

RBI Grade B Phase 1 Previous Year Question Paper (2022)

Directions (1-8): Read the following passage and answer the questions that follow. Some words in the passage have been highlighted to aid in answering the question.

The off-cycle meeting of the Monetary Policy Committee (MPC) on May 2 and May 4 and its decision to raise the repo rate to 4.4% sends a clear signal that the Reserve Bank of India (RBI) is committed to its mandate of keeping the consumer price index (CPI) inflation rate at 4% with an upper and lower band of plus or minus 2 percentage points. While stating that the policy remains accommodative, it has also expressed its intent to withdraw the accommodative stance. This policy response to global downward risks — including energy price volatility, supply chain disruptions due to geopolitical risks and macroeconomic uncertainties — is welcome.

The RBI has re-calibrated the monetary policy corridor. As per the recent MPC off-cycle meeting, the standing deposit facility (SDF) rate stands adjusted to 4.15% and the marginal standing facility (MSF) rate and the Bank Rate to 4.65%. Raising of the cash reserve ratio (CRR) to 4.5% is expected to absorb liquidity of ₹87,000 crore. Till the eruption of conflict in Europe, what was expected on the monetary policy front was a gradual move away from an accommodative stance, spread over a year or so. But the continuing war has necessitated urgent steps. The RBI has thus responded to the charge that it is behind the curve on inflation.

High inflation and low growth stare at the global economy, adding to uncertainty. The West is fearing stagflation. The International Monetary Fund (IMF) has revised its global growth forecast for 2022 downwards by 0.8 percentage point to 3.6%, in a short period of three months. The fact that the wholesale price index (WPI) inflation rate was continuing at two-digit numbers for a year and the CPI has remained above the upper band of 6% for three consecutive months has been a cause for concern. It is generally agreed that the WPI has a lagged effect on the CPI. So, the RBI will have to tighten the stance further if it is to bring down the CPI inflation rate within the band in the next few months. Hence, more tightening is on the way. High levels of inflation will have a deleterious effect on investment and growth in India. Similarly, the high rate of inflation with very high food and energy components erodes the purchasing power of the common man, and will have serious welfare implications.

Q1. What can be inferred about the economy of the world from the passage?

- (a) The continuing war in Europe has caused major concerns with respect to foreign investments
- (b) High inflation plagues the world due to the many factors of uncertainty affecting the economy.
- (c) Recession and unemployment rates are growing due to a fall in economic stability.
- (d) both (b) and (c)
- (e) All of these

Q2. Which of the following was/were the objectives of the off-cycle meeting by RBI?

- (a) controlling inflation
- (b) countering global uncertainty
- (c) addressing charges of inaction
- (d) both (a) and (b)
- (e) All of these

Q3. Which of the following come(s) under the changes introduced by the RBI's new policies?

- (a) RBI's new policies make only marginal changes even in view of the war as the policies are already sufficient to counter that risk.
- (b) The RBI has chosen a defensive stance against geopolitical factors to counter inflation by adopting these policies.
- (c) RBI, with its new policies, has shown that it intends to keep its economic stance rigid till some time despite their previous commitments of change.
- (d) RBI is following in the footsteps of other economic authorities to counter disturbances in economic structure.
- (e) RBI is making changes as it goes along in accordance with factors of ever-present uncertainty which has been helpful in keeping inflation in control.

Q4. Which of the following if correct, most invalidates the arguments in the third passage?

- (a) WPI inflation rate is projected to come down to single digits in the coming months.
- (b) Changes in trends of WPI rate do not depend on changes in trends of CPI rate.
- (c) The IMF does not need to revise its global growth forecast after every trend change.
- (d) The changes made by RBI are enough to counteract current trend of inflation.
- (e) The economy of Western countries is capable of rapidly recovering from inflation.

Q5. Which of the following is true according to the data in the passage?

- (a) WPI and CPI have been staggered for some time now.
- (b) High levels of inflation are projected in the near future in India.
- (c) Global forecast has decreased 0.8% from its initial forecast.
- (d) RBI has raised the SDF, MSF, and the CRR rates in the recent meeting.
- (e) RBI intends to adopt an accommodative stance when it's feasible.

Q6. What is the primary focus of the author in the passage?

- (a) Pointing out the oversight by RBI in delaying the newly drafted policies
- (b) Bringing to light the effects of inflation in global economy
- (c) Suggesting action by pointing out the similarity of inflation trends worldwide
- (d) Noting the effects of inflation and emphasising the importance of proper action
- (e) Connecting the variation of rate of inflation with change in policies

Q7. From among the following given options, choose the word most similar in meaning to the highlighted word "gradual", as used in the context of the passage.

- (a) intermediate
- (b) measured
- (c) restrained
- (d) uniform
- (e) calculated

Q8. Which of the following words is most opposite in meaning to the highlighted word "deleterious"?

- (a) inimical
- (b) torpid
- (c) mortifying
- (d) sinistral
- (e) abject

Directions (9-10): In the following questions six sentences are given. Further, these sentences may or may not form a contextually meaningful sequence, and one of these sentences is redundant to the context, which has to be eliminated. Rearrange the other sentences to make a contextually meaningful paragraph. The sentence (B), which has already been highlighted, would be the second sentence after rearrangement. Answer the follow-up questions.

(A) Thirteen plumes of the gas were observed at the Raspadskya mine, the largest coal mine in Russia, in late January during a single pass of a satellite operated by GHGSat, a commercial emissions-monitoring firm.

(B) The finding is another indication of the scope of the problem of curbing emissions of methane, a potent planet-warming gas.

(C) By contrast, the highest rate measured at Aliso Canyon, a natural gas storage facility in Southern California that had a major leak for nearly four months in 2015 and 2016, was about 60 metric tons an hour.

(D) The total flow rate from all the plumes was estimated at about 87 metric tons (about 95 U.S. tons) an hour.

(E) A remote-sensing satellite has detected one of the largest releases of methane from a single industrial site, an underground coal mine in south-central Russia.

(F) Mr. Wight said it was not known how long the releases continued at this rate at the mine. But several previous satellite passes had detected emissions in the tens of tons an hour.

Q9. Which is the fourth sentence after rearrangement?

- (a) A
- (b) D
- (c) E
- (d) C
- (e) B

Q10. What is the correct rearrangement of the given sentences?

- (a) ABEDC
- (b) CBADF
- (c) EBADC
- (d) ABDEF
- (e) ABDCF

Direction (11-13): Out of the given statements, only one is grammatically correct. Choose that statement as the answer. If all the sentences are incorrect, then choose option (e) as the answer.

Q11. (a) The Union Cabinet recently approved the auction of airwaves capable at offering fifth generation telecom services.

(b) Indian health policymakers needs to be very strategic and pragmatic in the use of a third COVID-19 vaccine shot.

(c) The frequent leak of examination papers has been a major problem with regard to recruitment of government jobs.

- (d) The government will ensure that the visitors to the new market, as well as their traders, get a unique and quality experience.
(e) None of these

Q12. (a) Despite India's open willingness to take part in the development of Sri Lanka after the civil war, the scale of its involvement has been modest.
(b) The recent geopolitical events transpiring around the world in practically all regions has made the global security climate more unstable.
(c) The commanders have proved inept in devising plans and taken appropriate decisions in battlefield conditions against a determined enemy.
(d) The central bank is ramping up its drive to tighten credit and slow growth while inflation having reached a four-decade high of 8.6%.
(e) None of these

Q13. (a) Banksia canei, commonly known as the mountain banksia, is a species of shrub that is endemic to southeastern Australia.
(b) Block printing first comes to Europe as a method for printing on cloth, where it was common by the year 1300.
(c) After the 1918-20 flu pandemic, the influenza virus continued to be on circulation and present even today.
(d) A strong political opposition is usually needed to help keep the ruling dispensation on check.
(e) None of these

Directions (14-18): In the following questions, a statement is given with a blank followed by five options. Choose the pair of words that fill in the given blank making the sentence grammatically and contextually correct.

Q14. The king released the lion from its cage into the arena where the champion stood, and by the end, the champion ultimately turned out to be _____.
(a) philanthropic/miser
(b) noble/wicked
(c) brave/cowardly
(d) clumsy/careful
(e) concerned/relaxed

Q15. Observing all the reports, the supervisor noted that the productivity of the warehouse was _____ for the company's needs.
(a) satisfactory/unsatisfactory
(b) sufficient/insufficient
(c) viable/inviable
(d) complete/incomplete
(e) hindered/unhindered

Q16. As soon as he entered the room, he was unable to see anything due to the stark _____ inside.
(a) dampness/dryness
(b) loudness/silence
(c) darkness/brightness
(d) order/chaos
(e) fragrance/odour

Q17. Noticing how the dimensions of the bridge were different than that of others in the city, my guest asked me why the bridge was so _____.
(a) bleak/glowing
(b) opulent/faded
(c) modern/pedestrian
(d) wide/narrow
(e) sturdy/weak

Directions (18-20): In each of the following questions, two sentences are given. Five connectors are provided to connect the sentences. Find the correct option to connect these two sentences without changing the intended meaning.

Q18. (i) BIMSTEC has, finally, taken measures to strengthen the Secretariat,
(ii) some members are yet to extend adequate personnel support to it.
(a) and
(b) however
(c) as if
(d) although
(e) even as

Q19. (i) Earlier in March, Musk said he would put the deal "temporarily on hold",
(ii) he waits for the social media company to provide more of its data.
(a) while
(b) with regard to
(c) therefore
(d) however
(e) whenceforth

Q20. (i) There are nearly 500 plus heritage buildings dotting the skyline of Mysuru,
(ii) only about 150 are notified while the rest are not declared as heritage buildings.
(a) by whom
(b) of which
(c) from that
(d) and then
(e) seeing as

Directions (21-27): Read the following passage and answer the questions that follow. Some words in the passage have been highlighted to aid in answering the question.

Vegetarian diets lower the burden of chronic diseases. Lacto-vegetarians are often impressively healthier – sometimes a lot healthier – than meat eaters. It is uncertain whether this advantage extends to vegans. Plant-based diets containing whole grains, nuts, fruits and vegetables are low in saturated fats and cholesterol and higher in fibre, vitamin C, folate, potassium, magnesium, and phytochemicals implicated in the protection against many diseases. Such diets also lower the risk of hypertension and type 2 diabetes mellitus. Diets low in fibre and in which chicken and meat are the principal ingredients can dramatically increase the incidence of colorectal cancers. Plant foods are also high in phytochemicals called polyphenols and contain higher proportions of polyunsaturated fatty acids. These substances have recently been shown to have **beneficial** effects on maintaining the integrity of brain function during the ageing process. Vegetarian diets may help in weight loss and long-term weight control and are associated with longevity. Diets containing animal products are generally higher in fat and calorific value while plant foods are low in energy and are nutrient dense.

However, the more limiting a diet is, the more difficult it is to get all the nutrients required by your body. Can vegetarian diets, therefore, be balanced, complete and healthy? The answer is yes. According to the American Dietetic Association “appropriately planned vegetarian diets are healthful, nutritionally **adequate** and may provide health benefits in the prevention and treatment of certain diseases. Well-planned vegetarian diets are suitable for individuals during all stages of the life-cycle and for athletes.” Only the most restrictive vegan diets can perhaps cause nutritional concerns and compromise on calcium, iron, zinc, vitamin B12 and sometimes even protein.

Vegetarian meals need not be boring or limiting. Whip up a variety of recipes from plant foods and feast on them. If you can't be a vegetarian, a healthy option would be to limit intake of animal foods and increase intake of fruits and vegetables. Remember what Einstein said: “Nothing will _____ human health and increase chances for survival of life on Earth as much as the evolution to a vegetarian diet.”

Q21. Which of the following is not a benefit of adopting a vegetarian diet?

- (a) helps lower intake of calories
- (b) helps with weight loss
- (c) helps prevent hypertension
- (d) helps in prevention of cancer
- (e) none of these

Q22. Which of the following qualifies as a difference between a vegetarian and a non-vegetarian diet?

- (a) Non-vegetarian diets do not properly nourish the body as compared to a vegetarian diet.
- (b) Vegetarian diets provide with low calories as compared to non-vegetarian diets.
- (c) Vegetarian diets can lead to vitamin B12 deficiency whereas non-vegetarian diets do not.
- (d) both (b) and (c)
- (e) All of the above

Q23. How is proper planning important for a vegetarian lifestyle?

- (a) Promotes health and nutrition
- (b) Prevents diseases
- (c) Makes a vegetarian lifestyle sustainable throughout all life cycles
- (d) Prevents several deficiencies introduced by not having a balanced diet
- (e) All of these

Q24. Which of the following ways can help in making vegetarian diets more interesting to adopt according to the passage?

- (a) Trying different recipes
- (b) Limit intake of non-vegetarian foods in your diet
- (c) Increase intake of fruits and vegetables in your diet
- (d) both (b) and (c)
- (e) all of these

Q25. Which of the following words can most appropriately be substituted in the blank in the passage?

- (a) accelerate
- (b) subsist
- (c) catalyse
- (d) benefit
- (e) affect

Q26. Which of the following words is the most similar in its definition as the highlighted word **adequate, the definition corresponding to its usage in the passage?**

- (a) ample
- (b) restrictive
- (c) cooperative
- (d) exuberant
- (e) vivacious

Q27. Choose the word from the following options which most aptly acts as an antonym to the highlighted word **beneficial as it is used in the context of the passage.**

- (a) fragile
- (b) jittery
- (c) grotesque
- (d) detrimental
- (e) quaint

Directions (28-30): An idiom is given in each of the questions below, following which are three sentences or situations. Mark the sentences which accurately represent the idiom as the answer.

Q28. Get a second wind

- (i) Even after dissatisfactory reports on his work, his manager decided to give him another chance.
(ii) After reaching a halt in his work, he found himself able to work again after taking a break.
(iii) He disinvested from the stocks after he saw another stock's prices going up at an exciting rate.
(a) Only (ii)
(b) Both (ii) and (iii)
(c) Both (i) and (iii)
(d) All of these
(e) None of these

Q29. Like two peas in a pod

- (i) Tim left the party immediately after John did, following in his footsteps.
(ii) As soon as the waves subsided, they both realised they were lost and stranded in the open sea.
(iii) The two employees joined the firm at the same time can always be found hanging out together.
(a) Both (i) and (iii)
(b) Only (iii)
(c) Only (ii)
(d) All of these
(e) None of these

Q30. Once bitten, twice shy

- (i) He's very cautious while crossing the road after just having recovered from a road accident injury.
(ii) After failing the test, he decided to study diligently, but very soon went back to his old habits.
(iii) The firm has refrained from actively investing in stocks ever since suffering losses in the recent financial crisis.
(a) Both (i) and (ii)
(b) Both (i) and (iii)
(c) Only (iii)
(d) All of these
(e) None of these

Direction (31-35): Study the following information carefully and answer the questions given below:

Seven classes of different subjects viz. Physics, Hindi, Math, English, Social study, Chemistry and Biology scheduled in school A but not necessarily in the same order. Each of the subject scheduled either for 30 minutes or 60 minutes.

Note: If Subject A scheduled from 9:00 am to 10:00 am than its must be scheduled on 9:00/9:30 or 10:00 am. Neither scheduled at 9:05 nor scheduled at 9:55. There is 30 minutes break given between two classes.

Hindi class is scheduled on 12:00 noon. No class scheduled between Hindi and Maths. English class scheduled at 2:00pm. There is 1:30 hours gap between English and Biology class which is scheduled after English class. Total time for all subjects is 5 hours. Physics class is scheduled 60 minutes before Maths class. No class is scheduled at 6pm and after 6pm. Chemistry class takes half time than English class and scheduled just after the English class. No class is scheduled at 10:00 am and 5:00 pm. Social study class is scheduled before the class which is scheduled at 3:30 pm. English class starts before 2:30pm.

Q31. Which of the following time for Chemistry class is scheduled?

- (a) 3:00-3:30
(b) 4:00-4:30
(c) 3:30-4:00
(d) 4:30-5:30
(e) None of these

Q32. Which of the following subject is scheduled at last?

- (a) Biology
(b) Chemistry
(c) Hindi
(d) Either Biology or Chemistry
(e) None of these

Q33. How many classes scheduled between Chemistry and Maths?

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

Q34. ____ class is scheduled 150 minutes after Maths class?

- (a) English
- (b) Hindi
- (c) Chemistry
- (d) Social study
- (e) None of these

Q35. The number of classes scheduled between Physics and Chemistry is same as the number of classes scheduled before ____ class.

- (a) Social study
- (b) English
- (c) Maths
- (d) Biology
- (e) None of these

Direction (36-40): A word arrangement machine when given an input line of words rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input: mgtuh kaops abewm bwxef mctqe aokpw

Step I: oivuj maoru adeyo dyzeh oevse aomry

Step II: adeyo aomry dyzeh maoru oevse oivuj

Step III: adeoy amory dehyz amoru eeosv ijouv

Step IV: 26 26 30 22 27 31

Step V: 3 4 4 8 8 9

Step V is the final step of given input.

Answer the following questions based on the following input: -

Input: helof kpest fumap hseub lmodu karlx

Q36. Which among the following word is third from the right end in step III?

- (a) ahoru
- (b) amntz
- (c) dejuu
- (d) emruv
- (e) fnoou

Q37. How many letters are there between third letter of the second word from the left end in step II and second letter of the fourth word from the right end in step III according to the English alphabetical series?

- (a) Three
- (b) Six
- (c) Five
- (d) Seven
- (e) More than seven

Q38. What is the sum of the even numbers appeared in step IV?

- (a) 48
- (b) 44
- (c) 42
- (d) 46
- (e) 50

Q39. What is the difference between the numbers which are second from the right end in step IV and third from the left end in step V?

- (a) 23
- (b) 20
- (c) 31
- (d) 39
- (e) 44

Q40. Which among the following word is second to the left of third word from the right end in step II?

- (a) huoar
- (b) matnz
- (c) noofu
- (d) jenoh
- (e) jueud

Directions (41-42): The Delhi government approved a new excise policy, lowering the minimum age for consumption of alcohol to 21 years. Earlier, the legal age of drinking in New Delhi was 25.

With the move, the national capital joins the majority of Indian states in having 21 as the legal drinking age. While in some states, the age limit is as low as 18, a few have it at the upper limit of 25. In some states, the consumption of alcohol is forbidden.

Q41. What could be the fallout of the new excise policy approved by Delhi government?

- (a) More revenue will be generated for Delhi Government as compare to earlier.
- (b) Opposition of Delhi will defy the move by state Government.
- (c) New liquor shop will be inaugurated in National Capital.
- (d) Other state will follow the move by Delhi government.
- (e) Liquor will be advertised by Delhi Government through banner in public places.

Q42. Which of the following can be postulated from the above statement?

- (I) Central government is not in the favour of move by Delhi Government.
- (II) Delhi government wants to increase their revenue through new excise policy.

(III) Annual revenue of states who has forbidden the liquor is less in compare to Delhi.

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

Direction (43-47): Study the following information carefully and answer the questions given below.

Nine persons live in three floored building marked 1 to 3 from bottom to top respectively. There are three flats on each floor viz.- flat 1, flat 2, and flat 3 from west to east respectively. Only one person lives in each flat. Each person goes to different countries i.e. Iran, USA, Russia, Korea, Oman, Malta, Japan, UK and UAE but not necessarily in the same order.

A lives on an odd numbered floor to the immediate west of the one who goes to Korea. F lives two floors below the one who goes to Korea. F lives in an even numbered flat. B lives to the south east flat of the one who goes to USA. B and the one who goes to USA live in odd numbered flat. B lives on an odd numbered floor. C doesn't go to Korea. C lives to the north east flat of the one who goes to USA. D lives below A in the same flat with A. The one who goes to UAE lives on the same floor with D but in different flat as F's flat. The one who goes to Japan lives above B's flat. E lives to the immediate south west of the one who goes to Japan. G lives to the east of H in the same floor with E. The one who goes to Oman lives to the west of G. One floor gap is there between I and the one who goes to Malta. The one who goes to Malta lives to the south east of the one who goes to Iran. D doesn't go to UK.

Q43. Who among the following goes to Korea?

- (a) The one who lives on floor 2 in flat 1
- (b) The one who lives to the north of E
- (c) The one who lives on the same floor with F
- (d) B
- (e) D

Q44. Four of the following five are alike in a certain way and thus form a group. Who among the following does not belong to the group?

- (a) A
- (b) I
- (c) B
- (d) D
- (e) H

Q45. Which among the following statement(s) is/are not true?

- (a) E lives on an even numbered floor
- (b) C goes to Japan
- (c) The one who goes to UAE live in the same floor with C
- (d) A and F live in different flats
- (e) All are true

Q46. In which among the following floor and flat does G live?

- (a) Floor 2, flat 3
- (b) Floor 2, flat 2
- (c) Floor 3, flat 3
- (d) Floor 1, flat 2
- (e) None of these

Q47. Which among the following pair of persons live to the south west of G?

- (a) A, I
- (b) The one who goes to Japan, D
- (c) F, C
- (d) The one who goes to Russia, F
- (e) None of these

Direction (48-51): Study the following information carefully and answer the questions given below.

In a family of three generation there are seven members and three married couples. Each person has different age. Only married couples have child. The one who is sister-in-law of W is 20 years old. K is uncle of P who is three years younger than S. W is the only son-in-law of M and has no siblings. T is sister-in-law of K who is 30 years old. K is unmarried and sibling of M. X is grandchild of M and 15 years younger than her aunt. Age of S is not an even number.

Q48. How X is related to W?

- (a) Niece
- (b) Daughter
- (c) Sister
- (d) Aunt
- (e) None of these

Q49. What is the sum of the ages of X mother's and K?

- (a) 55 years
- (b) 33 years
- (c) 45 years
- (d) 53 years
- (e) 50 years

Q50. Who among the following is the child of T?

- (a) P
- (b) X
- (c) S
- (d) Both P and X
- (e) Both P and S

Q51. What is the ratio of the ages of P's uncle and S's daughter?

- (a) 5:6
- (b) 6:5
- (c) 6:1
- (d) 3:2
- (e) 5:2

Directions (52-54): Each of the following questions below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the statements and give answer.

Q52. Seven persons i.e. P, Q, R, S, T, U and V attend the business meeting on different consecutive days starts from Tuesday but not necessarily in the same order. Find how many persons attend the meeting between U and T?

Statement I: Three persons attend the meeting between P and T. U attends the meeting one of the days before T but not the first one to attend the meeting.

Statement II: Two persons attend the meeting between T and S. The number of persons attends the meeting after T is two less than the number of persons attends the meeting before P.

Statement III: More than two persons attend the meeting between U and V. V attends the meeting after S.

- (a) If the data in statement I is sufficient
- (b) If the data in statement II is sufficient
- (c) If the data in statement I and statement II are sufficient to answer the question.
- (d) If the data in all the statements I, II and III together are necessary to answer the question.
- (e) If the data in statement III is sufficient

Q53. Eight persons- A, B, C, D, E, F, G and H sit around a square table such that four of them sit at the corner of the table and the remaining four sit at the middle of the side of the table but not necessarily in the same order. All of them face towards the centre. Find who among the following sits third to the right of H?

Statement I: E is an immediate neighbour of G who sits second to the left of H. A sits to the immediate left of E.

Statement II: The number of persons sits between H and C when counted to the left of H is same as the number of persons sits between F and B when counted to the right of F.

Statement III: F and D both didn't sit at the middle of the side. F sits second to the left of D. F doesn't sit adjacent to G.

- (a) If the data in statement I is sufficient
- (b) If the data in statement II is sufficient
- (c) If the data in statement I and statement III together are sufficient to answer the question.
- (d) If the data in all the statements I, II and III together are necessary to answer the question.
- (e) If the data in statement I and statement III together are sufficient to answer the question.

Q54. Seven persons i.e., P, Q, R, S, T, U and V have different weight but not necessarily in the same order. Find the third heaviest person among all?

Statement I: R is heavier than at least two persons. S is heavier than R but lighter than U.

Statement II: Three persons have weight between P and U. Q is just lighter than U.

Statement III: Neither T nor V is the heaviest persons. R is not heavier than U.

- (a) If the data in statement I is sufficient
- (b) If the data in statement II is sufficient
- (c) If the data in statement I and statement II are sufficient to answer the question.
- (d) If the data in all the statements I, II and III together are necessary to answer the question.
- (e) If the data in statement III is sufficient

Q55. Healthy diet, Regular exercise and Meditation are three key points to maintain your immunity level-Statement given by Health Ministry after cases of corona has been increased rapidly. Uses of mask, sanitizer has been encouraged. Washing hands with soaps and social distancing has been advised.

Which of the following diminish the advisory by Health Ministry?

- (a) Eating junk and street foods has been increased mainly in case of younger generation.
- (b) All the guests are wearing mask and following all norms in royal wedding of Minister's son.
- (c) Trade unions has decided to reopen the market with some guidelines.
- (d) Yoga class has been introduced in online format for all the Government and private schools.
- (e) Black marketing of Mask has been increased all over the country.

Q56. Statement: The Supreme Court said the government's new rules to regulate OTT (over-the-top) platforms lacked teeth to punish violators or to screen offensive content. There is no provision for punishment or fine. What is the mechanism to control and regulate these platforms?" Justice Ashok Bhushan, heading a Bench, asked Solicitor General Tushar Mehta. Mr. Mehta agreed and said, "We can come out with a draft and place it before the court," he stated. Which of the following can be assumed from the above statement?

- (I) Youth generations are diverting to wrong direction after watching web series released on OTT containing abusive content.
 (II) Producer and Director of a recently launched web series are sitting on a strike after Government puts a ban on its further telecast.
 (III) Government should regulate the OTT and it must be screened by a panel member before release.
- (a) Only I and III
 (b) Only III
 (c) Only I and II
 (d) Only II
 (e) Only I

Directions (57-60): In each question below some statements are given followed by some 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 conclusion definitely logically does not follow from the given statements, disregarding commonly known facts. Give answer –

Q57. Statements: All Dunzo are Zepto. All Zepto are Zomato. Some Zomato is not Otipy. No Otipy is a Drink prime.

Conclusions:

- (a) Some Drink prime are not Otipy.
 (b) All Zomato being Zepto is a possibility.
 (c) Some Zepto are Dunzo.
 (d) Some Zomato is Dunzo.
 (e) No Dunzo is Zomato.

Q58. Statements: Some Laptop are Grey. All Grey are User. Some User are Wi-fi. All User are Internet.

Conclusions:

- (a) Some User are Internet.
 (b) Some User are Laptop.
 (c) Some Wi-fi are Internet.
 (d) Some Grey are not Internet.
 (e) Some Laptop are Internet.

Q59. Statements: Only Paytm is G-pay. Only a few Paytm is UPI. Only a few Phone pe are UPI. All Phone pe are Bharat pay.

Conclusions:

- (a) No G-pay is UPI
 (b) All Bharat pay being UPI is a possibility
 (c) Some Paytm can be Phone pe
 (d) All UPI being Bharat pe is a possibility
 (e) None follows

Q60. Statements: Only a few Wicket is Ball. Only a few Ground is Ball. All Ground are Baller. No Wicket is Baller.

Conclusions:

- (a) Some Wicket is not Ball
 (b) Some Ball is Baller
 (c) Some Ground is not Ball
 (d) All Ball being Baller is a possibility
 (e) Some Ball are not Baller

Direction (61-65): Study the following information carefully and answer the questions given below.

Eight persons -A, B, C, D, E, F, G and H were born in different years i.e. 1991, 1995, 2002, 1998, 1985, 2018, 2015 and 2010 but not necessarily in the same order. Calculate the age of each person taking the base year 2021.

B's age is a prime number. There is four years gap between B and H. Two persons were born between B and E who was born in odd numbered year. The number of persons born before E is same as the number of persons born after F. G's age is a multiple of 3 but less than B. The difference between the age of A and D is neither even nor prime number. C's age is more than E's age but not less than F's age. E is older than F.

Q61. What is the sum of the ages of F and the person who was born in 2002?

- (a) 25 years
 (b) 30 years
 (c) 45 years
 (d) 22 years
 (e) None of these

Q62. How many persons were born between C and the one whose age is 11 years?

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

Q63. Who among the following is the youngest person?

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

Q64. Which among the following statement(s) is/are true?

- (a) A was born in 1985.
- (b) Two persons were born between H and B
- (c) Age of E is multiple of 7
- (d) C is the oldest person among all
- (e) All are true

Q65. Four of the following five are alike in a certain way and thus form a group. Who among the following does not belong to the group?

- (a) F
- (b) G
- (c) E
- (d) C
- (e) B

Directions (66-68): Study the following information carefully and answer the questions given below- In a certain code language:

“Enforcement directorate would acquitted soon” is coded as “19LG 13LV 38FW 4FW 34LM”

“Interrogation release completely added stems” is coded as “23LM 23VV 18LB 5VW 39VH”

“Prevention corruption allegedly purchase campaigning” is coded as “34LM 18FM 13VB 37FV 4RT”

Q66. What is the code for “Public Health” in the given code language?

- (a) 23FX 13SV
- (b) 13VS 37FX
- (c) 27FX 23VS
- (d) 26FX 13VS
- (e) None of these

Q67. The code “9RR 28VI” is coded for which of the following word?

- (a) Delhi weather
- (b) Desert welfare
- (c) Day night
- (d) Dusty weather
- (e) None of these

Q68. What is the code for “German language” in the given code language?

- (a) 14RS 13GD
- (b) 12MV 14FV
- (c) 12VM 13FV
- (d) 12VM 15FV
- (e) None of these

Direction (69-73): Study the following information carefully and answer the questions given below:

Eight persons sit in a row face north at consecutive multiple distance of 7m. All the persons face towards north. A sits 63m left of S. R sits immediate right of S. Distance between A and R is same as the distance between F and R. Difference between the total distance of W and D to the total distance of D and Y is 7m. Now F goes in the north and walks 50m to reach point C then, takes right turn and walks 98m to reach at point K after that F in the North-west of U. W goes in the south and walks 20m to reach point Q then he takes his left and walks some distance to reach south of R.

Q69. Find the sum of the distance walk by W and F?

- (a) 215m
- (b) 245m
- (c) 225m
- (d) 235m
- (e) 205m

Q70. In which direction is point C with respect to point Q?

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

Q71. What is the total distance between S and the one who sits immediate right of D?

- (a) 91m
- (b) 105m
- (c) 147m
- (d) 42m
- (e) None of these

Q72. Four of the following five are alike in a certain way and hence form a group. Which of the following does not belong to that group?

- (a) W
- (b) F
- (c) R
- (d) S
- (e) U

Q73. Which of the following statement is not true?

- (a) Number of persons sit to the right of W is more than sit to the left of D
- (b) Point Q is in south-west of S
- (c) F and Y are immediate neighbours
- (d) No one sits left of A
- (e) All are true

Q74. It is a well-known fact that one can learn and remember things easily if it has got both audio and visual aids instead of just audio. Keeping this thing in mind, many study sessions are taken where students are taught with the help of videos. Cinema has been popular since its inception. People came to realize that students can remember more through videos than just from verbal sessions as they observed kids remembering dialogue of the movie, they watched a week ago but nothing from the lecture they attended in the morning.

Which of the following weakens the concept discussed in above statement?

- (a) Many EdTech companies has launched their story-video courses for efficient and active learning for children.
- (b) Cinema is basically considered as the best among all means of entertainment.
- (c) Study material with video and audio is wastage of time.
- (d) Cinema has a negative impact on the youth by showing various ways of killing people and adult scenes.
- (e) Both (c) and (d)

Q75. Obesity is a medical condition in which excess body fat has accumulated to the extent that it may have an adverse effect on a person's health, leading to reduced life expectancy and/or increased health problems. In other words, it means to be dangerously overweight. Obesity is a leading preventable cause of death worldwide, with increasing prevalence in adults and children, and authorities view it as one of the most serious public health problems of the 21st century.

Which of the following can be concluded from the above statement?

- (a) Food is often regarded as the factor of sins of sloth and lust.

(b) Obesity is a one of the serious problems nowadays seen in children and adults.

(c) Obesity is a problem that requires lots of money for its treatment.

(d) Obesity increases the risk of only heart and kidney diseases.

(e) Both (b) and (d)

Directions (76): Below in each question are given two Statement I and II. These statements may be either independent causes or may be effects of independent causes or a common cause. One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements. Give answer

- (a) If Statement I is the cause and Statement II is its effect.
- (b) If Statement II is the cause and Statement, I is its effect.
- (c) If both the Statements I and II are independent causes.
- (d) If both the Statements I and II are effects of independent causes.
- (e) If both the Statement I and II are effects of some common causes.

Q76. I. The central government has started to build 500 beds with the help of DRDO in Mumbai after 5000 covid cases come in a single day.

II. Amid surge in covid cases two players of RCB have withdrawn their name form ongoing IPL cricket match.

Q77. Study the following digit-letter-symbol sequence carefully and answer the question given below:

@ 7 F 6 G © Z J L 2 € D ¥ M # 8C % B K 1 & A W 5 P E 4 Q

How many such symbols are there in the above sequence, each of which is immediately preceded by a consonant and immediately followed by a number?

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

Direction (78-82): Study the following information carefully and answer the questions given below:

A certain number of persons sit around a circular table facing the centre. Few of them like different colours- Red, Green, Yellow and Black but not necessarily in the same order. More than 9 persons sit around a table. Each of the neighbours sits at equal distance from each other. Two persons sit between Q and A who likes Green. T is an immediate neighbour of U who likes Red. U sits 2nd to the right of A. There are as many persons sit between T and W as between Q and W. R sits 3rd to the right of W and is immediate neighbour of Q. R and the one who likes Black are immediate neighbours. The one who likes yellow sits 2nd to the right of the one who likes Black. U and the one who likes Yellow are not an immediate neighbour. The number of persons sits between T and R is less than five when counted to the right of T.

Q78. Who among the following sits 8th to the right of T?

- (a) A
- (b) R
- (c) Q
- (d) U
- (e) Unknown person

Q79. ___ faces to the one who likes ___ colour?

- (a) W, Green
- (b) T, Red
- (c) Q, Yellow
- (d) A, Black
- (e) All of these

Q80. How many persons sit around the table?

- (a) More than 18
- (b) 12
- (c) 13
- (d) 10
- (e) 17

Q81. Four of the following five are alike in a certain way and hence form a group. Which of the following does not belong to that group?

- (a) T-W
- (b) Green-Red
- (c) A, Yellow
- (d) W-Black
- (e) R-Green

Q82. If T and Q interchanged their position then, how many persons sit between Q and A when counted to the right of Q?

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

Directions (83): Below in each question are given two Statement I and II. These statements may be either independent causes or may be effects of independent causes or a common cause. One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements. Give answer

- (a) If Statement I is the cause and Statement II is its effect.
- (b) If Statement II is the cause and Statement, I is its effect.
- (c) If both the Statements I and II are independent causes.
- (d) If both the Statements I and II are effects of independent causes.
- (e) If both the Statement I and II are effects of some common causes.

Q83. I. This year Bihar has record result of 98% in Intermediate Board Examination.

II. Transport facility has been improved in Bihar in recent years.

Directions (84-85): Study the following information carefully and answer the questions given below-

Point H is 32m west of Point G. Point A is 10m south of point R. Point P is 30m east of point D. Point R is 70m west of point C. Point F is 60m south of point C. Point Q is 80m west of point F and 38m south of point D. Point P is 28m north of point E which is 25m west of point B. Point G is 40m north of point B.

Q84. In which direction is point P with respect to point A?

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

Q85. Four of the following five are alike in a certain way and hence form a group. Which of the following does not belong to that group?

- (a) Q-C
- (b) P-F
- (c) D-A
- (d) E-G
- (e) Q-R

Direction (86-90): Study the following information carefully and answer the questions given below.

Eight boxes are kept in eight different shelves such that shelves are marked as 1 to 8 from bottom to top respectively. Each box contains different items i.e., Utensil, Pencil, Pen, Clothes, Marker, Book, Bottle and Toffees but not necessarily in the same order.

Box P is kept at an even numbered shelf and above box Q. Two boxes are kept between box P and box Q. The box which contains marker kept four boxes above box W. Box Q doesn't contain marker. Box W is kept at an odd numbered shelf. The number of boxes kept above the box which contains marker is one less than the number of boxes kept below the box which contains pencil. More than two boxes are kept between box P and box T which is kept just below the box which contains bottle.

Box R and box U kept at an adjacent shelf. Three boxes are kept between the box which contains pen and box R. Box W and the box which contains pen are not kept adjacent to each other. Box S is kept below the box which contains book. Three boxes are kept between box V and the box which contains clothes. Box T doesn't contain utensil.

Q86. Which among the following combination is correct?

- (a) P- Pen
- (b) Q- 4th shelf
- (c) U- Pencil
- (d) T- Toffees
- (e) S-5th shelf

Q87. How many boxes are kept between box S and the box which contains clothes?

- (a) Three
- (b) Four
- (c) More than five
- (d) Two
- (e) Can't be determined

Q88. Which among the following box contains marker?

- (a) P
- (b) V
- (c) S
- (d) T
- (e) U

Q89. If all the boxes are arranged from top to bottom in an alphabetical order then the position of how many boxes remains unchanged?

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

Q90. In which of the following shelf does the box contain pen is kept?

- (a) Sixth
- (b) Third
- (c) Fourth
- (d) First
- (e) Second

Q91. The lateral surface area of a cube is 420 cm^2 less than lateral surface area of a cylinder and the height of cylinder is $2x \text{ cm}$. If radius of the cylinder is $x \text{ cm}$ and side of the cube is equal to the radius of cylinder, then find the area (approximate) of a circle which radius is $(x+3) \text{ cm}$.

- (a) 372 cm^2
- (b) 396 cm^2
- (c) 288 cm^2
- (d) 314 cm^2
- (e) 424 cm^2

Q92. The marked price of an article is 1.45 times its cost price and the selling price of the article is Rs. 750. If profit percentage of shopkeeper on the article is 25%, then find the discount (in %) allowed by the shopkeeper.

- (a) $\frac{400}{29} \%$
- (b) $\frac{300}{29} \%$
- (c) $\frac{480}{29} \%$
- (d) $\frac{200}{29} \%$
- (e) $\frac{400}{23} \%$

Q93. Vessel A contains 80 liter milk and 12 liters water, while vessel B contains 156 liters mixture of milk and water are in the ratio of 10 : 3 respectively. If vessel A and B mixed into another vessel C which already contains 12 liters waters, then find the percentage of water in vessel C.

- (a) $\frac{300}{13} \%$
- (b) $\frac{300}{19} \%$
- (c) 20%
- (d) $\frac{200}{13} \%$
- (e) 40%

Q94. P and Q started a business together and investment of P is Rs. 2000 more than that of Q. After eight months, P left the business. At the end of a year, they get total profit of Rs. 6800 and profit share of P is Rs. 400X. Find the investment of Q (Given, $6X^3 = 3090 - \sqrt{324}$).

(a) 5400 Rs.
 (b) 5000 Rs.
 (c) 4800 Rs.
 (d) 4000 Rs.
 (e) 6000 Rs.

Q95. A man invested Rs. 6500 on compound interest at the rate of 10% p.a. for two years in scheme A. Find the total interest (approximate) received by man on investing the amount he received from scheme A again in the same scheme for two years.

(a) 1552 Rs.
 (b) 1692 Rs.
 (c) 1652 Rs.
 (d) 1532 Rs.
 (e) 1682 Rs.

Direction (96-97): Read the following paragraph carefully and answer the questions given below.

The monthly income of A is 60% more than B and both A & B pay equal amount for EMI. From the remaining monthly income, A and B spends a certain amount on house rent. Total amount that B pay for EMI is 20% of his monthly income and total amount A spends on house rent are ‘n’ times of the amount he pays for EMI.

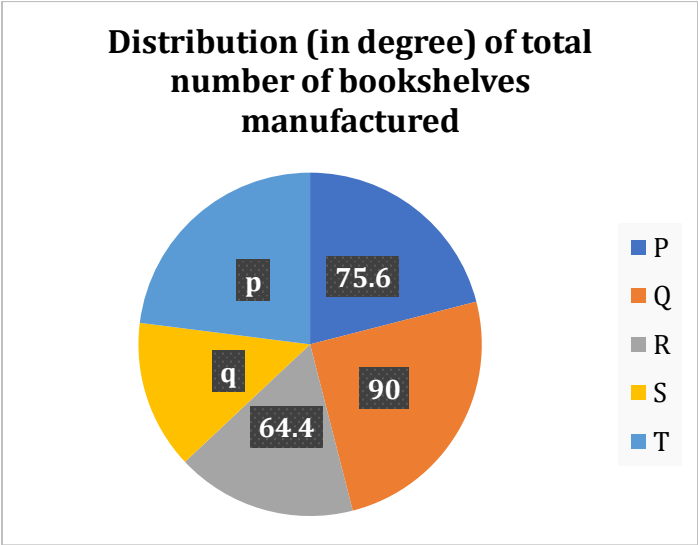
Q96. If total amount spends by A on EMI and house rent is 50% of his total monthly income and total amount pay by B for EMI is Rs. 15000, then find total saving of A (Given, A and B had only two expanses from their monthly income i.e., EMI and house rent).

(a) 30000 Rs.
 (b) 60000 Rs.
 (c) 40000 Rs.
 (d) 20000 Rs.
 (e) 25000 Rs.

Q97. The amount spends on house rent by A is Rs. 5000 more than that of B and total amount spends on house rent paid by A is Rs. 3000 more than total amount pays by him for EMI. If house rend paid by B is $\frac{1}{3}rd$ of the amount pays by A for EMI, then which of the following possible monthly income (in Rs.) of A.

(a) 24000 Rs.
 (b) 18000 Rs.
 (c) 20000 Rs.
 (d) 30000 Rs.
 (e) 36000 Rs.

Direction (98-102): The pie chart given below shows distribution (in degree) of total number of bookshelves manufactured by five (P, Q, R, S and T) different companies and the table given below shows percentage distribution of unsold bookshelves. Read the data carefully and answer the questions.



Companies	Percentage distribution of unsold bookshelves
P	3X%
Q	12%
R	4X%
S	20%
T	40%

Note: (i) $p + 25^\circ =$ degree of company Q
 (ii) Total bookshelves manufactured by S is 975.
 (iii) Total manufactured bookshelves = Sold bookshelves + Unsold bookshelves

Q98. Find the value of $(20X - \frac{2p}{5} - \frac{4q}{5})$.

(a) 8
 (b) 6
 (c) 4
 (d) 1
 (e) 2

Q99. The selling price of each book shelve sold by P and R is Rs. 25 & Rs. 30 respectively. If total 500 bookshelves are unsold, then find total revenue generated by P and R.

(a) 53430 Rs.
 (b) 52430 Rs.
 (c) 51430 Rs.
 (d) 53230 Rs.
 (e) 55430 Rs.

Q100. If difference between total unsold bookshelves of P and R is 16, then find average number of sold bookshelves of Q, S and T.

- (a) 1014
- (b) 1002
- (c) 1004
- (d) 1024
- (e) 1008

Q101. If total unsold bookshelves of P and R together is 210 and total sold bookshelves of X is 15% less than that of Q, then find total number of sold bookshelves of S are what percent (approx.) less than total sold bookshelves of X.

- (a) 18%
- (b) 12%
- (c) 28%
- (d) 23%
- (e) 5%

Q102. If total 1000 bookshelves are unsold, then find the difference between number of sold bookshelves of Q and the average number of sold bookshelves of S and T.

- (a) 525
- (b) 555
- (c) 515
- (d) 495
- (e) 500

Direction (103-104): In the given questions, two quantities are given, one as 'Quantity I' and another as 'Quantity II'. You have to determine relationship between two quantities and choose the appropriate option:

Q103. Quantity I: Value of 'x' for equation $(\sqrt{p^x})^2 = \frac{p^4}{\sqrt{p^{16}}}$

Quantity II: Value of 'y' for equation $\sqrt{y^4} = \sqrt{256}$

- (a) Quantity I > Quantity II
- (b) Quantity I < Quantity II
- (c) Quantity I $\geq$ Quantity II
- (d) Quantity I $\leq$ Quantity II
- (e) Quantity I = Quantity II or no relation

Q104. Given, $p > 1 > q > 0$.

Quantity I: Value of $\frac{p^3 - q^3}{p - q} - 3pq$.

Quantity II: Value of $(1 - \frac{1}{q})$

- (a) Quantity I = Quantity II or no relation
- (b) Quantity I $\leq$ Quantity II
- (c) Quantity I $\geq$ Quantity II
- (d) Quantity I < Quantity II
- (e) Quantity I > Quantity II

Direction (15-17): There are two equations I and II given, solve these equations and answer the following questions given below.

Equation I. $px^2 - 9x + 7 = 0$

Equation II. $qy^2 - 8y + 4 = 0$

Note: (A) Both p and q are positive integers.

(B) One of the roots of equation II is $\frac{2}{3}$.

(C) The ratio of highest root of equation I to the highest root of equation II is 7 : 4.

Q105. Find the ratio of smallest root of equation I to the smallest root of equation II. (a) 1 : 2

- (b) 1 : 3
- (c) 2 : 3
- (d) 3 : 2
- (e) 3 : 4

Q106. Find the value of (p + q).

- (a) 5
- (b) 3
- (c) 7
- (d) 8
- (e) 9

Q107. Find the both roots of equation $(p+q)^2a^2 + (3pq+1)a - 6 = 0$.

- (a) $\frac{4}{25}, -1$
- (b) $\frac{2}{25}, -1$
- (c) $\frac{8}{25}, -1$
- (d) $\frac{3}{25}, -1$
- (e) $\frac{6}{25}, -1$

Q108. If X is the correct number which replace the wrong number of the series 229, 256, 320, 441, 661, 1004, then which of following statement/s is or are correct.

I. X is completely divisible by 15.

II. (X+2) is a prime number.

- (a) Both I and II correct
- (b) Both I and II incorrect
- (c) I correct and II incorrect
- (d) I incorrect and II correct
- (e) Can't determine

Q109. Series (A): 1332, 612, 492, Y, 462, 460
If $\frac{Y-18}{5}$ is a fourth term of series (B) and follow same pattern as of the series (A), then find the first term of series (B).

- (a) 954
- (b) 882
- (c) 1045
- (d) 1198
- (e) 892

Q110. 49, ?, 82, 145, 269, 484, 826

If $?=A+6$, then find the nearest square of A.

- (a) 4
- (b) 8
- (c) 5
- (d) 11
- (e) 7

Directions (111-114): The following questions are accompanied by three statements i.e. statement (I), statement (II) and statement (III). You have to determine which statement (s) is/are sufficient/necessary to answer the questions.

- (a) Either statement I & III or statement II & III together.
- (b) None of the given statements can answer the question.
- (c) Any two of them.
- (d) Either statement I & II together or statement II & III together.
- (e) Either statement I & II together, statement II & III together or statement I & III together.

Q111. P, Q and R entered into a partnership. After ten months, P and Q left the business. Find the total profit at the end of year.

Statement I. The profit share of P & R together is 55% more than that of Q.

Statement II. Annual profit of R is Rs. 450 less than that of P and annual profit of Q is 80% of R.

Statement III. Total amount invested by R & Q are in the ratio of 5:4 respectively.

Q112. Find the downstream speed of boat.

Statement I. Difference between downstream speed of boat and speed of the boat in still water is 12 km/hr.

Statement II. Ratio of upstream speed of boat to speed of boat in still water is 4:7 respectively.

Statement III. The sum of time taken by the boat to cover 280 km in downstream and upstream is 24.5 hours.

Q113. Two train A and B running in same direction and cross each other in $32X$ seconds. Find the value of X.

Statement I. Train B crosses a 140 meters bridge in 22.4 seconds.

Statement II. Train A can cross a tree in 19 seconds.

Statement III. Length of train A is equal to length of train B.

Q114. Find the difference between age of Z five years hence to age of X seven years ago.

Statement I. Age of Z eight years hence will be eight years less than the average age of X & Y.

Statement II. Twelve years hence, the age of Y will be 52 years. Ratio of present age of X to Y is 3:5 respectively.

Statement III. The age of X is 50% more than that of Z.

Directions (115-119): Read the following passage carefully and answer the questions given below.

In a society, people like three different types of cars i.e. A, B & C. Ratio of people who like car A to car C is 29 :42 and people who like only car A&C together is one fourth of the people who like only car B. People who like only car C is 50 more than four times of the people who like only car A & B together. 10 people like all the three types of cars which is equal to people who like only car B&C together. People who like only car C is twice of the people who like only car A and people who like car C is 210. All people like either of the car.

Q115. Find the ratio of people who like only car C to people who like car B.

- (a) 11:14
- (b) 17:13
- (c) 10:17
- (d) 12:19
- (e) 14:15

Q116. People like only car A&C together is what percentage people like at least two cars?

- (a) $14\frac{2}{7}\%$
- (b) 12.5%
- (c) $28\frac{4}{7}\%$
- (d) 25%
- (e) 10%

Q117. Ratio of males to females who like only car A is 11:6 respectively. Find the people who like only car B&C together is how much more/less than males who like only car A?

- (a) 49
- (b) 32
- (c) 38
- (d) 42
- (e) 45

Q118. If 550 people living in the society, then find the people who do not like any of the three cars.

- (a) 52
- (b) 24
- (c) 65
- (d) 36
- (e) 45

Q119. People who like only car A and only car B together is how much percentage more/less than sum of the people who like only car A&B together and people who like only car C?

- (a) 17.5%
- (b) 10%
- (c) 22.5%
- (d) 33.33%
- (e) 62.5%

Q120. Length of train A is 60 meters less than train B and they cross a pole in 24 secs & $\frac{108}{7}$ secs respectively. If speed of train B is 126 km/hr and length of a bridge is $\frac{5}{9}$ th of length of train B, then find the time taken by train A to cross the bridge.

- (a) 12 seconds
- (b) 20.5 seconds
- (c) 39 seconds
- (d) None of these
- (e) 18 seconds

RBI Grade B Phase- 1 2022 (Solutions)

S1. Ans.(b)

Sol. Option (a) mentions concerns regarding “foreign investments”, which is not talked about in the passage and thus cannot be established as true. Option (c) talks about growing unemployment, which, again, isn’t one of the topics of concern in the passage.

The statement given by option (b) is correct and for justification, we refer to the first paragraph of the passage, which states how RBI changed its policies to control inflation in view of the growing global uncertainties.

Thus, option (b) is the correct answer.

S2. Ans.(e)

Sol. Both, option (a) and option (c), stand correct with regard to the passage.

The first paragraph mentions how the intention of RBI through these newly-drafted policies is to keep the Consumer Price Inflation in check. This makes option (a) correct.

The paragraph also mentions how the policies are intended to counter global risks. This makes option (b) correct.

Referring to the last lines of the second paragraph, “But the continuing war has necessitated urgent steps. The RBI has thus responded to the charge that it is behind the curve on inflation,” we see that RBI’s policy changes came after it was blamed for the increasing rate of inflation. Because the former of these statements talks about “urgent steps”, we understand that RBI was blamed for inaction, and as a result it introduced the change its policies. Thus, option (c) is correct too.

As all the statements are correct, the answer is option (e).

S3. Ans.(b)

Sol. Option (b) gives the most appropriate summary of the intention of RBI’s new policies. Moreover, only option (b) is true among all the options. Thus, we mark it as the correct answer.

S4. Ans.(b)

Sol. The third paragraph specifically states that “It is generally agreed that the WPI has a lagged effect on the CPI.” This shows that WPI has an effect on CPI eventually. Thus, as option (b) directly contradicts the fact in the passage, it is the correct answer.

S5. Ans.(e)

Sol. Since it is mentioned that RBI intended to adopt an accommodative stance, but hasn’t been able to do that because of the war, option (e) becomes correct. All other options are incorrect.

S6. Ans.(d)

Sol. Option (c) most accurately summarises the intention of the author of the passage. Thus, it is the correct answer. The author begins with how RBI’s new policies are to benefit. He then mentions the details of what these policies entail and how beneficial they are. He discusses the state of economy in India and the world, and ends with how more action is required on the issue.

S7. Ans.(b)

Sol. gradual – taking place or progressing slowly or by degrees

measured – having a slow, regular rhythm

intermediate – coming between two things in time, place, character, etc

restrained – characterized by reserve or moderation; unemotional or dispassionate

uniform – remaining the same in all cases and at all times;

unchanging in form or character

calculated – done with full awareness of the likely consequences

S8. Ans.(a)

Sol. deleterious – causing harm or damage

inimical – tending to obstruct or harm

torpid – mentally or physically inactive; lethargic

sinistral – of or on the left side or the left hand

abject – experienced or present to the maximum degree

mortifying – causing great embarrassment or shame

S9. Ans.(b)

Sol. The correct rearrangement of the sentences making grammatical and contextual sense would be EBADC.

Statement E serves as the best introduction to the passage, as it speaks of a discovery, the discovery being the subsequent topic of interest. Statement B further explains the discovery. Statement A goes into detail about the discovery of methane releases. Statement D goes into detail further of statement A. Statement C gives a fact on the basis of all the established facts about the methane releases from the coal mine. Statement F talks about a Mr. Wight who is not introduced properly in the passage yet. Thus, statement F is eliminated. The correct sequence will be EBADC.

S10. Ans.(c)

Sol. The correct rearrangement of the sentences making grammatical and contextual sense would be EBADC.

Statement E serves as the best introduction to the passage, as it speaks of a discovery, the discovery being the subsequent topic of interest. Statement B further explains the discovery. Statement A goes into detail about the discovery of methane releases. Statement D goes into detail further of statement A. Statement C gives a fact on the basis of all the established facts about the methane releases from the coal mine. Statement F talks about a Mr. Wight who is not introduced properly in the passage yet. Thus, statement F is eliminated. The correct sequence will be EBADC.

S11. Ans.(e)

Sol. Option (e) is correct as all the sentences contain at least one error, and these errors are addressed below with the correct forms of the sentences.

The Union Cabinet recently approved the auction of airwaves **capable of** offering fifth generation telecom services.

To be “capable” means to have attributes (such as physical or mental power) required for performance or accomplishment. “Of” is the only conjunction used after “capable” when it is a subject of a phrase (in this case, when the capability is mentioned).

“Indian health policymakers **need** to be very strategic and pragmatic in the use of a third COVID-19 vaccine shot.”

A singular verb is required in place of “needs”, thus, “need” is to be substituted at its place.

“The frequent leak of examination papers has been a major problem with regard to **recruitment to** government jobs.” The context requires the recruitment **of** candidates **to** government jobs. Thus, only “recruitment to” is correct for the context of the sentence.

“The government will ensure that the visitors to the new market, as well as **its** traders, get a unique and quality experience.”

Singular “its” has to be used instead of plural “their” as the subject is singular.

S12. Ans.(a)

Sol. Option (a) gives the only sentence free of any errors. All other sentences contain at least one error, and these errors are addressed below with the correct forms of the sentences.

“The recent geopolitical events transpiring around the world in practically all regions **have** made the global security climate more unstable.”

As “events” is the object of the sentence and its plural, “have” should be used instead of “has”.

“The commanders have proved inept in devising plans and **taking** appropriate decisions in battlefield conditions against a determined enemy.”

In accordance with the rules of parallelism, we use the same tense in phrases connected with conjunctions. Thus “taken” decisions makes the sentence grammatically incorrect.

“The central bank is ramping up its drive to tighten credit and slow growth **with** inflation having reached a four-decade high rate of 8.6%.”

with – in relation to

while – whereas (indicating a contrast)

The difference in usage makes “with” the correct choice. Also, “while” requires an auxiliary verb like “has” and not “having”, which is in present continuous tense.

S13. Ans.(a)

Sol. Option (a) gives the only sentence free of any errors. All other sentences contain at least one error, and these errors are addressed below with the correct forms of the sentences.

“Block printing first **came** to Europe as a method for printing on cloth, where it was common by 1300.”

The context talks about a time period in the past (specifically, around 1300 A.D.). Thus, “came” should be used and not “comes”, which is in the past perfect tense.

“After the 1918-20 flu pandemic, the influenza virus continued to be **in circulation** and present even today.”

“On circulation” does not make grammatical sense, and thus makes the sentence correct. “In circulation” is the right phrase which means “going or passing from person to person or place to place”.

“A strong political opposition is usually needed to help keep the ruling dispensation **in check**.”

“In check” does not make grammatical sense, and thus makes the sentence correct. “In check” is the right phrase which means “to slow or bring to a stop”.

S14. Ans.(c)

Sol. In this context, the champion of the arena can only be tested on his bravery or cowardice among the following adjectives. Thus, option (c) is correct.

S15. Ans.(b)

Sol. The supervisor would only want the productivity to be sufficient and would only be concerned about that factor. Moreover, productivity can only have words from option (b) as adjectives. Thus, option (b) is the correct option.

S16. Ans.(c)

Sol. Vision can only be hampered by the quality of darkness or brightness. Thus, option (c) is the right answer.

S17. Ans.(d)

Sol. Since the context requires the guest's questions to be about the bridge's dimensions, the only option that can be correct is option (d).

S18. Ans.(d)

Sol. "Although" is the only option that joins the two sentences to make the resulting sentence grammatically correct and contextually coherent. For reference, the usage/definitions of some of the options are given below.

however - serves as a conjunctive adverb that connects two independent clauses

although - to introduce a subordinate clause which contains a statement which makes the main clause of the sentence seem surprising or unexpected

as if/as though - to talk about an imaginary situation or a situation that may not be true but that is likely or possible

even as - at the very same time as

S19. Ans.(a)

Sol. "While" is the only option that joins the two sentences to make the resulting sentence grammatically correct and contextually coherent. For reference, the usage/definitions of some of the options are given below.

with regard to - signals a reference to the subject of a sentence

therefore - for that reason; consequently

however - used to introduce a statement that contrasts with or seems to contradict something that has been said previously

whenceforth - from which place, time, or point forth; forth from which; onward from which

S20. Ans.(b)

Sol. "Of which" is the only option that joins the two sentences to make the resulting sentence grammatically correct and contextually coherent.

S21. Ans.(e)

Sol. All of the above given options are correct in regard to the advantages of adopting a vegetarian diet. Thus, option (e) is the correct answer. (c)

For reference, note the lines in the second paragraph which state "Vegetarian diets may help in weight loss and long-term weight control and are associated with longevity. Diets containing animal products are generally higher in

fat and calorific value while plant foods are low in energy and are nutrient dense." This proves that options (a) and (b) are correct.

Also refer to the last lines in the first paragraph which state, "Such diets also lower the risk of hypertension and type 2 diabetes mellitus. Diets low in fibre and in which chicken and meat are the principal ingredients can dramatically increase the incidence of colorectal cancers."

The quoted text proves the validity of options (c) and (d) as answers to the question.

S22. Ans.(d)

Sol. For justification, refer to "Well-planned vegetarian diets are suitable for individuals during all stages of the life-cycle and for athletes." Only the most restrictive vegan diets can perhaps cause nutritional concerns and compromise on calcium, iron, zinc, vitamin B12 and sometimes even protein." These statements corroborate the truths of statements given by options (b) and (c). Option (a) is wrong as it actually contradicts the point of the passage. Thus, option (d) is the answer.

S23. Ans.(e)

Sol. For justification, refer to the third paragraph of the passage. All the given statements are correct. Thus, option (e) is the answer.

S24. Ans.(a)

Sol. For justification, refer to the beginning of the last paragraph, which states, "Vegetarian meals need not be boring or limiting. Whip up a variety of recipes from plant foods and feast on them."

Options (b) and (c) address the first statement's limiting aspect of vegetarianism, while option (a) addresses the boring aspect of vegetarianism. Thus, only option (a) is correct.

S25. Ans.(d)

Sol. "Benefit" will most properly complete the sentence while making it grammatically correct in itself and contextually coherent with the passage. Thus, option (d) is the correct answer.

subsist – maintain or support oneself, especially at a minimal level

catalyse – cause (an action or process) to begin

S26. Ans.(a)

Sol. adequate – satisfactory or acceptable in quality or quantity

ample – enough or more than enough; plentiful

restrictive – imposing restrictions on someone's activities or freedom

cooperative – involving mutual assistance in working towards a common goal

exuberant – full of energy, excitement, and cheerfulness

vivacious – attractively lively and animated

S27. Ans.(d)

Sol. beneficial – resulting in good; favourable or advantageous

detrimental – tending to cause harm

fragile – (of an object) easily broken or damaged

jittery – nervous or unable to relax

grotesque – comically or repulsively ugly or distorted

quaint – attractively unusual or old-fashioned

S28. Ans.(a)

Sol. Get a second wind - Have more energy after having been tired

The idiom can only be related to by statement (ii). Thus option (a) is the correct choice.

S29. Ans.(b)

Sol. Like two peas in a pod - They're always together

Only statement (iii) accurately represents the idiom. Thus option (b) is the correct choice.

S30. Ans.(b)

Sol. Once bitten, twice shy - You're more cautious when you've been hurt before

The idiom is only represented well by statements (i) and (iii). Thus, option (b) is the correct choice.

Solutions (31-35):

Subject	Time
Physics	9:30-10:00
Maths	10:30-11:30
Hindi	12:00-12:30
Social study	1:00-1:30
English	2:00-3:00
Chemistry	3:30-4:00
Biology	4:30-5:30

S31. Ans.(c)**S32. Ans.(a)****S33. Ans.(c)****S34. Ans.(a)****S35. Ans.(b)****Solutions (36-40):**

Logic for each step:

Step I: All the consonants within the words are changed with their second succeeding letter and the vowels remain same.

Step II: All the words are arranged according to dictionary order from the left end.

Step III: Letters within the word are arranged in alphabetical order.

Step IV: Sum of the place value of first and last letter within the word is taken.

Step V: The sum of the digits within the numbers is arranged in ascending order from the left end.

Input: helofkpestfumaphseub lmodu karlx

Step I: jenoh mreuv huoarjueudnoofumatnz

Step II: huoar jenoh jueudmatnz mreuv noofu

Step III: ahoru ehjno dejuu amntzemruvfnouu

Step IV: 22 20 25 27 27 27

Step V: 2 4 7 9 9 9

S36. Ans.(b)**S37. Ans.(e)****S38. Ans.(c)****S39. Ans.(b)****S40. Ans.(d)****S41. Ans.(b)**

Sol. "Fallout" means adverse effect. we need to find the option which shows the adverse results after new policy approved by Delhi Government. Option (b) is the right answer as it clearly states defy by opposition.

S42. Ans.(d)

Sol. Nothing is discussed about favour of central government in above passage. Option (II) can be assumed as government has reduced the minimum age from 25 to 21 and it is obvious to increase the revenue of state. Revenue comparison of Delhi with other states has not been discussed in the above statement.

Solutions (43-47):

Floors	Flat 1	Flat 2	Flat 3
3	A (Iran)	I(Korea)	C(Japan)
2	H(USA)	E(Oman)	G(UK)
1	D(Russia)	F(Malta)	B(UAE)

S43. Ans.(b)**S44. Ans.(e)****S45. Ans.(c)****S46. Ans.(a)****S47. Ans.(d)**

Solutions (48-51):

$$\begin{array}{c}
 (-)T = M(+)-K(+), 30 \\
 | \\
 20, (-)P-S(-) = W(+), 23 \\
 | \\
 (-)X, 5
 \end{array}$$

S48. Ans.(b)

S49. Ans.(d)

S50. Ans.(e)

S51. Ans.(c)

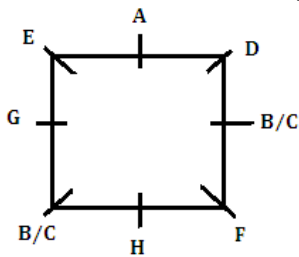
S52. Ans.(d)

Sol. Data in all the statement I, II and III together are necessary to answer the question.

Days	Persons
Tuesday	R/Q
Wednesday	U
Thursday	P
Friday	S
Saturday	R/Q
Sunday	V
Monday	T

S53. Ans.(c)

Sol. Data in statement I and statement III together are sufficient to answer the question.



S54. Ans.(d)

Sol. Data in all the statements I, II and III together are necessary to answer the question.

$$U > Q > S > R > P > T / V > V / T$$

S55. Ans.(a)

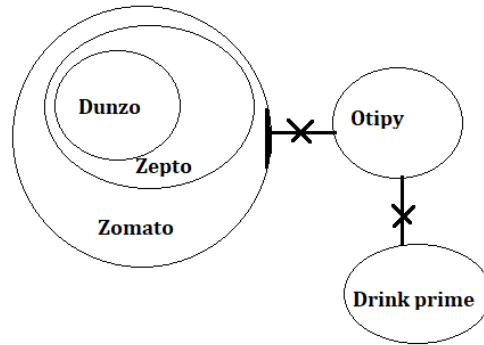
Only 1st Statement diminishes the advisory by Health Ministry as healthy food has been suggested. Guests are attending wedding, but they are following all norms and wearing masks. Trade Unions are also following guidelines. Yoga is good for health. Wearing mask has been advised but its black marketing is not the inference in given statement.

S56. Ans.(e)

Only I can be assumed as case is in Supreme Court regarding OTT represented by Solicitor General and if something is creating problem or result of it is not good then only Government is presenting this case in Supreme Court. There is nothing mentioned and discussed about any producer or director, so II cannot be assumed. (III) is a suggested course of action, it is not an assumption.

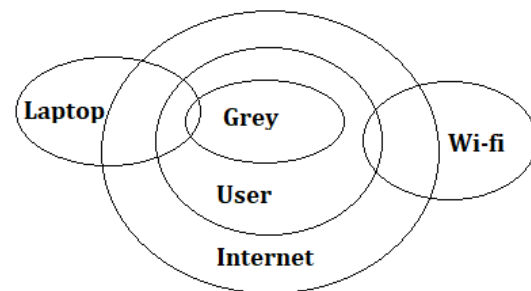
S57. Ans.(e)

Sol.



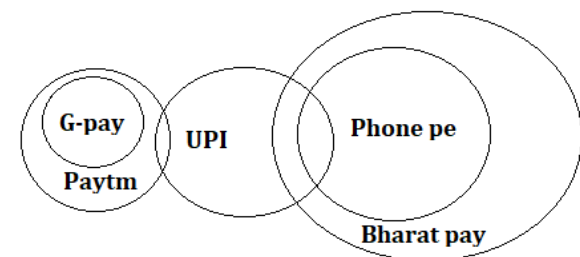
S58. Ans.(d)

Sol.



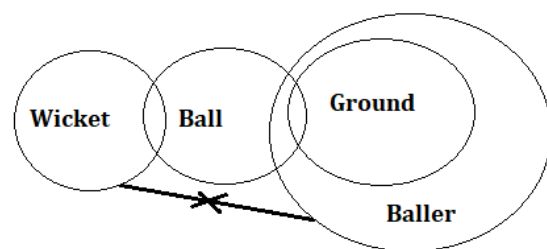
S59. Ans.(b)

Sol.



S60. Ans.(d)

Sol.



Solutions (61-65):

Years	Ages	Persons
1985	36	C
1991	30	E
1995	26	A/D
1998	23	H
2002	19	B
2010	11	D/A
2015	6	F
2018	3	G

S61. Ans.(a)

S62. Ans.(b)

S63. Ans.(c)

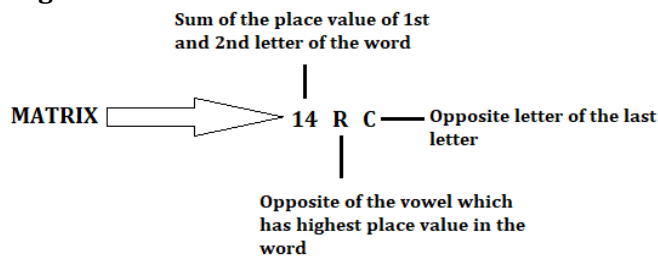
S64. Ans.(d)

S65. Ans.(e)

Sol. Except B, all other person ages are multiple of 3

Solutions (66-68):

Logic:



S66. Ans.(b)

Sol. The code for "Public Health" is "37FX 13VS"

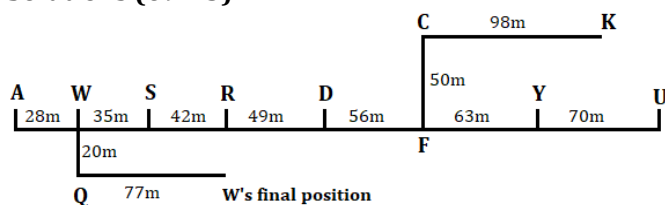
S67. Ans.(a)

Sol. The code "9RR 28VI" is coded for - Delhi weather

S68. Ans.(c)

Sol. The code for "German language" is - 12VM 13FV

Solutions (69-73):



S69. Ans.(b)

Sol. $20+77+50+98 = 245\text{m}$

S70. Ans.(a)

Sol. point C is in North-east with respect to point Q

S71. Ans.(c)

Sol. The total distance between S and the one who sits immediate right of D = 147m

S72. Ans.(e)

Sol. Only U sits at one of the extreme ends

S73. Ans.(e)

Sol. All the given statements are true

S74. Ans.(c)

Sol. Option (a) is supporting the concept discussed in above statement. Importance of study material with audio and video is discussed above but in option (c) it is said wastage of time. Option (d) will not be right answer because the concept which is discussed is importance of teaching with help of video and audio both. Cinema is just example which is taken. So, option (d) is not the right answer.

S75. Ans.(b)

Sol. Nothing is mentioned about the cause of excess body fat. Option (a) is not the right answer. And it is mentioned in the statement, it is spreading in adults and children. Nowhere mentioned about treatment of obesity. It is mentioned obesity increases health problems but nowhere mentioned that it increases the risk of only heart and kidney diseases.

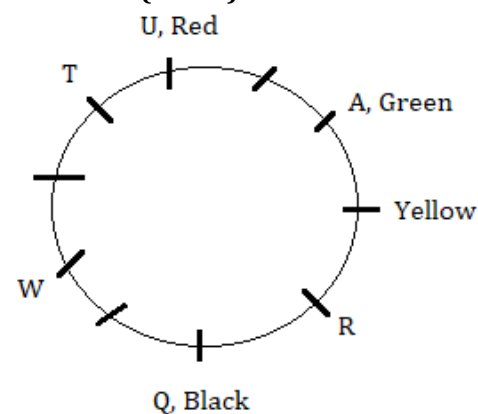
S76. Ans.(e)

Sol. Both the Statement I and II are effects of some common causes. And cause is increasing case of covid 19. Central government has been trying to increase medical infrastructure. And players have withdrawn their name due to fear.

S77. Ans.(b)

Sol. M#8

Solutions (78-82):



S78. Ans.(e)

Sol. Unknown person sits 8th to the right of T

S79. Ans.(a)

Sol. W faces to the one who likes green colour

S80. Ans.(d)

Sol. 10 persons sit around the table

S81. Ans.(c)

Sol. In option (c) both persons sit near to each other while in other options first person sits 2nd to the left of 2nd person

S82. Ans.(a)

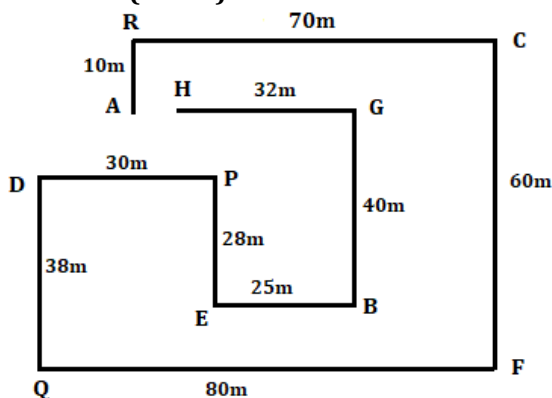
Sol. If T and Q interchanged their position then, six persons sit between Q and A when counted to the right of Q

S83. Ans.(d)

Sol. Both the Statements I and II are effects of independent causes. Bihar has good result may be due to students have studied well or due to education system get improved in Bihar.

Transport facility has been improved may be due to good governance.

Solutions (84-85):



S84. Ans.(d)

Sol. Point P is in South-east of point A

S85. Ans.(b)

Sol. Except option (b), first point is in north-west of second point

Solutions (86-90):

Shelves	Boxes	Items
8	P	Book
7	S	Marker
6	V	Pen
5	Q	Bottle
4	T	Toffees
3	W	Pencil
2	R	Clothes
1	U	Utensils

S86. Ans.(d)

S87. Ans.(b)

S88. Ans.(c)

S89. Ans.(b)

S90. Ans.(a)

S91. Ans.(d)

Sol. We know, lateral surface area of cube = $4a^2$

And, lateral surface area of cylinder = $2\pi rh$

Here $a = x$ and $r = x$, $h = 2x$

ATQ-

$$4x^2 + 420 = 2 \times \frac{22}{7} \times x \times 2x$$

$$420 = 4x^2 \left(\frac{22}{7} - 1 \right)$$

$$105 = x^2 \times \frac{15}{7}$$

$$x = 7 \text{ cm}$$

So, radius of circle = $(7+3) = 10 \text{ cm}$

$$\text{Required area} = \frac{22}{7} \times 10 \times 10 = 314.28 \approx 314 \text{ cm}^2$$

S92. Ans.(a)

Sol. Let cost price of the article = $100a$

So, mark price of the article = $100a \times 1.45 = 145a$

Given, selling price of the article = 750 Rs.

Also given, profit percentage of shopkeeper on the article is 25%

$$\text{So, selling price of the article} = 100a \times \frac{125}{100} = 125a$$

$$125a = 750$$

$$a = 6 \text{ Rs.}$$

Marked price = $145 \times 6 = 870 \text{ Rs.}$

$$\text{Required discount percentage} = \frac{870-750}{870} \times 100 = \frac{400}{29} \%$$

S93. Ans.(a)

Sol. Total milk in vessel B = $156 \times \frac{10}{13} = 120 \text{ liters}$

Total water in vessel B = $156 - 120 = 36 \text{ liters}$

Total water in vessel C = $(12+36+12) = 60 \text{ liters}$

Total milk in vessel C = $(80+120) = 200 \text{ liters}$

$$\text{Required percentage} = \frac{60}{(200+60)} \times 100 = \frac{300}{13} \%$$

S94. Ans.(e)

Sol. Given, $6X^3 = 3090 - \sqrt{324}$

$$6X^3 = 3090 - 18$$

$$6X^3 = 3072$$

$$X^3 = 512$$

$$X = 8$$

So, Profit share of P = $400 \times 8 = 3200 \text{ Rs.}$

And profit share of Q = $6800 - 3200 = 3600 \text{ Rs.}$

Let investment of Q = $a \text{ Rs.}$

So, investment of P = $(a+2000) \text{ Rs.}$

ATQ -

$$\frac{(a+2000) \times 8}{a \times 12} = \frac{3200}{3600}$$

$$3a + 6000 = 4a$$

$$a = 6000 \text{ Rs.}$$

S95. Ans.(c)

Sol. Equivalent rate of interest for two years at 10% p.a. on compound interest

$$= (10 + 10 + \frac{10 \times 10}{100})\% = 21\%$$

$$\text{Total amount received by man from scheme A} = 6500 \times \frac{121}{100} = 7865 \text{ Rs.}$$

$$\text{Required interest} = 7865 \times \frac{21}{100} = 1651.65 \approx 1652 \text{ Rs.}$$

Solutions (96-97):

Let monthly income of B = 500a

$$\text{So, monthly income of A} = 500a \times \frac{160}{100} = 800a$$

Total amount spends on EMI by A or B

$$= 500a \times \frac{20}{100} = 100a$$

Total amount spends by A on house rent = 100an

And let total amount spends by B on house rent = 100b

S96. Ans.(b)

$$\text{Sol. Total amount spends by A on EMI and house rent} = 800a \times \frac{50}{100} = 400a$$

$$\text{Total amount spends by A on house rent} = 400a - 100a = 300a$$

$$100an = 300a$$

$$n = 3$$

Also given, total amount pays by B for EMI = Rs. 15000

$$\text{So, } 100a = 15000$$

$$a = 150 \text{ Rs.}$$

$$\text{Total income of A} = 800 \times 150 = 120000 \text{ Rs.}$$

$$\text{Saving of A} = 120000 \times \frac{50}{100} = 60000 \text{ Rs.}$$

S97. Ans.(a)

Sol. ATQ –

$$100an - 100b = 5000$$

$$an - b = 50 \text{ ----- (i)}$$

Also give, $100an - 100a = 3000$

$$an - a = 30 \text{ ----- (ii)}$$

$$\text{And, } 100b = \frac{100a}{3}$$

$$b = \frac{a}{3} \text{ ----- (iii)}$$

Putting value of b in (i) we get

$$an - \frac{a}{3} = 50 \text{ ----- (iv)}$$

From (ii) and (iv) we get

$$a = 30$$

$$\text{So, monthly income of A} = 30 \times 800 = 24000 \text{ Rs.}$$

Solutions (98-102): Form pie chart, p + q

$$= 360 - (75.6 + 90 + 64.4) = 130$$

Given, p + 25 = degree of company Q

$$\text{So, } p + 25 = 90$$

$$p = 65$$

$$\text{And, } q = 130 - 65 = 65$$

Let total number of bookshelves manufactured by all five companies = 100n

$$100n \times \frac{65}{360} = 975$$

$$n = 54$$

So, total number of bookshelves manufactured by all five companies = 5400

$$\text{From table, } 3X + 12 + 4X + 20 + 40 = 100$$

$$7X + 72 = 100$$

$$7X = 28$$

$$X = 4$$

S98. Ans.(e)

$$\text{Sol. Required value} = 20 \times 4 - \frac{2 \times 65}{5} - \frac{4 \times 65}{5} = 80 - (26 + 52) = 2$$

S99. Ans.(a)

Sol. Total number of sold bookshelves of P

$$= 5400 \times \frac{75.6}{360} - 500 \times \frac{3 \times 4}{100} = 1074$$

Total number of sold bookshelves of R

$$= 5400 \times \frac{64.4}{360} - 500 \times \frac{4 \times 4}{100} = 886$$

$$\text{Required revenue} = 1074 \times 25 + 886 \times 30 = 53430 \text{ Rs.}$$

S100. Ans.(c)

Sol. Let total unsold bookshelves = 100y

ATQ –

$$100y \times \frac{4 \times 4}{100} - 100y \times \frac{4 \times 3}{100} = 16$$

$$4y = 16$$

$$y = 4$$

So, total unsold bookshelves = 400

Total number of sold bookshelves of Q

$$= 5400 \times \frac{90}{360} - 400 \times \frac{12}{100} = 1302$$

Total number of sold bookshelves of S

$$= 975 - 400 \times \frac{20}{100} = 895$$

Total number of sold bookshelves of T

$$= 975 - 400 \times \frac{40}{100} = 815$$

$$\text{Required average} = \frac{1302 + 895 + 815}{3} = 1004$$

S101. Ans.(d)**Sol.** Let total unsold bookshelves = $100n$

ATQ –

$$100n \times \frac{4 \times 4}{100} + 100n \times \frac{4 \times 3}{100} = 210$$

$$28n = 210$$

$$n = 7.5$$

So, total unsold bookshelves = 750

Total sold bookshelves of Q

$$= 5400 \times \frac{90}{360} - 750 \times \frac{12}{100} = 1260$$

$$\text{Total sold bookshelves of X} = 1260 \times \frac{85}{100} = 1071$$

Total number of sold bookshelves of S

$$= 975 - 750 \times \frac{20}{100} = 825$$

$$\text{Required percentage} = \frac{1071 - 825}{1071} \times 100 = 22.99 \approx 23\%$$

S102. Ans.(b)**Sol.** Total number of sold bookshelves of Q

$$= 5400 \times \frac{90}{360} - 1000 \times \frac{12}{100}$$

$$= 1350 - 120 = 1230$$

Total number of sold bookshelves of S

$$= 975 - 1000 \times \frac{20}{100} = 775$$

Total number of sold bookshelves of T

$$= 975 - 1000 \times \frac{40}{100} = 575$$

$$\text{Required difference} = 1230 - \frac{775 + 575}{2} = 555$$

S103. Ans.(d)**Sol. Quantity I:** $(\sqrt{p^x})^2 = \frac{p^4}{p^8}$

$$p^x = p^{-4}$$

$$\text{So, } x = -4$$

Quantity II: $\sqrt{y^4} = \sqrt{256}$

$$y^2 = 16$$

$$y = \pm 4$$

So, Quantity I $\leq$ Quantity II**S104. Ans.(e)****Sol.** Given, $p > 1 > q > 0$ **Quantity I:** $\frac{p^3 - q^3}{p - q} - 3pq$

$$\text{We know, } a^3 - b^3 = (a - b)(a^2 + ab + b^2)$$

$$\text{So, } \frac{p^3 - q^3}{p - q} - 3pq = p^2 + pq + q^2 - 3pq$$

$$= p^2 + q^2 - 2pq$$

$$= (p - q)^2$$

We know, whole square always be > 0 and here it can't be zero because $p \neq q$.

So, quantity I always give a positive value

Quantity II: $(1 - \frac{1}{q})$ Given, $1 > q$

$$\text{So, } 1 < \frac{1}{q}$$

Then, $1 - \frac{1}{q} < 0$ or give negative value

So, quantity II always give a negative value

So, Quantity I $>$ Quantity II**Solutions (15-17):****For equation II:** $q\left(\frac{4}{9}\right) - 8\left(\frac{2}{3}\right) + 4 = 0$

$$4q - 48 + 36 = 0$$

$$q = 3$$

$$\text{now, } 3y^2 - 8y + 4 = 0$$

$$3y^2 - 6y - 2y + 4 = 0$$

$$y = 2, \frac{2}{3}$$

Given, the ratio of highest root of equation I to the highest root of equation II is 7 : 4

So, let highest root of equation I = a

$$\text{So, } \frac{a}{2} = \frac{7}{4}$$

$$a = \frac{7}{2}$$

For equation I: $p\left(\frac{49}{4}\right) - 9\left(\frac{7}{2}\right) + 7 = 0$

$$49p - 126 + 28 = 0$$

$$p = 2$$

$$\text{Now, } 2x^2 - 9x + 7 = 0$$

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

$$x = \frac{7}{2}, 1$$

S105. Ans.(d)**Sol.** Required ratio = $\frac{1}{\frac{2}{3}} = 3 : 2$ **S106. Ans.(a)****Sol.** $p + q = 2 + 3 = 5$ **S107. Ans.(e)****Sol.** $(p+q)^2 a^2 + (3pq+1)a - 6 = 0$

$$(2+3)^2 a^2 + (3 \times 2 \times 3 + 1)a - 6 = 0$$

$$25a^2 + 19a - 6 = 0$$

$$25a^2 + 25a - 6a - 6 = 0$$

$$a = \frac{6}{25}, -1$$

S108. Ans.(b)**Sol.** Pattern of series –

229,	256,	320,	445,	661,	1004
+27	+64	+125	+216	+343	
↑	↑	↑	↑	↑	
3^3	4^3	5^3	6^3	7^3	

$$X = 445$$

For I: $\frac{445}{15} = 29.66$ (I is incorrect)For II: $(445+2) = 447$

447 is divisible by 149 so it is not a prime number (II is incorrect)

So, both I and II incorrect

S109. Ans.(a)**Sol.** Pattern of the series(A):

1332,	612,	492,	Y=468,	462,	460
720	120	24	6	2	
6!	5!	4!	3!	2!	

$$\text{Fourth term of series (B)} = \frac{468-18}{5} = 90$$

First term of the series(B):

954,	234,	114,	90,	84,	82
720	120	24	6	2	
6!	5!	4!	3!	2!	

S110. Ans.(e)**Sol.** Pattern of the series

49,	?=56,	82,	145,	269,	484,	826
7	26	63	124	215	342	
$(2^3 - 1)$	$(3^3 - 1)$	$(4^3 - 1)$	$(5^3 - 1)$	$(6^3 - 1)$	$(7^3 - 1)$	

$$? = A + 6$$

$$56 - 6 = A$$

$$50 = A$$

$$\text{Nearest square of } A = 7$$

S111. Ans.(b)**Sol.** The ratio of time for P, Q and R invested respectively = 10 : 10 : 12 = 5 : 5 : 6**From I.**

Let profit share of Q = 100x

And profit share of P & R = 155x

From II.

Let annual profit of P be = Rs.p

Annual profit of R = Rs. (p-450)

And Annual profit of Q = Rs. $\frac{80}{100} \times (p-450)$ **From III.**

Let amount invested by R = 5Y

And amount invested by Q = 4Y

There are three variables, so none of the given statements can answer the question

S112. Ans.(e)**Sol.** Let speed of boat in still water and speed of stream be x km/hr and y km/hr respectively.**From I.**

$$x + y - x = 12$$

$$y = 12$$

From II.

$$\frac{x-y}{x} = \frac{4}{7}$$

$$7x - 7y = 4x$$

$$3x = 7y$$

$$\frac{3}{7} = \frac{y}{x}$$

$$\frac{3a}{7a} = \frac{y}{x}$$

From III.

$$\frac{280}{(x+y)} + \frac{280}{(x-y)} = 24.5$$

So, either statement I & II together, statement II & III together or statement I & III together.

S113. Ans.(b)**Sol.** Let speed of train A = a m/s

And, speed of train B = b m/s

From I.

Let length of train B be L meters

$$\frac{L + 140}{b} = 22.4$$

$$L + 140 = 22.4b$$

From II.

Length of train A = 19a

From III

From I & II together:

$$19a = 22.4b - 140$$

None of the given statements can answer the question.

S114. Ans.(d)**Sol. From I.**

$$Z + 8 = \frac{X + Y}{2} - 8$$

$$Z + 16 = \frac{X + Y}{2}$$

From II.

Present age of Y = 52 - 12 = 40 years

And present age of X = $\frac{40}{5} \times 3 = 24$ years**From III.**

$$\frac{X}{Z} = \frac{3}{2}$$

From I & II together:

$$Z + 16 = \frac{40+24}{2}$$

$$Z = 16 \text{ years}$$

Required difference = 21 - 17 = 4 years

So, I & II together required to answer of the questions.

From II & III together:

Present age of Z = $24 \times \frac{2}{3} = 16$ years

Required difference = 21 - 17 = 4 years

So, II & III together required to answer of the questions.

So, either I & II together required or II & III together required to give answer of the question.

Solutions (115-119):

People who like car C = 210.

People who like car A = $210 \times \frac{29}{42} = 145$

Let people who like only car B be x

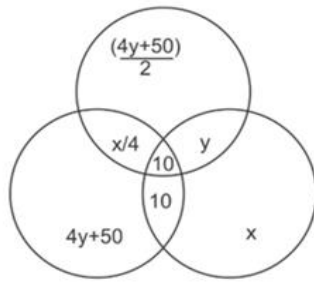
And people who like only car A&C together = $\frac{x}{4}$

Let people who like only car A & B together be y

And people who like only car C = $4y+50$

People who like only car A = $\frac{4y+50}{2}$

A(145)



C(210)

ATQ,

$$\frac{4y+50}{2} + y + \frac{x}{4} + 10 = 145$$

$$\frac{4y+50+2y}{2} + \frac{x}{4} = 135$$

$$8y+100+4y+x=540$$

$$x+12y=440 \dots (i)$$

And

$$\frac{x}{4} + (4y+50) + 10 + 10 = 210$$

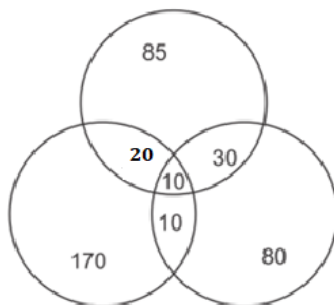
$$\frac{x}{4} + 4y = 140$$

$$x+16y=560 \dots (ii)$$

From (i) & (ii)

$$y=30, x=80$$

A (145)



C(210)

B(130)

S115. Ans.(b)

Sol. Required ratio = $170 : 130 = 17:13$

S116. Ans.(c)

Sol. Required percentage = $\frac{20}{20+30+10+10} \times 100$

$$= \frac{20}{70} \times 100$$

$$= 28\frac{4}{7}\%$$

S117. Ans.(e)

Sol. Males who like only car A = $85 \times \frac{11}{17} = 55$

People who like only car B & C together = 10

Required difference = $55 - 10 = 45$

S118. Ans.(c)

Sol.

People who do not like any of the three cars

$$= 550 - (145 + 210 + 130) = 65$$

S119. Ans.(a)

Sol. People who like only car A and only car B together = $85+80=165$

People who like only car A & B together and people who like only car C = $30+170=200$

$$\text{Required percentage} = \frac{200-165}{200} \times 100 = 17.5\%$$

S120. Ans.(c)

Sol. Let length of train A be x meters

And length of train B = $x+60$ meters

ATQ,

$$\frac{x+60}{5} = \frac{108}{7}$$

$$126 \times \frac{5}{18}$$

$$x+60=108 \times 5$$

$$x=480 \text{ meters}$$

$$\text{Speed of train A} = \frac{480}{24} = 20 \text{ m/sec}$$

$$\text{Length of bridge} = \frac{5}{9} \times (480+60) = 300 \text{ meters}$$

$$\text{Required time} = \frac{300+480}{20} = 39 \text{ seconds}$$