

SBI Clerk Mains 2020 (Memory Based Paper)

REASONING ABILITY

Directions (1-5): Study the following information carefully and answer the given questions.

There are 30 stairs in a house which use to go 1st floor from ground floor in such that the bottommost step is considered as 1 and the immediate above step is considered as 2 and so on till the topmost step is considered as 30. There are three persons A, B and C are stay at ground floor. Persons from A to C- are stay from west to east. They are moving from bottom to top based on certain conditions i.e. If A move to step 2 then he doesn't move on step 1 and step 3(that means A does not move its immediate next and immediate back steps) and the same for all. All the persons move from the ground floor.

Conditions:

- I. A moves only on prime numbered step.
- II. B moves an interval at least four steps and
- III. C moves only on the step which is a multiple of 5.

Note: If A moves on the 1st step it counts as 1st stoppage and if A moves on the 30th step it counts as last stoppage and same for the all.

No one stops either on bottommost step or topmost step. C stops only 5 times. C's 2nd stoppage is 2 steps above of B's 2nd stoppage. A's 3rd stoppage is just below step of B's 2nd stoppage. Both A and B don't stop on the same step. Both B and C stop on the same step only once and at that step the number of steps above B and C is more than the number of steps below to the B and C. The number of steps below A's 1st stoppage is one more than the number of steps above the A's last stoppage. Stoppage counts of B and C are equal. A's 2nd last stoppage is 2 steps below of B's 2nd last stoppage. A stoppage three more than the B's stoppage. B's last stoppage is above the step which is a multiple of 9.

1. On which of the following steps A and C stop on the same step?
(a) Step 25 (b) Step 10 (c) Step 5
(d) Step 20 (e) Step 15
2. A's fourth stoppage on which of the following steps?
(a) 17 (b) 11 (c) 19
(d) None of these (e) 13
3. If all the persons face north then, A's last stoppage is in which direction of B's last stoppage?
(a) North-east (b) North-west (c) South-east
(d) South-west (e) None of these

4. The number of steps below C's first stoppage is same as the number of steps below A's ___ stoppage.
(a) 4th (b) 1st (c) 2nd
(d) 3rd (e) Can't be determined
5. What is the average number of the stoppage of A, B and C?
(a) 6 (b) 18 (c) 12
(d) 11 (e) 10

Directions (6-8): Each of the questions below consists of a question and two statements numbered I, and II 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 answer the following questions.

- (a) If the data in statement I alone are sufficient
 - (b) If the data in statement II alone are sufficient
 - (c) If the data either in statement I alone or statement II alone are sufficient to answer
 - (d) If the data given in both I and II together are not sufficient
 - (e) If the data in both the statements I and II together are necessary to answer
6. Seven family members are living in the family of three generations. In which only two married couples are in the family. The number of females is more to males in the family. Who among the following is the grandmother of S's niece?
Statements: I. T is the son in law of Q. P is the mother of V who has one sibling. S is the daughter of U. S is unmarried.
II. Q has only two children of same gender. R is a male member in the family. P is not married with Q. U is not the mother of P.

7. Rajesh goes from his house to his office. He goes 10m in the east direction from his house and reached at point Q. Find the direction of his office with respect to Point Q?
Statements: I. From Point Q his goes to 5m north to reach point T and after that takes his right and goes 7m to reach point R. Finally, he takes another his right turn and goes 12m and reached his office.

II. From Point Q he goes 12m south and reach at point V. Now he takes his left and goes 7m to reach point W. After that he takes his left and goes 5m to reach his office.

8. Six persons M, N, O, P, Q and R takes their class from Monday to Saturday of the same week. No two persons takes their class on the same day. Who among the following takes his class just after P?

Statements: I. Two persons takes their class between M and O. Q takes his class just after R.

II. P does not take his class on Monday and Saturday. More than one person's take class between O and Q.

9. Statement-The Union health ministry has made Aadhaar a compulsory document for tuberculosis patients to be able to avail treatment under the government's Revised National Tuberculosis Control Programme (RNTCP).

- (I) A person cannot take treatment of TB without Aadhar card.
(II) Patients suffering from TB will be unable to get cash benefits under a central government scheme till they produce their Aadhaar card.
(III) An individual eligible to receive the benefit under the scheme, is hereby, required to furnish proof of possession of Aadhaar number or undergo Aadhaar authentication.
(IV) The World Health Organisation(WHO) recently said that tuberculosis epidemic in India was "larger" than what had been previously estimated.

Which of the following could be the outcome of the given statement?

- (a) Only II (b) Only I and III (c) Only II and III
(d) Only I (e) None of these

10. Statement-The Captain Amarinder Singh-led government in Punjab has announced free education for girls in government schools and colleges from Nursery to PhD.

- (I) Good social welfare law. It is initially for girls as they are comparatively disadvantaged. Hopefully it will soon be followed by free education for everyone.
(II) It is gender biased as if a poor or average person wants to educate his son for higher education, he has to pay higher bills. If, you are introducing a law / scheme / bills under no circumstance it should not favour any particular gender, if they are really concerned about education.

(III) Do not differentiate a poor or average person on gender. A poor boy or man should also get free education as well.

Which of the following argument holds strong for the given statement?

- (a) Only II (b) Only III (c) Only II and III
(d) Only I and II (e) All of the above

Direction (11-15): Study the following information carefully and answer the given questions.

Six persons are living in a three-story building such as ground floor is numbered as 1, above it is floor 2 and so on till the topmost floor is numbered as 3. Each of the floors has 2 flats in it viz. flat-1 and flat-2. Flat-1 of floor-2 is immediately above flat-1 of floor-1 and immediately below flat-1 of floor-3 and so on. In the same way flat-2 of floor-2 is immediately above flat-2 of floor-1 and immediately below flat-2 of floor-3 and so on. Flat-1 is in west of flat-2. The persons work in different department of the same MNC i.e. IT, Operation, HR, Sales, Marketing and Accounts. All the data was not necessarily in the same order.

B lives in the east of the one who work in Accounts. The person who work in Sales lives just above the floor of the one who works in marketing. S lives in flat just above of the one who work in operation department but not live on odd numbered floor. S does not work in Accounts. C lives in the south west of the one who works in marketing. C is neither work in accounts nor HR. Both D and A live in the same flat number. D lives above S. R is one of the persons.

11. Who among the following lives in the east of the one who work in HR?

- (a) None of these
(b) The one who lives just above the R's flat
(c) R
(d) D
(e) The one who work in Operation

12. Who among the following is working in _____ department and lives in the south of A?
 (a) HR (b) IT (c) Operation
 (d) Accounts (e) None of these
13. A lives in the flat __ of floor ___?
 (a) 1-2 (b) 3-1 (c) 2-3
 (d) 1-3 (e) 2-2
14. B and C working in ___ and ___ respectively?
 (a) Accounts, Marketing
 (b) HR, Operation
 (c) Sales, IT
 (d) None of these
 (e) Operation, Sales
15. Four of the following five are alike in a certain way and so form a group. Find the one who does not belong to that group?
 (a) D
 (b) The one who works in Sales
 (c) C
 (d) The one who works in Operation
 (e) A

Directions (16-20): In each of the questions given below, a group of digits/letter is given followed by four combinations of symbols numbered (a), (b), (c) and (d). You have to find out which of the four combinations correctly represents the group of digits/letters based on the symbol codes and the conditions given below. If none of the four combinations represents the group of digits/letters correctly, give (e) i.e. 'None of these' as the answer.

Digit/ letters	B	U	2	3	Y	M	7	D	5	P	9	X	4	S
Symbol	®	£	μ	∞	≠	©	@	#	\$	&	^	*	%	+

Condition for coding the group of elements:

- (i) If the first letter is Consonant and the last digit is perfect square, then both are to be coded as ^.
- (ii) If the first digit is an odd number and the last letter is consonant, then both are to be coded by the code of the last element.
- (iii) If the first letter is Vowel and the last element is a digit, then the code of first and last elements are to be interchanged.
- (iv) If the first digit and the last digit are even number, then the obtained code will be written in reversed order.

16. What is the code for "XBU7PS4"?
 (a) #^£&+®% (b) *®£@+&% (c) ^®£@+&%^
 (d) ^®£@&+^ (e) None of these

17. What is the code for "3PUM79"?
 (a) @®∞≠*@ (b) ∞&£©@^ (c) ^@∞≠*@
 (d) ^®∞≠*® (e) None of these

18. What is the code for "UMBS92"?
 (a) £%@\$≠∞ (b) ∞%\$@#£ (c) μ©®+^ £
 (d) ∞%≠\$@£ (e) None of these

19. What is the code for "24PM7U4"?
 (a) %£@©&% μ (b) μ%©#∞®% (c) μ©#∞®%@
 (d) μ@®∞#©% (e) None of these

20. What is the code for "5PX49Y"?
 (a) ≠&*%^≠ (b) @&£%^≠ (c) ≠&%£^@
 (d) ©&£^%© (e) None of these

Direction (21-24): Study the following information carefully and answer the given questions.

Seven boxes are placed one above other in a stack. Each of the box are in different colours i.e. Green, Black, Blue, Pink, Purple, White and Red. The bottommost box is numbered as 1 and just above the box is numbered as 2 and so on the topmost box is numbered as 7. All the data was not necessarily in the same order.

Box Q is placed at even numbered. The number of boxes placed above the box Q is same as the number of boxes placed below the box of Red coloured. Box P is placed just above the box which is in Purple coloured. Two boxes placed between the boxes of Blue and Purple coloured. Purple coloured box is placed at even numbered position. Box T is placed just above the box V, which is in Black coloured. Box T is placed above the box Q. Box U is placed above the box which is in Pink coloured but not placed just above. Box U is placed below the box R, which is not in Green coloured. One box is placed between the boxes of Blue and Green coloured. Box S is not in White coloured. At most one box is placed between Box U and the box which is of Purple coloured.

21. How many boxes are placed above the box of Black coloured?
 (a) One (b) Four (c) Three
 (d) Five (e) None
22. How many boxes are placed between box Q and the one which is in Red coloured?
 (a) More than four
 (b) Four (c) None of these
 (d) Two (e) One

23. Which of the following is true as per the given information?
- Box P is placed 3rd from the topmost position
 - The number of boxes placed between U and V is same as between S and P
 - Box Q is placed at the bottommost position
- (a) Only I (b) Both II and III (c) Only II
(d) Both I and III (e) Only III

24. Which of the following box is in Blue coloured?
- (a) Q (b) R (c) U
(d) None of these (e) T

Direction (25-27): Study the following information carefully and answer the given questions.

Q E U * K \$ 4 Y 7 A 6 P & R # 3 % T @ 3 1 5 S I O 9 9 J L

STEP I. The letters which are immediately preceded and immediately followed by a symbol are arranged between 1 and 5 in the reverse alphabetical order.

STEP II. The number immediately followed by the letter are arranged in the end of the series in ascending order.

STEP III. The letter which are immediately followed by number are interchanged its position with each other.

(STEP II is applied after STEP I and STEP III is applied after STEP II)

25. Which of the following element is 4th to the right of 9th from the left end in step-2?
- (a) % (b) 3 (c) T
(d) None of these (e) @
26. Which among the following are the elements of the series which are eleven position from the left end and fifth position from the right end respectively in step-III?
- (a) 34 (b) #L (c) PJ
(d) A5 (e) #6
27. How many symbols are immediately followed by numbers in step-III?
- (a) one (b) Three (c) Four
(d) Five (e) Two

Directions (28-32): A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of an input and rearrangement.

Input: notice 65 other 92 under 46 direct 71 allow 21 service 88

Step I: allow notice 65 other 92 under 46 direct 71 service 88 22

Step II: other allow notice 92 under 46 direct 71 service 88 22 66

Step III: under other allow notice 92 46 direct service 88 22 66 72

Step IV: direct under other allow notice 92 service 88 22 66 72 45

Step V: notice direct under other allow 92 service 22 66 72 45 87

Step VI: service notice direct under other allow 22 66 72 45 87 91

And Step VI is the last step of the rearrangement of the above input.

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

Input: public 86 interest 95 exit 67 such 43 upper 64 large 18

28. In which step the elements '86 such 64' found in the same order?
- (a) Step IV (b) Step II (c) Step III
(d) Step V (e) Both (a) and (c)
29. In step III, which of the following word/number would be at 4th to the left of the element which is 5th from the right end?
- (a) exit (b) such (c) public
(d) 86 (e) 64
30. How many steps required completing the above arrangement?
- (a) Three (b) Four (c) Six
(d) Seven (e) Five
31. Which of the following is the penultimate step?
- (a) public large upper interest exit such 86 44 68 96 19 65
(b) large upper interest exit public 86 such 64 44 68 96 19
(c) large upper interest such 64 44 exit public 86 68 96 19
(d) public large upper interest exit 86 such 44 68 96 17 63
(e) None of these
32. In step VI, 'public' is related to '63' and 'upper' is related to '96'. In the same way 'exit' is related to?
- (a) 44 (b) 85 (c) 63
(d) 17 (e) None of these

Direction (33-34): In making decisions about important questions, it is desirable to be able to distinguish between 'strong' arguments and 'weak' arguments. 'Strong' arguments are those which are important and directly related to the question. 'Weak' arguments are those which are of minor importance and also may not be directly related to the question or may be related to a trivial aspect of the question. Each question below is followed by two arguments numbered as I and II. You have to decide which of the arguments a strong argument is and which a weak argument is.

Give answer -

- (a) if only Argument I is strong
- (b) if only Argument II is strong
- (c) if either Argument I or II is strong
- (d) if neither Argument I nor II is strong
- (e) if both Argument I and II are strong

33. Statement: Should the provision to dissolve the assembly prematurely be amended ?

Arguments:

- I. Yes, on many occasions the provision has been used by ruling governments to fulfill their vested interests.
- II. No, to fulfil the constitutional obligations and norms, it sometimes becomes the need of the hour to dissolve the assembly prematurely.

34. Statement: Should only reputed NGO's be authorized to distribute the commodities to the public under the programme of Public Distribution System (PDS)?

Arguments:

- I. Yes, the move will be helpful to implement the programme more effectively and will keep a tab on various problems like black marketing of the commodities supplied under PDS.
- II. Yes, NGO's have helped government on many occasions

35. In the question below is given a statement followed by three courses of action numbered I, II, and III. A course of action is a step or administrative decision to be taken for improvement, follow up or further action in regard to the problem, policy etc. On the basis of the information given in the statement, you have to assume everything in the statement to be true, then decide which of the suggested courses of action logically follow (s) for pursuing.

Statement: Many school buses have fitted CNG Kit without obeying the safety guidelines properly. This results into some instances of these buses catching fire due to short circuit and endangering the lives of the school children.

Courses of action:

- I. The regional transport authority should immediately carry out checks of all the school buses fitted with CNG Kit.
 - II. The management of all the schools should stop hiring buses fitted with CNG Kit.
 - III. The Government should issue a notification banning school buses for use of CNG Kit.
- (a) Only I follows
 - (b) Only II follows
 - (c) Only III follows
 - (d) I and III follow
 - (e) None of these

Direction (36): Study the following information carefully and answer the given questions.

894#S3D8T#I@EP!956\$WJF*&BH3T@7E&2^N5K

36. If in a given arrangement, groups of letters that immediately preceded by a number and immediately followed by a symbol are removed along with that symbol and number, then which of the following element is 7th from the right end and 9th from the left end respectively?

- (a) @B
- (b) DB
- (c) B@
- (d) HE
- (e) I2

Direction (37-41): Study the following information carefully and answer the given questions.

Twelve persons are sitting in a boat containing 6 persons in each of the longer side of the boat in such a way that there is an equal distance between adjacent persons. 6 persons of one longer side of the boat face north and 6 persons of another longer side of the boat face south direction. Persons sit at the both side of the boat doesn't face to each other. Seating of the persons are in such a way that one person sits behind the other person. At most two persons ahead of B. The number of persons north of B is equal to the number of persons south of U on the different sides of the boat. Q sits exactly in between A and U. The number of persons south of Q is equal to the number of persons north of R on the different sides of the boat. There are as many persons ahead of R as same as behind of T on the same side of the boat. Three persons sit between U and A. No one sits south of S. One person sits between T and S. C sits behind of E and ahead of P. F is ahead of D. S faces the north and another side of the boat is right of S.

37. How many persons ahead of the one who is just behind of P?

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

38. How many persons sit between D and F?
(a) None (b) Four (c) Three
(d) Two (e) One

39. Four of the following five are alike in a certain way and so form a group. Find the one who does not belong to that group?

- (a) F (b) E (c) S
(d) A (e) C

40. The number of persons sit behind of F is same as the number of persons sit ahead of ___?

- (a) P (b) R (c) T
(d) E (e) A

41. If C is related to E, D is related to R in the same way who among the following is related to B?

- (a) F (b) T (c) S
(d) U (e) None of these

Direction (42-45): Study the following information carefully and answer the given questions.

Seven persons i.e. F, D, B, G, E, A and C who lives on the seven different floors of a multi storey building such that ground floor is numbered 1 and above it is 2 and so on till the top floor which is numbered 7. They all like different colour. Only three persons live between A and the one who likes White colour, who lives on an odd number floor. Only one person lives between the one who likes white and the one who likes Green colour, who lives immediately below the floor on which F lives. Only three persons live between F and the one who likes Yellow colour. The one who likes Red colour lives immediately below the one who likes Black colour. D live one of the floors below the one who likes Blue colour. Only one person lives between E and the one who likes Yellow colour. G lives immediately above C, who does not like yellow colour. B lives immediately above the one who likes Pink colour, who lives on an even number floor. B does not like Green colour.

42. Who among the following likes Blue colour?

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

43. How many persons lives below the D's floor?

- (a) No One (b) Two (c) Three
(d) One (e) None of these

44. Who among the following lives on the 5th Floor?

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

45. Which of the following statement is true regarding E?

- (a) E lives on an odd numbered floor
(b) E likes Red colour.
(c) E lives below D.
(d) Two persons live between G and E.
(e) None is true

Direction (46-50): Study the following information carefully and answer the given questions.

Eight persons sit around a circular table facing the centre. There are two vacant seats. No one sits between B and D, when counted to the left of D. The one who faces to D sits immediate right of S. B does not sit opposite to S. One of the vacant seats is immediate either left or right of S. F sits immediate left of R, who sits opposite to Q. D does not sit next to Q. P sits 2nd to the right of Vacant seat. A does not sit next to F. At most one person sits between F and P either from the one side. B sits next to one of the vacant seat. D does not sit opposite to vacant seat.

46. How many persons sit between P and Q when counted to the left of Q?

- (a) Is same as the number of persons sit between S and R, when counted to the left of R
(b) Three
(c) None of these
(d) Is same as the number of persons sit between D and F when counted to the right of D
(e) More than three

47. Which of the following statement is not true?

- I. R and B are immediate neighbours to each other
II. S sits opposite to F
III. Q sits immediate left of S
IV. One person sits between P and B
(a) Both II and IV (b) All I, II, III and IV
(c) II, III and IV (d) Only II (e) None is true

48. If P and D, are interchanged their position then who among the following sits 3rd to the right of D?

- (a) F (b) R (c) Q
(d) None of these (e) B

49. Four of the following five are alike in a certain way and so form a group. Find the one who does not belong to that group?

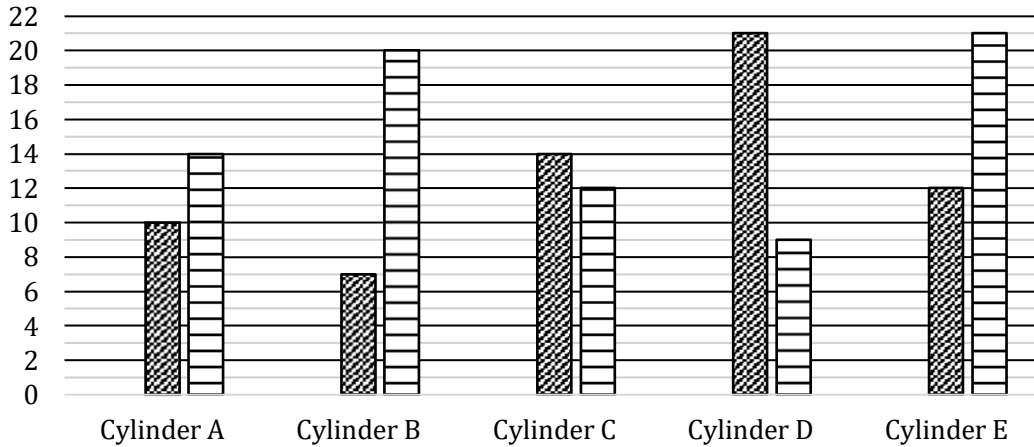
- (a) S-R (b) B-P (c) B-A
(d) Q-P (e) A-S

50. The number of persons sit between S and the one who sits immediate left of B, when counted to the right of S is same as the number of persons sit between Q and when counted to the right of Q?

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

QUANTITATIVE APTITUDE

Direction (51 – 56): Bar graph show radius (in cm) and height (in cm) of five different cylinders. Read the data carefully and answer the questions.



Radius
 Height

- 51.** If some cubes having side of 2 cm is filled in cylinder A and cylinder B, then find the difference between number such cubes filled in both cylinders?
 (a) 155 (b) 165 (c) 145
 (d) 175 (e) 135
- 52.** If cylinder C is 40% filled with water and cylinder D is 80% filled with water, then find the difference between empty volumes of both cylinders (cm³)?
 (a) 1948.4 (b) 1904.4 (c) 1930.4
 (d) 1924.4 (e) 1940.4
- 53.** Difference between diameter and height of cylinder A is what percent more or less than difference between diameter and height of cylinder C?
 (a) 67.5% (b) 50% (c) 62.5%
 (d) 75% (e) 87.5%
- 54.** Find the ratio of curved surface are of cylinder D to that of cylinder A?
 (a) 27 : 20 (b) 9 : 7 (c) 8 : 5
 (d) 21 : 16 (e) 6 : 5
- 55.** Find the sum of total surface are of cylinder B to the of cylinder E (in cm²)?
 (a) $\frac{25440}{7}$ (b) $\frac{25740}{7}$ (c) $\frac{25540}{7}$
 (d) $\frac{25840}{7}$ (e) $\frac{25640}{7}$
- 56.** Find the average of volume of cylinder C, D & E (in cm³)?
 (a) 9740 (b) 9730 (c) 9750
 (d) 9790 (e) 9760
- 57.** A rectangular park having length of 60 meters surrounded by a path, which width is 5 meters. If rate of flooring per square meter is Rs. 500 and total cost of flooring on path is Rs. 550000, then find the area of rectangular park (in m²)?
 (a) 1800 (b) 2400 (c) 3000
 (d) 2520 (e) 2880
- 58.** The certain number of men can do a work in some days. When eight more men would join them, then work would be finished in 40% less time. If $33\frac{1}{3}\%$ less men can do the same work in 30 more days, then find 12 men can finish half of the same work in how many days?
 (a) 20 (b) 40 (c) 36
 (d) 24 (e) 30
- 59.** Monthly income of P is Rs. 11000 more than that of Q. P and Q spent 15% and 10% of their respective monthly income on rent, while each spent 10% of his respective monthly income on household items. If remaining amount they saved and saving of P is Rs. 7000 more than Q, then find monthly income of Q (in Rs.)?
 (a) 15000 (b) 36000 (c) 25000
 (d) 24000 (e) 32000

60. When a man sold a watch for Rs. 4000, then he makes a loss of in this transaction. If man would sell the same watch for Rs. 5000, then he would make a profit of $\frac{2}{3}$ rd of what the loss he makes initially. Find the cost price of watch (in Rs.)?

- (a) 4400 (b) 4600 (c) 4500
(d) Can't determine (e) None of these

61. A man invests Rs. P in scheme A on simple interest for two years at certain rate of interest and he invests Rs. (P + 5000) in scheme B on simple interest for five years at twice the rate of interest of the rate of interest of scheme A. If interest received by man from scheme B is ten times of interest received from scheme A, then find the amount invested by man in scheme A.

- (a) 8000 Rs. (b) 4000 Rs. (c) 7500 Rs.
(d) 5000 Rs. (e) 10000 Rs.

62. In two towns A and B the ratio of males to females is 5 : 3 & 5 : 1 respectively. If population of both towns is equal and total males in town A are 500 less than total males in town B, then find the total females in both the towns together?

- (a) 1000 (b) 1300 (c) 1100
(d) 700 (e) 1600

Direction (63 – 66): 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:

63. A man purchases two articles in total Rs. 1800. If he sells first article at 15% profit and second article at loss of 8% and selling price of both the articles is equal.

Quantity I – Cost price of first article.

Quantity II – Cost price of second article.

- (a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or no relation

64. If the product of two integers are 24 times of their difference and sum of both integers is 14.

Quantity I – Value of greater integer.

Quantity II – Twice the value of smaller integer.

- (a) Quantity I < Quantity II
(b) Quantity I > Quantity II
(c) Quantity I = Quantity II or no relation
(d) Quantity I ≤ Quantity II
(e) Quantity I ≥ Quantity II

65. A, B & C entered in a business and I invest such that, investment of A is $\frac{1}{3}$ rd of total investment made by them, while investment of B is equal to the sum investment of A and C together. Their total profit after one year in business is Rs. 840.

Quantity I. Difference between profit share of B and C.

Quantity II. Rs. 240.

- (a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or no relation

66. A started his journey from point X at the speed of 25 km/hr at 10 am and B started from point X at 4 pm at the speed of 40 km/hr in the direction of A.

Quantity I. Total distance covered by B when he crossed A.

Quantity II. 400 km

- (a) Quantity I < Quantity II
(b) Quantity I > Quantity II
(c) Quantity I = Quantity II or no relation
(d) Quantity I ≤ Quantity II
(e) Quantity I ≥ Quantity II

67. A and B invested into a business with capital of Rs. 12500 and Rs. 8500 respectively. If they share 60% of total profit equally and rest profit they distributed as per their respective investment. If profit share of A is Rs. 300 more than that of B, then find the total profit received by both (in Rs.)?

- (a) 3937.5 (b) 3737.5 (c) 3537.5
(d) 3637.5 (e) 4037.5

68. Marked price of an article is two times of its cost price and a discount of Rs. D is given such that profit on article is 50% more than the discount (in Rs.). If discount was of 40% given on the article, then find the profit percentage on the article?

- (a) 30% (b) 25% (c) 10%
(d) 20% (e) 15%

Direction (69 - 71): Read the data carefully and answer of the questions.

There are 350 students in a school who like Orange, Grapes and Apple and students can like more than one fruit as well. 6% of total students like only Orange, 18% of total students like only Apple and 12% of total students like only Grapes. X% of total students like Orange and Grapes but not Apple. Y% of total students like Apple and Orange but not Grapes and Z% of total students like Apple and Grapes but not Orange. Value of X, Y & Z is multiple of ten and no value are same.

69. How many students like all three fruits?

- (a) 28 (b) 21 (c) 14
(d) 7 (e) Can't determine

70. What would be maximum value of total students who like Apple, Orange but not Grapes?

- (a) 105 (b) 70 (c) 210
(d) 35 (e) Can't determine

71. What would be minimum difference between total students like Orange and Grapes but not Apple and total students like Apple and Grapes but not Orange?
 (a) 105 (b) 42 (c) 70
 (d) 35 (e) Can't determine

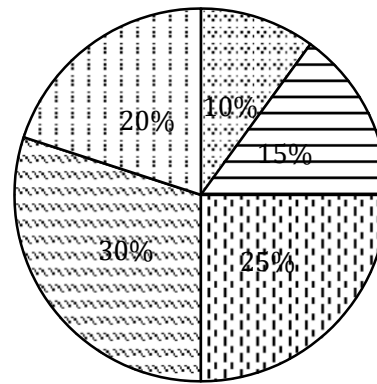
Direction (72 - 74): Read the data carefully and answer the questions.

In the year 2018, there were three classes 8th, 9th and 10th and total number of students in all three classes is 181. Total number of boys in 9th class are 20% more than that of in 8th class and total number of girls in 9th class are 50% more than that of in 10th class. Sum of total number of boys in 8th class & 9th class together and total number of girls in 9th & 10th class is 128. The sum of total boys in 8th class and girls in 10th class is 56. Total number of boys in 10th class are 17 more than total number of girls in 8th class.

72. If in class 11th total number of boys are 80% of the total number of boys in class 10th and 75% of total boys in class 11th is equal to 50% of girls in class 11th, then find percentage of girls in class 11th?
 (a) 50% (b) 55% (c) 60%
 (d) 65% (e) 70%
73. In class 7th in the year 2017 total number of students are 60 and total number of girls in 7th class are 25% more than total girls in class 10th in 2018. If out of total boys and girls in class 7th in the year 2017 20% & 40% are failed respectively, then find total boys take new admission in class 8th in the years 2018 are what percent more than that of girls take new admission in same class and in the same year (All students enrolled in exam in class 7th in the year 2017)?
 (a) 48% (b) $66\frac{2}{3}\%$ (c) 30%
 (d) 40% (e) $33\frac{1}{3}\%$
74. In the class 12th in 2020 total new boys and new girls take admission are X & Y respectively. Total new boys and new girls take admission in class 11th in year 2019 are 12 & 8 respectively, while 80% of total boys and 87.5% of total girls passed in class 10th in 2018. If 90% of total boys and $\frac{6}{11}$ th of total girls passed in class 11th in year 2019 and total boys in class 12th in 2020 are 75% of total students in class 9th in 2018, then find difference between total students in class 12th in 2020 and that of in class 8th in 2018 (total boys in class 12th in 2020 are 170% more than that of girls)?
 (a) 18 (b) 16 (c) 24
 (d) 12 (e) 22

Direction (75 - 80): Pie chart given below show percentage distribution of total unsold cookies on five different days by a shop. Read the data carefully and answer the questions.

Total unsold cookies = 180



- Sunday Monday Tuesday
 Wednesday Thursday

Note -

- (i) Total 200 cookies baked each day from Sunday to Thursday.
 (ii) Total unsold cookies on particular day will be sold next day.
 (iii) There are no unsold cookies carry forward on Sunday.
75. $\frac{9}{14}$ th of total sold cookies on Tuesday each cookie sold for Rs. X and rest of cookies each cookie sold for Rs. Y. If ratio of value of X to that of Y is 2 : 3 and shop received total amount of Rs. 1716 for selling all cookies on Tuesday, then find the total amount received by shop for selling each cookie for Rs. X?
 (a) 819 Rs. (b) 936 Rs. (c) 750 Rs.
 (d) 702 Rs. (e) 916 Rs.
76. If average number of cookies baked by shop on Monday & Friday is 220 and the ratio of total baked cookies to total unsold cookies on Friday is 6 : 1, then Find percentage of sold cookies on Friday (Consider no unsold cookies carry forward from Thursday to Friday)?
 (a) $90\frac{1}{3}\%$ (b) 75% (c) 80%
 (d) $83\frac{1}{3}\%$ (e) 96%

77. Out of total baked cookies in Sunday, 45% cookies were chocolate base, 25% cookies were fruit base and rest were almond base cookies. If ratio of total unsold chocolate base, fruit cake base and almond base cookies is 2 : 1 : 3, then find the fruit base cookies sold on Sunday?
 (a) 35 (b) 33 (c) 47
 (d) 36 (e) 34
78. Total unsold cookies on Thursday carry forward for Friday and 96% of total cookies available for sell on Friday sold and unsold cookies carry forward for next day. If total 290 cookies baked on Saturday and total cookies available for sell on Saturday is 20% more than total cookies available for sell on Friday, then find total sold cookies on Friday?
 (a) 192 (b) 288 (c) 264
 (d) 216 (e) 240
79. In all the given five days what percent of total baked cookies were sold?
 (a) 92.4% (b) 96.4% (c) 98.4%
 (d) 96.8% (e) 96.2%
80. Average of total cookies baked on all seven days (from Sunday to Saturday) is 220 and total cookies baked on Saturday are 25% more than that of on Friday. If total unsold cookies on Thursday carry forward for Friday and 75% of total cookies available for sell on Friday were sold, then find total cookies available for sell on Saturday (consider total unsold cookies on Friday carry forward for Saturday)?
 (a) 363 (b) 371 (c) 365
 (d) 359 (e) 369
81. Arun and Veer together takes 18 days to do a work while Arun and Chiru together take 30 days to do that work. Veer is 200% more efficient than Chiru. What is the time taken by all three together to do the work?
 (a) 12 days (b) 20 days (c) 16 days
 (d) 10 days (e) 15 days
82. Rate of interest for first and second year is 15% and X% respectively. If total interest (total CI + total SI) received on a sum of Rs. 800 in these two years is Rs.756, then what is the value of X?
 (a) $12\frac{1}{2}\%$ (b) 30% (c) 15%
 (d) 25% (e) 20%
83. Ratio of income of A to that of B is 9: 10. Income of C is $16\frac{2}{3}\%$ less than that of A. Average income of A, B and C is Rs.5300. Savings of A and B are equal and savings of C is Rs.300 less than that of B. Expenditure of A is 20% more than that of C. Savings of A is what percent of income of A?
 (a) $31\frac{2}{3}\%$ (b) $33\frac{1}{3}\%$ (c) 35%
 (d) $27\frac{1}{2}\%$ (e) 30%
84. If A works on 1st day, B works on 2nd day and C works for 3rd day then in this way the whole work is completed in 15 days. The same work is completed when A works for 8 days and B works for 11 days. Same work is completed when A works for $8\frac{3}{4}$ days and C works for 5 days. What is the time taken by A and C together to complete the work?
 (a) 8 days (b) $7\frac{1}{2}$ days (c) $6\frac{1}{2}$ days
 (d) 5 days (e) $6\frac{2}{3}$ days
85. P, Q and R entered into a partnership. Amount invested by P is 5% more than that of Q. Amount invested by R is $2\frac{6}{7}\%$ more than that of P. After 4 months, Q increases his investment by 15% and after 6 months from the beginning, P withdraws 60% of his amount. Find the difference between profit share of P and Q if the profit share of R is Rs. 3240.
 (a) Rs 1020 (b) Rs 1080 (c) Rs 1110
 (d) Rs 1125 (e) Rs 1095
86. Both Vikash and Vijay sold an article at 20% profit on selling price. Average of cost price of article for Vikash and Vijay is Rs.700. Profit earned by Vikash is Rs.50 less than profit earned by Vijay. What is the average of selling price of article for Vikash and Vijay?
 (a) Rs 825 (b) Rs 875 (c) Rs 910
 (d) Rs 925 (e) Rs 805
87. Series S1 contains four consecutive odd numbers and Series S2 contains four consecutive even numbers. Smallest number of series S1 is 5 less than the largest number of series S2. What is the difference between sum of smallest numbers of both series and sum of second smallest number of both series?
 (a) 4 (b) 6 (c) 8
 (d) 2 (e) None of these
88. There are some white balls and some red balls in a bag. Number of red balls are 2 more than the number of white balls in the bag. Three balls are drawn from the bag at random. What is the probability that out of three balls drawn at least one ball is red and at most two balls are white? (it is given that there are total 10 balls in the bag)
 (a) $\frac{19}{20}$ (b) $\frac{9}{10}$ (c) $\frac{29}{30}$
 (d) $\frac{39}{40}$ (e) None of these
89. Difference between downstream speed and upstream speed of a boat is 8 km/h. If total time taken by the boat to cover 56 km in downstream and 36 km in upstream is 8 hours, What is the time taken by the boat to cover 48 km in still water?
 (a) 3 hours (b) 4 hours (c) 5 hours
 (d) 6 hours (e) 7 hours

90. A vessel of capacity 108 liters is full of pure milk. 'X' liters of milk is taken out from the vessel and is replaced with water. Again, X liters of the mixture is taken out from the vessel and is replaced with water. Now the vessel contains only 48 liters of milk. What is the value of X?

- (a) 36 litres (b) 24 litres (c) 30 litres
(d) 40 litres (e) 48 litres

Directions (91 - 95): Each of given question is followed by two statements i.e. Statement I & II. You have to determine which statement (s) is/are sufficient/necessary to answer the question and mark answer accordingly.

- (a) Only statement II is sufficient
(b) Either statement I or II is sufficient
(c) Both statements together are not sufficient to answer
(d) Only statement I is sufficient
(e) Both statements together are necessary to answer

91. What is the speed of train?

- I. train can cross a platform in 30 sec while a tree in 12 sec.
II. length of platform is 50% more than that of train.

92. What is quantity of milk in mixture of milk & water?

- I. if 10 lit of the mixture is taken out then water becomes 35% of total quantity of remaining mixture.
II. if 30 lit water is added to the initial mixture then quantity of the milk becomes equal to that of water.

93. How many balls are in the bag? Bag contains only three types of colored balls.

- I. ratio of blue balls to red balls 4 : 5. Number of white colored ball is one more than that of red colored balls.
II. no. of ways of selecting 2 red balls from the bag is 10.

94. In what time pipe C alone can fill the tank?

- I. pipe A & B together takes 4 hours to fill the tank while pipe A, B and C together takes 3 hours to fill the tank. All pipes are inlet.
II. time taken by pipe A alone to fill half of the tank is same as time taken by pipe A & B together to fill the complete tank.

95. What is area of square?

- I. length of diagonal of square is equal to diameter of circle of area.
II. area of circle circumscribing the square is 154 sq.m.

Directions (96-100): Study the passage given below and answer the following questions.

Passage gives information about tourists from India who visited at least 1 country out of USA, UK and Australia. Ratio of total tourists from India who visited USA, UK and Australia is 3:4:3 respectively. Total tourists from India who visited all 3 countries together are 500.

Ratio of tourists from India who visited only USA to total tourists from India who visited UK is 1:5. Tourists from India who visited both USA and UK but not Australia are equal to tourists from India who visited both Australia and UK but not USA. Tourists from India who visited both USA and Australia but not UK are 700. Tourists from India who visited only USA are 800. Tourists from India visited only these 3 countries.

96. Find total number of tourists from India who visited only one country.

- (a) 2500 (b) 3100 (c) 2900
(d) 2700 (e) 2300

97. Total tourists from India who visited only one more country along with Australia is what percent of total tourists from India who visited UK?

- (a) 38.5% (b) 42.5% (c) 54.5%
(d) 56.5% (e) 75.5%

98. Find the total number of tourists from India who visited exactly 2 countries.

- (a) 3200 (b) 3500 (c) 2500
(d) 2700 (e) 2400

99. Total tourists from India who visited both USA and UK together are what percent more or less than total tourists from India who visited Australia?

- (a) 80% (b) 40% (c) 70%
(d) 60% (e) 50%

100. Find total number of tourists from India who visited atleast one country.

- (a) 10000 (b) 7500 (c) 6300
(d) 6000 (e) 6700

Directions (101-107): Read the passage carefully and answer the questions given below it.

If plastic had been invented when the Pilgrims sailed from Plymouth, England, to North America—and the Mayflower had been stocked with bottled water and colorful plastic-wrapped snacks for consumers' attraction—their plastic trash would likely still be around, four centuries later. If the Pilgrims had been like many people today and simply tossed their empty bottles and wrappers over the side, Atlantic waves and sunlight would have worn all that plastic into tiny bits. And those bits might still be floating around the world's oceans today, sponging up toxins to add to the ones already in them, waiting to be eaten by some hapless fish or oyster, and ultimately perhaps by one of us.

We should give thanks that the Pilgrims didn't have plastic, I thought recently as I rode a train to Plymouth along England's south coast. I was on my way to see a man who would help me make sense of the whole mess we've made with plastic, especially in the ocean. Because plastic wasn't invented until the late 19th century, and production really only took off around 1950, we have a mere 9.2 billion tons of the stuff to deal with. Of that, more than 6.9 billion tons have become waste. And of that waste, a staggering 6.3 billion tons never made it to a recycling bin—a figure that stunned the scientists who crunched the numbers in 2017.

No one knows how much unrecycled plastic waste ends up in the ocean, Earth's last sink. In 2015, Jenna Jambeck, a University of Georgia engineering professor, caught everyone's attention with a rough estimate: between 5.3 million and 14 million tons each year just from coastal regions. Most of it isn't thrown off ships but is dumped carelessly on land or in rivers, mostly in Asia. It's then blown or washed into the sea. Imagine five plastic grocery bags **stuffed** with plastic trash says, sitting on every foot of coastline around the world—that would correspond to about 8.8 million tons, her middle-of-the-road estimate of what the ocean gets from us annually. It's unclear how long it will take for that plastic to completely biodegrade into its constituent molecules. Estimates range from 450 years to never.

Meanwhile, ocean plastic is estimated to kill millions of marine animals every year. Nearly 700 species, including endangered ones, are known to have been affected by it. Some are harmed visibly—strangled by abandoned fishing nets or discarded six-pack rings. Many more are probably harmed invisibly. Marine species of all sizes, from zooplankton to whales, now eat microplastics, the bits smaller than one-fifth of an inch across. On Hawaii's Big Island, on a beach that seemingly should have been

pristine—no paved road leads to it—I walked ankle-deep through microplastics. They crunched like Rice Krispies under my feet. After that, I could understand why some people see ocean plastic as a looming catastrophe, worth mentioning in the same breath as climate change. At a global summit in Nairobi last December, the head of the United Nations Environment Programme spoke of an “ocean Armageddon.” And yet there's a key difference: Ocean plastic is not as complicated as climate change. There are no ocean trash deniers, at least so far. To do something about it, we don't have to remake our planet's entire energy system.

- 101.** According to the passage, what is the reason for existence of plastic in a huge amount?
- As plastic is cheaper and easily accessible while alternatives are costlier
 - Because of large production of it for convenient commercial uses in many sectors
 - Breakdown of plastic into tiny pics in soil and it presents for a long time
 - People prefer use plastic more in their daily lives
 - None of these
- 102.** What is the reason for the plastic pollution as per the information given in passage?
- Usage of plastic on regular basis has an adverse effect on health and on environment
 - Disposal of used plastic is easier.
 - Government's rules are lenient for the use of plastic in almost every country.
 - There is lack of dumping system for the waste.
 - None of these
- 103.** Which of the following statement can be said in reference to the frequent use of plastic?
- The production of plastic should be banned as this is the major reason for pollution.
 - Plastic is important in our daily lives as it makes life better, healthier and safer every day.
 - The environment with plastic pile will have adverse effects as plastic is non-biodegradable.
 - The price of plastic will be increased due to increase in its demand in market.
 - None of these

104. What does the author mean by “ocean Armageddon” given in third paragraph in the passage?

- (a) The various measures taken by the UNEP to tackle plastic pollution
- (b) Pollution of soil due to tiny bits of plastic in the soil and in ocean
- (c) Dumping of plastic waste in millions in and nearby the ocean
- (d) Usage of plastic for almost every purpose in our daily lives
- (e) None of these

105. Which of the following statement is incorrect as per the given passage?

- (A) Half of the plastic has been recycled and can be reused.
 - (B) Plastic is one of the major reasons for the endangerment of marine life.
 - (C) Plastic can be there in human food chain.
- (a) Only (C)
 - (b) Both (B) and (C)
 - (c) Both (A) and (C)
 - (d) Only (A)
 - (e) All (A), (B) and (C)

106. Which of the following is the similar word of ‘stuffed’ given in passage?

- (a) default (b) fill (c) reeling
- (d) optimal (e) None of these

Directions (107-112): Read the passage carefully and answer the questions given below it.

Insomnia, especially in its chronic form, is a frequent sleep disorder, probably the most frequent sleep disorder of all, afflicting approximately 10% of the adult population worldwide. According to most recent diagnostic criteria, like the DSM-5 or the ICSD-3, we nowadays talk of insomnia disorder instead of primary or secondary insomnia, as it was usually called in older versions of diagnostic manuals. Insomnia disorder as a diagnostic category encompasses disturbances of sleep and daily work, like problems to fall asleep or to maintain sleep and associated daytime sequelae like **impairment** of concentration or attention, increased fatigue, dysphoria etc. Chronic insomnia significantly increases the risk of developing somatic or mental illness, especially depressive disorders.

It has been speculated that the early and adequate treatment of insomnia may be very helpful in avoiding these long-time consequences, and in cases of comorbidity, insomnia treatment may also have a positive impact on the somatic or mental comorbidity. Insomnia comes at a high cost because recent research has shown that insomnia has severe consequences for work productivity, sick leave and many other areas. Summarising, the costs for the society are high and has

inferior outcomes, but adequate insomnia treatment is supposed to reduce these.

This virtual issue covers several aspects of insomnia disorder. An article focusses on the prevalence and management of chronic insomnia in Swiss primary care. This article nicely shows that insomnia is a very frequent problem encountered in general practice, but still, the predominant modality of treatment is pharmacological treatment instead of CBT-I. This is a pity, because CBT-I has now been confirmed by several international guidelines to be the first-line treatment of insomnia. Methods are discussed about how to further disseminate knowledge about CBT-I in general practice. In a similar way, other article covers the endeavours of the European Academy for Cognitive Behavioral Therapy for Insomnia to improve the teaching system for CBT-I. Hopefully, this initiative will be successful and lead to more adequately trained CBT-I therapists all over Europe.

Four articles in this virtual issue deal with the question of whether insomnia symptoms may be predictive for somatic or mental disorders. It is shown that insomnia may be involved in the development of post-traumatic stress symptoms, place people at a higher risk of cancer and also lead to an increased frequency of perinatal depressive symptoms during pregnancy. Two articles look at digital, web-based CBT treatment interventions. It becomes clear that CBT delivered via web-based solutions conveys a good chance of being able to help people with insomnia and to reduce associated depressive symptoms. Furthermore, the long-term benefits are clearly proven.

107. What is/are the impact(s) of chronic insomnia on the efficiency of day time work?

- (a) Depression and overthinking are the common causes of insomnia.
- (b) The efficiency of a person will decrease due to exhaustion and lack of focus.
- (c) Initially person’s abilities will be affected because of mental health issues.
- (d) Insomnia doesn’t have too much effect as it has become common in adults.
- (e) None of these

108. What is/are the possible links between insomnia and public societal concerns?

- (a) The societal consequences of insomnia are substantial and include impaired quality of life.
- (b) It increases the cost of life due to expenses on medication and remedies.
- (c) Insomnia and normal sleepers have a broadly similar understanding of societal concerns and activities.
- (d) The societal outcomes of insomnia are insignificant as it doesn’t have mental effect.
- (e) None of these

- 109.** What is/are the major concern(s) in the treatment of insomnia?
- Some believe insomnia is turning out to be a very common problem amongst the masses.
 - There is absence of resources for clinicians and researchers for insomnia.
 - The high treatment cost makes it unaffordable and unreachable to the general public.
 - Diffuse awareness among people about the new prescript for the cure of insomnia.
 - None of these
- 110.** Which of the following statement is correct as per the information given in passage?
- Insomnia is a worldwide problem and is not confined to a country.
 - Insomnia has become an inevitable disorder nowadays.
 - There is a need to increase the number of predominantly modality therapist.
- only (i)
 - only (i) and (ii)
 - only (iii)
 - only (ii) and (iii)
 - only (i) and (iii)
- 111.** Which of the following words is similar to 'Impairment', as highlighted in the above passage?
- accompany
 - commence
 - intervene
 - dimension
 - disablement
- 112.** According to the passage, why timely therapy of insomnia becomes imperative?
- Because this is the only reason of depression in many countries.
 - Untreated insomnia can cause the major mental and health issues later.
 - As the social cost of insomnia is not as much high as mental health have.
 - Modern therapies are the only prescript to cure insomnia timely.
 - None of these

Directions (113-117): Read each sentence to find out which part doesn't have any grammatical or idiomatic error in it. The correct, if any, will be one part of the sentence. The number of that part is the answer. If all the given parts are erroneous then mark the answer 'e'. (Ignore errors of punctuation, if any.)

- 113.** The Supreme Court in Tuesday directed banks and financial institutions to refunding compound interest, interest on interest or penal interest collected on EMI for loans during the period to moratorium.
- The Supreme Court in Tuesday directed banks and
 - financial institutions to refunding compound interest
 - interest on interest or penal interest collected on
 - EMI for loans during the period to moratorium
 - None is correct
- 114.** The past fortnight have seen a persistent increase in the COVID-19 cases in Delhi and positivity is also on the risen and it has been observed that COVID-19 appropriate behaviour is not been followed amongst the general public.
- The past fortnight have seen a persistent increase in the COVID-19 cases
 - in Delhi and positivity is also on the risen
 - and it has been observed that COVID-19
 - behaviour is not been followed amongst the general public.
 - None is correct
- 115.** Perhaps the government have done due diligence that demonstrates its financial viability but it has an obligation to lay the facts of the business model on the table.
- Perhaps the government have
 - due diligent that demonstrates its financial viability
 - it has an obligation to laid
 - the business model on the table
 - None is correct
- 116.** Monthly deadlines have been set to insure speedy complete of the market redevelopment project, which has suffered several delay due to the COVID-induced lockdown and curbs.
- Monthly deadlines have been set to insure
 - speedy complete of the market redevelopment project
 - which has suffered several delay
 - due to the COVID-induced lockdown and curbs.
 - None is correct

117. While recognising society's deep-rooted patriarchy and initiating a course correction in the way the judiciary itself views gender rights a playwright known for his feisty women characters who break free of traditions of familial confines and notions of social propriety.

- (a) While recognising society's deep-rooted patriarchy and
- (b) initiate a course correction in the way the judiciary
- (c) themselves views gender rights a playwright known for his feisty women characters
- (d) break free of traditions of familial confines and notions of social propriety
- (e) None is correct

Directions (118-123): In the following passage, each sentence consists of a highlighted word that can be incorrect. Find out which word should be replaced with other bold words to make the sentence grammatically correct and contextually meaningful. Choose the most appropriate alternative reflecting the word (s) that can fill the given blank.

India has released new rules **stringent (118)** the trade of electricity across its borders. They define the contours of the South Asian electricity market, **contour (119)** clear limits on who can buy from and sell into India. This has **balancing (120)** for the electricity markets of Bangladesh, Bhutan, and Nepal, which, to varying degrees, have aligned their energy futures with the Indian market. The new rules show that India's approach is unmistakably political. It attempts to balance China's growing **economically (121)** in the region with developmental aims, both its own and the region's. Of central importance is the ownership of power plants wishing to sell to India. In masterful legalese, the rules strongly **stunt (122)** the participation of plants owned by a company situated in "a third country with whom India shares a land border" and "does not have a bilateral agreement on power sector cooperation with India". Chinese companies **rotate (123)** to establish plants in Nepal, Bhutan, or Bangladesh will presumably have a hard time making good on their investments with the Indian market cut off.

- 118. (a) elaborate (b) governing (c) afflict
(d) produce (e) designs
- 119. (a) placing (b) protect (c) enact
(d) disappoint (e) subsequent
- 120. (a) ramifications (b) manifest (c) alarmed
(d) deteriorate (e) commodity
- 121. (a) scuffle (b) influence (c) resorted
(d) flee (e) establish

122. (a) equipped (b) existing (c) discourage
(d) satisfactory (e) respectively

123. (a) inappropriate (b) agree
(c) tender (d) hoping (e) revised

Directions (124-126): In the following questions, a grammatically correct and meaningful sentence is given which is divided into four parts, (A),(B),(C) and (D). You have to arrange the four parts to make a contextually and grammatically meaningful sentence (the meaning can be different from the one given in the question). If no such rearrangement is possible mark (e) as your answer i.e. 'No rearrangement is possible'.

124. because the fight for gender equality is far from over (A)/ it needs to stand on women's rights (B)/ the Court's reiteration on where (C)/ is a move in the right direction (D).

- (a) BCDA (b) CBDA (c) ACBD
(d) DCAB (e) No rearrangement is possible

125. elected will not be able to act on (A)/ the popular government they have (B)/ constitution vests in it the competence to do (C)/ matters which the (D).

- (a) BCDA (b) CADB (c) BADC
(d) DCAB (e) No rearrangement is possible

126. An effective justice system should not depend (A)/ irrespective of the individual in charge (B)/ robust enough to ensure justice for everyone, (C)/ on a few individuals' goodness and should be (D).

- (a) BCDA (b) CADB (c) ADCB
(d) DCAB (e) No rearrangement is possible

Direction (127-128): In each of the question given below, a phrase is highlighted, which can be incorrect. Choose the most appropriate phrase from given options which could replace the highlighted phrase to make the statement grammatically and contextually correct. If no such replacement is required mark (e) as your answer i.e. 'No replacement is required'.

127. They'd taken a step together towards their future by talking openly on topics he **never thought he would been able to** bring up.

- (a) never thought he have been able to
(b) never thought he has been able
(c) never thought he will be able to
(d) never thought he will not be able to
(e) No replacement required

128. The foreigners covered under this Amendment Act **may submit applications for grand of** Indian citizenship after appropriate rules are notified by the Central government

- (a) might submit applications for grand of
- (b) may submit applications for grant of
- (c) may submitted applications for grant of
- (d) might submit application for granting of
- (e) No replacement required

Directions (129-133): A word has been given in each question and has been used in the sentences given below. Identify the statements where the word has been used in a contextually and grammatically correct manner. If the word has been used incorrectly in all the statements, mark (e), "None of these", as your answer.

129. Thrive

- (i) To survive and thrive after COVID-19, community networks are the key
 - (ii) Thriving is a cool concept because it encompasses the component of both development and success.
 - (iii) A lady IPS officer has also thrive the State Home Minister of taking money for transfers and postings.
- (a) only (i) (b) only (ii) (c) both (ii) and (i)
(d) both (i) and (iii) (e) none of these

130. Reconcile

- (i) Due to the pain and burns, victim reconcile consciousness after four-five minutes.
 - (ii) Company is coming up with the approaches that really reconcile some of the challenge it is facing.
 - (iii) The Indian Tea Association has reconcile the daily wage of tea plantation workers in Assam to `193.
- (a) only (ii)
(b) both (i) and (ii)
(c) both (ii) and (iii)
(d) all (i), (ii), (iii)
(e) None of these

131. Convalesce

- (i) Prague city hall has rented a luxury hotel where homeless people who contract COVID-19 can convalesce.
 - (ii) The victim has criminal background and was convalesce in murder and robbery cases.
 - (iii) The patient has now returned to convalesce with her family and as rates of infection have dropped so much.
- (a) both (i) and (ii)
(b) both (i) and (iii)
(c) only (iii)
(d) only (ii)
(e) None of these

132. Repudiate

- (i) He BSES discoms have repudiate its Delhi consumers to switch off all non-essential lights and electrical appliances for an hour.
 - (ii) Iran strongly repudiate unsubstantiated allegations over claims of its involvement
 - (iii) Norwegian Air is seeking to repudiate three aircraft sales contracts with Boeing as part of its restructuring process.
- (a) only (iii)
(b) both (i) and (ii)
(c) both (ii) and (iii)
(d) all (i), (ii), (iii)
(e) none of these

133. Exacerbate

- (i) The future requirement of digital documentation that demonstrates Covid-19 vaccine status may exacerbate inequality.
 - (ii) Slow solar rollout exacerbating grid supply concerns
 - (iii) Physical masks may even exacerbate racial bias
- (a) both (i) and (ii)
(b) both (i) and (iii)
(c) only (iii)
(d) only (ii)
(e) all (i), (ii), (iii)

Directions (134-135): In the following question, a sentence is given. Find out which idiom is most suitable for sentence. Choose the most appropriate idiom for the given sentence.

134. I will go on trusting James always in every situation

- no matter what happens.
- (a) take it with a pinch of a salt
 - (b) through thick and thin
 - (c) sat on the fence
 - (d) once in a blue moon
 - (e) None of these

- 135.** We cannot trust him as he reveals all secrets in front of other friends.
- (a) under the weather
 - (b) the balls your court
 - (c) spill the beans
 - (d) break a leg
 - (e) None of these

Directions (136-140): Choose the most suitable pair of words in blank that is the antonym of the given word and make the sentence grammatically and contextually correct.

136. RESTRICT

A major concern in contemporary Indian development is the_____socio-economic disparity across groups and regions.

- (a) mutate, originate
- (b) found, invent
- (c) transfer, transport
- (d) widening, broaden
- (e) None of these

137. RETIRING

The_____in the establishment's response is partly because India currently enjoys a favourable international constellation.

- (a) required, mandate
- (b) assertiveness, decisiveness
- (c) dispose, exhort
- (d) import, deliver
- (e) None of these

138. DISASSOCIATE

While some_____a few of the awards to the political alignment of the personalities, there were others who thought that deserving candidates were overlooked.

- (a) destroy, revoke
- (b) attributed, allocate
- (c) conserve, protect
- (d) substitute, replacement
- (e) None of these

139. INDULGE

By_____from the vote on the UN Human Rights Council resolution on Sri Lanka, India has signalled its unwillingness to upset its neighbour.

- (a) remove, rotate
- (b) sacred, religious
- (c) provide, endow
- (d) abstaining, refraining
- (e) None of these

140. IMMACULATE

While we are still in the grip of the COVID-19 pandemic, which is airborne, we have forgotten that another such blight could well come from _____water.

- (a) present, available
- (b) contaminated, polluted
- (c) create, develop
- (d) evolve, cultivate
- (e) None of these

Solutions

REASONING ABILITY

Directions (1-5):

Stairs	A	B	C
30			
29	A		
28			
27		B	
26			
25			C
24			
23			
22			
21		B	
20			C
19	A		
18			
17	A		
16			

15		B	C
14			
13	A		
12			
11	A		
10			C
9			
8		B	
7	A		
6			
5	A		C
4			
3	A		
2		B	
1			

- 1. (c):
- 2. (b):
- 3. (b):
- 4. (c):
- 5. (a):

Direction (25-27):

Q E U * K \$ 4 Y 7 A 6 P & R # 3 % T @ 3 1 5 S I O 9 9 J L
STEP I. Q E U * \$ 4 Y 7 A 6 P & # 3 % @ 3 1 T R K 5 S I O 9 9 J L
STEP II. Q E U * \$ Y A P & # 3 % @ 3 T R K S I O 9 J L 1 4 5 6 7 9
STEP III. Q E U * \$ Y A P & # 3 % @ 3 T R K S I 9 O J 1 L 4 5 6 7 9

25. (e):

26. (a):

27. (e): #3, @3

Directions (28-32):

When we see each step, then we can find that there is both number and words are arranged in each step. In each step one word and one number are arranged. By following logic-

Word: In each step first, we arrange the word that have first letter vowel according to alphabetic series from left end then we arrange the word that have first letter consonant from left end according to alphabetic series.

Number: Numbers are arranged according to following condition. In first step lowest odd number arranges first to right end. And this process is continued in further step until all the odd number is arranged. Then lowest even number is to be arranged. And this process is continued in further step until all the even number are arranged (Each odd number is added by one (+1) while they are arranged and each even number is subtracted by one (-1) while they are arranged).

Input: public 86 interest 95 exit 67 such 43 upper 64 large 18

Step I: exit public 86 interest 95 67 such upper 64 large 18 44

Step II: interest exit public 86 95 such upper 64 large 18 44 68

Step III: upper interest exit public 86 such 64 large 18 44 68 96

Step IV: large upper interest exit public 86 such 64 44 68 96 17

Step V: public large upper interest exit 86 such 44 68 96 17 63

Step VI: such public large upper interest exit 44 68 96 17 63 85

And Step VI is the last step of the rearrangement of the above input.

28. (e):

29. (c):

30. (c):

31. (d):

32. (a):

Direction (33-34):

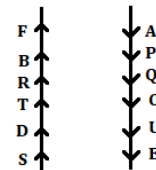
33. (c): Either Argument I or II is strong because many times ruling government misuse it while sometimes dissolving the assembly becomes the need of the hour.

34. (a): Argument I is strong because it will reduce the problem of black marketing of commodities supplied under PDS. Argument II is not strong because it is not directly related with the statement.

35. (a): Only 1st course of action seems to be appropriate because it is clearly mentioned, that buses which have fitted CNG Kit without obeying the safety guidelines met with short circuit resulting of catching fire. So, IInd and IIIrd courses of action are not appropriate.

36. (c): 894#S3DI@EP!956\$WJF*&BH2^N5K

Direction (37-41):



37. (a):

38. (c):

39. (e):

40. (e):

41. (b):

Direction (42-45):

Floors	Person	Colour
7	A	Blue
6	G	Yellow
5	C	Black
4	E	Red
3	B	White
2	F	Pink
1	D	Green

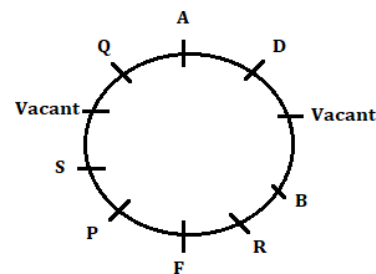
42. (b):

43. (a):

44. (d):

45. (b):

Direction (46-50):



46. (e):

47. (c):

48. (e):

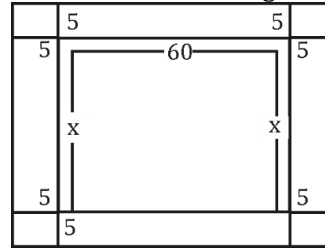
49. (b):

50. (b):

QUANTITATIVE APTITUDE

- 51. (b):** We know volume of cylinder = $\pi r^2 h$
 In cylinder A number of such cubes filled
 $= \frac{22}{7} \times \frac{10 \times 10 \times 14}{2 \times 2 \times 2} = 550$
 In cylinder B number of such cubes filled
 $= \frac{22}{7} \times \frac{7 \times 7 \times 20}{2 \times 2 \times 2} = 385$
 Required difference = $550 - 385 = 165$
- 52. (e):** We know volume of cylinder = $\pi r^2 h$
 Empty volume of cylinder C
 $= \frac{(100-40)}{3} \times \frac{22}{100} \times 14 \times 14 \times 12$
 $= \frac{1}{5} \times 22 \times 2 \times 14 \times 12$
 $= 4435.2 \text{ cm}^3$
 Empty volume of cylinder D
 $= \frac{(100-80)}{100} \times \frac{22}{7} \times 21 \times 21 \times 9$
 $= \frac{1}{5} \times 22 \times 3 \times 21 \times 9$
 $= 2494.8 \text{ cm}^3$
 Required difference = $4435.2 - 2494.8 = 1940.4 \text{ cm}^3$
- 53. (c):** Diameter of cylinder A = $10 \times 2 = 20 \text{ cm}$
 Diameter of cylinder C = $14 \times 2 = 28 \text{ cm}$
 Difference between diameter and height of cylinder A = $20 - 14 = 6 \text{ cm}$
 Difference between diameter and height of cylinder C = $28 - 12 = 16 \text{ cm}$
 Required percentage = $\frac{16-6}{16} \times 100 = 62.5\%$
- 54. (a):** We know curved surface area of cylinder = $2 \pi r h$
 Required ratio = $\frac{2\pi \times 21 \times 9}{2\pi \times 10 \times 14} = 27:20$
- 55. (b):** We know total surface area of cylinder = $2\pi r h + 2\pi r^2 = 2\pi r(h + r)$
 Total surface area of cylinder B
 $= 2 \times \frac{22}{7} \times 7 \times (20 + 7) = 1188 \text{ cm}^2$
 Total surface area of cylinder E
 $= 2 \times \frac{22}{7} \times 12 \times (21 + 12)$
 $= \frac{17424}{7} \text{ cm}^2$
 Required sum = $1188 + \frac{17424}{7} = \frac{25740}{7} \text{ cm}^2$
- 56. (d):** We know volume of cylinder = $\pi r^2 h$
 Volume of cylinder C
 $= \frac{22}{7} \times 14 \times 14 \times 12 = 7392 \text{ cm}^3$
 Volume of cylinder D
 $= \frac{22}{7} \times 21 \times 21 \times 9 = 12474 \text{ cm}^3$
 Volume of cylinder E
 $= \frac{22}{7} \times 12 \times 12 \times 21 = 9504 \text{ cm}^3$
 Required average = $\frac{7392+12474+9504}{3} = \frac{29370}{3} = 9790 \text{ cm}^3$

- 57. (b):** Let breadth of rectangular park = $x \text{ m}$



ATQ -
 $4 \times 5 \times 5 + 2 \times 60 \times 5 + 2 \times 5 \times x = \frac{550000}{500}$

$$100 + 600 + 10x = 1100$$

$$10x = 400$$

$$x = 40 \text{ m}$$

So, area of square = $60 \times 40 = 2400 \text{ m}^2$

- 58. (e):** Let total men be 'M'
 And time taken by 'M' men be 'D' days
 ATQ -
 $M \times D = (M + 8) \times \frac{(100-40)}{100} D$
 $5M = 3M + 24$
 $M = 12$
 $12 \times D = 12 \times \frac{2}{3} \times (D + 30)$
 $D = 60$
 So, 12 men can finish half of the same work
 $= \frac{60}{2} = 30 \text{ days}$
- 59. (c):** Let monthly income Q = Rs. X
 So, monthly income of P = Rs. (X + 11000)
 Saving of P
 $= (X + 11000) \times \frac{100 - (15 + 10)}{100} = \frac{75X + 825000}{100}$
 Saving of Q = $X \times \frac{100 - (10 + 10)}{100} = \frac{80X}{100}$
 ATQ -
 $\frac{75X + 825000}{100} - \frac{80X}{100} = 7000$
 $5X = 125000$
 $X = 25000 \text{ Rs.}$
- 60. (b):** Let total loss = $3x$
 So, total profit = $3x \times \frac{2}{3} = 2x$
 Given, Profit + loss = Rs. (5000 - 4000) = Rs. 1000
 So, $3x + 2x = 1000$
 $x = \text{Rs. } 200$
 So, total loss = $3x = 3 \times 200 = 600 \text{ Rs.}$
 Cost price of watch = $4000 + 600 = 4600 \text{ Rs.}$
- 61. (d):** Let rate of interest for scheme A = R
 So, rate of interest for scheme B = 2R
 So, total interest received by man from scheme A
 $= P \times \frac{2 \times R}{100} = \frac{2PR}{100}$

And, total interest received by man from scheme

$$B = (P + 5000) \times \frac{5 \times 2R}{100} = \frac{10PR + 50000R}{100}$$

ATQ -

$$\frac{10PR + 50000R}{100} = 10 \times \frac{2PR}{100}$$

$$10PR = 50000R$$

$$P = 5000 \text{ Rs.}$$

62. (b): Let total males and females in town A be $5x$ & $3x$ respectively

While, total males and females in town B be $5y$ and y respectively

ATQ -

$$(5x + 3x) = (5y + y)$$

$$8x = 6y$$

$$x : y = 3 : 4$$

$$\text{Also given, } \frac{4}{3}x \times 5 - 5x = 500$$

$$20x - 15x = 1500$$

$$x = 300$$

$$\text{And } y = 400$$

$$\text{So, total females in town A \& B together} = 300 \times 3 + 400 = 1300$$

63. (b): Let cost price of first article = Rs. A

And cost price of second article = Rs. B

ATQ -

$$\text{Selling price of first article} = A \times \frac{115}{100} = \text{Rs. } 1.15A$$

And, selling price of second article

$$= B \times \frac{92}{100} = 0.92B$$

$$1.15A = 0.92B$$

$$A : B = 4 : 5$$

$$\text{Quantity I} - A = 4$$

$$\text{Quantity II} - B = 5$$

So, Quantity I < Quantity II

OR

Let cost price of first article = Rs. X

And cost price of second article = Rs. $(1800 - X)$

ATQ -

$$\text{Selling price of first article} = X \times \frac{115}{100} = \text{Rs. } \frac{115X}{100}$$

And, selling price of second article

$$= (1800 - X) \times \frac{92}{100}$$

$$\frac{115X}{100} = (1800 - X) \times \frac{92}{100}$$

$$115X + 92X = 1800 \times 92$$

$$207X = 1800 \times 92$$

$$X = \frac{1800 \times 92}{207}$$

$$X = 800$$

So, cost price of first article = Rs. 800

And cost price of second article = Rs. $(1800 - 800) = \text{Rs. } 1000$

$$\text{Quantity I} = \text{Rs. } 800$$

$$\text{Quantity II} = \text{Rs. } 1000$$

So, Quantity I < Quantity II

64. (a): Let greater integer = x

And, smaller integer = y

ATQ -

$$x \times y = 24 \quad (x - y) \text{ ----- (i)}$$

$$\text{And, } (x + y) = 14$$

$$x = 14 - y$$

Put the value of x in equ. (i)

$$y^2 - 62y + 336 = 0$$

$$y^2 - 56y - 6y + 336 = 0$$

$$y(y - 56) - 6(y - 56) = 0$$

$$(y - 56)(y - 6) = 0$$

$$y = 56, 6$$

but y can't be 56

$$\text{So, } y = 6$$

$$\text{So, } x = 8$$

Quantity I - Value of greater integer = $x = 8$

Quantity II - Twice the value of smaller integer =

$$2y = 2 \times 6 = 12$$

So, Quantity I < Quantity II

65. (a): Let total investment = Rs. $6x$

So, investment of A = $6x \times \frac{1}{3} = 2x$ Rs.

Given, investment of B is equal to the sum investment of A and C together

$$\text{So, investment of B} = \frac{6x}{2} = 3x$$

$$\text{And investment of C} = 6x - (2x + 3x) = x$$

$$\text{Profit ratio of A, B \& C} = 2x : 3x : x = 2 : 3 : 1$$

Quantity I - Required difference = $840 \times \frac{(3-1)}{6} = 280$ Rs.

Quantity II - Rs. 240.

So, Quantity I > Quantity II

66. (c): Total distance covered by A in (10 am - 4 pm = 6 hours) = $25 \times 6 = 150$ km

Total time required when A & B meet or B crossed

$$A = \frac{150}{(40-25)} = 10 \text{ hours}$$

Quantity I - Total distance covered by B when he crossed A = $10 \times 40 = 400$ km

Quantity II - 400 km

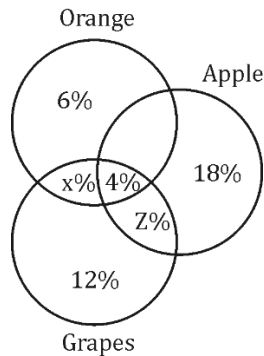
So, Quantity I = Quantity II

67. (a): Ratio of profit share of A to B = $12500 \times 12 : 8500 \times 12 = 25 : 17$
 Let total profit received by both = $105x$
 ATQ -
 $[105x \times \frac{60}{100} \times \frac{1}{2} + 105x \times \frac{40}{100} \times \frac{25}{(25+17)}] - [105x \times \frac{60}{100} \times \frac{1}{2} + 105x \times \frac{40}{100} \times \frac{17}{(25+17)}] = 300$
 $(31.5x + 25x) - (31.5x + 17x) = 300$
 $8x = 300$
 $x = 37.5$
 So, total profit = $37.5 \times 105 = 3937.5$ Rs.

68. (d): Let cost price of article = $100x$ Rs.
 So, marked price of article = $200x$ Rs.
 When 40% discount given on article, then selling price of article = $200x \times \frac{(100-40)}{100} = 120x$ Rs.
 Required profit % = $\frac{120x - 100x}{100x} \times 100 = 20\%$

Sol. (69 - 71):

Total students like only Orange, only Grapes and only Apple = $6\% + 18\% + 12\% = 36\%$
 Given, Value of X, Y & Z is multiple of ten and no value are same
 So only possible value of $(X\% + Y\% + Z\%)$ should be 60%
 Let assume $X\% = 10\%$, $Y\% = 20\%$ and $Z = 30\%$ (Note- Value of X can be any multiple of 10 like 10% or 20% or 30%, And same of Y and Z also)
 Total students who like all three fruits = $100\% - 36\% - 60\% = 4\%$



69. (c): Total students who like all three fruits = 4% of 350
 $= \frac{4}{100} \times 350 = 14$

70. (a): For maximum value of students who like Apple, Orange but not Grapes, value of Y should be 30%
 So, required number = $350 \times \frac{30}{100} = 105$

71. (d): For minimum difference between total students like Orange and Grapes but not Apple and total students like Apple and Grapes but not Orange
 When, $X = 10\%$ then $Z = 20\%$

$X = 30\%$ then $Z = 20\%$
 Difference = 10%
 Similarly, when $Z = 10\%$ then $X = 20\%$
 $Z = 30\%$ then $X = 20\%$
 Difference = 10%
 So, minimum difference between total students like Orange and Grapes but not Apple and total students like Apple and Grapes but not Orange =
 10% of 350
 $= \frac{10}{100} \times 350 = 35$

Sol. (72 - 74):

Let total number of boys in 8th class = $5a$
 So, total number of boys in 9th class = $5a \times \frac{120}{100} = 6a$
 And let total number of girls in 10th class = $2b$
 So, total number of girls in 9th class = $2b \times \frac{150}{100} = 3b$
 Given, $(5a + 6a) + (3b + 2b) = 128$
 $11a + 5b = 128$ -----(i)
 Also given, $5a + 2b = 56$ ----- (ii)
 From (i) and (ii) we get -
 $3a = 24$
 So, $a = 8$ & $b = 8$
 Let total number of girls in 8th class = c
 So, total number of boys in 10th = $(c + 17)$
 Total number of student - total number of boys in class 8th and 9th and total number of girls in 9th and 10th class = total number of girls in 8th class + total number of boys in 10th
 $c + c + 17 = 181 - 128$
 $c = 18$
 And total number of boys in 10th = $(c + 17) = (18 + 17) = 35$

Classes	Boys	Girls	Total
8 th	40	18	58
9 th	48	24	72
10 th	35	16	51
Total	123	58	181

72. (c): Total boys in class 11th = $35 \times \frac{80}{100} = 28$

Let total girls in class 11th = G
 So, $G \times \frac{50}{100} = 28 \times \frac{75}{100}$
 $G = 42$
 Required percentage = $\frac{42}{(28+42)} \times 100 = 60\%$

73. (e): Total number of in class 7th in the year 2017 = $16 \times \frac{125}{100} = 20$
 So, total number of boys in class 7th in the year 2017 = $60 - 20 = 40$
 Now, total number of boys who passed in class 7th in the year 2017 and promoted to class 8th in 2018 = $40 \times \frac{(100-20)}{100} = 32$
 total number of girls who passed in class 7th in the year 2017 and promoted to class 8th in 2018 = $20 \times \frac{100-40}{100} = 12$

Total boys take new admission in class 8th in the years 2018 = 40 - 32 = 8

And, total girls take new admission in class 8th in the years 2018 = 18 - 12 = 6

$$\text{Required percentage} = \frac{8-6}{6} \times 100 = 33\frac{1}{3}\%$$

74. (b): Total boys in class 11th in year 2019 = (total boys passed in class 10th in 2018 + 12) + (total girls passed in class 10th in 2018 + 8)

$$\begin{aligned} &= (35 \times \frac{80}{100} + 12) + (16 \times \frac{7}{8} + 8) \\ &= 40 + 22 \\ &= 62 \end{aligned}$$

Total boys in class 12th in 2020 = (40 × $\frac{90}{100}$ + X) = (36 + X)

Total girls in class 12th in 2020 = (22 × $\frac{6}{11}$ + Y) = (12 + Y)

ATQ -
 $(36 + X) = \frac{75}{100} \times 72$

$$36 + X = 54$$

$$X = 18$$

Also, $(12 + Y) \times 2.7 = 54$

$$2.7Y = 54 - 32.4$$

$$Y = 8$$

So, total students in class 12th in 2020 = (36 + 18) + (12 + 8) = 74

$$\text{Required difference} = 74 - 58 = 16$$

Sol. (75 - 80):

Total unsold cookies on Sunday = $180 \times \frac{10}{100} = 18$

Total unsold cookies on Monday = $180 \times \frac{15}{100} = 27$

Total unsold cookies on Tuesday = $180 \times \frac{25}{100} = 45$

Total unsold cookies on Wednesday = $180 \times \frac{30}{100} = 54$

Total unsold cookies on Thursday = $180 \times \frac{20}{100} = 36$

Days	Total baked	Total cookies available for sell	Total unsold	Total sold
Sunday	200	200	18	200 - 18 = 182
Monday	200	200 + 18 = 218	27	218 - 27 = 191
Tuesday	200	200 + 27 = 227	45	227 - 45 = 182
Wednesday	200	200 + 45 = 245	54	245 - 54 = 191
Thursday	200	200 + 54 = 254	36	254 - 36 = 218

75. (b): Let total cookies sold for Rs. X on Tuesday = 182 × $\frac{1}{14} = 117$

And total cookies sold for Rs. Y on Tuesday = 182 × $\frac{5}{14} = 65$

Let X = 2p

And Y = 3p

$$\text{So, } 117 \times 2p + 65 \times 3p = 1716$$

$$429p = 1716$$

$$p = 4 \text{ Rs.}$$

$$\text{Required amount} = 4 \times 2 \times 117 = 936 \text{ Rs.}$$

76. (d): Total baked cookies on Friday

$$= 220 \times 2 - 200 = 240$$

And total unsold cookies on Friday = $240 \times \frac{1}{6} = 40$

So, total sold cookies on Friday = 240 - 40 = 200

$$\text{Required percentage} = \frac{200}{240} \times 100 = 83\frac{1}{3}\%$$

77. (c): Total fruit base cookies baked on Sunday = 200 × $\frac{25}{100} = 50$

Total fruit base cookies unsold on Sunday = 18

$$\times \frac{1}{(2+1+3)} = 3$$

So, total fruit base cookies sold on Sunday = 50 - 3 = 47

78. (e): Let total baked cookies on Friday = X

So, total cookies available for sell on Friday = (X + 36)

Total cookies available for sell on Saturday = 290 + $\frac{(X+36)}{100} \times 4$

$$= (.04X + 291.44)$$

ATQ -

$$(.04X + 291.44) = \frac{120}{100} \times (X + 36)$$

$$0.2X + 1457.2 = 6X + 216$$

$$5.8X = 1241.2$$

$$X = 214$$

So, total sold cookies on Friday = (214 + 36)

$$\times \frac{96}{100} = 240$$

79. (b): Total baked cookies in all the given five days = 5 × 200 = 1000

Total sold cookies in all the given five days = 182

$$+ 191 + 182 + 191 + 218 = 964$$

$$\text{Required percentage} = \frac{964}{1000} \times 100 = 96.4\%$$

80. (e): Total cookies baked on all seven days (from Sunday to Saturday) = 220 × 7 = 1540

Total cookies baked on Friday and Saturday =

$$1540 - (5 \times 200) = 540$$

Let total cookies baked on Friday = 4x

So, total cookies baked on Saturday = $4x \times \frac{125}{100} =$

$$5x$$

Total cookies baked on Friday = $540 \times \frac{4x}{9x} = 240$

$$\text{And total cookies baked on Saturday} = 540 - 240 = 300$$

Total cookies available for sell on Saturday = 300

$$+ (240 + 36) \times \frac{(100-75)}{100}$$

$$= 300 + 69 = 369$$

81. (e): Let total work be 90 units (LCM of 18 and 30)

Then efficiency of Arun and Veer together

$$= 5 \text{ units/day}$$

efficiency of Arun and Chiru together = 3 units/day

Let efficiency of Chiru be x unit/day then efficiency of Veer = $3x$ units/day

ATQ

$$5 - 3x = 3 - x$$

$$x = 1$$

$$\text{Required days} = \frac{90}{6} = 15 \text{ days}$$

82. (b): Total SI = $\frac{800 \times 15 \times 1}{100} + \frac{800 \times X \times 1}{100}$
= Rs. $(120 + 8X)$

Total CI in two years when rate is different for first and second year

$$\text{Total CI} = P \left(1 + \frac{R_1}{100}\right) \left(1 + \frac{R_2}{100}\right) - P$$

$$= 800 \left(1 + \frac{15}{100}\right) \left(1 + \frac{X}{100}\right) - 800$$

$$= \text{Rs } (120 + 9.2X)$$

ATQ,

$$\Rightarrow (120 + 8X) + (120 + 9.2X) = 756$$

$$\Rightarrow X = 30\%$$

83. (b): Let income of A and B be Rs $9x$ and Rs $10x$ respectively.

$$\text{Then income of C} = 9x \times \frac{5}{6} = \text{Rs } 7.5x$$

ATQ

$$\frac{9x + 10x + 7.5x}{3} = 5300$$

$$x = 600$$

Let savings of A be Rs y .

Then saving of B = Rs y

Saving of C = Rs $(y - 300)$

ATQ

$$5400 - y = 1.2 \times (4500 - y + 300)$$

$$y = 1800$$

$$\text{Required \%} = \frac{1800}{5400} \times 100 = 33 \frac{1}{3}\%$$

84. (c): Let efficiency of A, B and C be a units/day, b units/day and c units/day respectively
The whole work is completed in 15 days which means A, B and C each works for 5 days.

ATQ

$$5(a + b + c) = 8a + 11b$$

$$3a + 6b = 5c \dots\dots\dots (i)$$

$$\text{Also, } 5(a + b + c) = \frac{35}{4}a + 5c$$

$$\frac{a}{b} = \frac{4}{3}$$

Put $a=4$ and $b=3$ in (i)

$$c=6$$

$$\text{total work} = 5 \times (4 + 3 + 6) = 65 \text{ units}$$

$$\text{required days} = \frac{65}{10} = 6 \frac{1}{2} \text{ days}$$

85. (e): Let the amount invested by Q be Rs $100x$

Then amount invested by P = Rs $105x$

And the amount invested by R

$$= 105 \times \frac{720}{700} = \text{Rs } 108x$$

Ratio of profit share of P, Q and R

$$\begin{array}{lcl} P & : & Q & : & R \\ (105x \times 6 + 42x \times 6) & : & (100x \times 4 + 115x \times 8) & : & (108x \times 12) \\ 882x & : & 1320x & : & 1296x \end{array}$$

Ratio of profit share of P: Q: R = 147: 220: 216

$$\text{Required difference} = 73 \times \frac{3240}{216} = \text{Rs. } 1095$$

86. (b): Let the selling price of article for Vikash be Rs. $100x$

Let selling price of article for Vijay be Rs. $100y$

Cost price of article for Vikash = $100x \times 0.8 = \text{Rs } 80x$

Cost price of article for Vijay = $100y \times 0.8 = \text{Rs } 80y$

ATQ

$$80x + 80y = 1400$$

$$x + y = 17.5 \dots\dots\dots (i)$$

$$\text{Also, } 20y - 20x = 50$$

$$y - x = 2.5 \dots\dots\dots (ii)$$

from (i) and (ii),

$$y = 10 \text{ and } x = 7.5$$

$$\text{Required average} = \frac{100 \times 7.5 + 100 \times 10}{2} = \text{Rs. } 875$$

87. (a): Let series S1: $x, x + 2, x + 4, x + 6$

largest number of series S2 = $(x + 5)$

So, series S2 = $x - 1, x + 1, x + 3, x + 5$

$$\text{required difference} = \{(x + 1 + x + 2) - (x + x - 1)\} = 4$$

88. (c): Let the number of white balls be x

then the number of red balls be $(x + 2)$

ATQ

$$x + x + 2 = 10$$

$$x = 4$$

red balls = 6 and white balls = 4

Favorable case —

(1 red, 2 white), (2 red, 1 white), (3 red) =

$$\frac{{}^6C_1 \times {}^4C_2}{{}^{10}C_3} + \frac{{}^6C_2 \times {}^4C_1}{{}^{10}C_3} + \frac{{}^6C_3}{{}^{10}C_3} = \frac{(6 \times 6)}{120} + \frac{15 \times 4}{120} + \frac{20}{120}$$

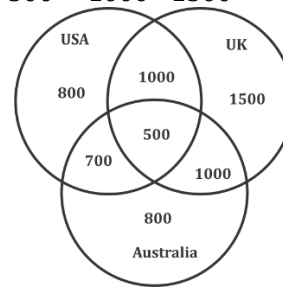
$$= \frac{116}{120} = \frac{29}{30}$$

- 89. (b):** Let the speed of boat in still water be x km/h and the speed of current be y km/h
 ATQ—
 $(x + y) - (x - y) = 8$
 $y = 4$ km/h
 $\frac{56}{x+4} + \frac{36}{x-4} = 8$
 $x = 12$ km/h
 Required time = $\frac{48}{12} = 4$ hours
- 90. (a):** ATQ,
 $48 = 108 \left(1 - \frac{x}{108}\right)^2$
 $\frac{4}{9} = \left(1 - \frac{x}{108}\right)^2$
 $x = 36$ liters
- 91. (c):** let length of train be l m and speed be x m/s
 From statement I, $x = \frac{l}{12}$
 Let length of platform be d m
 $x = \frac{l+d}{30} = \frac{l}{12}$
 $3l = 2d$
 From statement II, platform length = $1.5 \times$ train length
 (same result obtained from statement I)
 Clearly, both statements together are not sufficient to answer
- 92. (e):** from statement I,
 Let initial quantity of mixture be $100x$ lit
 Ratio of milk to water = $65 : 35 = 13 : 7$
 From statement II,
 $35x + 30 = 65x$
 $x = 1$
 initial quantity of the milk = 65 lit
 and initial quantity of the water = 35 lit
 So, both the statements together are necessary to answer the questions.
- 93. (e):** From statement I & II,
 Let no. of red & blue balls be $5x$ & $4x$ respectively
 No. of white balls = $5x + 1$
 $5x_{c_2} = 10$
 $5x(5x - 1) = 20$
 $5x^2 - x - 4 = 0$
 $x = 1$ (neglecting negative value of x)
 total balls = $5x + 4x + 5x + 1 = 15$
 clearly, both statements together are necessary to answer.
- 94. (d):** from statement I,
 1 hour work of pipe C = $\frac{1}{3} - \frac{1}{4} = \frac{1}{12}$ units
 Required time = 12 hours
 From statement II, since no value of time taken is given
 Clearly, only statement I alone is sufficient to answer

- 95. (a):** from statement I, diagonal length = diameter of circle
 From statement II, circle circumscribing the square means diameter of circle is diagonal of square
 Let radius be r m
 ATQ, $\pi r^2 = 154$
 $r = 7$ m
 diagonal of square = 14 m
 Side of square = $7\sqrt{2}$ m
 area of square = 98 sq.m.
 clearly, only statement II alone is sufficient to answer

Sol (96-100):

- Total tourists from India who visited UK = $800 \times 5 = 4000$
 Total tourists from India who visited USA = $4000 \times \frac{3}{4} = 3000$
 Total tourists from India who visited Australia = $4000 \times \frac{3}{4} = 3000$
 So, tourists from India who visited both USA and UK but not Australia = $3000 - 800 - 500 - 700 = 1000$
 Hence, tourists from India who visited both Australia and UK but not USA = 1000
 Now, tourists from India who visited only Australia = $3000 - 500 - 700 - 1000 = 800$
 And, tourists from India who visited only UK = $4000 - 1000 - 500 - 1000 = 1500$



- 96. (b):** Required number of tourists = $800 + 1500 + 800 = 3100$
- 97. (b):** Tourists from India who visited only one more country along with Australia = $700 + 1000 = 1700$
 Required % = $\frac{1700}{4000} \times 100 = 42.5\%$
- 98. (d):** Required number of tourists = $1000 + 700 + 1000 = 2700$
- 99. (e):** Total tourists from India who visited both USA and UK together = $1000 + 500 = 1500$
 Required % = $\frac{(3000 - 1500)}{3000} \times 100 = 50\%$
- 100. (c):** Required number of tourists = $800 + 1000 + 1500 + 700 + 500 + 1000 + 800 = 6300$

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- 101. (b):** With reference to the first paragraph which mentions, "If plastic had been invented when the Pilgrims sailed from Plymouth, England, to North America—and the *Mayflower* had been stocked with bottled water and colorful plastic-wrapped snacks for consumers' attraction—their plastic trash would likely still be around, four centuries later" we can infer the use of plastic and reason for their abundance.
Hence, option (b) is the right choice for the answer.
- 102. (d):** With reference to the first paragraph which mentions, "I was on my way to see a man who would help me make sense of the whole mess we've made with plastic, especially in the ocean. Because plastic wasn't invented until the late 19th century, and production really only took off around 1950, we have a mere 9.2 billion tons of the stuff to deal with. Of that, more than 6.9 billion tons have become waste. And of that waste, a staggering 6.3 billion tons never made it to a recycling bin".
Hence, option (d) is the right choice for the answer.
- 103. (c):** Option (c) is the correct choice. As per the third paragraph which mentions, "It's unclear how long it will take for that plastic to completely biodegrade into its constituent molecules. Estimates range from 450 years to never."
- 104. (c):** Option (c) is the correct choice. Refer the last paragraph where author mentions, "On Hawaii's Big Island, on a beach that seemingly should have been pristine—no paved road leads to it—I walked ankle-deep through microplastics. They crunched like Rice Krispies under my feet. After that, I could understand why some people see ocean plastic as a looming catastrophe, worth mentioning in the same breath as climate change. At a global summit in Nairobi last December, the head of the United Nations Environment Programme spoke of an "ocean Armageddon."
- 105. (d):** Option (d) is correct answer here i.e., statement (A) is incorrect here.
For statement (A) refer to paragraph 2nd which mentions, "Because plastic wasn't invented until the late 19th century, and production really only took off around 1950, we have a mere 9.2 billion tons of the stuff to deal with. Of that, more than 6.9 billion tons have become waste. And of that waste, a staggering 6.3 billion tons never made it to a recycling bin".
From this we can conclude that statement (A) is incorrect.
- 106. (b):** 'STUFFED' means 'to fill something with something' and 'fill' is synonym which means 'to make something full or to become full'.
Default means a course of action taken by a computer when it is not given any other instruction.
Reeling means to walk without being able to control your legs.
Optimal means best or most favourable.
- 107. (b):** The correct choice is option (b). Refer to the 1st paragraph which mentions, "Insomnia disorder as a diagnostic category encompasses disturbances of sleep and daily work, like problems to fall asleep or to maintain sleep and associated daytime sequelae like **impairment** of concentration or attention, increased fatigue, dysphoria etc."
- 108. (a):** The correct choice is option (a). Refer to the 2nd paragraph which mentions, "Summarising, the costs for the society are high and has inferior outcomes, but adequate insomnia treatment is supposed to reduce these."
- 109. (a):** Refer to the 3rd paragraph which mentions, "This article nicely shows that insomnia is a very frequent problem encountered in general practice, but still, the predominant modality of treatment is pharmacological treatment instead of CBT-I. This is a pity, because CBT-I has now been confirmed by several international guidelines to be the first-line treatment of insomnia. Methods are discussed about how to further disseminate knowledge about CBT-I in general practice."

- 110. (b):** The correct answer is option (b) i.e. statement (i) and statement (iii) are correct.
for statement (i), refer to 1st paragraph which mentions, "Insomnia, especially in its chronic form, is a frequent sleep disorder, probably the most frequent sleep disorder of all, afflicting approximately 10% of the adult population worldwide."
For statement (ii), refer to the 3rd paragraph which mentions, "This article nicely shows that insomnia is a very frequent problem encountered in general practice"
for statement (iii) refer 3rd and 7th line of 3rd paragraph which mentions the need for adequate trained therapist.
- 111. (e):** 'Impairment' is 'the condition of being unable to perform as a consequence of physical or mental unfitness' and 'disablement' is synonym which means 'disable'.
Accompany means to go together with somebody/something.
Commence means to start or begin.
Intervene means to act in a way that prevents something happening.
- 112. (b):** Throughout the last paragraph of passage which mentions the major health issues like cancer and mental issues like depression, we can conclude option (b).
- 113. (c):** All options are incorrect except option (c). In option (a), 'in' should be 'on' as we use 'on' with day. In option (b), 'refunding' should be 'refund' as 'to +V1'. In option (d), 'to' should be 'period of moratorium'.
- 114. (c):** All options are incorrect except option (c). In option (a), 'have' should be replaced by 'has' because subject is singular here. In option (b), 'risen' should be 'rise' as we need 'v1' here because sentence is in the present tense. In option (d), 'been' should be 'being' as we need present participle.
- 115. (d):** All options are incorrect except option (d). In option (a), 'have' should be replaced with 'has'. In option (b), 'diligent' should be replaced by 'diligence' as we need noun here. In option (c), 'laid' should be 'lay' as sentence is in present perfect.
- 116. (d):** All options are incorrect except option (d). In option (a), 'insure, should be 'ensure'. Ensure means make certain that (something) will occur or be the case.

Insure means secure or protect someone against. In option (b), 'complete' should be 'completion' as we need noun here. In option (c), 'delay' should be 'delays'.

- 117. (a):** All options are incorrect except (a). In option (b), 'initiate' should be 'initiating' because 'and' follows same part of speech. In option (c), 'theirsself' should be 'itself' as noun here is singular. In option (d), 'socially' should be 'social' as we need an adjective here.
- 118. (b):** The above paragraph talks about the new rules and the trading partners of electricity trade of South Asian Market. Hence the correct word will be 'governing' which means 'having authority to conduct the policy, actions, and affairs of a state, organization, or people. No other word fits in the blank is grammatically correct and contextually meaningful manner. Hence, option (b) is the most suitable answer choice.
Afflict means cause pain or trouble to; affect adversely.
Elaborate means involving many carefully arranged parts or details
- 119. (a):** The above paragraph talks about the new rules and the trading partners of electricity trade of South Asian Market. Hence the correct word will be 'placing' which means 'put in a particular position'.
Enact means make (a bill or other proposal) law. No other word fits in the blank in grammatically correct and contextually meaningful manner. Hence, option (a) is the most suitable answer choice.
Disappoint means fail to fulfil the hopes or expectations of.
Subsequent means coming after something in time; following.
- 120. (a):** The above paragraph talks about the new rules and the trading partners of electricity trade of South Asian Market. Hence the correct word will be 'ramifications' which means 'a complex or unwelcome consequence of an action or event.' No other word fits in the blank in grammatically correct and contextually meaningful manner. Hence, option (a) is the most suitable answer choice.
Manifest means clear or obvious to the eye or mind.
Alarmed means make (someone) feel frightened, disturbed, or in danger.
Deteriorate means become progressively worse.
Commodity means a useful or valuable thing.

- 121. (e):** The above paragraph talks about the new rules and the trading partners of electricity trade of South Asian Market. Hence the correct word will be 'establish' which means 'to start or create an organization, a system, etc.' No other word fits in the blank in grammatically correct and contextually meaningful manner. Hence, option (e) is the most suitable answer choice.
Scuffle means a short, confused fight or struggle at close quarters.
Influence means the capacity to have an effect on the character.
Resorted means turn to and adopt.
Flee means run away from a place or situation of danger.
- 122. (c):** The above paragraph talks about the new rules and the trading partners of electricity trade of South Asian Market. Hence the correct word will be 'discourage' which means 'cause (someone) to lose confidence or enthusiasm'. No other word fits in the blank in grammatically correct and contextually meaningful manner. Hence, option (a) is the most suitable answer choice.
Equipped means supply with the necessary items for a particular purpose.
- 123. (d):** The above paragraph talks about the new rules and the trading partners of electricity trade of South Asian Market. Hence the correct word will be 'hoping' which means 'want something to happen or be the case'. No other word fits in the blank in grammatically correct and contextually meaningful manner. Hence, option (d) is the most suitable answer choice.
Tender means showing gentleness, kindness, and affection.
Misappropriate means dishonestly.
- 124.(b):** Among the given phrases, the correct rearrangement will be CBDA. The statement thus formed will be: "The Court's reiteration on where it needs to stand on women's rights is a move in the right direction because the fight for gender equality is far from over."
- 125.(c):** Among the given phrases, the correct rearrangement will be BADC. The statement thus formed will be: "The popular government they have elected will not be able to act on matters which the Constitution vests in it the competence to do."
- 126. (c):** Among the given phrases, the correct rearrangement will be ADCB. The statement thus formed will be: "An effective justice system should not depend on a few individuals' goodness and should be robust enough to ensure

justice for everyone, irrespective of the individual in charge."

- 127.(c):** The highlighted phrase given in the question is incorrect as we don't use past participle (been) with 'will' hence the correct option will be option (c). As subject is plural so 'has' is incorrect therefore option (b) is incorrect. Option (a) is incorrect since 'have' indicates present tense and also 'have' is used for plural subjects. Option (d) does not make sense contextually.
- 128.(b):** The highlighted phrase given in the question is incorrect as 'grand' is an adjective and we need verb here which is 'grant' hence the correct phrase will be option (b). 'Might' is incorrect here because sentence is in simple present tense hence option (a) and option (d) are incorrect here. Option (c) is incorrect because 'submitted' here is incorrect and this should be in simple present.
- 129.(c):** Thrive means 'prosper; flourish' hence its use is correct in statement (i) and statement (ii). In statement (iii), 'thrive' should be 'accused'.
- 130.(a):** 'Reconcile' means 'to find a way of dealing with two ideas, situations, statements, etc.' Hence its use is incorrect in statement (i) and (iii). In statement (i), it should be 'lost' and in statement (iii), it should be 'enhanced'.
- 131.(b):** 'Convalesce' means 'to rest and get better over a period of time after an illness' hence its use is correct in statement (i) and in statement (ii) therefore the correct answer is option (b). In statement (ii), 'convalesce' should be 'involved'.
- 132.(c):** 'Repudiate' means 'to say that you refuse to accept or believe something', hence its use is correct in statement (ii) and in statement (iii) therefore the correct answer is option (c). In statement (i), 'repudiate' should be 'urged'.
- 133.(e):** 'Exacerbate' means 'to make something worse, especially a disease or problem hence its use is correct in all three statements. Therefore, the correct answer is option (e).
- 134.(b):** Among the given idioms, 'through thick and thin' is most suitable idiom here which means "To be loyal no matter what". Hence, option (b) is the most suitable answer choice.
Take it with a pinch of a salt means "don't take it too seriously".
Sat on the fence means to be undecided.
Once in a blue moon means rarely.

135.(c): Among the given idioms, 'spill the beans' is most suitable idiom here which means 'to give away the secret'. Hence, option (c) is the most suitable answer choice.

Under the weather means to feel ill.

The balls your court means "it's up to you".

Break a leg means to wish someone luck.

136. (d): Among the given set of words, 'widening, broaden' fit in perfectly in the given blank which is antonym of 'RESTRICT' which means 'to put a limit on somebody/something'. No other set of words fit in the blank in grammatically correct and contextually meaningful manner. Hence, option (d) is the most suitable answer choice.

137. (b): Among the given set of words, 'assertiveness, decisive' fit in perfectly in the given blank which is antonym of 'RETIRING' which means 'shy and quiet'. No other set of words fit in the blank in grammatically correct and contextually meaningful manner. Hence, option (b) is the most suitable answer choice.

assertiveness means expressing your opinion clearly and firmly and decisiveness is synonym of it.

138. (b): Among the given set of words, 'attributed, allocate' fit in perfectly in the given blank which is antonym of 'DISASSOCIATE' which means 'to detach from association'. No other set of words fit in the blank in grammatically correct and contextually meaningful manner. Hence, option (b) is the most suitable answer choice.

139. (d): Among the given set of words, 'abstaining, refraining' fit in perfectly in the given blank which is antonym of 'INDULGE' which means 'allow oneself to enjoy the pleasure of.' No other set of words fit in the blank in grammatically correct and contextually meaningful manner. Hence, option (d) is the most suitable answer choice.

140. (b): Among the given set of words, 'contaminated, polluted' fit in perfectly in the given blank which is antonym of 'IMMACULATE' which means 'perfectly clean, neat, or tidy'. No other set of words fit in the blank in grammatically correct and contextually meaningful manner. Hence, option (b) is the most suitable answer choice.

