Zoo between C and G. No one goes Zoo between G and F. Three persons are going to Zoo between A and D. Neither A nor D going for Zoo on Tuesday. Here we get 3 possibilities i.e. Case 1 and Case 2 and case 3.

Days	Case 1	Case 2	Case 3
	Friends	Friends	Friends
Monday			C
Tuesday	C	C	
Wednesday	A/D	A/D	A/D
Thursday	F		G
Friday	G	G	F
Saturday		F	
Sunday	D/A	D/A	D/A

From the given statements, No one goes to Zoo between D and B. B goes before D but after F. From these conditions Case 2 is ruled out now.

Days	Case 1	Case 3
	Friends	Friends
Monday		C
Tuesday	C	
Wednesday	A	A
Thursday	F	G
Friday	G	F
Saturday	B	B
Sunday	D	D

From the given statements, three persons are going for Zoo between E and B. From this condition Case 1 is eliminated now.

So, the final arrangement is such as-

Days	Friends
Monday	C
Tuesday	E
Wednesday	A
Thursday	G
Friday	F
Saturday	B
Sunday	D

S71. Ans.(e)

S72. Ans.(b)

S73. Ans.(c)

S74. Ans.(d)

S75. Ans.(b)

Solutions (76-80)

Words	Codes
is	lm
out	to
Climate	ck/zg
Action	ck/zg
of	mp
Politics	tp
about	tz
likely	cz
Global	yo

S76. Ans.(c)

S77. Ans.(b)

S78. Ans.(e)

S79. Ans.(d)

S80. Ans.(b)

Solution (81-85):

S81. Ans.(c)

Sol. $(6+6+0+7+8+3)*3 = 90$

S82. Ans.(b)

Sol.

364 762 908 **576** 789 232

987 809 **675** 463 267 232

S83. Ans.(d)

Sol. $232 - (4+2+8+6+9+2) = 201$

S84. Ans.(d)

Sol.

364 762 908 576 789 232

232 364 **576** 762 789 908

S85. Ans.(b)

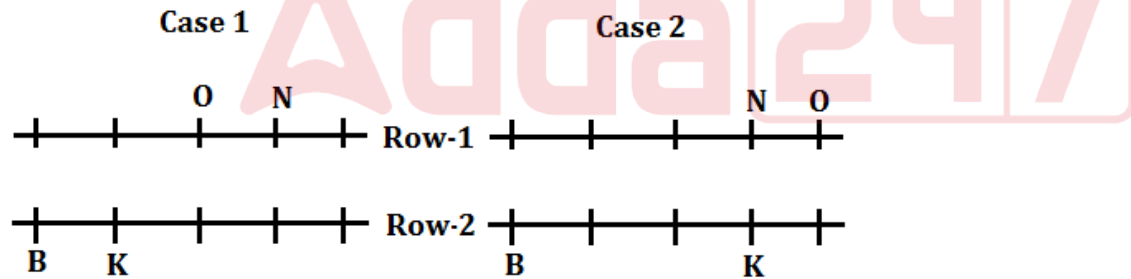
Sol.

364 762 908 576 789 232

098 322 634 **672** 756 879

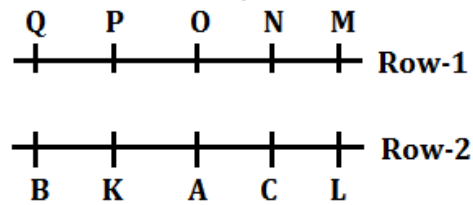
Solution (86-90):

From the given statements, K faces to the one who sits immediate to the right of O. K sits 2nd from one of the ends of the row. Here we get 2 possibilities i.e. Case 1 and Case 2. N faces the one who sits 3rd to the right of B.



From the given statements, only one person sits between A and L, who faces M. C sits to the right of K. Here Case 2 is ruled out now. More than one person sits between Q and N.

So, the final arrangement is-



S86. Ans.(a)

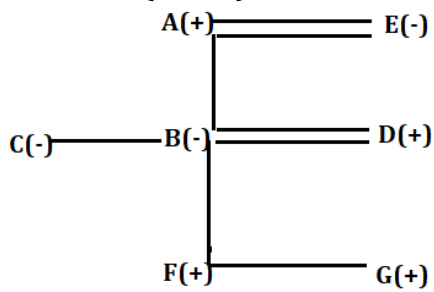
S87. Ans.(a)

S88. Ans.(a)

S89. Ans.(d)

S90. Ans.(d)

Solutions (91-93)

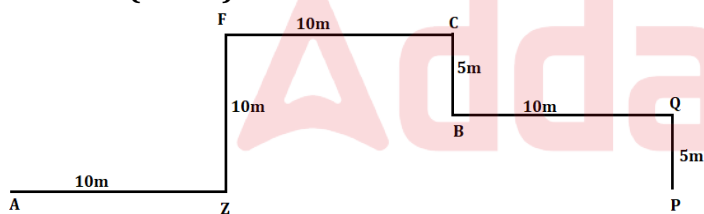


S91. Ans.(e)

S92. Ans.(b)

S93. Ans.(e)

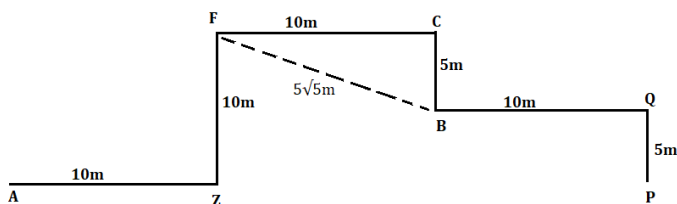
Solution (94-96):



S94. Ans.(d)

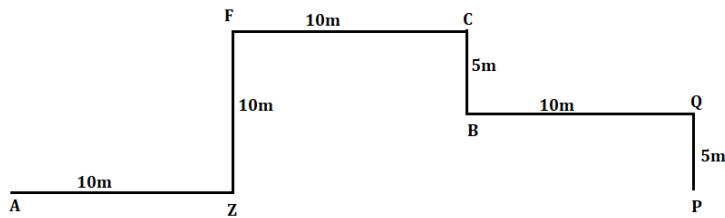
S95. Ans.(a)

Sol.



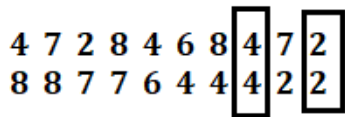
S96. Ans.(d)

Sol.



S97. Ans.(b)

Sol.



S98. Ans.(d)

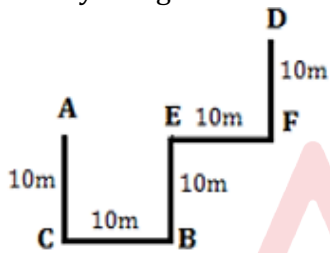
Solutions (99-100):

S99. Ans.(d)

By using both the statement we could not find out the relation between Sumit and Neha.

S100. Ans.(e)

Sol. By using both the statement we can find out that Point C is to the South West of Point D.



S101. Ans.(c)

Sol. Former Comptroller and Auditor General (CAG) and chief of Supreme court-appointed Committee of Administrators (CoA) in 2017, Vinod Rai has penned a book titled, "Not Just A Nightwatchman: My Innings with BCCI" in which the former bureaucrat encapsulates his 33-month stint at the BCCI.

In the book, Rai – whose stint of overseeing the administration of one of the richest sports bodies in the world ended in September 2019 – has made some major revelations.

S102. Ans.(b)

Sol. The Airport Authority of India (AAI) has launched an initiative "AVSAR" to encourage the talent of women, artisans, and craftsmen and provide them with the right opportunities. AVSAR stands for 'Airport as Venue for Skilled Artisans Of The Region'.

Under "AVSAR" (Airport as Venue for Skilled Artisans Of The Region), which is an initiative of AAI, an opportunity to help the indigent to mobilize their households into functionally effective self-earned groups

S103. Ans.(c)

Sol. The food and Agriculture organisation was founded in 1945.

The Food and Agriculture Organization of the United Nations is a specialized agency of the United Nations that leads international efforts to defeat hunger and improve nutrition and food security.

According to the UN Food and Agriculture Organization (FAO), the World food price index averaged 159.3 points in March, breaking an earlier record of 137.6 points scaled 11 years ago in February 2011.

The FAO Food Price Index (FFPI) is a measure of the monthly change in international prices of a basket of food commodities. It consists of the average of five commodity group price indices weighted by the average export shares of each of the groups over 2014-2016.

S104. Ans.(c)

Sol. SFDR technology is a missile propulsion system based on the concept of the Ramjet Engine principle.

It is a missile propulsion technology jointly developed by India and Russia.

The Defence Research and Development Organisation (DRDO) successfully flight tested the "Solid Fuel Ducted Ramjet" (SFDR) booster at the Integrated Test Range (ITR), Chandipur off the coast of Odisha.

The test met all the mission objectives. The SFDR-based propulsion enables the missile to intercept aerial threats at very long range at supersonic speeds. It has an extremely high projected range of 350 km.

S105. Ans.(d)

Sol. Union Home and Cooperation Minister, Amit Shah has inaugurated the newly built National Tribal Research Institute (NTRI) in New Delhi.

This institute is to promote and preserve the tribal heritage and culture and the nerve centre of tribal research issues and matters in academic, executive and legislative fields.

The institute will collaborate and network with reputed research institutes, universities, and organisations as well as academic bodies and resource centres.

It is being established at a cost of 10 crore rupees.

Tribal Research Institute (TRI) is the research body of the Ministry of Tribal Affairs at the state level. There are 26 Tribal Research Institutes (TRIs) supported by the Ministry of Tribal Affairs.

S106. Ans.(d)

Sol. Indian women's cricket team captain, Mithali Raj (39 years old), hailing from Jodhpur, Rajasthan, announced her retirement from all forms of international cricket

Previously in September 2019, she retired from twenty 20 International (T20Is) but continued to play One Day Internationals (ODIs) and Test cricket.

Mithali Raj made her international debut in the ODI against Ireland at Milton Keynes in 1999.

She has represented India in around 232 ODI matches and scored 7805 runs (50.68 on average). She is the only female cricketer to reach the 7,000-run mark. She holds the record for most runs in Women's ODI.

The government of India (GoI) honoured her with Arjuna Award in 2003 for her outstanding achievement in cricket and the Major Dhyan Chand Khel Ratna Award in 2021.

S107. Ans.(c)

Sol. 'Namami Gange Programme', is an Integrated Conservation Mission, approved as 'Flagship Programme' by the Union Government in June 2014 with budget outlay of Rs.20,000 Crore to accomplish the twin objectives of effective abatement of pollution, conservation and rejuvenation of National River Ganga.

S108. Ans.(c)

Sol. Andhra Pradesh has retained its number one spot in the SKOCH State of Governance rankings for the second consecutive year.

According to a release, the State retained the first rank for the second consecutive year. In 2020 too, Andhra Pradesh bagged the top rank in governance. Andhra Pradesh was ranked at second position in 2018 and later it slipped to 4th position in 2019, according to Skoch.

The second rank was bagged by West Bengal and Odisha was ranked 3, Gujarat was ranked 4, and Maharashtra was ranked 5. Neighboring Telangana was ranked 6.

The SKOCH Group has released the SKOCH Governance Report Card for 2021 in New Delhi, ranking the states according to their performance in various projects at state, district, and Email Article Print Article municipal levels.

S109. Ans.(d)

Sol. India has taken first place in the medal standings at the ISSF World Cup 2022 in Cairo, organised by the International Shooting Sport Federation.

By winning a total of seven medals, the Indian team took first place in the medals tally, with four gold, two silver, and one bronze.

Norway took second place in the medals tally with six medals (three gold, one silver, and two bronze). France came in third place with three gold medals out of a total of twenty.

On the final day of the ISSF World Cup 2022 in Cairo, Egypt, Indian shooters took home two medals.

India won their third World Cup gold, defeating Singapore 17-13 in the women's 25m pistol team event final. In the gold medal match, Rahi Sarnobat, Esha Singh, and Rhythm Sangwan defeated the Singaporean trio of Xiu Hong, Shun Xie, and Ling Chiao Nicole Tan.

S110. Ans.(c)

Sol. Tripura Government has announced a special scheme 'Mukhyamantri Chaa Srami Kalyan Prakalpa' for tea workers. A special scheme, allotting Rs. 85 crores for its implementation, as a step towards bringing the 7000 tea garden workers of Tripura under the social security net.

This special scheme would ensure housing, rations, and financial support to the tea garden workers by integrating the facilities that are entitled to them, by the state government and the central government.

About 75% of the 7000 tea garden workers are women and they produce nearly 90 lakh kilograms of tea through 54 tea estates & 21 tea processing factories across the state. The tea production is mainly distributed in the North, Sepahijala, Unakoti, and West Tripura districts.

Tripura Static Facts:

Capital: Agartala

Chief Minister: Biplab Kumar Deb

S111. Ans.(c)

Sol. Debasish Panda has been appointed as the chairman of the Insurance Regulatory and Development Authority of India (IRDAI). He is a former financial services secretary.

The headquarters of IRDAI is in Hyderabad, Telangana. It was founded in 1999.

The Insurance Regulatory and Development Authority of India is a regulatory body under the jurisdiction of the Ministry of Finance, Government of India, and is tasked with regulating and licensing the insurance and re-insurance industries in India.

S112. Ans.(e)

Sol. "Commission approves acquisition of 100 percent share capital of L&T Investment Management Ltd (L&T AMC) by HSBC Asset Management (India) Private Limited (HSBC AMC),".

The transaction involves the acquisition by HSBC AMC and its nominees of 100 percent share capital of L&T AMC from L&T Finance Holdings Ltd and its nominees.

The L&T MF schemes will be managed and operated by HSBC AMC, and HSBC Trustee will be appointed as the trustee of the L&T Mutual fund.

S113. Ans.(a)

Sol. The European Space Agency's (ESA) Vigil mission, formerly known as Lagrange, is a planned solar weather mission. Under this mission, two spacecraft will be stationed at the Lagrangian points L1 and L5, respectively.

It's the first of its kind mission, to monitor the unpredictable and active Sun and help protect the Earth from its outbursts.

Solar flares, coronal mass ejections, geomagnetic storms, solar proton events, and other space weather incidences will be monitored by ESA Vigil.

Monitoring of the space incidences will help in predicting the timing of its arrival on Earth and any effect it might have on infrastructure.

S114. Ans.(d)

Sol. ICICI Bank tied-up with Emirates Skywards to launch a range of co-branded credit cards named "Emirates Skywards ICICI Bank Credit Card".

Customers can earn reward points – known as Skywards Miles – on travel, lifestyle, and everyday purchases with the collection of cards. These cards, according to the private sector lender, offer best-in-class rewards and advantages and are a perfect fit for affluent consumers who travel abroad frequently.

ICICI Bank is the first Indian bank to join together with Emirates Skywards to offer the exclusive credit card programme in India.

S115. Ans.(c)

Sol. Only statement A is correct.

Pradhan Mantri Jan-Dhan Yojana was launched by the Prime Minister of India Narendra Modi on 28 August 2014.

Interest is earned on the deposit in PMJDY accounts.

S116. Ans.(b)

Sol. the Khadi and Village Industries Commission (KVIC) launched “Banarasi Pashmina” to boost self-sustainability & Artisanal Creativity.

From the Himalayan highlands of Leh-Ladakh to the banks of River Ganges in Varanasi – the heritage handicraft of Pashmina has got a brand new identity.

The premium Pashmina products prepared by the highly skilled Khadi weavers of Varanasi were launched by Chairman KVIC, Shri Vinai Kumar Saxena in Varanasi.

This is for the first time that Pashmina products are being produced outside the region of Leh-Ladakh and Jammu & Kashmir.

KVIC will be selling the “Made-in-Varanasi” Pashmina products through its showrooms, outlets and its online portal.

S117. Ans.(e)

Sol. The Bhima Bhoi Chair at Delhi University and Guru Ghasidas Vishwavidyalaya in Bilaspur, Chhattisgarh, has been authorised by the University Grants Commission.

In separate letters to the two central institutions, the UGC stated that the universities may create the Chair by filling existing vacant positions and that other recurrent expenses could be charged to monies already allocated to them.

Bhima Bhoi was a saint, poet, and philosopher from Odisha. He battled against the caste system in Hinduism. Bhima Bhoi was born in 1850 and died in 1895.

Bhima Bhoi was a Mahima Swamy bhakta (commonly referred to as Mahima Gosain and whose birth name is said to have been Mukunda Das). Bhima Bhoi would be initiated into Mahima Dharma, an Indian religious tradition that challenged caste Hinduism on its own terms, from Mahima Swamy.

S118. Ans.(d)

Sol. Patrick Achi has been re-appointed as Prime Minister of Ivory Coast by President Alassane Ouattara. He was appointed prime minister in March 2021. He was the third prime minister in the West African state (Ivory Coast) in the last three years after Amadou Gon Coulibaly (who died in 2020) and Hamed Bakayoko (who died in 2021).

President has accepted Achi’s resignation ahead of a government reshuffle. Ivory Coast, also officially known as the Republic of Côte d’Ivoire, is a country on the southwest coast of Africa.

Ivory Coast Static Facts:

Capital: Yamoussoukro

Currency: Franc

President: Alassane Ouattara

S119. Ans.(b)

Sol. Maharashtra is first state in India to launch a bus service with a totally digital ticketing system.

Maharashtra State Environment Minister Aditya Thackeray inaugurated the tap-in tap-out service on the Gateway of India to Churchgate route in an effort to make commuting across Mumbai easier.

Aditya Thackeray stated during the event that Brihanmumbai Electricity Supply and Transport (BEST) is India’s first fully digital bus service.

According to Lokesh Chandra, BEST’s General Manager (GM), this is the country’s first-ever 100 percent digital bus service, with the goal of increasing the digitalisation of the bus ticketing system.

It provides travellers with comfort and convenience because they can tap-in using their smart card or the ‘Chalo’ app on their cellphones.

If the tourist taps out using the app, they will receive a receipt on their phone, and if they used the smart

S120. Ans.(c)

Sol. For the collection of taxes, Dhanlaxmi Bank has signed a memorandum of understanding with the Central Board of Direct Taxes (CBDT) and the Central Board of Indirect Taxes and Customs (CBIC).

The technical integration required to implement the seamless flow of remittances from the bank's portal to the CBDT and CBIC portals will be implemented as soon as possible in order to give customers early access to the facilities.

Dhanlaxmi Bank said in a regulatory filing that the Reserve Bank of India (RBI) has authorised the bank to collect different taxes based on a recommendation from the Controller General of Accounts.

Dhanlaxmi Bank, based in Kerala, was placed under the RBI's Prompt Corrective Action (PCA) framework in November 2015 due to its poor financial condition, and it was only last year that it was released. It has been profitable since then.

S121. Ans.(a)

Sol. Startup India Seed Fund Scheme (SISFS) was launched on 19 April 2021. The scheme aims to provide financial assistance to startups for proof of concept, prototype development, product trials, market-entry, and commercialization.

This would enable these startups to graduate to a level where they will be able to raise investments from angel investors or venture capitalists or seek loans from commercial banks or financial institutions.

DPIIT has created Startup India Seed Fund Scheme (SISFS) with an outlay of INR 945 Crore to provide financial assistance to startups for Proof of Concept, prototype development, product trials, market entry, and commercialization. It will support an estimated 3,600 entrepreneurs through 300 incubators in the next 4 years.

S122. Ans.(b)

Sol. Barren Island Wildlife Sanctuary was established in the year 1977 to preserve the wildlife and the ecosystem of the region. It is located in Andaman Nicobar.

It is the only confirmed active volcano in the Indian subcontinent, and the only active volcano along a chain of volcanoes from Sumatra to Myanmar.

S123. Ans.(d)

Sol. About Consumer Price Index (CPI)-

- It measures price changes from the perspective of a retail buyer.
- It is released by the National Statistical Office (NSO).
- Four types of CPI are as follows:
 - CPI for Industrial Workers (IW).
 - CPI for Agricultural Labourer (AL).
 - CPI for Rural Labourer (RL).
 - CPI (Rural/Urban/Combined).
- Of these, the first three are compiled by the Labour Bureau in the Ministry of Labour and Employment. Fourth is compiled by the NSO in the Ministry of Statistics and Programme Implementation.
- Base Year for CPI is 2012.
- Recently, the Ministry of Labour and Employment released the new series of Consumer Price Index for

S124. Ans.(d)

Sol. Nagaland has created history by becoming the first State Assembly in the country to implement the National e-Vidhan Application (NeVA) program to become completely paperless. The Nagaland Assembly Secretariat has attached a tablet or e-book on each table in the 60 members' assembly amid the ongoing Budget session.

NeVA is a workflow system deployed on NIC Cloud, MeghRaj which helps the Chair of the House to conduct the proceedings of the House smoothly and to conduct Legislative Business of the House in a Paperless manner.

Nagaland Static Facts:

Capital: Kohima

Chief Minister: Neiphiu Rio

Governor: Jagdish Mukhi

S125. Ans.(b)

Sol. With a view to boosting exports and job creation in the textile sector, the government has approved the continuation of the Scheme for Rebate of State and Central Taxes and Levies (RoSCTL) with the same rates as notified by the Ministry of Textiles for exports of apparel/garments and made-ups till March 31, 2024.

What is the Rebate of State and Central Taxes and Levies (RoSCTL) Scheme?

RoSCTL is a forward-looking and growth-oriented scheme that has provided a stable and predictable policy regime, helping boost exports and employment.

The scheme helped improve cost efficiency and export competitiveness in the international market. It has also promoted incubation of start-ups & entrepreneurs in the domain and also led to a large number of MSMEs joining the apparel export business."

After the introduction of GST in 2017, the RoSL (Rebate of State Levies) scheme was replaced by a new scheme – Rebate of State and Central Taxes Levies (RoSCTL) in March 2019.

S126. Ans.(a)

Sol. Dunagiri (Yard- 3023), Project 17A frigate has been built by Garden Reach Shipbuilders Limited (GRSE) in Kolkata.

The Union Minister Rajnath Singh, Ministry of Defence (MoD) launched indigenously built Y- 3023 Dunagiri, Project 17A frigate onto the river Hooghly in Kolkata (West Bengal). The Project 17A frigates, also known as Nilgiri-class stealth frigates.

About P17A Ships:

These are guided-missile frigates, which are follow-on classes of the P17 (Shivalik Class) Frigates with improved stealth features, advanced weapons and sensors and platform management systems.

About Dunagiri: It is a world class stealth frigate with multidimensional capabilities to destroy enemies

S127. Ans.(c)

Sol. La'eeb is an Arabic word meaning super-skilled player.

FIFA has unveiled La'eeb as the official mascot for this year's FIFA World Cup Qatar 2022.

The FIFA World Cup 2022 was the 22nd edition of the quadrennial international men's football championship, which was contested by national teams from FIFA member countries.

FIFA aims to regulate and grow football worldwide. The organization has been swiftly evolving since 2016, into a body that can better serve our game for the benefit of everyone on the planet.

This was the first World Cup ever to be held in the Arab world, and it will be the second World Cup held entirely in Asia after the 2002 tournament was held in South Korea and Japan.

S128. Ans.(b)

Sol. The parliament of Kazakhstan has unanimously approved the appointment of Alikhan Smailov as the new Prime Minister of the country.

His name was nominated by Kazakh President Kassym-Jomart Tokayev on January 11, 2022. Prior to this, the 49-year-old Smailov served as the country's finance minister from 2018 to 2020.

He became the first deputy prime minister in the Cabinet in 2019.

Kazakhstan Static Facts:

Capital: Nur-Sultan

Currency: Kazakhstani tenge

S129. Ans.(b)

Sol. The World Health Organization (WHO) has chosen Jharkhand for the World No Tobacco Day (WNTD) Award-2022, in recognition of the state's efforts to reduce tobacco usage.

The award will be presented to the State Tobacco Control Cell of the Health Department in New Delhi in honour of World No Tobacco Day. The coveted award, which honoured the State Government's achievements in reducing tobacco usage, was given by the National Tobacco Control Program in Jharkhand. According to the Global Adult Tobacco Survey (GATS)-1 report, the NTCP was begun in Jharkhand in 2012, when the state's tobacco prevalence rate was 51.1 percent, with 48 percent of smokers.

According to the GATS-2 study, tobacco users in the state decreased to 38.9%, with 35.4 percent of those using smokeless tobacco.

Every year, 3.5 million hectares of land are destroyed throughout the world to plant tobacco. Tobacco farming also causes in 20,000 hectares of deforestation and soil deterioration each year.

S130. Ans.(b)

Sol. In 2021-22, the UAE is India's third-largest trading partner with USD 72.9 billion. It is followed by Saudi Arabia (USD 42.85 billion) as 4th, Iraq (USD 34.33 billion) as 5th, & Singapore (USD 30 billion) as its 6th largest trading partner.

The United States overtook China to become India's top trading partner in 2021-22, reflecting strong economic ties between the two countries.

According to commerce ministry data, in 2021-22, bilateral trade between the US and India stood at US\$ 119.42 billion as against US\$ 80.51 billion in 2020-21.

Exports to the US increased to US\$ 76.11 billion in 2021-22 from US\$ 51.62 billion in the previous fiscal,

S131. Ans.(a)

Sol. The 17th edition of the Mumbai International Film Festival of India (MIFF 2022) confers Dr V. Shantaram Lifetime Achievement Award on noted author and documentary filmmaker Shri Sanjit Narwekar to commemorate his exquisitely deep, remarkably diverse and inspiring body of work.

Union Minister of Commerce & Industry, Consumer Affairs, Food & Public Distribution and Textiles Piyush Goyal presented the award to Sanjit Narwekar along with a cash prize of Rs 10 lakhs (Rs 1 million), Golden Conch and a citation.

Shri Narwekar is a National award-winning film historian, author, publisher and documentary filmmaker with more than four decades of cross-media experience in Journalism, Public Relations, Publishing and Filmmaking.

S132. Ans.(d)

Sol. The headquarters of the Coalition for Disaster Resilient Infrastructure (CDRI) is located in New Delhi, India.

The Coalition for Disaster Resilient Infrastructure is an international coalition of countries, United Nations agencies, multilateral development banks, the private sector, and academic institutions, that aims to promote disaster-resilient infrastructure.

Its objective is to promote research and knowledge sharing in the fields of infrastructure risk management, standards, financing, and recovery mechanisms. It was launched by the Indian Prime Minister Narendra Modi at the 2019 UN Climate Action Summit in September 2019.

CDRI's initial focus is on developing disaster resilience in ecological, social, and economic infrastructure. It aims to achieve substantial changes in member countries' policy frameworks and future infrastructure investments, along with a major decrease in the economic losses suffered due to disasters.

S133. Ans.(d)

Sol. Under Para Banking, banks may form subsidiary companies for undertaking types of banking business like hire/purchase business and Underwriting of bonds of Public Sector Undertakings, Mutual Fund business etc.

S134. Ans.(d)

Sol. Reserve Bank of India performs merchant banking function for the central and the state governments, also acts as their banker. It also manages the Foreign Exchange Management Act, 1999.

It Prescribes broad parameters of banking operations within which the country's banking and financial system functions.

S135. Ans.(e)

Sol. Shahabuddin Ahmed, the former President of Bangladesh passed away at the age of 92 in Dhaka, Bangladesh.

He was the interim head of state as the consensus nominee of all parties amid a mass upsurge in 1990 to topple ex-military dictator HM Ershad.

Shahabuddin Ahmed also served as the President of Bangladesh from 1996 to 2001. He was responsible

S136. Ans.(c)

Sol. Confederation of Indian Industry (CII), New Delhi in partnership with the Department of Science & Technology (DST), GoI hosted the 28th edition of the DST – CII Technology Summit on 23rd and 24th of February 2022.

The Summit was held virtually. Singapore is the Partner Country for this year's Technology Summit.

This Technology summit will provide the right platform to further improve the interaction; will help to explore more opportunities in the businesses and investment areas, and to upgrade the bilateral cooperation.

It is expected that the summit is going to be a turning point by leading to interaction amongst a big and important group of technology experts, government leaders, elite scholars, industry stalwarts and start-ups from both countries.

The focus of the summit would be making Smarter Cities, Space, Industry 4.0 and Advanced Engineering, Healthcare, Precision Medicine, etc.

S137. Ans.(c)

Sol. Ambit Finvest has announced the signing of a co-lending agreement with Union Bank of India (UBI) for financing to Micro, Small and Medium Enterprise (MSME) customers.

Ambit Finvest is the Ambit Group's non-deposit-taking Non-Banking Financial Company (NBFC). This collaboration will enable underwriting for businesses in 11 states now served by Ambit Finvest.

Ambit Finvest and Union Bank of India hope to speed up credit disbursement across multiple geographies with this partnership, according to Sanjay Dhoka, COO and CFO of Ambit Finvest.

S138. Ans.(a)

Sol. Researchers at the Indian Institute of Technology (IIT) Kanpur have created a biodegradable nanoparticle that can be used as an alternative to chemical-based insecticides to protect crops from bacterial and fungal illnesses.

Abhay Karandikar, who is the director of IIT Kanpur said that because farmers suffer a variety of issues, IIT Kanpur has worked tirelessly to improve the farming environment as a whole. Nanoparticles would reduce the risk of crop infection while also increasing agricultural productivity.

S139. Ans.(e)

Sol. The Red Bull racing driver Sergio Pérez (Mexican) has won the Formula 1 (F1) Grand Prix (GP) De Monaco 2022 with 25 points, held at Circuit de Monaco, Monaco, Europe.

The event took place between May 27 to May 29 2022. With this victory, Sergio Pérez becomes the first Mexican to win the Monaco Grand Prix, and the first North American to win it since Gilles Villeneuve in 1981.

The Second position was occupied by the Ferrari racing driver Carlos Sainz Jr. (Spanish) with 18 points. The third position was taken by the Belgian-Dutch racing driver Max Emilian Verstappen who drove for Red Bull Racing.

S140. Ans.(c)

Sol. Param Ananta, is a state-of-the-art supercomputer at IIT Gandhinagar dedicated to the nation under the National Supercomputing Mission (NSM).

It is a joint initiative of the Ministry of Electronics and Information Technology (MeitY) and the Department of Science and Technology (DST), which was commissioned. This indigenous software stack is developed by C-DAC and is a Make in India initiative.

The Param Ananta is based on direct contact liquid cooling technology to obtain a high power usage effectiveness and thereby reduce the operational cost.

The Param Ananta Supercomputing Facility will greatly benefit IIT Gandhinagar's R&D activities in multidisciplinary domains of science and technology, including, but not limited to, artificial intelligence (AI), machine learning (ML), data science; computational fluid dynamics (CFD); bio-engineering for genome sequencing and DNA studies.

S141. Ans.(c)

Sol. NTPC Dadri or National Capital Power Station (NCPS) owned and operated by NTPC is located in the Gautam Budh Nagar district of Uttar Pradesh, about 48km from the Indian capital New Delhi.

S142. Ans.(e)

Sol. Vietnamese dong is currency of Vietnam and Capital is Hanoi.

S143. Ans.(b)

Sol. Ujjain is the largest city in Ujjain district of the Indian state of Madhya Pradesh. The city is on the bank of the river Shipra which flows into the nearby Chambal.

S144. Ans.(c)

Sol. Daph dance is one of the popular folk dances of Haryana. Performed to show joy and happiness regarding a good harvest, this dance is popular in various regions of Haryana. The dance is majorly performed by Ahir Community.

S145. Ans.(a)

Sol. Thae Pongal is a harvest festival dedicated to the Sun God. It is a four-day festival which according to the Tamil calendar is usually celebrated from January 14 to January 17. Thai Pongal is one of the most important festivals celebrated by Tamil people in the Indian state of Tamil Nadu.

S146. Ans.(a)

Sol. Jigme Dorji National Park (JDNP) is the second largest national park in Bhutan with an area of 4316 sq. km. Located in the north western park of the country, the park also shares international border with the Tibetan Autonomous Region of China

S147. Ans.(b)

Sol.

S148. Ans.(d)

Sol. The Hasdeo Thermal Power Station or Korba West Thermal Power Station is an 840 megawatt (MW) coal-fired power station at Korba in Chhattisgarh, India.

S149. Ans.(a)

Sol. Jim Corbett National Park is a forested wildlife sanctuary in northern India's Uttarakhand State.

S150. Ans.(c)

Sol. Gajendra Singh Shekhawat is an Indian politician from Rajasthan who is currently serving as Union Cabinet Minister in Ministry of Jal Shakti. He is a member of parliament from the Bharatiya Janata Party representing Jodhpur in the Lok Sabha.

S151. Ans.(a)

Sol. Pattern of series

$$17 \times 0.5 + 0.5 = 9$$

$$9 \times 1 + 1 = 10$$

$$10 \times 1.5 + 1.5 = 16.5$$

$$16.5 \times 2 + 2 = 35$$

$$35 \times 2.5 + 2.5 = \mathbf{90}$$

S152. Ans.(b)

Sol. Pattern of series

$$20+6=26$$

$$26+12 = 38$$

$$38+18 = 56$$

$$56+24 = 80$$

$$80+30 = \mathbf{110}$$

S153. Ans.(c)

Sol. Pattern of series

$$110+8 = \mathbf{118}$$

$$118-16 = 102$$

$$102+24 = 126$$

$$126-32 = 94$$

$$94+40 = 134$$

S154. Ans.(d)

Sol. Pattern of series

$$7 \times 5 = 35$$

$$35 \times 4 = 140$$

$$140 \times 3 = 420$$

$$420 \times 2 = \mathbf{840}$$

S155. Ans.(c)**Sol.** Pattern of series

$$120 \div 2 - 1 = 59$$

$$59 \div 2 - 1 = 28.5$$

$$28.5 \div 2 - 1 = 13.25$$

$$13.25 \div 2 - 1 = \mathbf{5.625}$$

$$5.625 \div 2 - 1 = 1.8125$$

S156. Ans.(b)**Sol.** Total work = L.C.M.(15,20,30) = 60 units

$$\text{Efficiency of D\&E} = \frac{60}{15} = 4 \text{ unit/day}$$

$$\text{Efficiency of E\&F} = \frac{60}{20} = 3 \text{ unit/day}$$

$$\text{Efficiency of F\&D} = \frac{60}{30} = 2 \text{ unit/day}$$

$$\text{Efficiency of D, E\&F} = \frac{9}{2} = 4.5 \text{ unit/day}$$

$$\text{Efficiency of D} = 4.5 - 3 = 1.5 \text{ unit/day}$$

$$\text{Days taken by D} = \frac{60}{1.5} = 40 \text{ days}$$

S157. Ans.(a)**Sol.** Ratio of Present ages of R and P is 28x: 23xPresent age of S is $7\frac{1}{7}\%$ more than the present age of R

$$\text{Ratio of Present age of S: R is} = 28x \times \frac{15}{14} : 28x$$

$$= 30x : 28x$$

So, ratio of present ages of R, P\&S is = 28x: 23x: 30x

$$\text{Present average age of P and S} = 23x + 30x = 106$$

$$x = 2$$

$$\text{Present age of S} = 30x = 30 \times 2 = 60 \text{ years}$$

S158. Ans.(c)**Sol.** Let the cost price = 100x

$$\text{So, marked price} = 100x \times \frac{160}{100} = 160x$$

Article sold it two consecutive discount 20% and 25%

$$\text{So, selling price is} = 160x \times \frac{80}{100} \times \frac{75}{100} = 96x$$

Difference between selling price and cost price is Rs.220

$$100x - 96x = 220$$

$$4x = 220$$

$$x = 55$$

S159. Ans.(d)

Sol. Let the speed of the train A and B is x m/s, y m/s respectively

So, length of train A = $25x$ m

And, length of train B = $32y$ m

Trains running in opposite direction, their relative speed = $(x + y)$ m/sec

According to ques.

$$\frac{25x + 32y}{(x + y)} = 28$$

$$25x + 32y = 28x + 28y$$

$$3x = 4y$$

$$\text{So, required ratio} = \frac{x}{y} = \frac{4}{3}$$

S160. Ans.(e)

Sol. For mukesh simple interest = $2Z \times \frac{20}{100} \times X = Z$

$$X = \frac{5}{2}$$

For sonu simple interest = $3Z \times \frac{Y}{100} \times X = 2Z$

$$3Z \times \frac{Y}{100} \times \frac{5}{2} = 2Z$$

$$Y = \frac{80}{3}$$

$$\text{Required \%} = \frac{\frac{5}{80}}{\frac{80}{3}} \times 100 = \frac{75}{8} = 9.375\%$$

S161. Ans.(a)

Sol. Required probability = $\frac{{}^8C_5}{{}^{12}C_5} = \frac{7}{99}$

S162. Ans.(d)

Sol. Let total student in a school = 100%

Present student in a school = 62.5%

Absent student in a school = $(100 - 62.5)\% = 37.5\%$

$$37.5\% = 66$$

$$1\% = \frac{66}{37.5}$$

$$\text{Total student in a school} = \frac{66}{37.5} \times 100 = 176$$

$$\text{Number of girls} = 176 \times \frac{3}{8} = 66$$

S163. Ans.(c)

Sol. Let the speed of stream = x km/h

$$\text{Speed of the boat} = x \times \frac{500}{100} = 5x \text{ km/h}$$

ATQ

$$\frac{240}{6x} + \frac{140}{4x} = 15$$

$$\frac{75}{x} = 15$$

$$x = 5$$

Upstream speed = $4x \text{ km/h} = 4 \times 5 = 20 \text{ km/h}$

So, required time = $\frac{70}{20} = 3.5 \text{ hours}$

S164. Ans.(e)

Sol. Let the length of the rectangle field = $l \text{ m}$

length of the rectangle field = $b \text{ m}$

Area of the rectangular field

$$l \times b = 420 \text{ m}^2$$

$$l = \frac{420}{b} \dots\dots\dots(i)$$

Perimeter of a field

$$2(l + b) = 82 \text{ m}$$

$$(l + b) = 41 \text{ m}$$

$$\frac{420}{b} + b = 41 \text{ m}$$

$$b^2 - 41b + 420 = 0$$

$$b^2 - 21b - 20b + 420 = 0$$

$$b(b - 21) - 20(b - 21) = 0$$

$$(b - 21)(b - 20) = 0$$

$$b = 21, 20$$

$b = 20 \text{ m}, l = 21 \text{ m}$ as length is greater than breadth

$$\text{Required \%} = \frac{(21-20)}{20} \times 100 = 5\%$$

S165. Ans.(a)

Sol. Quantity of alcohol in initial mixture = $250 \times \frac{7}{10} = 175 \text{ lit.}$

Quantity of water in initial mixture = $250 \times \frac{3}{10} = 75 \text{ lit.}$

Total quantity of alcohol in final mixture = $175 + 45 \times \frac{4}{9} = 195 \text{ lit.}$

Total quantity of water in final mixture = $75 + 45 \times \frac{5}{9} = 100 \text{ lit}$

So, required difference = $195 - 100 = 95 \text{ lit.}$

S166. Ans.(e)

Sol. The ratio of profit share A, B & C
 $= 5,000 \times 12 : 7,000 \times 12 : 10,000 \times 12$
 $= 5 : 7 : 10$

Let the total profit is $= 100u$

B get profit of total profit for managing the business $= 12u$

Remaining profit divide among their investment $= 100u - 12u = 88u$

$$A \text{ get} = 88u \times \frac{5}{22} = 20u$$

$$B \text{ get} = 88u \times \frac{7}{22} = 28u$$

$$C \text{ get} = 88 \times \frac{10}{22} = 40u$$

$$B \text{ get total profit} = 12u + 28u = 40u$$

According to ques.

$$60u - 40u = 2500$$

$$20u = 2500$$

$$1u = 125$$

$$\text{Profit earned by A} = 20u = 20 \times 125 = 2,500$$

$$= \text{Rs. } 2,500$$

S167. Ans.(c)

Sol. Side of the cube $= 12 \text{ cm}$

$$\text{So, diameter of disk} = 12 \times \frac{7}{6} = 14 \text{ cm}$$

$$\text{Radius of disk} = \frac{14}{2} = 7 \text{ cm}$$

Total surface area of the disk $= 2 \times \pi r^2$ (where r is the radius of the disk)

$$= 2 \times \frac{22}{7} \times 49$$

$$= 308 \text{ cm}^2$$

S168. Ans.(b)

Sol. Students passed in both the subjects $= 100 - 40 - 50 = 10\%$

Students failed in English only $= \text{Total students} - \text{students passed in Hindi}$

$$= 100 - 40 - 10 = 50\%$$

And, students failed in Hindi Only $= \text{Total students} - \text{students passed in English}$

$$= 100 - 50 - 10 = 40\%$$

As, $50\% = 75$

$$\text{So, required no. of students} = \frac{75}{50} \times 40 = 60$$

S169. Ans.(e)

Sol. Let length and speed of first train be 'L' meter and 's' m/s respectively.

And length of the platform be 'P' meter.

ATQ

$$\frac{L+P}{s} = 27 \dots (i)$$

$$\frac{L}{s} = 12 \dots (ii)$$

From (i) and (ii)

$$L = 12s \text{ and } P = 15s \dots (iv)$$

Let speed of second train be 'S' m/s.

$$\text{Now, } \frac{L+\frac{L}{2}}{s-S} = 36$$

$$\frac{L}{s-S} = 24$$

$$12s = 24s - 24S$$

$$S = \frac{s}{2} \dots (v)$$

Now,

$$\text{Required time} = \frac{\frac{L+P}{2}}{S}$$

From (iv) and (v)

$$= \frac{6s+15s}{\frac{1}{2}s} = 42 \text{ sec}$$

S170. Ans.(d)

Sol. Let the initial quantity of milk and water be 7x and 5x lit respectively.

ATQ

$$\left(7x - \frac{7}{12} \times 2.4 + 0.3\right) - \left(5x - \frac{5}{12} \times 2.4 + 0.6\right) = 1.3$$

$$(7x - 1.1) - (5x - 0.4) = 1.3$$

$$2x = 2.0$$

$$x = 1$$

So, initial quantity of mixture = 12x = 12 liter

S171. Ans.(a)

Sol. Let sum be Rs. P.

$$\frac{P \times R \times 15}{100} = 3P$$

$$R = 20\%$$

From statement I:

$$P \left[\left(1 + \frac{25}{100}\right)^2 - 1 \right] = 225$$

$$P = \text{Rs. } 400$$

From statement II:

$$\frac{P \times 15 \times 40}{100} = 4P$$

Can't be determined.

S172. Ans.(d)

Sol. From statement I:

Let quantity of milk and water in mixture be $5x$ and $7x$ respectively.

$$\text{Quantity of milk taken out} = 36 \times \frac{5}{12} = 15 \text{ lit}$$

$$\text{Quantity of water taken out} = 36 - 15 = 21 \text{ lit}$$

$$\text{So, } \frac{5x-15}{7x-21+12} = \frac{5}{13}$$

$$13x - 39 = 7x - 9$$

$$6x = 30$$

$$x = 5$$

$$\text{Quantity of milk} = 25 \text{ lit}$$

From statement II:

Let quantity of milk and water in the mixture be $5a$ and $7a$ respectively.

$$7a - 5a = 10$$

$$a = 5$$

$$\text{So, quantity of milk} = 25 \text{ lit}$$

So, either statement I or statement II alone is sufficient.

S173. Ans.(c)

Sol. From statement I and II

Let cost price of article be $100x$.

Marked price of article = $150x$

$$\text{Selling price of article} = 150x \times \frac{80}{100} \times \frac{90}{100} = 108x$$

$$42x = 63$$

$$x = 1.5$$

$$\text{Req. profit} = 8x = 8 \times 1.5 = \text{Rs. } 12$$

So, both statement I and II together is sufficient.

S174. Ans.(a)

Sol. Statement I. Let total work = L.C.M. (20,10,15) = 60 units

$$\text{Efficiency of X \& Y} = \frac{60}{20} = 3 \text{ unit/day}$$

$$\text{Efficiency of Y \& Z} = \frac{60}{10} = 6 \text{ unit/day}$$

$$\text{Efficiency of Z \& X} = \frac{60}{15} = 4 \text{ unit/day}$$

$$\text{Efficiency of X, Y \& Z} = \frac{13}{2} = 6.5 \text{ unit/day}$$

$$\text{Efficiency of Z} = 6.5 - 3 = 3.5 \text{ unit/day}$$

$$\text{Days taken by Z} = \frac{60}{3.5} = \frac{120}{7} \text{ days}$$

Statement II. Ratio of efficiency of X and Y is 2: 3.

(I)

S175. Ans.(a)

Sol. From statement 1: Let denominator of fraction be p

$$\text{Fraction} = \frac{\left(\frac{p \times 60}{100}\right)}{p}$$

$$\text{Fraction} = \frac{6}{10} = \frac{3}{5}$$

$$\text{Reqd value} = \frac{40}{100} \times \frac{6}{10} = \frac{24}{100} = \frac{6}{25}$$

From statement 2:

$$\text{Fraction} = \frac{p-4}{p}$$

Required value can't be determined

Hence, statement **(1)** alone is sufficient to answer the question but statement **(2)** alone is not sufficient to answer the question.

Solutions (176-180):

Events	Total students	Boys	Girls
Music	80	50	30
Dance	120	80	40
Painting	100	40	60
Sports	90	50	40
Quiz	150	75	75

S176. Ans.(a)

Sol. Required sum = 80 + 40 = 120

S177. Ans.(d)

$$\begin{aligned} \text{Sol. Required average} &= \frac{30+40+60+40+75}{5} \\ &= \frac{245}{5} = 49 \end{aligned}$$

S178. Ans.(b)

$$\begin{aligned} \text{Sol. Required \%} &= \frac{75-60}{75} \times 100 \\ &= \frac{15}{75} \times 100 = 20\% \end{aligned}$$

S179. Ans.(e)

$$\begin{aligned} \text{Sol. Required ratio} &= \frac{40+50}{40+75} \\ &= \frac{90}{115} = \frac{18}{23} \end{aligned}$$

S180. Ans.(e)

Sol. Required difference = (50 + 80 + 40 + 50 + 75) – (30 + 40 + 60 + 40 + 75)

S181. Ans.(c)

Sol. $65\% \text{ of } 280 + 17^2 - \frac{4}{7} \text{ of } 714 = ? \div \frac{2}{3}$

$$\frac{65}{100} \times 280 + 289 - 4 \times 102 = ? \times \frac{3}{2}$$

$$182 + 289 - 408 = ? \times \frac{3}{2}$$

$$? = 63 \times \frac{2}{3}$$

$$? = 42$$

S182. Ans.(b)

Sol. $450 + 800 - 16 = ?$

$$? = 1234$$

S183. Ans.(d)

Sol. $52\% \text{ of } 350 + \frac{7}{8} \text{ of } ? = \sqrt[3]{1728} + 18^2$

$$182 + \frac{7}{8} \times ? = 12 + 324$$

$$? = 154 \times \frac{8}{7}$$

$$? = 176$$

S184. Ans.(e)

Sol. $7\frac{3}{4} + \frac{17}{8} - 11\frac{3}{8} + 3\frac{4}{9} \times 2\frac{1}{4} = ? - 15\frac{5}{8}$

$$\frac{31}{4} + \frac{17}{8} - \frac{91}{8} + \frac{31}{9} \times \frac{9}{4} = ? - \frac{125}{8}$$

$$-\frac{3}{2} + \frac{31}{4} = ? - \frac{125}{8}$$

$$? = \frac{25}{4} + \frac{125}{8}$$

$$? = \frac{175}{8}$$

$$? = \frac{175}{8} = 21\frac{7}{8}$$

S185. Ans.(d)

Sol. $96\% \text{ of } (75\% \text{ of } 60 \div 12 \div 4) + 1.25\% \text{ of } 8 = ? \div 6$

$$\frac{96}{100} \times \left(\frac{75}{100} \times 60 \times \frac{1}{12} \times \frac{1}{4} \right) + \frac{1}{10} = ? \div 6$$

$$\frac{96}{100} \times \frac{45}{48} + \frac{1}{10} = ? \div 6$$

$$\frac{90}{100} + \frac{1}{10} = ? \div 6$$

$$? = 6$$

S186. Ans.(b)

Sol. $\sqrt{841} + \sqrt{1296} - \sqrt{1024} = \sqrt{?}$

$$29 + 36 - 32 = \sqrt{?}$$

$$\sqrt{?} = 33$$

$$? = (33)^2$$

S187. Ans.(d)

$$\begin{aligned} \text{Sol. } 14400 \div 36 + 15600 \div 12 + 450 &= 1800 + ? \\ 400 + 1300 + 450 &= 1800 + ? \\ 2150 &= 1800 + ? \\ ? &= 2150 - 1800 \\ &= 350 \end{aligned}$$

S188. Ans.(a)

$$\begin{aligned} \text{Sol. } 7450 + 5880 - 6890 &= 9000 - ? \\ ? &= 9000 - 6440 \\ &= 2560 \end{aligned}$$

S189. Ans.(c)

$$\begin{aligned} \text{Sol. } 32 \times 25 + 44 \times 18 + 348 \div 6 &= ? \\ ? &= 800 + 792 + 58 \\ &= 1650 \end{aligned}$$

S190. Ans.(c)

$$\begin{aligned} \text{Sol. } \sqrt{1225} \times 28 + 203 \times 7 &= (?)^2 \\ (?)^2 &= 35 \times 28 + 203 \times 7 \\ &= 980 + 1421 \\ &= 2401 \\ ? &= \sqrt{2401} \\ &= 49 \end{aligned}$$

S191. Ans.(b)

$$\begin{aligned} \text{Sol. Total digital watches sold by B and C together} &= 140 \times \frac{5}{14} + 180 \times \frac{5}{9} \\ &= 50 + 100 = 150 \\ \text{Total analog watches sold by A and D together} &= 135 \times \frac{5}{9} + 160 \times \frac{13}{32} \\ &= 75 + 65 = 140 \\ \text{So, required ratio} &= 150 : 140 = 15 : 14 \end{aligned}$$

S192. Ans.(d)

$$\begin{aligned} \text{Sol. Average no. of Analog watches sold by B, C and E} &= \frac{1}{3} \times \left(140 \times \frac{9}{14} + 180 \times \frac{4}{9} + 150 \times \frac{7}{15} \right) \\ &= \frac{1}{3} \times (90 + 80 + 70) \\ &= 80 \\ \text{Average no. of Digital watches sold by A, C and D} &= \frac{1}{3} \times \left(135 \times \frac{4}{9} + 180 \times \frac{5}{9} + 160 \times \frac{19}{32} \right) \\ &= \frac{1}{3} \times (60 + 100 + 95) \\ &= 85 \end{aligned}$$

S193. Ans.(a)

Sol. Total analog watches of B = $140 \times \frac{9}{14} \times \frac{100}{30} = 300$

Total analog watches of A = $135 \times \frac{5}{9} \times \frac{100}{25} = 300$

So, required percentage = $\frac{300}{300} \times 100 = 100\%$

S194. Ans.(d)

Sol. Fossil Analog watches sold by D = $160 \times \frac{13}{32} \times \frac{5}{13} = 25$

Fossil digital watches sold by D = $160 \times \frac{19}{32} \times \frac{6}{19} = 30$

So, required no. of Titan watches = $160 - (25 + 30)$
= 105

S195. Ans.(c)

Sol. Analog watches sold by A on Tuesday = $\frac{6}{5} \times 135 \times \frac{5}{9} = 90$

Analog watches sold by C on Tuesday = $\frac{5}{4} \times 180 \times \frac{4}{9} = 100$

So, required percentage = $\frac{100-90}{100} \times 100 = 10\%$ (less)

S196. Ans.(b)

Sol. $(360.91)^{\frac{1}{2}} - 10.99 \times 3.03 = \frac{419.82}{?} - 21.91 \times 7.02$

$361^{\frac{1}{2}} - 11 \times 3 = \frac{420}{?} - 22 \times 7$

$19 - 33 = \frac{420}{?} - 154$

$\frac{420}{?} = 140$

? = 3

S197. Ans.(a)

Sol. $349.94\% \text{ of } 43.98 + 140.04\% \text{ of } 204.98 = (?)^2$

$350\% \text{ of } 44 + 140\% \text{ of } 205 = ?^2$

$\frac{350}{100} \times 44 + \frac{140}{100} \times 205 = ?^2$

$154 + 287 = ?^2$

? = 21

S198. Ans.(c)

Sol. $124.97\% \text{ of } 464.04 + ?^3 \times 14.99 = (37.987)^2 + 96.08$

$125\% \text{ of } 464 + ?^3 \times 15 = 38^2 + 96$

$\frac{125}{100} \times 464 + ?^3 \times 15 = 1444 + 96$

$580 + ?^3 \times 15 = 1540$

$?^3 = \frac{960}{15} = 64$

? = 4

S199. Ans.(d)

$$\text{Sol. } (12.01)^2 + \frac{?}{10.99} = (16.02)^2 + \sqrt{1935.91}$$

$$12^2 + \frac{?}{11} = 16^2 + \sqrt{1936}$$

$$144 + \frac{?}{11} = 256 + 44$$

$$\frac{?}{11} = 156$$

$$? = 1716$$

S200. Ans.(a)

$$\text{Sol. } (20.93)^2 + (19.03)^2 + (5.98)^3 = ? \% \text{ of } 499$$

$$21^2 + 19^2 + 6^3 = ? \% \text{ of } 500$$

$$441 + 361 + 216 = 5 \times ?$$

$$? = \frac{1018}{5} = 204.40 \approx 204$$

