

IBPS Clerk Mains Previous Year Paper - 2020

REASONING ABILITY

Direction (1-5): Study the following information carefully and answer the questions given below:

There are three rows i.e., row 1, row 2 and row 3 Such that row 2 is in the north of row 3 and row 1 is in the north of row 2. There are 6 persons sitting in each row. Persons sitting in the row 3 faces north. Persons sitting in the row 1 faces south. First 3 persons sitting from west to east in row 2 faces north and last three person sitting from west to east in row 2 faces south.

Note: Last three persons sitting west to east in the row 1 and first three persons sitting in the row 3 are facing the persons sitting in the row 2.

T sits one of the extreme ends of the row 2 and faces to the one who sits immediate right of D. D faces the one who sits 2nd to the right of C. V faces the one who sits 2nd to the left of C. more than one person sit between H and V. The number of persons sit between H and V is same as the number of persons sit between D and X, who faces south. W sits immediate right of E, who does not face D, T and V. E does not sit any of the extreme ends. More than two persons sit between P and G, who faces Q. S is the only immediate neighbour of R. Both R and C are not facing to each other. A sits immediate right of F. B, who sits at extreme ends sit to the left of U. K is not an immediate neighbour of A.

- **1.** Which of the following statement is not true? I. More than two persons sit between R and T II. E sits 3rd to the left of the one who faces C. III. E does not sit in the same row with U.
 - (a) Only I
- (b) Both II and III (c) Only III
- (d) Only II
- (e) Both I and III
- 2. Who among the following faces to the one who sits 4th to the left of H?
 - (a) K
- (b) Q
- (c) S

- (d) C
- (e) None of these
- **3.** Which of the following pair of persons sit at the extreme ends in the same row?
 - (a) T, H
- (b) R, G
- (d) B, X
- (e) W, V
- (c) T, R

4. 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, X
- (b) F, P
- (c) V, H

(d) S, K

- (e) B, E
- **5.** __ sits in the row-2 and sits 3rd to the right of the ___ who faces the person __ who sits in the row-1?
 - (a) S-K-D
- (b) T-C-B
- (c) R-Q-D

- (d) T-C-F
- (e) None of these
- **6.** In each of the numbers given below numbered as I, II and III, find pair of numbers (both forward and backward) which have as many numbers between them as there are in the number series then find which of the following numbers I, II and III has the highest number of these pairs?

I. 2387465193

- II. 189264573
- III. 485274753 (a) Only II
- (b) Only I
- (c) Only III
- (d) Both II and III (e) Both I and II
- 7. **Statement:** In order to counter fake, sub-standard and expired drugs, the Union Health Ministry has said Hindi and regional language will be used in the tendering process. "Drug names and expiry date during tendering will be in Hindi/regional language too for — polio drop and Iron tablets — procured for children under the government programmes," said a senior Indian health official.

Which of the following can be assumed from the given statement?

- Polio drop and Iron tablets are the only drugs which requires to be used the regional language during the tendering process.
- (II) A large amount of people are more comfortable with Hindi or their regional language.
- (III) Language barrier is the major cause of the problem of fake or expired drugs as it drag the customers away from getting the required information.
- (IV) As mostly drug producing companies are based in foreign countries, they preferred English language to examine and give recommendations to streamline the labelling requirements of drugs so as to provide the requisite information to the consumer.

- (a) Only I and IV are implicit
- (b) Only III is implicit
- (c) Only III and II are implicit
- (d) All are implicit
- (e) Only I, II and III are implicit
- 8. Statement: In our hospitalization policy, you can include your spouse, dependent children, parents and parents-¬in law. Including senior citizens in your policy gets you additional tax benefits- An Advertisement issued by a popular Health Insurance Company A.

Which of the following can be inferred from the given statement?

- (a) Rival Company B does not include the family members in their healthcare policies.
- (b) Company A is more popular than the others as only company A provide additional tax benefits in their hospitalization policy.
- (c) Inclusion of family members and the additional tax benefits in hospitalization policy may attract more number of people to get health insurance from company A.
- (d) If the senior members are not included one is not eligible to get the tax benefits in Insurance policies.
- (e) Company A provide more benefits and attractive offers under its healthcare policies to customers than company B.

Direction (9-13): Study the following information carefully and answer the questions given below:

Eight members of three generations of a family are sitting in a circular table. Some of them are facing towards center and some are facing outside. There are two married couples in a family. Married couples are facing towards center.

H is not male. D is grand daughter of F. Two persons are sitting between E and sister-in-law of A. H sits 3rd to the left of son in law of F. E is grandfather of C who sits opposite to his father. G who is unmarried is only son of E. C is son of B. G sits immediate right of daughter of B. F faces sister of B. C who doesn't face towards center sits 2nd to the right of brother-in-law of A. F is mother of B who is sister of G.

- **9.** Who among the following sits opposite to uncle of C?
 - (a) D
- (b) Husband of F (c) B
- (d) Brother of A (e) Either (b) or (d)
- **10.** How many persons are sitting between A and G when counted from left of G?
 - (a) None
- (b) One
- (c) Three

- (d) Two
- (e) More than three
- **11.** How is H related to F?
 - (a) Sister
- (b) Aunt
- (c) Niece

- (d) Daughter
- (e) None of these

- **12.** Which of the following is true regarding H?
 - (a) A is brother-in-law of H
 - (b) E is parent of H
 - (c) H is Aunt of D
 - (d) B sits 2nd to the left of H
 - (e) All are true
- **13.** How many persons are facing towards center?
 - (a) Two
- (b) Three
- (c) Four

- (d) Six
- (e) Five

Directions (14-18): 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 and together are not sufficient
- (e) If the data in both the statements I and II together are necessary to answer
- 14. Seven persons P, Q, R, S, T, U and V are living on different floors of seven storey building. Ground floor is numbered as 1st floor and just above the floor is numbered as 2nd floor and so on till the topmost floor is numbered as 7th floor. How many persons live between U and V?

Statement I: At least one person lives between Q and U. No one lives between S and T.

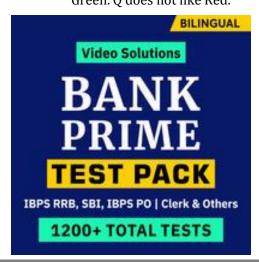
Statement II: P lives just above T and just below U. Q lives just above R. V lives just below S.

15. Five persons like different colour. Who among the following likes White?

like Blue and Pink.

Statement I: M neither like Pink nor Green. N neither like Pink nor blue. Both Q and P are not

Statement II: P neither like Red nor Blue. O does not like Green. O neither like Red nor Green. Q does not like Red.



- **16.** Eight persons A to H are sitting around a square table. Four of them sit at corner sides and rest four sit in the middle sides of the table. The ones who sit at corner side face inside while the ones who sit in the middle side face outside. Who among the following sits 3rd to the left of the one who E?
 - **Statement I:** C sits 3rd to the left of B. A does not sit near B and G. D sits immediate right of F and does not sit at any corner side.
 - **Statement II:** One person sits between A and C. H sits 2nd to the right of E. H does not face outside.
- **17.** In a certain code language. How is "Traffic" coded?
 - **Statement I:** "Traffic light green road" is coded as "we dw ry qs" and "Green road become white" is coded as "qs ry mn tu".
 - **Statement II:** "Green white found light" is coded as "gs mn vu dw" and "Open traffic road green" is coded as "rs we rv qs"
- **18.** Six persons P, Q, W, X, Y and Z join gym classes on different days of a same week starting from Monday to Sunday but not necessarily in the same order. One day is holiday. Who among the following join gym on Wednesday?
 - **Statement I:** Z join just before Y and just after W. X join just after P. One day is gap between joining of Q and P. Z joins after Thursday.
 - **Statement II:** One person joins between P and Q, who join after P. The number of persons join gym between P and Q is same as the number of persons join gym between X and Z. Y joins after Z.
- **19. Statement:** Unless parents are in a high paying job or have an established business running, aspiring for their children to study in international schools may be an uphill task. Now, that essentially means saving up simultaneously for education and wedding and, of course, fervently hoping some money will last for your retirement after all this!

Which of the following statement strengthen the given statement?

- (a) Avoid prioritising saving for wedding over saving for education.
- (b) Taking a loan for an Ivy League school where you know you will get a job is very different from sending your child abroad for the sake of a 'foreign' degree.
- (c) Very important, you cannot entirely kill your retirement plan.
- (d) The actual way to meet most of the expenses if your child wishes to study abroad is to start saving early and save right.
- (e) Unless you have a basket of some risky market linked investments with some fixed income products, there is no way you will be able to save for education abroad.

20. Statement: Saving the diversity and abundance of life on the earth may cost \$100 billion a year, say scientists who have proposed a policy to prevent another mass extinction event on the planet. Scientists now estimate that society must urgently come to grips this coming decade to stop the very first human-made biodiversity catastrophe. "The Global Deal for Nature (GDN) is a time-bound, science-based plan to save the diversity and abundance of life on Earth.

Which of the following can be assumed from the given statement?

- (a) The policy's mission is to save the diversity and abundance of life on the earth — for the price tag of \$100 billion a year.
- (b) Companion pact Societal investment in the GDN plan would, for the first time, integrate and implement climate and nature deals on a global scale to avoid human upheaval and biodiversity loss.
- (c) The international team of GDN scientists believe a companion pact similar to Paris Climate Agreement is desperately needed to implement the very first global nature conservation plan to meet these challenges.
- (d) Achieving the milestones and targets of the Global Deal for Nature is the best gift we can offer to future generations.
- (e) The essence of implementing the plan is to set up protected areas of land as Artificial ecosystems.
- **21. Statement:** IT major Tata Consultancy Services (TCS) has partnered with the Department of Posts to modernize the delivery of mail and packages, enhance customer experience, and launch innovative services that will drive new revenues.

Which of the following may be the cause behind the new venture of TCS with DOP?

- (a) The integrated solution is built to cater to the department's immense scale and future needs.
- (b) This involved deploying an integrated ERP solution that caters to mail operations.
- (c) TCS connects its network of more than 1,50,000 post offices, making this the largest distributed epostal network in the world.
- (d) It supports the HR needs of over 5 lakh employees. services over 40,000 concurrent users, and processes over 3 million postal transactions a day.
- (e) TCS has implemented its Point-of-Sale solution across 24,000 post offices with over 80,000 PoS terminals.

- 22. Statement: Police have rescued 216 human trafficking victims, mainly children, from forced labor and prostitution in a major operation in Benin and Nigeria.
 - (I) Mostly children fall into the hands of traffickers in their own countries and abroad.
 - (II) Mainly Benin and Nigeria witnessed the problem of human trafficking.
 - (III) Almost every country in the world is affected by trafficking, whether as a country of origin, transit or destination for victims.

Which of the following can be inferred from the given statement?

- (a) Only I and II are implicit
- (b) Only III is implicit
- (c) Only III and II are implicit
- (d) All are implicit
- (e) None is implicit

Directions (23-27): Study the following information carefully and answer the questions given below-

Seven persons were born in seven different years but in the same month (Note- All the calculations of the ages are to be done on the basis of year 2021). Oldest person was born in 1984.

A was born in 1994 and the age difference between A and G is 10 years. D is the youngest person and his age is cube of an even number. C is 6 years older than B who is 8 years older than G. Age difference between E and F is 4 years and F's age is multiple of 11. D is younger than G and age difference between them is more than 1 years.

- **23.** What is the age of D?
 - (a) 31 years
- (b) 33 years
- (c) 25 years

- (d) 8 years
- (e) None of these
- **24.** F was born in which of the following year?
 - (a) 1988
- (b) 2013
- (c) 1990

- (d) 2014
- (e) None of these
- **25.** What is the age difference between E and C?
 - (a) 2 years
- (b) 6 years
- (c) 8 years

- (d) 10 years
- (e) None of these
- **26.** Which of the following statement is true about B?
 - (a) B's age is a prime number
 - (b) Age difference between B and A is more than 3
 - (c) B's age is perfect square of an odd number
 - (d) D is older than B
 - (e) None of these
- **27.** How many persons are older than A?
 - (a) One
- (b) More than three
- (c) Two

- (d) Three
- (e) None

- **28.** In the word '**EVERYTHING**' all consonants are written as their preceding letter and all vowels are written as their succeeding letters. Now all letters are arranged in alphabetical order from left to right and all the repeated letters are eliminated and written only once. How many letters are between U and G?
 - (a) One
- (b) Two

- (d) Three
- (e) More than four

Direction (29-31): In the following questions, the symbols &, @, *, \$, % and © are used with the following meanings as illustrated below. Study the following information and answer the given questions:

P@Q-P is the child of Q

P©Q-P is the parent of Q

P%Q-P is father-in-law of Q

P&Q- P is brother-in-law of Q

P\$Q- P is brother of Q

P*Q- P is wife of Q

- **29.** If the expression 'A%D©E@G\$H' is true, then how H is related to E?
 - (a) Uncle
- (b) Brother
- (c)Aunt
- (d) Grandmother (e) Can't be determine
- **30.** If the expression 'F@M&S\$R©T\$F' is true, then which of the following is true?
 - (a) M is mother of T
 - (b) R is brother of S
 - (c) S is uncle of T
 - (d) R is husband of M
 - (e) All are true
- **31.** Which of the following expression shows 'F is aunt of
 - (a) E ©H@C%F@G
 - (b) E©H@C\$F*G
 - (c) F©E*C@H\$G
 - (d) G\$H@C*F&E
 - (e) None of these

Directions (32-36): A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule. The following is an illustration of input and rearrangement.

Input: 6712 8521 4596 4876 9384 Step I- 1258 1267 3489 4569 4678 Step II- BCFI BCGH DEIJ EFGI EGHI Step III- %11 %10 %14 \$15 \$14 Step IV- TWO ONE FIVE SIX FIVE

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

Input: 1763 6948 3541 8214 2946

- **32.** What is the last letter of the word which is third from the right end in step II?
 - (a) J
- (c) I

- (d) F
- (e) None of these
- **33.** What is the multiplication of the number which is second from the left end and the number which is second from the right end in step III?
 - (a) 96
- (b) 84
- (c) 104

- (d) 100
- (e) None of these
- **34.** Which of the following word is third from the left in step IV?
 - (a) SIX
- (b) FIVE
- (c) TEN

- (d) EIGHT
- (e) None of these
- **35.** What is the sum of the number which is second from the left in step I and the number which is third from the left (only number) in step III?
 - (a) 1355
- (b) 2470
- (c) 1377

- (d) 1250
- (e) None of these
- **36.** How many words are starting with vowel in step II?
 - (a) Four
- (b) Three
- (c) Two

- (d) One
- (e) None
- 37. How many meaningful words will be formed by 1st, 3rd, 5th and 7th letter of 'ENTITRE'?
 - (a) One
- (b) Two
- (c) Four

- (d) Five
- (e) None

Direction (38-42): Study the following information carefully and answer the given questions.

Nine students sit in a row some of them face north while some of them face south and each of them ranked between 1 to 9 but not necessarily in the same order. Not more than two students face the same direction who are immediate neighbours. F is the only neighbour of the one who get 2nd rank. T sits 2nd to the left of M and both are facing the same direction. More than four students sit between F and T, who does not sit at any of the extreme ends. D sits immediate right of the one who get lowest rank among all. E gets 1st rank and sits 2nd to the left of L. H gets 3rd rank and sits 4th to the left of the one who gets 8th rank, who sits at one of the extreme ends. The students sit at extreme ends face the same direction. G gets 6 rank lower than H and is an immediate neighbour of the one who gets 4th rank. D gets odd numbered rank. The one who gets 5th rank, sits 4th to the right of the one who gets 7th rank. B faces to north. Immediate neighbours of the one who gets 3rd rank face opposite direction to each other. T does not rank just below of L.

- **38.** How many students sit to the left of the one who gets 6th rank?
 - (a) Three
- (b) Six
- (c) Five

- (d) Four
- (e) Seven

- **39.** How many students sit between G and the one who get top ranked among all?
 - (a) As many students sit between D and L
 - (b) As many students sit to the left of M
 - (c) As many students sit to the right of D
 - (d) Same as students sit between B and the one who gets 7th rank
 - (e) Both (c) and (d)
- **40.** What is the position of the one who gets just lower rank than D with respect to the one who sits immediate left of G?
 - (a) 5^{th} to the right (b) 4^{th} to the left (c) 3^{rd} to the right
 - (d) 4th to the right(e) 5th to the left
- **41.** Which of the following pair/group of students facing the same direction?
 - (a) E, G, L
- (b) H, M, G
- (c) F, D, G

- (d) L, E, M
- (e) None of these
- **42.** 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) B
- (b) L
- (c) E
- (d) D (e) H
- **43. Statement:** Ghana launched a fleet of drones to carry medical supplies to remote areas, with President Nana Akufo-Addo declaring it would become the "world's largest drone delivery service". The craft are part of an ambitious plan to leapfrog problems of medical access in a country with poor roads.

Which of the following can be deduced from the given statement?

- (I) Drones supply medicines faster than the vehicles by road to the remotest areas.
- (II) On road supply of medicines are much cheaper than the supply of medicines by drones.
- (III) Other countries also following Ghana to provide medical services to its people across the country.
- (a) Only I and II are implicit
- (b) Only III is implicit
- (c) Only III and II are implicit
- (d) All are implicit
- (e) None is implicit



44. World's forests are 'in emergency room'. Study shows that the world lost 12 million hectares of tropical tree cover last year — the equivalent of 30 football pitches a minute — researchers said on Thursday, warning the planet's health was at stake as we depend on forests for our survival from the air we breathe to the wood we use and so on.

Which of the following may be the reason of the warning given in the statement?

- (I) Forests and trees make vital contributions to both people and the planet, bolstering livelihoods, providing clean air and water, conserving biodiversity and responding to climate change.
- (II) How to increase agricultural production and improve food security without reducing forest area is one of the great challenges of our times.
- (III) There is quantitative evidence to show that forests are being managed more sustainably.
- (a) Only I is implicit
- (b) Only III is implicit
- (c) Only III and II are implicit
- (d) None is implicit
- (e) Only I, II and III are implicit

Direction (45-49): Study the following information carefully and answer the given questions.

Nine persons were born in three different months-September, November and December on three different dates viz. 5, 11 or 14 and each of them likes different colours but not necessarily in the same order.

More than six persons were born after 0. The number of persons born before Q is same as the number of persons were born between Q and the one who likes Green. Two persons were born between the ones who like Green and Purple. W likes Red and was born before the one who likes Green but not just before. The one who likes White was born just before S and just after the one who likes Pink. S does not like Green. P was born just before the one who likes Peach. B likes Yellow. The number of persons were born between B and T is same as the number of persons were born between T and D. R was born before D. The number of persons were born between R and the one who likes Black is same as the number of persons born between R and the one who likes Magenta. X was born after the one who likes Black.

- **45.** How many persons were born between the one who likes Pink and the one who was born just after P?
 - (a) As many persons were born between W and T
 - (b) As many persons were born after the one who likes Purple
 - (c) As many persons were born between Q and the one who likes Pink
 - (d) Both (a) and (c)
 - (e) None of these
- **46.** Find odd one out?
 - (a) 5th September- Q
 - (b) 11th November-X
 - (c) 14th November T
 - (d) 14th December P
 - (e) 5th December T
- **47.** The number of persons were born between R and the one who likes Red is same as the number of persons were born between S and the one who likes ___?
 - (a) Yellow
- (b) Pink (e) Green
- (c) White

- (d) Red
- **48.** Which of the following statement is true?
 - I. S was born in the month having odd number of days
 - II. W was not born before T
 - III. P likes Magenta
 - (a) Both I and III (b) Both II and III (c) Only II
 - (d) Only III
- (e) Only I
- **49.** Which of the following combination is correct?
 - (a) B-11th September
 - (b) X- Green
 - (c) P-14th December
 - (d) T- Magenta
 - (e) Both (b) and (c)
- 50. In the word 'DOWNLOADING' all consonants are written as their preceding letter and all vowels are written as their following letters. Then, how many such pairs of letters are there, each of which have as many letters between them in the word (in both forward and backward direction) as they have between them in the English alphabetical series?
 - (a) One
- (b) Two
- (c) Four

- (d) Three
- (e) More than Four

OUANTITATIVE APTITUDE

51. If one of the root of given below quadratic equation is $\frac{3}{2}$, then find the other root of this equation.

$$x^2 - \frac{23x^2}{\sqrt{46x^2 + 54x^2}} + k = 0$$

- (b) $-\frac{2}{3}$ (c) $\frac{4}{5}$

- (d) $\frac{3}{1}$
- (e) Can't be determined
- **52.** There are total 80 students in a class. 40 Number of boys who are present in a class and Number of boys who are not present in class are 4 less than no. of girls who are not present in the class. If the no. of girls who are present in class are 66.66% more than the no. of girls who are not present in class, then find the total no. of girls in class.
 - (a) 48
- (b) 32
- (c)36

- (d) 40
- (e) 28

Directions (53-55): The following questions are accompanied by two statements (I) and (II). You have to determine which statements(s) is/are sufficient/necessary to answer the questions.

53. There is a series of three consecutive odd numbers and another series of three consecutive even numbers. Find the difference between the sums of both the series.

Statement I: Difference between the middle value of odd number series and even number series is 7.

Statement II: Sum of smallest odd number and largest even number is 57.

- (a) Statements (I) and (II) taken together are not sufficient to answer the question.
- (b) Statement (II)alone is sufficient to answer the question but statement (I) alone is not sufficient to answer the question.
- (c) Either statement (I) or statement (II) by itself is sufficient to answer the question.
- (d) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the auestion.
- (e) Statement (I) alone is sufficient to answer the question but statement (II) alone is not sufficient to answer the questions
- **54.** In a class 52% students failed in English and 42% students failed in Mathematics. Find the percentage of students who passed both the subjects.

Statement I: 48% students passed in English.

Statement II: 25% students passed in only Mathematics.

- (a) Statements (I) and (II) taken together are not sufficient to answer the question.
- (b) Statement (II) alone is sufficient to answer the question but statement (I) alone is not sufficient to answer the question.
- (c) Either statement (I) or statement (II) by itself is sufficient to answer the question.
- (d) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.
- (e) Statement (I) alone is sufficient to answer the question but statement (II) alone is not sufficient to answer the questions
- **55.** There is a path around a square field. Find the area of the square field.

Statement I: Width of path around square field is 2

Statement II: Total area of the path is 136 square meter.

- (a) Statements (I) and (II) taken together are not sufficient to answer the question.
- (b) Statement (II) alone is sufficient to answer the question but statement (I) alone is not sufficient to answer the question.
- (c) Either statement (I) or statement (II) by itself is sufficient to answer the question.
- (d) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.
- (e) Statement (I) alone is sufficient to answer the question but statement (II) alone is not sufficient to answer the questions
- **56.** There are two villages X and Y. females in village X and village Y are equal. Males in village Y are 25 % less than that in village X. If females in village Y reduced by 50% and males in village Y becomes 50% more than that of village X, then population of village Y remains same. Find the ratio of population of village X to village Y.

(a) 5: 4 (b) 7: 10 (c) 3:5

(d) 10:9 (e) 7:4

57. A container contains 160 liters of pure milk. X liters of pure milk replaced by same quantity of water, due to which quantity of milk become three times of water. If 20 liters of mixture is replaced by same quantity of water, then find the quantity of water in final mixture.

(a) 55 liters

(b) 35 liters

(c) 45 liters

(d) 42 liters

(e) 30 liters

58. An article is marked up by X% and sold on a discount of 0.5X% and earns a profit of 8%. Find the value of X, if value of X is more than 20.

(a) 40

(b) 60

(c) 50

(d) 80 (e)70

59. A person invested Rs. 9780 in scheme A at R% rate of simple interest for 3 years. He reinvests the interest amount in scheme B at 20% rate of interest on CI for 2 vears. From scheme B he got a total amount of Rs. 6337.44. Find the value of R.

(a) 5%

(b) 15%

(c) 10%

(d) 12.5%

(e) 20%

60. 60 men can complete a piece of work on time while 40 men can complete the same amount of work in 12 more days. Find in how many days 18 men can complete the 3/5th of the work?

(a) 80 days

(b) 64 days

(c) 72 days

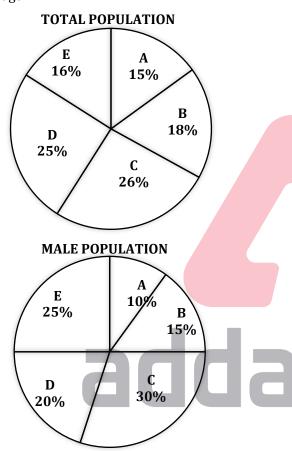
(d) 42 days

Directions (61-66): Read the given pie chart carefully and answer the following questions.

Pie chart (i) shows the total population of five villages (A. B, C, D and E) and pie chart (ii) shows the male population of these five villages (A, B, C, D and E)

Note: 1. Difference between population of village A and B is 21.

2. Male population of village A is $38\frac{2}{21}\%$ of total population of same village.



- **61.** Find the ratio of male in village B and C together to the female in village B?
 - (a) 45: 19
- (b) 20:9
- (c) 30:11

- (d) 7:5
- (e) 11:9
- **62.** In village F total population is 75% more than that of village E. Ratio of male and female in village F is 9: 5. Find the average of female in village E and F.
 - (a) 46
- (b) 41
- (c)37

- (d) 31
- (e) 35
- 63. Females in village A is what percentage more than males in same village? (b) 25% (c) $61\frac{19}{21}$ % (e) $38\frac{6}{13}$ %
 - (a) $38\frac{2}{21}\%$

- (d) 62.5%

- **64.** Find the central angle of total population of village C.
 - (a) 93.6
- (b) 79.2
- (c) 26

- (d) 54.8
- (e) 84.5
- 65. If 20% and 50% of total population of village A and C respectively are literate. Literate females of village A and C are 9 and 42 respectively. Find the total literate males of both the villages.
 - (a) 49
- (b) 61
- (c) 54

- (d) 63
- (e) 51
- **66.** Find the difference between total male population and total female population of village C.
 - (a) 81
- (b) 62
- (c)49

- (d) 75
 - (e) 58

Directions (67-71): Study the following information carefully and answer the following questions.

Gun A: 70% of the fired bullets were missed the target.

Gun B: Total 900 bullets fired and 33.33% of them hit the target.

Gun C: 450 bullets hit the target.

Gun A hits the target 20% less than that by Gun B. Bullets from Gun C which missed the target are 6.25% less than fired bullets from Gun A. Time gap between two fired bullets of Gun A, Gun B and C is 5 sec, 3 sec and 7 sec respectively.

- **67.** If Gun C fires bullets between 12: 30 PM to 12: 34 PM. find the remaining bullets in Gun C.
 - (a) 1023
- (b) 1166
- (c)867

- (d)710
- (e) 983
- **68.** Find the average bullets hit the target by all the Guns.
 - (a) 495
- (b) 375
- (c)330

- (d) 536
- (e) 300
- 69. If all Guns starts firing at 12: 00 PM. After 30 min how bullets are remained in all the guns?
 - (a) 1683
- (b) 1543
- (c) 1217

- (d) 1753
- (e) 1517
- 70. Bullets fired by Gun A in 10 minutes are what percentage more/less than that by Gun B in 4 minutes?
 - (a) 25%
- (b) 100%
- (c) 75%

- (d) 50%
- (e) $33\frac{1}{2}\%$
- **71.** Targets hit by bullets from Gun D is equal to that of from Gun B. Total bullets fired from Gun D is average of total bullets fired from Gun A and Gun C. Find how many bullets of Gun D missed the target?
 - (a) 700
- (b) 400
- (c)600

- (d) 500
- (e) 300

Directions (72-73): Study the following information carefully and answer the following questions.

Car A: Car travels a certain distance for 6 hours. Distance travelled by Car A is 16.66% less than that by Car B.

Car B: Car travels a certain distance for 7.2 hours at the speed of 50 kmph.

Car C: Car travelled a distance of 400 km with the twice of speed of Car B.

- **72.** If speed of Car A is reduced by 2 kmph and speed of Car B is increased by 10%, then find the difference between distances travelled by both the cars in 4
 - (a) 108 km
- (b) 48 km
- (c) 72 km

- (d) 28 km
- (e) 96 km
- 73. If Car D travelled 40% more distance than Car A in 10 hours, then find the speed of Car D.
 - (a) 42 kmph
- (b) 36 kmph
- (c) 48 kmph

- (d) 24 kmph
- (e) 32 kmph

Directions (74-76): Study the given table carefully and answer the following questions.

0 1				
Persons	Amount	Denomination	Denomination	Denomination
reisons	Amount	I	II	III
A	Rs. 1120	50	20	10
В	Rs. 3250	100	20	5
С	Rs. 5400	200	50	20
D	-	20	10	5

Notes: Number of notes of given denomination for each person is same (D I, D II and D III)

- 74. Another person F has an amount equal to Rs. 25 more than the average amount of B and C and he has minimum two notes of Rs. 2000 and he also has notes of denomination of Rs. 200 and 50. Find the possible no. of notes of Rs. 50 denomination.
 - (a) 5
- (b) 1
- (c)7

- (d) 3
- (e) 9
- **75.** D has an amount less than Rs. 1000 and no. of notes of each denomination is a prime number between 20 and 30. Find the total no. of notes D have.
 - (a) 46
- (b) 23
- (c)69

- (d) 29
- (e) 87
- 76. G has D I, D II and D III as Rs. 500, Rs. 20 and Rs. 10 respectively. If G has total amount of Rs. 3710, then find the no. of notes of each denomination which G has.
 - (a) 14
- (b) 7
- (c) 21

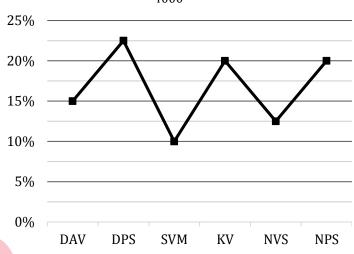
- (d) 12
- (e) 15

Directions (77-81): Study the line chart given below and answer the following questions.

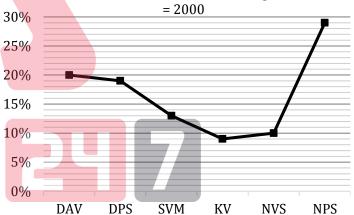
First line chart shows the percentage distribution of total students who cleared 1st stage of a test from six different schools and second line chart shows percentage distribution of total students who cleared 2nd stage of same test from these six schools.

Note: Only those who cleared 1st stage of test can participated in 2nd stage of test.

> Total students who cleared 1st stage of test = 4000



Total students who cleared 2nd stage of test



- 77. What is the ratio of total number of students from DAV and SVM together who did not clear 2nd stage to total number of students from DAV and SVM together who did not clear 1st stage? (It is given that total students who participated in test from DAV and SVM are 800 and 600 respectively)
 - (a) 5:8
- (b) 8:15
- (c) 17:20

- (d) 17:25
- (e) None of these
- **78.** Total number of students who did not clear 2nd stage from KV, NVS and DPS together is what percent of total number of students who cleared 1st stage from all schools together?
 - (a) 35%
- (b) 36%
- (c) 30%

- (d) 37.5%
- (e) 40%

- **79.** The ratio of girls to boys from NPS who did not clear 2nd stage is 6:5 and ratio of girls to boys from SVM who did not clear 2nd stage is 4:3. What is the ratio of total number of girls who did not clear 2nd stage from NPS and SVM together to total number of boys who did not clear 2nd stage from NPS and SVM together?
 - (a) 6: 5
- (b) 3: 2

- (d) 5: 3
- (e) None of these
- 80. If 15% of total number of students who cleared 1st stage from DAV, KV and NPS together but did not participate in 2nd stage, then what is the total number of students from DAV, KV and NPS together who did not clear 2nd stage?
 - (a) 690
- (b) 700
- (c)720

- (d) 710
- (e) 730
- 81. If number of students who participated in test from DPS and KV are 1000 and 1500 respectively, then average of students who did not clear 1st stage from DPS and KV is what percent more or less than average of students who cleared 2nd stage from NVS and DAV?
 - (a) 30%
- (b) $33\frac{1}{3}\%$ (c) $37\frac{1}{2}\%$
- (d) $27\frac{1}{2}\%$
- (e) 25%

Directions (82-86): Find the approximate value of (?) in the following questions.

- **82.** 34.99% of 7500.01 $-\frac{150.03\% \text{ of } 1500.01}{1784.991 \div 118.992} = (?)^2 (?)^2$ $(5.002)^2$
 - (a) 30
- (b) 50
- (c)80

- (d) 60
- (e) 20
- **83.** 45.03% of 2000.003 (48.009 of 120.02 \div $(24.001)^2$) = ? +467.021
 - (a) 381
- (b) 345
- (c) 292

- (d) 371
- (e) 423
- **84.** ((54.03% of 4499.98 × 19.97) ÷
 - 80.996 of (50.01% of 240.001)) = ?(a) 18
 - (d) 5
- (b) 9 (e) 16
- (c) 12
- **85.** $31.01 \times ? = (\sqrt[3]{19683.02} \times \frac{39.997}{12.01}) +$ 32.01% of 6499.99
 - (a) 50
- (b) 20
- (c)70

- (d) 90
- (e) 10
- **86.** $\sqrt[3]{?} = (39.01)^2 (44.01)^2 + (11.004)^3 (32.99)^2 +$ $(12.97)^2$
 - (a) 216
- (b) 512
- (c) 64

- (d) 8
- (e) 1000
- 87. If $x^2 13x + k = 0$ and its two roots are a and b. If a b
 - I. Find value of 'k'.
 - II. 36
 - (a) I < II
- II < I (d)
- (c) $I \leq II$

- (d) $I \ge II$
- (e) I = II or no relation.

- **88.** One of the roots of $2x^2 + bx 5 = 0$ is 1.
 - I: Value of the other root.
 - II: 2.5
 - (a) I < II
- (b) I > II
- (c) $I \leq II$

- (d) $I \ge II$
- (e) I = II or no relation
- 89. In a company, male employees are 70% of total employees. 40% males are working with the company for more than 2 years rest joined after that. Total 55% employees in the company are working for more than 2 years. Find the percentage of females who have joined company in last 2 years?
 - (a) 12 %
- (b) 3 %
- (c) 32 %

- (d) 45 %
- (e) 13.5 %
- 90. The radius of a semicircle is equal to the radius of a sphere whose surface area is 616 cm² and height of a cylinder is 150% more than radius of semicircle and ratio of height to radius of cylinder is 5:1. Then find radius of cylinder? (in cm)
 - (a) 14
- (b) 7.5
- (c) 3

- (d) 3.5
- (e) 5.5
- 91. Tap A can fill a tank in 24 minutes and tap B can fill the same tank in 30 minutes, another tap C can empty the tank in 20 minutes. If tap A and tap B are opened together & after six minutes tap C is also opened, then find the total time taken to fill the remaining tank?
 - (a) 18 minutes
- (b) 14 minutes
- (c) 22 minutes

(c) 7!

- (d)12 minutes
- (e) 16 minutes
- **92.** In how many ways can 5 prizes be given away to 7 students when each student is eligible for every prize?
 - (a) 7⁵ (d) 5!
- (b) 5^7 (e) $(7!)^5$
- 93. vessel 'A' contains 400 liters milk & vessel 'B' contains 220 liters water. 40 liters milk taken out from 'A' and mixed in 'B' and then 3Q liters mixture from 'B' taken out and poured into a vacant vessel 'C'. If ratio of water to milk in vessel C is 11:4, then find remaining quantity of milk in vessel 'B'?
 - (a) 240 liters
- (b) 60 liters
- (c) 64 liters

- (d) 80 liters
- (e) 48 liters
- **94.** Relative speed of two trains A & B is $\frac{10}{3}$ m/s while running in same direction and ratio of speed of A to that of B is 6:7. If both train cross each other while running in opposite direction in $\frac{120}{13}$ sec and train A can cross a platform (length of platform is twice of length of train A) in 24 sec, then find length of train B?
 - (a) 240 meters
- (b) 210 meters
- (c) 180 meters

- (d) 300 meters
- (e) 150 meters

- 95. Anurag & Ravi entered into a business with capital of Rs. 2000 & Rs. 1600 respectively. At the end of 8th month Anurag added Rs. 400 more and he left the business after 10 months, after one year's Ravi invested his profit in a scheme, which offers CI at 20% p.a. If after two years Ravi gets total amount of Rs. 6912, then find total profit of Anurag?
 - (a) 5200 Rs.
- (b) 2550 Rs.
- (c) 10200 Rs.

- (d) 7650 Rs.
- (e) 2700 Rs.
- **96.** There is 12 people in a group. When two people are selected at random, difference between probability of either both are male, or both are female is $\frac{1}{6}$. Find difference between male and female in the group(male are more than female in the group)?
 - (a) 3
- (b) 2
- (c) 1

- (d) 4
- (e) Can't determine
- 97. When digits of the two digits number are reversed, number obtained is 9 less than twice of the original number. Also the new number obtained is 175% of the original number. Find the sum of the digits of the number?
 - (a) 13
- (b) 10
- (c) 9

- (d) 12
- (e) 15

- **98.** Ratio of time taken to cover (D +5) km in downstream to that of time taken to cover (D - 7) km in upstream is 5:12.If ratio of speed of boat in upstream to that of stream is 2:3 and difference of time taken by the boat to travel (D-1) km in upstream and that of in downstream is 6 hr then find the speed of boat in still water?
 - (a) 4.5 km/hr
- (b) 5.5 km/hr
- (c) 7.5 km/hr

- (d) $4 \, \text{km/hr}$
- (e) 6 km/hr
- **99.** A salesman in order to boost the sale of his articles increased the marked price of each article by 60% and then offered a scheme - when a buyer buys 5 articles then salesman will give him 3 articles free. If each article was initially marked up 50% above the cost price, then find overall profit or loss percentage earned by salesman due to above scheme?
 - (a) 20% loss
- (b) 25% profit
- (c) 30% loss

- (d) 50% profit
- (e) 90% profit
- **100.** Average weight of a family of X members is 18 kg. When three men of this family get married, average weight increases by 1kg and when an old man having weight 18kg more than total weight of wife of these three men died, average weight become 16 kg. Find the value of X?
 - (a) 24
- (b) 28
- (c) 26

- (d) 22
- (e) 25

ENGLISH LANGUAGE

Directions (101-105): Read the passage carefully and answer the questions given below it. Certain words/ phrases are given in bold to help you locate them while answering some of the questions.

The government's statement about bringing in a law on cryptocurrencies is welcome, as it could put an end to the existing ambiguity over the legality of these currencies in India. The vagueness exists notwithstanding the fact that the government has, from time to time, suggested that it does not consider them to be legal tender. It has not, however, been able to channel this understandable disapproval — arising out of the fact that such currencies are highly volatile, used for illicit Internet transactions, and wholly outside the ambit of the state — into any sort of regulation.

In 2018, the RBI did send a circular to banks directing them not to provide services for those trading in cryptocurrencies. But this was eventually set aside by the Supreme Court, which found the circular to be "disproportionate," given that the central bank had consistently maintained that virtual currencies were not banned in India. Also, the RBI could not show that entities that it regulated were adversely impacted by exchanges dealing in virtual currencies. The Minister of State for Finance, Anurag Thakur, who on Tuesday confirmed in the

Rajya Sabha that a Bill was in the offing, highlighted the complexity in regulation. He said, "Regulatory bodies like RBI and Sebi etc also don't have a legal framework to directly regulate cryptocurrencies as they are neither currencies nor assets or securities or commodities issued by an identifiable user."

This legal ambivalence has not, however, been able to prevent cryptocurrencies from having a growing clientele in India. Their attraction may only grow now, given that the most well-known of them as also the most valuable, Bitcoin, has hit new peaks in price and is gaining influential followers such as Tesla founder Elon Musk. Cryptocurrency exchanges, which have sprung up, are reportedly lobbying with the government to make sure these currencies are regulated rather than banned outright. Smart regulation is preferable, as a ban on something that is based on a technology of distributed ledger cannot be implemented for all practical purposes. Despite this and the fact that most countries it studied had opted for regulation, this committee still went ahead to an outright ban. Of course, it encouragingly also batted for an official digital currency as well as for the promotion of the underlying blockchain technology. The

- **101.** How cryptocurrency is fundamentally different from fiat currency?
 - (a) bitcoin is illegal in India while only fiat money is legal worldwide
 - (b) the cryptocurrency's verification process is similar to the fiat currency's verification
 - (c) bitcoin has various measures for valuation while fiat money has fixed measures
 - (d) Fiat currency issuance is highly centralized while bitcoin has no such support mechanism
 - (e) None of these
- 102. How cryptocurrency trading overrule the RBI circular banning services to traders?
 - (a) because RBI's compliances are not enough to curb illegal trading in a bank account
 - (b) as there is a lack of evidence provided by the Central bank supporting ban
 - (c) people are still engaged in trading for huge profit even though its illegality
 - (d) The Supreme court agrees with RBI by allowing people to access account for trading
 - (e)None of these
- **103.** Although there is equivocation, why cryptocurrency is ubiquitous than conventional currency?
 - (a) traditional currency is unregulated and vice versa for cryptocurrency
 - (b) its facile availability in Indian markets and straightforward use
 - (c) shoot up in its prices has made it so impressive for investors
 - (d) the reason is that the exchange rate of conventional currency is higher
 - (e) None of these



- **104.** Which of the following statement is correct as per the information given in the passage?
 - (a) the financial market is also get impacted by the cryptocurrency
 - (b) forming legal framework for cryptocurrency's regulation is an intrinsic procedure
 - (c) Bitcoin's value has been historically quite fluctuating (a) Both (B) and (C)
 - (b) Both (A) and (B)
 - (c) Both (C) and (A)
 - (d) Only (A)
 - (e) All are correct
- **105.** Why author said "The government must resist the idea of a ban and push for smart regulation"?
 - (a) as it is now part of the Indian financial system which is now widely used by people
 - (b) its success has inspired the creation of alternative cryptocurrencies
 - (c) because it is laborious prohibit to cryptocurrency based technological infrastructure
 - (d) formation of strict laws is lengthy procedure which needs a lot of time
 - (e) None of these

Directions (106-112): Read the passage carefully and answer the questions given below it. Certain words/ phrases are given in bold to help you locate them while answering some of the questions.

The Indian economy has beaten two straight quarters of recession, expanding 0.4% in the three months to December 2020, a promising turnaround, but there's a twist: the V-shaped recovery could be "optical" and there's a "missing middle". As there has been a fast pick-up in growth, resulting, visibly, in a V-shaped recovery, it is never going to be close to the pre-Covid trend line. This trend line is sort of a trajectory that Gross Domestic Product (GDP), the most widely used measure of income, should have taken, had there been no pandemic.

To be sure, recovery has been skewed. Growth has skipped small low-end manufacturing firms in the "missing middle", the largest source of jobs and manufacturing while soaring oil prices and a fresh wave of Covid cases in some states are dangers to watch out for, economists said. There is an optical rebound in growth because growth is below the trend line. Growth (for next fiscal) is high but in real terms, the size of the economy next fiscal will be a mere 2% bigger than what it was in fiscal 2020. Despite the growth, the economy will suffer a permanent output loss of 11%.

The turnaround has to be more broad-based to bring back at least 14 million jobs estimated by the Centre for Monitoring of the Indian Economy to have been lost. The pandemic hit the services sector harder than manufacturing. Within services, the sharpest decline was in trade, hotels, transport, and communication services, which account for roughly 16% of employment. The biggest _____ continues to be low demand. People, especially poorer households, aren't spending much on a variety of goods and services, such as consumer durables, food items, clothing, health, transport, and education. Private final consumption expenditure narrowed its slippage in the December 2020 quarter but continued to shrink 2.4% after having tanked by 26.3% and 11.3% in the preceding two quarters, according to official data.

Limping small businesses, which make up more than a quarter of India's GDP and over 40% of manufacturing output, are key to a broad-based recovery. The pandemic caused revenues of smaller firms to plunge sharper than larger firms, the main reason for job losses. The dynamics of domestic demand and trade continue to be unfavourable for small businesses. Recovery has skipped labour-intensive sectors of mass employment due to lower bargaining power and cash crunches. Exports are recovering for large industries but remain weak for smaller manufacturing units, a significant employer of the semi-skilled workforce. Labour-intensive sectors such as garments, like leather goods and gems and jewelry account for 18% of India's exports.

Lending by risk-averse banks has been the weakest for micro and small enterprises, while large firms have managed to leverage financing options well. The seesaws in business resumption mean the economy is yet to be sure-footed. The Nomura India Business Resumption Index fell to 95.2 for the week ending March 7 versus 98.1 in the prior week, indicating the gap from the prepandemic normal has slipped to 4.8 percentage points from only 0.7 percentage points a fortnight earlier.

- **106.** According to the author, why the recovery of the Indian economy could be "optical" only?
 - (a) the recovery rate presented by the organizations are far above the real recovery rate
 - (b) there is still lack of confidence among consumer and hence lack of demand
 - (c) because there will be only a little bit of increase in the size of the economy
 - (d) as the package announced by the government during a pandemic is not efficient
 - (e) None of these

13

- **107.** What does author mean by "missing middle" in the given passage?
 - (a) the inefficiency of the government's policy in tackling the slumping economy during pandemic
 - (b) domination by a large number of tiny enterprises that typically employ workers in the hundreds
 - (c) failure in getting the target of the economist of getting sharp V-Shape recovery
 - (d) initiatives by government to formulate policies to resolve industrial issues.
 - (e) None of these
- **108.** What will be the impact of inefficient missing middle on the export of the country?
 - (a) less than one-fourth export will be impacted as they have this much contribution in export
 - (b) there will be a huge impact because the most number of laborers employed in small scale firms
 - (c) there will be an insignificant impact because small firms have small contribution in export
 - (d) manufacturing units will face demand crises and unemployment at a large scale further
 - (e) None of these
- **109.** Which of the following statement is correct as per the information given in passage?
 - (a) large scale industries will take more time for recovery than small firms
 - (b) there is no impact of pandemic on manufacturing sector
 - (c) the manufacturing sector has roughly 16 % of employment
 - (d) there is a decrease in the pace of recovery of businesses
 - (e) None of these
- **110.** Which of the following statement is correct in the context of 'small firms' as per the passage?
 - (a) there is still endangerment of a pandemic for the small firms
 - (b) credit availability by financial institutions is lesser for the small businesses
 - (c) small firms are still anguished by the weak demand side
 - (a) Only (B) and (C)
 - (b) All (A), (B) and (C)
 - (c) Only (A) and (B)
 - (d) Only (C) and (A)
 - (e) Only (A)

Directions (118-122): In the given sentences there is an **111.** What is meant by the highlighted phrase "WATCH odd one. Find out which sentence is an odd one and **OUT**" given in the passage? rearrange the remaining six sentences in the proper (a) high risk of decreasing demand and profit sequence to form a meaningful paragraph and then answer (b) to be careful because of possible danger the questions given below. (c) to be ignored as it is not much important Yet the actions governments, financial institutions, (d) slightly improvement in the economic situations businesses and individuals are taking fall short of (e) None of these (B) Three environmental add up to a planetary emergency that will cause far more pain than COVID-**112.** Which of the following word will fit in the blank to 19 in the long-term. make the sentence grammatically and contextually (C) Moreover, the UNEP also announced last year that, despite a dip in greenhouse gas emissions caused by correct? the pandemic, the world is still headed for global (c)abandon (a)tactics (b)retreat warming. (d)startle (e)drag (D) As COVID-19 upends our lives, a more persistent crisis demands urgent action on a global scale. **Directions (113-117):** In the following passage there are (E) Some of the most harmful to humans and blanks, each of which has been numbered. These numbers the environment are heavy metals produced as a are printed below the passage and against each, five result of metal refining. options are given. Find out the appropriate word which fits (F) For years, scientists have detailed how humanity is the blank appropriately. degrading nature and causing this emergency. (G) what is needed to protect current and future Last week, the Union Government issued a set of rules generations from a hothouse Earth, beset by mass under the Information Technology Act, noting that it was species extinctions and poisonous air and water. (113) rules issued under Section 79 of that statute **118.** Which of the following sentence is the odd one out of in 2011. Those earlier rules had specified the due all the given sentences? (114) obligations that Internet intermediaries had to (a)G (b)C(c)E follow in order to qualify for the limited immunity for legal (d)A (e)B liability regarding user content, which Parliament had **119.** Which of the following should be the FIRST sentence strengthened in 2008 when it amended that law. The after rearrangement? notification of these new rules, however, do not merely (a) A (b) C (c)D (d)F (e)E represent the executive branch superseding previous (115) rules under a law with newer regulation. They **120.** Which of the following should be the SECOND represent a dramatic, dangerous move by the Union sentence after rearrangement? Government towards cementing increased censorship of (a) E (b)D (c) C (d)B (e) A (116) compliance with Internet content and government demands regarding user data collection and **121.** Which of the following should be the FIFTH sentence after rearrangement? policing of online services in India. This has happened in (c) F (a) E (b) D the absence of open and public discussion of the full (d) A (e) G (117) of regulatory powers the government has **122.** Which of the following should be the LAST (SIXTH) sought to exercise, and without any parliamentary study sentence after rearrangement? and scrutiny (a)C (b) D (c) A (e)B (d)F **113.** (a) flaw (b)controversy (c) fundamentally (d) superseding(e)intermediaries **Directions (123-124):** In the following questions, one (c) bullwhip **114.** (a) rejoice (b) diligence (d)gazette (e)laborious (c) subordinate **115.** (a) conjure (b) superficial highlighted word. (d) renounce (e) overwhelming

highlighted word is given and pairs of words are given in the options which have contained synonym and antonym respectively. Find out which pair of words contains the correct pair of synonym and antonym of the given

123. ESCALATING

- (a) create, reform
- (b) provoke, dilute
- (c) nostalgic, refresh
- (d) surge, plunge

(e) develop, devastate

(d)cajole

(d) swathe

117. (a) reconcile

(b) hitherto

(e)visible

(e) mandating

116. (a) compliances (b) overboard

(c) revoke

(c) abrogate

124. SUSTAINABLE

- (a) enduring, temporary
- (b) edible, jumble
- (c) variable, deter
- (d)stagger, daunt
- (e) decline, assess

125. PRACTICAL

- (a) present, revive
- (b) procurement, ensure
- (c) conspire, dilemma
- (d) empirical, theoretical
- (e) retrieve, believe

Directions (126-129): In the following question there are three statements in each question. Each sentence has one given blank. Below three statements five options have been given with one word. Find the word which must fit in all three sentences to make all the sentences grammatically and contextually correct.

126.	(I)	The opposition's persistent protest over rising
	(II)	fuel prices both Houses of Parliament " We must send a message to the bar that we haven't matters for anything " said Chief Justice of India.
	(III)	A virtual preliminary examination which is scheduled for next week in Michigan has been
		treamline (b)adjourned (c) resist repel (e)None of these
127.	(I)	Communication sector likely to network capacity to 6 circles via Chinese vendor.
	(II)	Chief Minister is expected to his cabinet on March 12, party chief said on Thursday.
	(a)e	Climate change may not dryland. ncounter (b)predator (c) acquit
	(a)e	xpand (e)None of these
128.	(I)	The authors of the study highlighted that land- use change drives theand spread of micro-organisms (pathogens)
	(II)	of coronavirus 2 (SARS-CoV-2) in many parts of the world is creating the
	(III)	conditions for significant virus evolution In the last few years, of organics farming is a major trend in the agricultural sector

129.	(I)	With steady headlines of acquisitions of LBM
		dealers and distributors, industryis a
		hot topic among our readers
	(II)	Indian States Keep Spending Taps On While
		Eyeing Fiscal
	(III)	Meanwhile in the aircraft leasing
		sector is indicative of the structural changes

that this crisis will bring to the aviation

- industry. (a) Consolidation
- (b)dominance
- (c) shedding
- (d)advance
- (e) None of these

Directions (130-132): Read the passage carefully and answer the questions given below it. Certain words/ phrases are given in bold to help you locate them while answering some of the questions.

There's no denying the fact that we live in a period where technology has inevitably become less counterfeit but rather more intelligent. Regardless of whether we talk about AI applications or the uses of its subsets specifically machine learning and deep learning, the scope is huge on what people could have or can envision. Given that, would it be bizarre to realize that AI applications have outperformed our customary lives and are currently taking control over space (Indian moon mission - Chandrayaan-2, for example)?

Expanding the levels of automation and autonomy utilizing strategies from artificial intelligence takes into account a more extensive variety of space missions and furthermore frees people to zero in on tasks for which they are more qualified. At times, autonomy and automation are crucial to the success of the mission. For instance, deep space exploration may require more autonomy in the rocket, as communication with ground operators is adequately inconsistent to block persistent human monitoring for conceivably hazardous situations.

- 130. What is/are the opportunity (ies) of the Artificial Technology in the future?
 - (a) its usage will be limited due to its complicated
 - (b) it is totally based on technology that cannot be trusted completely
 - (c) the AI technology will going to be expand in large
 - (d) labor will take over the usage of Al technology
 - (e) None of these

(a) influential (b) delist

(d) emergence (e) None of these

(c)advancement

- **131.** According to the passage, what is/are the impact(s) of AI technology on human life?
 - (a) AI has made people worse off and dependent on technology
 - (b) humans are well off because their lives have become easier
 - (c) human lives don't have any impact of Al technology
 - (d) the new scope of the invention has been now available to people
 - (e) None of these
- **132.** How AI technology will provide assistance to human in the Space mission?
 - (a) AI technique offered something equally as
 - (b) AI methods will help free up processing power from human brains by doing a lot of the initial legwork
 - (c) AI technologies embedded on spacecraft are smart enough to make real-time science decisions
 - (d) AL Technology won't replace humans any time soon, because there is still need to check the results
 - (e) None of these

Directions (133-136): In the questions given below few sentences are given in three column which are grammatically correct and meaningful. Connect them to make the statements in the best possible way without changing the intended meaning while only COLUMN A contains starting phrase of statement. Choose the best possible combination as your answer accordingly from the options to form a correct, coherent sentence.

133. **COLUMN (I)**

- (A) Immense agony and hardship that
- (B) and it could be subjected to the
- (C) The agitations on the street became an

COLUMN (II)

- (1) inseparable from its political context.
- (2) imperative because the issues were not
- (3) that there is no absolute

COLUMN (III)

- (D) apart from thinking about the legal
- (E) subjected to a timely judicial examination.
- (F) that refused to review its earlier verdict
- (b)B2D and C2F (c) A3F (a) C2E
- (d) C1D and B3E

(e) None of these

134. COLUMN (I)

- (A) Sharing, I realise,
- (B) Walking is a basic
- (C) always felt satisfied.

COLUMN (II)

- (1) are designed to do
- (2) when we were having
- (3) other that we care

COLUMN (III)

- (D) from the serving dish
- (E) activity that our bodies
- (F) is a way of telling the
- (a)CE1 and DB2(b)AF3 and BE1 (c)B2D
- (d)A1F and B3D

(e)None of these

135. COLUMN (I)

- (A) And lest we forget the
- (B) she could not have been subjected
- (C) The consequences of disbelief can

COLUMN (II)

- (1) that could only be termed
- (2) but it bears the imprint
- (3) to build networks that enable

COLUMN (III)

- (D) wondered if they ought not to come up
- (E) has been acquitted by
- (F) what is at stake for her as
- (a) CE1 and BF2
- (b) AD3 and BE1
- (c) AF3
- (d) C1F and BA3
- (e) None of these

136. COLUMN (I)

- (A) There were definitely difficulties
- (B) Reforms are not just
- (C) This smoothens the passage for reforms

COLUMN (II)

- (1) one's ideological commitments
- (2) the numbers in both Houses are much improved
- (3) that we plan to undertake.

COLUMN (III)

- (D) reiterating a socialist and,
- (E) an activity derived from
- (F) socialism had degenerated
- (a)C1F and BA3 (b) BE1
- (c) AD3
- (d)CE1 and BF2(e)None of these



Directions (137-140): In the following question there are three statements in each question. Each sentence has one highlighted word. Below three statements five options have been given with one word. Find out the word which will replace all three highlighted words to make all the sentences grammatically and contextually correct.

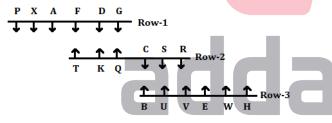
- **137.** (I) Perhaps you've just conjured a machine with a **turned**, metallic exterior.
 - (II) Women have learnt how to break away from the **current** norms of patriarchy.
 - (III) Police can be **coated** if the larger motive is to protect people.
 - (a) resembling (b) rigid (c)primary
 - (e)No replacements possible (d) insight
- **138.** (I) Government Scheme can **sought** Rs.35-40 lakh crore incremental revenue in 5 years.
 - (II) New technology can follows 3D Holograms in Real -Time.
 - (III) Instagram tests new sticker feature in effort to **require** auto-captions for IG stories.

- (a)carried (b)tradition (c)validate (e) No replacements possible (d)generate
- **139**. (I) China generals concern more spending for US conflict 'trap'
 - (II) Punjab unions cancel mahapanchayats, recall farmers to return to Delhi
 - (III) As spring break approaches, public health experts **highlight** caution
 - (b)variant (a)cusp (c)urge (d)dwindle (e) No replacements possible
- **140**. (I) The world is presently grappling with the adverse impact of the COVID-19 pandemic
 - (II)This teaching-learning dynamic has always **relied** upon the interaction between students and teachers.
 - (III) Ukraine to abolish hard copy employment record books within the next five years
 - (a) essence (b)swift (c)support
 - (d)conducive (e) No replacements possible

Solutions

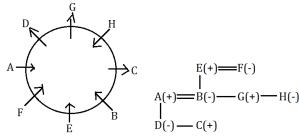
REASONING ABILITY

Direction (1-5):



- (c):3.1. (d): 2. (c):
- (d): 5. (a):
- (a):
- 7. (c): I cannot be assumed from the given statement as it is given that the guidelines are to curb the problem of fake and expired drugs not only for Polio or Iron tablet. II and III can be assumed as the statement focus on the barrier of language which restrain people from getting required information. IV cannot be assumed as we do not have the required information regarding the origin of drug companies.
- **8. (c)**: Only **(c)** can be inferred from the given statement as benefits of family members and tax are the exclusive features of Insurance policy of Company A so it may grab people attention. (a) and (e) can't be inferred as enough information is not provided of Company B in the statement. (b) can't be inferred as it is not stated that only Company A is providing additional tax benefits. (d) also can't be inferred as the given statement states about additional tax benefits.

Direction (9-13):



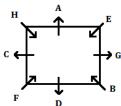
- 10. (b): 11. (d): 9. (b):
- 12. (e): 13. (e):

Directions (14-18):

- **14. (d)**: We can't get the answer even after combined both the statements.
- **15. (e)**: By combining the both we get to know, Q likes White.

Persons	Colour
M	Blue
0	Pink
Q	White
N	Red
P	Green

16. (e): By combining the both I and II we know, A sits 3rd to the left of the one (F, who) faces E.



17. (e): By combining the both I and II we know; Traffic is coded as "we".

rougu as mon			
Code			
We			
Dw			
Qs			
Rv			
Mn			
Yu			
Rs			
Tu			

- **18.** (d): We can't get the answer even combining the both I and II.
- 19. (d): Only (d) strengthen the given statement as the given statement states that without having enough salary or established business it will be difficult to make your children study in abroad. So statement (d) supports it as early and right saving is required to fulfill the dream of your children. (a), (c) are not directly related to the statement. Also (b) and (e) negates the statement.
- **20.** (e): Only (e) cannot be assumed from the given statement as the whole statement states about the saving of natural ecosystem but (e) is about protecting land for artificial ecosystem. Except (e) all the statement states about the importance and approach of GDN for conservation of ecosystem.

- **21.** (a): Only (a) can be the reason of this collaboration as this may fulfill the future needs and services of postal department. Except (a) all other states about the benefits and aspects of this new venture.
- 22. (e): None of the statement can be inferred from the given statement as the statement states about an incident of Benin and Nigeria so nothing can be inferred about the problem of trafficking across the world, So (I) and (III) can't be inferred. (II) also can't be inferred as only one incident cannot describe the actual structure of the problem in a country.

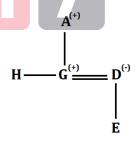
Directions (23-27):

Year	Age	Persons
1984	37	E
1988	33	F
1990	31	С
1994	27	A
1996	25	В
2004	17	G
2013	8	D

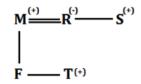
- 23. (d): 24. (a): 25. (b):
- 26. (c): 27. (d):
- 28. (c): Given Word- EVERYTHING Obtained word-FUFQXSGIMF Apply the given condition- FGIMQSUX

Solution (29-31):

29. (e):



30. (c):



31. (b):

Directions (32-36):

Logic:

Step I: First, arrange the digits within the numbers in ascending order and then arranged the numbers thus formed in ascending order.

Add 1 to each digit within the number and then Step II: write letters corresponding to each digits

Step III: For symbol= if the word starts with a consonant then use %, if the word starts with a vowel use \$ For numbers = Addition of the place value of the first and the last letter in the given words

Step IV: After elimination of the symbols. The digit sum of the number obtained in the previous step is written in words.

Input: 1763 6948 3541 8214 2946 Step I- 1248 1345 1367 2469 4689 Step II- BCEI **BDEF BDGH** CEGI **EGII** \$15 Step III-%11 %8 %10 %13 Step IV-TWO EIGHT ONE FOUR SIX

32. (b): 33. (c): 34. (e):

35. (a): 36. (d): 37. (e):

Direction (38-42):

38. (a): 40. (b): 39. (b):

41. (a): 42. (e):

43. (e): None of the given statement can be deduced from the given statement as the statement states about the newly launched drone facility in Ghana to supply medical facility to the remote areas where the conditions of roads are not up to the mark, but it does not provide enough information about its

faster delivery system or its high price range. Also, we do not have enough data regarding the other countries take on it.

44. (a): Only (I) may be the reason as forest being the essential source of life so the warning is issued for its conservation. II shows the concern regarding the given statement but it is not the reason of the warning. Also, III contradicts the statement by stating that the forests are being managed more sustainably.

Direction (45-49):

Months	Dates	Persons	Colours
September	5	W	Red
	11	Q	Black
	14	В	Yellow
November	5	X	Green
	11	R	Pink
	14	T	White
December	5	S	Purple
	11	P	Magenta
	14	D	Peach

45. (e): 46. (c): 47. (a):

48. (a): 49. (b):

50. (c):

DOWNLO ADING C PVMKP BCIMF



QUANTITATIVE APTITUDE

51. (c):
$$x^2 - \frac{23x^2}{\sqrt{46x^2 + 54x^2}} + k = 0$$

 $x^2 - \frac{23x^2}{\sqrt{100x^2}} + k = 0$
 $x^2 - \frac{23x^2}{10x} + k = 0$
 $10x^2 - 23x + 10k = 0$
If two roots of the equations is α and β , then $\alpha = \frac{3}{2}$
 $\alpha + \beta = \frac{-b}{a}$
 $\frac{3}{2} + \beta = \frac{23}{10}$

- **52. (b):** Let total no. of girls who are not present be 3x. Total no. of girls who are present = 5xTotal no. of boys who are not present = 3x - 43x + 5x + 3x - 4 + 40 = 8011x = 44x = 4So, required no. = 8x = 32
- **53.** (e): Let odd no. series = a 2, a, a + 2And even no. series = b - 2, b, b + 2From statement I a - b = 7

Required difference = (a - 2 + a + a + 2) - (b - a + a + a + b)

$$2 + b + b + 2$$

$$=3(a-b)=21$$

From statement II

$$a - 2 + b + 2 = 57$$

$$a + b = 57$$

We cannot find the required difference from statement II.

So, statement I alone is sufficient.

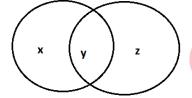
54. (b): Let total students be 100.

52 students failed in English (only English + both English and Mathematics). So, no. of students who passed in English (only English + both English and Mathematics) are 48.

And, 42 students failed in Mathematics (only Mathematics + both English and Mathematics). So, no. of students who passed in Mathematics (only Mathematics + both English and Mathematics) are 58.



Mathematics



ATQ

(no. of students who passed in x + y = 48English (only English + both English and Mathematics)

And, y + z = 58 (no. of students who passed in Mathematics (only Mathematics + both English and Mathematics)

From statement I

$$x + y = 48$$

From statement I, we cannot get the required no.

From statement II

$$z = 25$$

So,
$$y = 33$$
 and $x = 15$

So, statement II alone is sufficient.

55. (d): Let the side of the square field be a meter.

From statement I and II

$$(a+4)^2 - a^2 = 136$$

$$a = 15$$

So, area of the square field can be calculated.

So, statement I and II together are sufficient.

56. (d): Let no. of females in village X and village Y be 'a'. And no. of males in village X be 4x.

So, no. males in village Y = 3x ($4x \times \frac{75}{100}$)

$$0.5a + \frac{150}{100} \times 4x = a + 3x$$

$$0.5a + 6x = a + 3x$$

$$a = 6x$$

So, required ratio =
$$\frac{4x+a}{3x+a}$$

$$=\frac{10x}{9x}=\frac{10}{9}$$

57. (a): ATQ

$$\frac{160-X}{X} = \frac{3}{1}$$

$$X = 40$$

Milk = $40 \times 3 = 120$ *liters*, *water* = 40 liters

So, quantity of water in final mixture = 40 -

$$\frac{40}{160} \times 20 + 20$$

$$= 60 - 5$$

$$= 55 liters$$

58. (d): Let the cost price be Rs. Y.

Marked price =
$$Y\left(1 + \frac{X}{100}\right)$$

Selling price =
$$Y\left(1 + \frac{X}{100}\right)\left(1 - \frac{0.5X}{100}\right)$$

$$Y\left(1+\frac{X}{100}\right)\left(1-\frac{0.5X}{100}\right) = Y \times \frac{108}{100}$$

$$(100 + X)(100 - 0.5X) = 10800$$

$$10000 - 50X + 100X - 0.5X^2 = 10800$$

$$X^2 - 100X + 1600 = 0$$

$$X = 20,80$$

As
$$X > 20$$

Required value of X = 80.

59. (b): Simple interest earned from scheme $A = \frac{9780 \times 3 \times R}{100}$

Amount from scheme B =
$$\frac{9780\times3\times R}{100}$$
 × $\left(1 + \frac{20}{100}\right)^2$ =

$$= \frac{9780 \times 3 \times R}{100} \times \frac{36}{25} = 6337.44$$

$$R = 1^{\circ}$$

60. (e): Let efficiency of each man be 'M' and days required by 60 men to complete the work on time be D davs. ATO

$$60 M \times D = 40 M \times (D + 12)$$

$$3D = 2D + 24$$

$$D = 24$$

Let required no. of days be T.

$$18 M \times T = \frac{3}{5} \times 60 M \times 24$$

$$T = 48 \text{ Davs}$$

Sol. (61-66): Let total population of five villages be 100x. So, 18x - 15x = 21

$$x = 7$$

Population of village $A = 15 \times 7 = 105$

Male population of village A = $\frac{8}{21} \times 105 = 40$

Now.

Villages	Total Population	Male population	Female population
A	105	40	65
В	126	60	66
С	182	120	62
D	175	80	95
E	112	100	12

- **61.** (c): Required ratio = $\frac{120+60}{66}$ = 30:11
- **62. (b):** Total population of village $F = 112 \times \frac{175}{100} = 196$ No. of female in village $F = \frac{5}{14} \times 196 = 70$ So, required average = $\frac{70+12}{2}$ = 41
- **63.** (d): Required percentage = $\frac{65-40}{40} \times 100 = 62.5\%$
- **64.** (a): Required angle = $\frac{182}{700} \times 360 = 93.6^{\circ}$
- **65. (b):** Literate population from village A = $\frac{20}{100} \times 105 =$ Literate population from village $C = \frac{50}{100} \times 182 =$

Literate male from village A = 21 - 9 = 12Literate male from village C = 91 - 42 = 49

So, required population = 12 + 49 = 61

- **66.** (e): Require difference = 120 62= 58
- **Sol. (67-71):** Target hit by Gun B = $\frac{900}{3}$ = 300

So, missed the target by Gun B = 900 - 300 = 600

Target hit by Gun A = $\frac{4}{5} \times 300 = 240$

Missed target by Gun A = $\frac{240}{30} \times 70 = 560$

Total bullets fired by Gun A = 240 + 560 = 800

Missed target by Gun C = $\frac{15}{16} \times 800 = 750$

Total bullets fired from Gun C = 450 + 750 = 1200

Gun	Fired	Hit	Missed
A	800	240	560
В	900	300	600
C	1200	450	750

67. (b): Total bullets fired between 12: 30 PM and 12: 34 $PM = \frac{240}{7} = 34 \ bullets$

> So, remaining bullets in Gun C = 1200 - 34 =1166

- **68. (c):** Required average = $\frac{240+300+450}{3}$ $=\frac{990}{3}=330$
- **69. (a):** Total bullets fired in 30 min from all the guns = $\frac{1800}{5} + \frac{1800}{3} + \frac{1800}{7}$ = 360 + 600 + 257 = 1217So, remaining bullets = 2900 - 1217 = 1683
- **70.** (d): Bullets fired by Gun A in 10 min = $\frac{600}{5}$ = 120 Bullets fired by Gun B in 4 min = $\frac{240}{3}$ = 80 So, required percentage = $\frac{120-80}{80} \times 100 = 50\%$
- **71.** (a): Targets hit by bullets of Gun D = 300Bullets fired by Gun D = $\frac{1200+800}{2}$ = 1000 So, missed target by bullets of Gun D = 1000 -300 =700

Sol. (72-73):

Distance travelled by car B = $50 \times 7.2 = 360 \text{ km}$

Distance travelled by Car A = $360 \times \frac{5}{6} = 300 \text{ km}$

Speed of Car A = $\frac{300}{6}$ = 50 kmph

Time taken by Car C = $\frac{400}{100}$ = 4 hr

- **72.** (d): Distance travelled by Car A = $48 \times 4 = 192 \text{ km}$ Distance travelled by Car B = $50 \times \frac{11}{10} \times 4 =$ So, required difference = 220 - 192 = 28 km
- 73. (a): Distance travelled by Car D = $300 \times \frac{140}{100} = 420 \text{ km}$ So, required speed = $\frac{420}{10}$ = 42 kmph
- **74.** (d): Amount of $F = \frac{3250 + 5400}{3} + 25$ = 4350

If he has minimum two notes of Rs. 2000 denomination. As he has only Rs. 4350, so he has not more than two notes of Rs. denomination.

Remaining amount = 4350 - 4000 = 350

He has notes of Rs. 200 and Rs. 50 denomination.

So, required no. of notes = $\frac{350-200}{50} = 3$

75. (c): Possible no. of notes of each denomination are 23 and 29. But he has an amount which is less than

So, only 23 notes of each denomination can be possible.

Amount of D = $20 \times 23 + 10 \times 23 + 5 \times 23 =$ Rs. 805

total no. of notes D have = 23+23+23=69 notes

76. (b): Let no. of notes of each denomination which G has be N.

$$500 \times N + 20 \times N + 10 \times N = 3710$$

$$530 \times N = 3710$$

$$N = 7$$

So, required no. = 7

Sol (77-81):

School	Students who cleared 1 st stage	Students who cleared 2 nd stage	Students who did not clear 2 nd stage
DAV	600	400	200
DPS	900	380	520
SVM	400	260	140
KV	800	180	620
NVS	500	200	300
NPS	800	580	220
TOTAL	4000	2000	2000

77. (c): total number of students from DAV and SVM together who did not clear 2^{nd} stage = 200 + 140 =340

> total number of students from DAV and SVM together who did not clear 1st stage = (800 -600) + (600 - 400) = 400

Required ratio =
$$\frac{340}{400} = \frac{17}{20}$$

- **78. (b)**: Total number of students who did not clear 2nd stage from KV, NVS and DPS together = 620+300+520=1440

Required
$$\% = \frac{1440}{4000} \times 100 = 36\%$$

79. (e): Total number of students who did not clear 2nd stage from NPS = 220

> Total number of students who did not clear 2nd stage from SVM= 140

Required ratio =
$$\frac{\frac{6}{11} \times 220 + \frac{4}{7} \times 140}{\frac{5}{11} \times 220 + \frac{3}{7} \times 140} = \frac{200}{160} = 5:4$$

80. (d): total number of students from DAV, KV and NPS together who participated in 2nd stage = $(600+800+800) \times \frac{85}{100} = 1870$

> total number of students from DAV, KV and NPS together who cleared 2^{nd} stage = 400 + 180 + 580

> Total number of students from DAV, KV and NPS together who did not clear 2nd stage = 1870 -1160 = 710

81. (b): students who did not clear 1st stage from DPS and KV together = (1000 - 900) + (1500 - 800) = 800Average of students who did not clear 1st stage from DPS and KV = $\frac{800}{2}$ = 400

Average of students who cleared 2nd stage from

NVS and DAV =
$$\frac{400+200}{2}$$
 = 300

Required $\% = \frac{400 - 300}{300} \times 100 = 33\frac{1}{2}\%$

82. (b): $\frac{35}{100} \times 7500 - \frac{\frac{150}{100} \times 1500}{1785 \times \frac{1}{110}} + 25 = (?)^2$

$$2625 - \frac{2250}{15} + 25 = (?)^2$$

$$(?)^2 = 2650 - 150$$

$$(?)^2 = 2500$$

$$? = 50$$

83. (e): $\frac{45}{100} \times 2000 - \left(48 \times 120 \times \frac{1}{576}\right) - 467 = ?$

$$? = 900 - 467 - 10$$

$$? = 423$$

84. (d): ? = $\left(\left(\frac{54}{100} \times 4500 \times 20 \right) \div 81 \text{ of } \left(\frac{50}{100} \times 240 \right) \right)$

? =
$$48600 \times \frac{1}{81} \times \frac{1}{120}$$

$$? = 5$$

85. (c): $31 \times ? = \left(27 \times \frac{40}{12}\right) + \frac{32}{100} \times 6500$

$$31 \times ? = 90 + 2080$$

$$? = \frac{2170}{}$$

$$? = 70$$

86. (c):
$$\sqrt[3]{?} = 1521 - 1936 + 1331 - 1089 + 169$$

$$\sqrt[3]{?} = -4$$

$$? = -64$$

87. (b): I. Given, $x^2 - 13x + k = 0$

So, sum of two roots a and b = a + b = 13 ----- (i)

And,
$$a - b = 3$$

So.
$$a = 8$$

$$b = 5$$

So,
$$k = 8 \times 5 = 40$$

So,
$$I > II$$

88. (a): I: Let roots are a_1, a_2 then $a_1 a_2 = \frac{-5}{2}$

$$\Rightarrow a_2 = \frac{-5}{2} \ (\because a_1 = 1)$$

So, So,
$$II > I$$

89. (b): let total employees in company be 100x.

Male employees =
$$\frac{70}{100} \times 100x = 70x$$

Female employees =
$$100x - 70x = 30x$$

$$70x \times \frac{40}{100} = 28x$$

$$\frac{55}{100} \times 100x = 55x$$

Female employees joined in last 2 years =
$$30x -$$

$$(55x - 28x) = 3x$$

Required percentage =
$$\frac{3x}{100x} \times 100 = 3\%$$

90. (d): Radius of sphere = radius of semicircle

Surface area of sphere =
$$4\pi$$
 (radius)²

$$(\text{radius of sphere})^2 = \frac{616 \times 7}{4 \times 22} = 49 \text{ cm}^2$$

Height of cylinder =
$$7 \times 2.5$$

$$= 17.5 cm$$

Radius of cylinder =
$$\frac{17.5}{5}$$
 = 3.5 cm

91. (c): Total capacity of tank = 120 units (LCM of time taken by tab A, B & C)

Efficiency of A =
$$\frac{120}{24}$$
 = 5 units/mir

Efficiency of B =
$$\frac{120}{20}$$
 = 4 units/mir

Efficiency of A =
$$\frac{120}{24}$$
 = 5 units/min
Efficiency of B = $\frac{120}{30}$ = 4 units/min
Efficiency of C = $\frac{120}{20}$ = 6 units/min

Tank filled by A&B in 6 minutes=
$$(5+4) \times 6=54$$
 units

Remaining capacity of
$$tank = 120 - 54 = 66$$
 units

Required time =
$$\frac{66}{(5+4-6)}$$
 = 22 minutes.

92. (a): First prize can be given to any of 7 students, same way next prize can be given to any of 7 students and so on with every prize.

No. of ways =
$$7 \times 7 \times 7 \times 7 \times 7 = 7^5$$



93. (c): Given, milk taken out from vessel 'A' = 4Q liters

Total mixture in vessel 'B' =
$$(220 + 4Q)$$
 liters

Ratio of water to milk in vessel 'B' =
$$\frac{220}{40} = \frac{55}{0}$$

$$\frac{3Q}{55+Q} \times 55 : \frac{3Q}{55+Q} \times Q = 11 : 4$$

$$\frac{55}{0} = \frac{11}{4}$$

$$Q = 20$$
 liters

Required quantity =
$$4 \times Q - \frac{3Q}{55 + Q} \times Q$$

$$=4 \times 20 - \frac{3 \times 20}{55 + 20} \times 20$$

$$=80-\frac{60}{75}\times20$$

$$= 80 - 16 = 64$$
 liters

94. (a): Let speed of A & B be 6s m/sec & 7s m/sec respectively

So,
$$7s - 6s = \frac{10}{3}$$

$$s = \frac{10}{3} \, \text{m/s}$$

Speed of train A =
$$6 \times \frac{10}{3} = 20 \ m/s$$

And, speed of train B =
$$7 \times \frac{10}{3} = \frac{70}{3}$$
 m/s

Let length of train A & B be x meter & y meter respectively

$$\frac{13(x+y)}{120} = \frac{130}{3}$$

$$x + y = 400$$
 meters

Now, length of platform =
$$2x$$

$$\frac{x+2x}{24} = 20$$

$$x = 160$$
 meters

So, length of train B =
$$400 - 160 = 240$$
 meters

95. (a): Ratio of profit of Anurag & Ravi after one year

$$= (2000 \times 8 + 2400 \times 2) : (1600 \times 12)$$

$$= 13:12$$

Let total profit = 25P Rs.

Equivalent CI of two years at
$$20\% = 20 + 20 +$$

$$\frac{20 \times 20}{100} = 44\%$$

$$12P \times \frac{144}{100} = 6912$$

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

Profit share Anurag =
$$10000 \times \frac{13}{25} = 5200 Rs$$
.

So, total male =
$$(12 - x)$$

$$\frac{(12-x)(11-x)}{12\times11} - \frac{x(x-1)}{12\times11} = \frac{1}{6}$$

$$132 - 23x + x^2 - x^2 + x = 22$$

$$22x = 110$$

$$x = 5$$

So male =
$$(12 - 5) = 7$$

Required difference =
$$7 - 5 = 2$$

97. (c): Let the unit digit and tens digit of the number be y and x respectively.

Original number=(10x+v)

$$1.75(10x+y) = 10y+x$$

$$x: y=1:2$$

let the unit and tens digits be 1a and 2a respectively

Now,
$$(21a) + 9 = 2(12a)$$

98. (c): Let upstream speed be 2x km/hr & speed of stream be 3x km/hr

Then downstream speed= 8x km/hr

$$\frac{\left(\frac{D+5}{8x}\right)}{\frac{D-7}{3x}} = \frac{5}{12}$$

currency

$$D = 25 km$$

$$\frac{(D-1)}{2x} - \frac{D-1}{8x} = 6$$

$$x = 1.5$$

Speed of boat in still water=5x=7.5 km/hr

99. (d): Let cost price of each article be Rs. 100x.

Then, original M.P. of each article =
$$100x \times \frac{150}{100}$$
 = Rs. $150x$

New M.P. of each article =
$$150x \times \frac{160}{100}$$
 = Rs. 240x

Total revenue of salesman =
$$240x \times 5$$
 = Rs. $1200x$

Total cost of articles for salesman =
$$100x \times 8 = Rs$$
.

Profit of salesman =
$$1200x - 800x = Rs.400x$$

Required profit% =
$$\frac{400x}{800x} \times 100 = 50\%$$

Total weight of all the members of the family=18X

When three men got married

Total weight =
$$19(X + 3)$$
 kg

$$= (X + 75) \text{ kg}$$

$$19(X+3) - (X+75) = (X+3-1) \times 16$$

ENGLISH LANGUAGE

- 101. (d): Option (d) is the correct answer with the reference to the second paragraph which mentions," "Regulatory bodies like RBI and SEBI etc. also don't have a legal framework to directly regulate cryptocurrencies as they are neither currencies nor assets or securities commodities issued by an identifiable user." Fiat money-Fiat money is a government-issued
- **102. (b):** Option (b) is the correct answer with the reference to the second paragraph which mentions," Also, the RBI could not show that entities that it regulated were adversely impacted by exchanges dealing in virtual currencies."
- **103. (c):** Referring the third paragraph which mentions," Their attraction may only grow now, given that the most well-known of them as also the most

- valuable, Bitcoin, has hit new peaks in price and is gaining influential followers such as Tesla founder Elon Musk."
- **104.** (a): Option (a) is correct choice here i.e. statement (B) and (C) are correct choice.
 - Referring the second paragraph for statement (B) which mentions," The Minister of State for Finance, Anurag Thakur, who on Tuesday confirmed in the Rajva Sabha that a Bill was in the offing, highlighted the complexity in regulation."
 - Referring first paragraph for statement (C) which mentions," It has not, however, been able to channel this understandable disapproval arising out of the fact that such currencies are highly volatile, used for illicit Internet transactions, and wholly outside the ambit of the state — into any sort of regulation. "

- **105.** (c): With reference to the last paragraph which mentions," Smart regulation is preferable, as a ban on something that is based on a technology of distributed ledger cannot be implemented for all practical purposes." it can be said that option (c) is the correct choice.
- **106. (c)**: Referring second paragraph of the passage which mentions "There is an optical rebound in growth because growth is below the trend line. Growth (for next fiscal) is high but in real terms, the size of the economy next fiscal will be a mere 2% bigger than what it was in fiscal 2020" indicates that the correct answer will be option (c).
- **107. (b)**: Option (b) is correct choice here with reference to the second paragraph which mentions," small low-end Growth has skipped manufacturing firms in the "middle", the largest source of jobs while soaring oil prices and a fresh wave of Covid cases in some states are dangers to watch out for" hence the correct choice will be option (b).
- **108.** (a): With reference to the second paragraph we can conclude that small businesses are "missing middle" which employ workers in thousands and which is labour- intensive firms and with reference to the fourth paragraph which mentions". Exports are recovering for large industries but remain weak for smaller manufacturing units, a significant employer of the semi-skilled workforce. Labour-intensive sectors such as garments, like leather goods and gems and jewelry account for 18% of India's exports" hence we can conclude option (a).
- **109. (d)**: Only Option (d) is correct as per the information given in passage. With respect to the few lines of last paragraph which mention," The seesaws in business resumption mean the economy is yet to be sure-footed. The Nomura India Business Resumption Index fell to 95.2 for the week ending March 7 versus 98.1 in the prior week, indicating the gap from the pre-pandemic normal has slipped to 4.8 percentage points from only 0.7 percentage points a fortnight earlier" it can be deduced that except option D, all other options are incorrect.
- **110. (b)**: All statements given above are correct. For Statement (A) refer paragraph second which mentions," To be sure, recovery has been skewed. Growth has skipped small low-end manufacturing firms in the "missing middle", the largest source of jobs and manufacturing while soaring oil prices and a fresh wave of Covid cases in some states are dangers to watch out for, economists said."

For Statement (B) refer last paragraph which mentions," Lending by risk-averse banks has been the weakest for micro and small enterprises, while large firms have managed to leverage financing options well"

For Statement (C) refer to fourth paragraph which mentions," The pandemic caused revenues of smaller firms to plunge sharper than larger firms, the main reason for job losses. The dynamics of domestic demand and trade continue to be unfavourable for small businesses."

- **111. (b):** The meaning of "WATCH OUT" is "to be careful because of possible danger" so correct choice is option (b).
- 112. (e): The most suitable word for the blank will be "drag" which means "to pull somebody/something along with difficulty" tactics mean the particular method you use to achieve something retreat means to move backward; to go to a safe or private place abandon means to leave somebody/something
- 113. (d): The above passage talks about the issuance of a new set of rules and the interest is largely about trying to force technologists to fall in line hence the correct answer here is option (d) which is 'superseding' which means 'take the place of '. All other options are contextually and grammatically incorrect.

Startle means shock

flaw (noun) - a mark, blemish controversy (noun)prolonged public disagreement or heated discussion. fundamentally (adverb)- in central or primary respects.

that you are responsible for, usually permanently

114. (b): The above passage talks about the issuance of a new set of rules and the interest is largely about trying to force technologists to fall in line hence the correct answer here is option (b) which is 'diligence' which means 'careful and persistent work or effort'. All other options are contextually and grammatically incorrect

intermediaries (noun) - a mediator.

rejoice (verb)- feel or show great joy or delight. bullwhip (noun)- strike or thrash with a bullwhip.

gazette (noun)- a journal or newspaper. laborious (adjective)- requiring considerable time and effort.

- **115. (c)**: The above passage talks about the issuance of a new set of rules and the interest is largely about trying to force technologists to fall in line hence the correct answer here is option (c) which is 'subordinate' which means 'lower in rank or position. '. All other options are contextually and grammatically incorrect
 - conjure (verb)- cause (a spirit or ghost) to appear by means of a magic ritual.

Superficial (adjective) - existing or occurring at or on the surface.

renounce (verb)- existing or occurring at or on the surface.

overwhelming (adjective)- very great in amount.

- **116. (e):** The above passage talks about the issuance of a new set of rules and the interest is largely about trying to force technologists to fall in line hence the correct answer here is option (e) which is 'mandating' which means 'give (someone) authority to act in a certain way'. All other options are contextually and grammatically compliances (noun) - the action or fact of complying with a wish or command. overboard (adverb)- from a ship into the water. revoke (verb) - officially cancel cajole (verb)- persuade (someone) to do
- **117.** (d): The above passage talks about the issuance of a new set of rules and the interest is largely about trying to force technologists to fall in line hence the correct answer here is option (d) which is 'swathe' which means 'a broad strip or area of something'. All other options are contextually and grammatically incorrect. reconcile (verb)- make or show to be compatible. hitherto (adverb) -until now or until the point in time under discussion. abrogate (verb)- repeal or do away with

something by sustained coaxing or flattery.

118. (c): The passage given above discusses the humans are deteriorating nature and causing climate change and the actions needed to control it. Here, apart from statement (D), none of the given statements is the first statement in the logical sequence which states the hint of the theme of the paragraph and mentions another challenge that needs to be tackled. Further, statement (D) will be followed by statement (B) which mentions more about other challenges. Statement (F) supports statement (B), which mentions a study that has been conducted for the last five years on this issue. Further, statement (A) will be the appropriate statement to follow (F) which adds more information about the steps taken against it. Statement (G) will then follow statement (A) information about the need to take action. Further, statement (C) will conclude the

- given passage as it talks about the report presented by the UNEP on green-house gases. Therefore, the correct sequence of the statements will be DBFAGC. Statement (E) is an odd one, as it talks about the harm of metal refining on humans hence correct choice is Option (c).
- **119. (c):** The passage given above discusses the humans are deteriorating nature and causing climate change and the actions needed to control it. Here, apart from statement (D), none of the given statements is the first statement in the logical sequence which states the hint of the theme of the paragraph and mentions another challenge that needs to be tackle. Further, statement (D) will be followed by statement (B) which mentions more about other challenges. Statement (F) supports statement (B), which mentions a study that has been conducted for the last five years on this issue. Further, statement (A) will be the appropriate statement to follow (F) which adds more information about the steps taken against it. Statement (G) will then follow statement (A) information about the need to take action. Further, statement (C) will conclude the given passage as it talks about the report presented by the UNEP on green-house gases. Therefore, the correct sequence of the statements will be DBFAGC. Statement (E) is an odd one, as it talks about the harm of metal refining on humans. The correct choice is Option
- **120.** (d): The passage given above discusses the humans are deteriorating nature and causing climate change and the actions needed to control it. Here, apart from statement (D), none of the given statements is the first statement in the logical sequence which states the hint of the theme of the paragraph and mentions another challenge that needs to be tackle. Further, statement (D) will be followed by statement (B) which about other challenges. mentions more Statement (F) supports statement (B), which mentions a study that has been conducted for the last five years on this issue. Further, statement (A) will be the appropriate statement to follow (F) which adds more information about the steps taken against it. Statement (G) will then follow statement (A) information about the need to take action. Further, statement (C) will conclude the given passage as it talks about the report presented by the UNEP on green-house gases. Therefore, the correct sequence of the statements will be DBFAGC. Statement (E) is an odd one, as it talks about the harm of metal refining on humans. The correct choice is Option (d)

- **121. (e):** The passage given above discusses the humans are deteriorating nature and causing climate change and the actions needed to control it. Here, apart from statement (D), none of the given statements is the first statement in the logical sequence which states the hint of the theme of the paragraph and mentions another challenge that needs to be tackle. Further, statement (D) will be followed by statement (B) which mentions more about other challenges. Statement (F) supports statement (B), which mentions a study that has been conducted for the last five years on this issue. Further, statement (A) will be the appropriate statement to follow (F) which adds more information about the steps taken against it. Statement (G) will then follow statement (A) information about the need to take action. Further, statement (C) will conclude the given passage as it talks about the report presented by the UNEP on green-house gases. Therefore, the correct sequence of the statements will be DBFAGC. Statement (E) is an odd one, as it talks about the harm of metal refining on humans. The correct choice is Option (e)
- **122. (a):** The passage given above discusses the humans are deteriorating nature and causing climate change and the actions needed to control it. Here, apart from statement (D), none of the given statements is the first statement in the logical sequence which states the hint of the theme of the paragraph and mentions another challenge that needs to be tackle. Further, statement (D) will be followed by statement (B) which mentions more about other challenges. Statement (F) supports statement (B), which mentions a study that has been conducted for the last five years on this issue. Further, statement (A) will be the appropriate statement to follow (F) which adds more information about the steps taken against it. Statement (G) will then follow statement (A) information about the need to take action. Further, statement (C) will conclude the given passage as it talks about the report presented by the UNEP on green-house gases. Therefore, the correct sequence of the statements will be DBFAGC. Statement (E) is an odd one, as it talks about the harm of metal refining on humans hence correct choice is Option (a).

- **123.** (d): The correct pair of words is "surge, plunge". 'Escalating' means 'increasing rapidly' hence 'surge' is a synonym which means 'a sudden large increase' and 'plunge' is antonym which means 'fall suddenly' therefore option (d) is the correct choice.
 - dilute means make (a liquid) thinner or weaker provoke means stimulate or give rise to nostalgic means feeling, evoking, devastate means destroy or ruin
- **124.** (a): The correct pair of words is "enduring, temporary". 'Sustainable' means 'able to be maintained at a certain rate or level for long' hence 'enduring' is a synonym which means 'lasting over a period of time' and 'temporary' is antonym which means 'lasting for only a limited period' therefore correct answer is option (a). edible means fit or suitable to be eaten.

Jumble means an untidy collection or pile of things.

variable means not consistent or having a fixed

deter means discourage (someone) from doing something

Stagger means walk or move unsteadily, daunt means make (someone) feel intimidated or apprehensive.

assess means evaluate or estimate the nature, ability, or quality of.

125. (d): The correct pair of words is 'empirical, theoretical'. 'Practical' means 'of or concerned with the actual doing or use of something' therefore 'empirical' is a synonym which means 'based on, concerned with, or verifiable by observation' and 'theoretical' means 'concerned with or involving the theory of a subject or area of study rather than its practical application' hence the correct answer is option (d)

> procurement means the action of obtaining or procuring something.

> revive means restore to life or consciousness. conspire means make secret plans jointly to commit an unlawful or harmful act.

dilemma means puzzle

retrieve means to get or bring (something) back from somewhere

'adjourned' which means 'break off with the intention of resuming it later. All the other given words are grammatically and contextually incorrect. Streamline means make (an organization or employing faster or *simpler* working methods

126. (b): The correct word to fill all the three blanks is

- system) more efficient and effective by resist means withstand the action or effect of. *repel* means drive or force (an attack or attacker) back or away.
- 127. (d): The correct word to fill all three blanks is 'expand' which means 'become or make larger or more extensive. All the other given words are grammatically and contextually incorrect. encounter means unexpectedly be faced with or predator means an animal that naturally preys on others acquit means free (someone) from a criminal charge by a verdict of not guilty
- **128.** (d): The correct word to fill all the three blanks is 'emergence' which means 'the process of becoming visible after being concealed. All the other given words are grammatically and contextually incorrect. influential means having a great influence on someone or something *delist* means remove from a list or category. advancement means the process of promoting a cause or plan.
- 129. (a): The correct word to fill all three blanks is 'consolidation' which means 'the action or process of making something stronger or more solid'. All the other given words grammatically and contextually incorrect. dominance means power and influence over others. Shedding means park (a vehicle) in a depot. advance means move forwards in a purposeful way.
- **130.** (c): The correct choice is option (c) which can be inferred from few lines of 1st paragraph which mentioned," Regardless of whether we talk about Al applications or the uses of its subsets specifically machine learning and deep learning, the scope is huge on what people could have or can envision."

- **131. (b)**: Referring the last line of the 1st paragraph which mentions," Given that, would it be bizarre to realize that AI applications have outperformed our customary lives and are currently taking control over space", it can be deduced that option B is the correct answer choice.
- **132. (b)**: The correct choice is option (b) which can be inferred from the first few lines of the second paragraph which mentions," Expanding the levels of automation and autonomy utilizing strategies from artificial intelligence takes into account a more extensive variety of space missions and furthermore frees people to zero in on tasks for which they are more qualified." Therefore option (b) is the correct choice.
- **133. (a):** Sol. The correct combination to contextually and grammatically correct sentence is 'C2E' therefore the correct sentence will be "The agitations on the street became imperative because the issues were not subjected to a timely judicial examination". No other combination makes contextually and grammatically correct sentences.
- **134.** (d): The correct combinations to form contextually and grammatically correct sentences are 'A1F' and 'B3D' therefore the correct sentences will be "Walking is a basic activity that our bodies are designed to do" and "Sharing, I realize, is a way of telling the other that we care". No other combination make contextually grammatically correct sentence.
- **135. (e):** There is no correct combination of phrases hence correct choice is option (e)
- **136. (b)**: The correct combination to form contextually and grammatically correct sentence is 'BE1' therefore the correct sentence will be "Reforms" are not just an activity derived from one's ideological commitments". No other contextually combination makes and grammatically correct sentences. Hence the correct choice is option (b)
- **137. (b)**: The correct word to replace all three highlighted word to make sentences contextually and grammatically correct is "rigid" which means "not able to be changed or adapted" therefore the sentences will be
 - (I) Perhaps you've just conjured a machine with a rigid, metallic exterior.
 - (II)Women have learnt how to break away from the rigid norms of patriarchy.
 - (III) Police can be rigid if the larger motive is to protect people.
 - resembling means have a similar appearance to insight means the capacity to gain an accurate and deep understanding of someone

- **138. (d):** The correct word to replace all three highlighted word to make sentences contextually and grammatically correct is "generate" which means "produce or create" therefore the sentences will be
 - (I)Government Scheme can generate Rs.35-40 lakh crore incremental revenue in 5 years
 - (II)New technology can generate 3D Holograms in Real-Time.
 - (III)Instagram tests a new sticker feature in an effort to generate auto-captions for IG stories.
- **139. (c):** The correct word to replace all three highlighted word to make sentences contextually and grammatically correct is "urge" which means "encourage (a person or animal) to move more quickly or in a particular direction." therefore the sentences will be
 - (I) China generals urge more spending for US conflict 'trap'
 - (II)Punjab unions cancel mahapanchayats, urge farmers to return to Delhi
 - (III)As spring break approaches, public health experts urge caution
 - cusp means a point of transition between two different states

- variant means a form or version of something that differs in some respect from other forms of the same thing dwindle means diminish gradually in size, amount, or strength.
- 140. (e): The above sentences are contextually and grammatically correct therefore no correction required. Hence answer is option (e). essence means the intrinsic nature indispensable quality of something, Swift means happening quickly or promptly. conducive means making a certain situation or outcome likely or possible.



