Directions (1-5): Read the following passage and answer the questions that follow

Shirley Schmitt is no one’s idea of a dangerous criminal. She lived quietly on a farm in Iowa, raising horses and a daughter, until her husband died in 2006. Depressed and suffering from chronic pain, she started using methamphetamine. Unable to afford her habit, she and a group of friends started to make the drug, for their own personal use. She was arrested in 2012, underwent drug treatment, and has been sober ever since. She has never sold drugs for profit, but federal mandatory minimum rules, along with previous convictions for drug possession and livestock neglect, forced the judge to sentence her to ten years in prison. Each year she serves will cost taxpayers roughly $30,000—enough to pay the fees for three struggling students at the University of Iowa. When she gets out she could be old enough to draw a pension. Barack Obama tried to reduce the number of absurdly long prison sentences in America. His attorney-general, Eric Holder, told federal prosecutors to avoid seeking the maximum penalties for non-violent drug offenders. This reform caused a modest reduction in the number of federal prisoners (who are about 10% of the total). Donald Trump’s attorney-general, Jeff Sessions, has just torn it up. This month he ordered prosecutors to aim for the harshest punishments the law allows, calling his new crusade against drug dealers “moral and just”. It is neither. Prisons are an essential tool to keep society safe. A burglar who is locked up cannot break into your home. A mugger may leave you alone if he thinks that robbing you means jail. Without the threat of a cell to keep them in check, the strong and selfish would prey on the weak, as they do in countries where the state is too feeble to run a proper justice system. But as with many good things, more is not always better. The first people any rational society locks up are the most dangerous criminals, such as murderers and rapists. The more people a country imprisons, the less dangerous each additional prisoner is likely to be. At some point, the costs of incarceration start to outweigh the benefits. Prisons are expensive—cells must be built, guards hired, prisoners fed. The inmate, while confined, is unlikely to work, support his family or pay tax. Money spent on prisons cannot be spent on other things that might reduce crime more, such as hiring extra police or improving pre-school in rough neighbourhoods. And—crucially—locking up minor offenders can make them more dangerous, since they learn felonious habits from the hard cases they meet inside. America passed the point of negative returns long ago. Its incarceration rate rose fivefold between 1970 and 2008. Relative to its population, it now locks up seven times as many people as France, 11 times as many as the Netherlands and 15 times as many as Japan. It imprisons people for things that should not be crimes (drug possession, prostitution, unintentionally violating incomprehensible regulations) and imposes breathtakingly harsh penalties for minor offences. Under “three strikes” rules, petty thieves have been jailed for life. A ten-year sentence costs ten times as much as a one-year sentence, but is nowhere near ten times as effective a deterrent. Criminals do not think ten years into the future. If they did, they would take up some other line of work. One study found that each extra year in prison raises the risk of reoffending by six percentage points. Also, because mass incarceration breaks up families and renders many ex-convicts unemployable, it has raised the American poverty rate by an estimated 20%. Many states, including Mr Sessions’s home, Alabama, have decided that enough is enough. Between 2010 and 2015 America’s incarceration rate fell by 8%. Far from leading
to a surge in crime, this was accompanied by a 15% drop. America is an outlier, but plenty of countries fail to use prison intelligently. There is ample evidence of what works. Reserve prison for the worst offenders. Divert the less scary ones to drug treatment, community service and other penalties that do not mean severing ties with work, family and normality. A good place to start would be with most of the 2.6m prisoners in the world—a quarter of the total—who are still awaiting trial. For a fraction of the cost of locking them up, they could be fitted with GPS-enabled ankle bracelets that monitor where they are and whether they are taking drugs. Tagging can also be used as an alternative to locking up convicts—a “prison without walls”, to quote Mark Kleiman of New York University, who estimates that as many as half of America’s prisoners could usefully be released and tagged. A study in Argentina finds that low-risk prisoners who are tagged instead of being incarcerated are less likely to reoffend, probably because they remain among normal folk instead of sitting idly in a cage with sociopaths. Justice systems could do far more to rehabilitate prisoners, too. Cognitive behavioural therapy—counselling prisoners on how to avoid the places, people and situations that prompt them to commit crimes—can reduce recidivism by10-30%, and is especially useful in dealing with young offenders. It is also cheap—a rounding error in the $80 billion a year that America spends on incarceration and probation. Yet, by one estimate, only 5% of American prisoners have access to it. Ex-convicts who find a job and a place to stay are less likely to return to crime. In Norway prisoners can start their new jobs18 months before they are released. In America there are 27,000 state licensing rules keeping felons out of jobs such as barber and roofer. Norway has a lower recidivism rate than America, despite locking up only its worst criminals, who are more likely to reoffend. Some American states, meanwhile, do much better than others. Oregon, which insists that programmes to reform felons are measured for effectiveness, has a recidivism rate less than half as high as California’s. Appeals to make prisons more humane often fall on deaf ears; voters detest criminals. But they detest crime more, so politicians should not be afraid to embrace proven ways to make prison less of a school of crime and more of a path back to productive citizenship.

1. Choose the synonym for Felonious
   a) Official pardon
   b) Bartender
   c) Sage
   d) Criminal
   e) None of these.

2. What is author’s tone during description of the passage?
   a) Critical
   b) Analytical
   c) Biased
   d) Both a and b
   e) None of these.

3. Choose Antonym for Embrace
   a) Mock
   b) Detest
   c) Thrash
   d) Welcome
   e) None of these.

4. Choose the most appropriate title for the passage.
   a) Jail break
   b) Deciding on Jail laws
   c) Jail and America
   d) All of the above
   e) None of these.

5. Which of the following is true?
   a) The Jails in America are the only ones not working well
   b) America needs to learn from India in terms of Jail manipulation
   c) There are various alternatives available to putting in jail for minor offenders
   d) All of the above
   e) None of these.

Direction (6-10): Five sentences denoted by A, B, C, D and E have been given. Identify the odd sentence and arrange rest of the four sentences in such a way that they make a meaningful paragraph.

6. (A) The report, which summarized 2016 data for 4,300 cities, ranks 14 Indian cities among the 20 most polluted ones globally.
(B) In 2016 alone, it says, around 4.2 million people died owing to outdoor air pollution, while 3.8 million people succumbed to dirty cooking fuels such as wood and cow dung.
(C) All the countries in their region are making efforts to expand the availability of clean fuel and technologies.
(D) A new report from the World Health Organisation highlights not only how widespread air pollution is in urban India, but also how deficient air quality monitoring is.
(E) The report puts the global death toll from air pollution at seven million a year, attributable to illnesses such as lung cancer, pneumonia and ischemic heart disease.

a) BEAC
b) ADEC
c) CAEB
d) EBDA
e) DAEB

7.
(A) “This situation would not have arisen if the ASI had done its job”, bench of Justices told Additional Solicitor General.
(B) The counsel for ASI told the court that the problem of insects was due to stagnation of water of river Yamuna.
(C) The Supreme Court on Wednesday came down heavily on the Archeological Survey of Indian for its failure to take appropriate steps to protect and preserve the iconic Taj Mahal.
(D) “It also added, “we are surprised at the way ASI is defending itself and Centre please consider if the ASI is needed there or not”.
(E) The apex court also expressed concern over Taj Mahal being infected by insects and asked the authorities, including the ASI, what steps they have taken to prevent this.

a) BEAC
b) DAEC
c) CAEB
d) EBDA
e) DAEB

8.
(A) If a salaried individual earns income from other sources then they have to pay advance tax too.
(B) Advance tax is the tax payable on total income of the year earned from different sources including salary, business, profession, rent, etc.
(C) Advance tax is applicable to individuals who earn income from sources other than salary like Interest earned on fixed deposits, Income received via capital gains on shares etc.
(D) Advance tax can be paid through tax payment challans at bank branches which are authorised by the Income Tax department.
(E) Salaried individuals need not pay advance tax as they already pay tax at source because their employer deducts the tax at source.

a) EBAC
b) DAEC
c) CAEB
d) BECA
e) ADCE

9.
(A) In his inaugural speech, Mr. Putin said he would stay focused on domestic issues in his new term, particularly the economy, which has just recovered from a painful recession.
(B) Mr. Putin presents himself as a strongman seeking to restore Russia’s lost glory.
(C) Vladimir Putin, who has maintained a tight grip on power in Russia for almost two decades, begins his fourth term as president at a time when the country is going through a difficult period, economically and diplomatically.
(D) Mr. Putin’s muscular foreign policy is a more solid source of public support for him.
(E) In the March presidential election he won 77% of the popular vote, the largest margin for any post-Soviet leader.

a) BEAC
b) CEAD
c) ADEB
d) EBDA
e) ADCE

10.
(A) This tax could be paid either to the local state government or Municipal Corporation, depending on government policies.
(B) Every property is an asset which is taxable and the property tax is an annual amount paid by a property/land owner to the government.
(C) This tax amount is used to develop local amenities including road repairs, maintenance of parks and public schools, etc.
(D) Taxes are the primary source of income for a government and it dictate about the resources available to citizens.

(E) The word “property” in this context refers to all tangible real estate under the ownership of an individual and includes houses, office buildings and premises rented to third parties.
a) BEAC  
b) DAEC  
c) CAEB  
d) DBAE  
e) ADCE

Directions (11-15): In the questions given below, there is a sentence in which one part is given in bold. The part given in bold may or may not be grammatically correct. Choose the best alternative among the four given which can replace the part in bold to make the sentence grammatically correct. If the part given in bold is already correct and does not require any replacement, choose option (e), i.e. “No replacement required” as your answer

11. His overbearing nature was often a cause of concern.
   a) Cause concern  
   b) Cause for concern  
   c) Causing concern  
   d) Cause in concern  
   e) No replacement required

12. The commandos need to familiarize themselves with the topography and the dynamics of violence in the region before they can launch an attack.
   a) Make familiar themselves with the topography  
   b) Make themselves familiar with topography  
   c) Familiarize them with the topography  
   d) Familiarize themselves within the topography  
   e) No replacement required

13. They found it necessary to continuously monitoring areas of convergence of terrorist groups as part of the anti terrorism program.
   a) Continually monitor in areas of convergence  
   b) Continuously monitoring areas in convergence  
   c) Continuously monitor areas of convergence  
   d) Continuously monitor areas that converged  
   e) No replacement required

14. The government was accused of not taking necessary measures to curb terrorism since such terrorist groups continuing to operate with freedom and impunity.
   a) Continued to operate within freedom and impunity  
   b) Continued to operate with freedom and impunity  
   c) Continuing to operate for freedom and impunity  
   d) Continues to operate under freedom and impunity  
   e) No replacement required

15. Notwithstanding the incessant downpour of shellfire and bullets, they charged on and took charge of the situation.
   a) Notwithstanding the incessantly downpour  
   b) Notwithstanding of the incessant downpour  
   c) Notwithstanding with the incessant downpour  
   d) Notwithstanding the incessant downpouring  
   e) No replacement required

Directions (16-20): In the following questions two columns are given containing three sentences/phrases each. In first column, sentences/phrases are A, B and C and in the second column the sentences/phrases are D, E and F. A sentence/phrase from the first column may or may not connect with another sentence/phrase from the second column to make a grammatically and contextually correct sentence. Each question has five options, four of which display the sequence(s) in which the sentences/phrases can be joined to form a grammatically and contextually correct sentence. If none of the options given forms a correct sentence after combination, mark (e), i.e. “None of these” as your answer.

16. Column 1       Column 2
A)She knew that she was expendable,     D) because she too sick to work.
B)She had to call it a day      E) since it was a sunny day.
C)She will no longer      F) and that assistants
work for them were a dime a dozen.

17. Column 1  Column 2
A) He got fired after only a week  D) give him the benefit of the doubt
B) He wore all black because  E) he wanted to be inconspicuous
C) Although she had heard rumors  F) as they found out that he was cutting corners.

Directions (21-23): Choose the most appropriate word from the options given below to make the phrasal verb correct in its usage according to the context of the sentence.

21. It will be easy to bring him _______ to embrace our ideology.
a) out  b) round  c) up  d) on  e) towards

22. The sufferings he saw in his village cut _______ him terribly.
a) off  b) into  c) up  d) upon  e) across

23. I don’t get _______ with arrogant people.
a) off  b) on  c) across  d) into  e) from

Directions (24-26): In a given passage. Some sentences begin with a number (corresponding to the question number) and some words are highlighted in bold. One of the highlighted words is grammatically incorrect. Choose the word from the option as your answer. If all the highlighted words are correct, mark 'All correct' as your answer.
24. Appraisal season is here. Many salaried persons have already finalized how they would spend the extra money that would accompany a salary hiked. However, some financial advisors are reaching out to their clients to increase their investments to achieve their financial goals without any trouble.

"Increment season is the best time for investors to go through their portfolio to check if the funds are performing as per their goals. More important they can analyze if they need to invest more towards any long term goal and allocate a portion of their increment towards it," says Ankita Tanna Narsey, Founder, Oaktree Financial Advisors. According to advisors, when you plan for a goal that is 20 years away, say, your child’s higher education or marriage, you made your calculations based on certain assumptions like rate of inflation, return on investment, etc.

Directions (27-30): In each of the following sentences there is one blank space. Below each sentence there are four words denoted by a), b), c) and d). Find one word that to be fitted in both the sentences I and II and another word that to fit in sentence III and to make it meaning fully complete, In case no word is fit to these sentences, option 'e' is the answer.

27. The price of the shares has ________ and it will definitely help the company in arranging more funds for future investment.
   a) rushed
   b) dashed
   c) darted
   d) sprinted
   e) surged

28. “This is only the strategy by which we can ________ our rivals,” said the marketing manager to marketing head of the company.
   a) mislead
   b) misinform
   c) outwit
   d) outsmart
   e) deceive

29. Coach clearly mentioned that ________ and bad performers in practice match will not be included in the team for final match.
   a) vigorous
   b) brisk
   c) active
   d) lethargic
   e) adept

30. As soon as children reached the picnic spot they started ________ around the spot.
   a) playing
   b) gamboling
   c) skipping
   d) leaping
   e) diving

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

There are fourteen persons A, B, C, D, E, F, G, P, Q, R, S, T, U and V are sitting in two parallel rows containing seven persons in each rows. In Row-1, A, B, C, D, E, F and G are sitting and facing towards south while in Row-2, P, Q, R, S, T, U and V are sitting and facing towards north. Person in Row-1 is facing the person in Row-2.

V sits third to the right of T. Either V or T sits at extreme end of the row. B sits third to the left of A. Neither A nor B faces T and V. The one who faces D sits third to the right of S, who is not an immediate neighbour of T.
One of the immediate neighbours of D faces R. Q sits to the left of R but not immediate left. Q sits second to the right of U. G does not faces the immediate neighbour of Q. More than one person sit between A and E. C does not faces T. 
31). Who among the following persons faces the person who sits third to the left of C? 
   a) D  
   b) P  
   c) T  
   d) B  
   e) R  
32). How many persons are sitting between E and the one who faces T? 
   a) More than three  
   b) Three  
   c) One  
   d) Two  
   e) None  
33). Four of the following five are alike in a certain way and hence form a group. Which one of the following does not belong to that group? 
   a) U  
   b) E  
   c) Q  
   d) V  
   e) G  
34). If Q is related to D and B is related to T in a certain way. Then, A is related to which of the following? 
   a) P  
   b) T  
   c) Q  
   d) S  
   e) U  
35). Who among the following persons is immediate neighbour of both A and the one who faces P? 
   a) F  
   b) C  
   c) B  
   d) E  
   e) G  

**Give answer**

   a) Data in statement I alone is sufficient  
   b) Data in statement II alone is sufficient  
   c) Data in statement I alone or statement II alone is sufficient  
   d) Data even in both statement I and statement II together are not sufficient  
   e) Data in both statement I and statement II together are sufficient  

36). Seven persons P, Q, R, S, T, U and V are sitting around a circular table and facing centre of the table. Who sits second to the right of T? 
   I. S sits second to the right of V. Two persons sit between P and R. P is not an immediate neighbour of S and V.  
   II. R sits third to the left of U. T is not an immediate neighbour of R and U.  
37). Six persons K, L, M, N, P and S are in a family with three generations. How is L related to P? 
   I. M is married to N. M is the only son of P. S is the sister of L.  
   II. K is the father-in-law of N, who is the mother of S.  
38). There are six students A, B, C, D, E and F in a class with different heights. Who among them is the second tallest? 
   I. A is taller than F but shorter than D. C is shorter than B but not the shortest person.  
   II. Only two persons are taller than A. Only person between C and E. D is not the tallest person.  

**Direction (36-38): In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions. Give answer**

   a) If only conclusion I is true  
   b) If only conclusion II is true  
   c) If either conclusion I or II is true  
   d) If neither conclusion I nor II is true  
   e) If both conclusions I and II are true  
39). **Statements:** X ≥ Y > V = W ≤ N; K ≤ V > S ≥ T.  
   **Conclusions:**  
   I. N ≥ S  
   II. X > T  
40). **Statements:** G < H = F < K ≥ J < L; M ≥ H = Z ≤ N.  
   **Conclusions:**  
   I. K > N  
   II. M > J
Direction (41-45): Study the following information carefully and answer the questions given below.
A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of an input and rearrangement.
Input: water 81 particular 53 blasting 14 material 36 location 72
Step I: blasting water particular 53 14 material 36 location 72 82
Step II: location blasting water particular 53 14 material 36 71 82
Step III: material location blasting water particular 14 36 54 71 82
Step IV: particular material location blasting water 14 35 54 71 82
Step V: water particular material location blasting 13 35 54 71 82
And Step V is the last step of the rearrangement of the above input.
As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.
Input: question 56 49 candles 92 doctor forest 32 18 utility
41). Which of the following elements will be the fifth to the left of seventh from the left end in step II?
a) 55 
b) candles 
c) doctor 
d) question 
e) forest
42). How many elements are there in between ‘50’ and ‘doctor’ in Step IV?
a) One 
b) Three 
c) Two 
d) None 
e) More than three
43). If the elements ‘forest’ and ‘32’ are interchange in Step III. Then, which of the following elements will be the second to the right of ‘forest’ in the same step?
a) doctor 
b) question 
c) 50 
d) 18 
e) utility
44). Which of the following elements will be the fourth to the right of ‘candles’ in last but one step?
a) 31 
b) utility 
c) 50 
d) 18 
e) forest
45). What will be the sum of the elements of fourth from the left end in Step I and fourth from the right end in Step IV?
a) 67 
b) 63 
c) 105 
d) 80 
e) 68

Direction (46-50): Study the following information carefully and answer the questions given below.
There are seven boxes A, B, C, D, E, F and G are kept one above the other containing different number of chocolates ranging from 10-90. Not More than three boxes are kept above A. Two boxes are kept between A and the box which has 47 chocolates. The box G has thrice the number of chocolates of box F has. The box E has 53 chocolates and kept two boxes above box C. Two boxes are kept between G and E. The box G is placed above the box E. The box G is not placed immediately above or immediately below A. Four boxes are placed between the box which has 24 and 60 chocolates. The box G has twice the amount of the chocolates of box D has. One of the boxes has 81 chocolates. The Box D doesn’t place above B. The box F doesn’t kept between B and D. The box B has more number of chocolates than the box E has and kept above G.
46). Which of the following box have second highest number of chocolates?
a) B 
b) D 
c) G 
d) F 
e) None of these
47). Which of the following box is kept just above C?
a) A 
b) C 
c) F 
d) E 
e) None of these
48). How many boxes are kept between G and F?
   a) One
   b) None
   c) Two
   d) Three
   e) More than Three

49). Which of the following combination is correct?
   a) G-81
   b) F-20
   c) A-47
   d) B-24
   e) None of these

50). Which of the following boxes are kept at top and bottom most position respectively?
   a) D, F
   b) G, A
   c) B, C
   d) D, A
   e) None of these

Direction (51-54): Study the following information carefully and answer the questions given below.

Eight persons P, Q, R, S, T, U, V and W are sitting in a row but not necessary in the same order. Some of them are facing north and others are facing south.

Two persons are sit between V and T. S sits second to the right of V. Four persons are sit between Q and U. U faces south and is an immediate neighbour of T. Q sits right of V. W sits third to the right of U. Immediate neighbours of U faces opposite direction. R doesn’t faces north and sits at one of the extreme ends of the row. More than two person sits between R and W. P sits right of R. S and P doesn’t faces same direction. Q doesn’t sits at extreme end. S sits right of U. Not more than two persons are facing same direction are sit together. Q and W faces same direction.

51). How many persons are facing north direction?
   a) Two
   b) None of these
   c) Four
   d) Three
   e) Five

52). Who sits third to the right of Q?
   a) P
   b) T
   c) U
   d) W
   e) None of these

53). How many person sits between V and W?
   a) One
   b) Two
   c) None
   d) Three
   e) More than three

54). If all the persons are seated according to alphabetical series from left end to right end then how many persons remains unchanged from the previous position?
   a) One
   b) Three
   c) Four
   d) Two
   e) None

Direction (55-59): Study the following information carefully and answer the questions given below.

There are nine people viz. P, Q, R, S, T, U, V, W and X. All of them belong to three different cities viz. Hyderabad, Jaipur and Bhopal but not necessarily in the same order. Not more than four and less than two belongs to the same city.

P and Q belong to same city but not same city as S. W with only one person belongs to the same city but not Hyderabad. V and X belongs to different cities; neither of them belong to Bhopal. U doesn’t belong to Bhopal. R doesn’t belong to Jaipur and belongs to same city as X. T and P belong to same city but not Hyderabad.

55). Who among the following belongs to Hyderabad?
   a) V
   b) P
   c) U
   d) W
   e) None of the above

56). Which of the following combinations is true?
   a) U-V
   b) P-W
   c) S-T
   d) W-X
   e) T-V

57). Which of the following statement is false?
   a) U and X belongs to same city
   b) V belongs to Jaipur
   c) R belongs to Bhopal
   d) All are true
58). Who among the following belongs to Jaipur?
a) U  
b) V  
c) Q  
d) W  
e) S

e) None is true

59). How many people belongs to Bhopal?
a) Two  
b) Three  
c) Four  
d) Either Two or Three  
e) Cannot be determined

60). Five persons A, B, C, D and E are in family with two generations. A is the daughter of E, who is husband of C. D is a sister-in-law of A, who is an unmarried person. Then, how is B related to C?
a) Son-in-law  
b) Daughter  
c) Brother  
d) Son  
e) Sister

Direction (61-62): Read the following information carefully and answer the questions given below.
H stands 1 meter to the south of G, who stands 5 meters to the west of F. A stands 1 meter to the south of B, who stands 2 meters to the west of C. E stands 3 meters to the north of F. E stands 1 meter to the east of D, who stands 1 meter to the north of C.
61). In which direction does A stands with respect to H?
a) North West  
b) North East  
c) South West  
d) South East  
e) None of these
62). If T stands 2 meters south of A, then what is the distance between H and T?
a) 4 meters  
b) 3 meters  
c) 2 meters  
d) 5 meters  
e) None of these

63). How many such pairs of letters are there in the word ‘APPAREL’ each of which has as many letters between them in the word as in the English alphabetical series?
a) One  
b) Two  
c) Three

d) Four  
e) None

Direction (64-65): Read the following information carefully and answer the questions given below.
In certain code language, “Newspaper may be choice published” is coded as “lkf ero kof jow rei”  
“All newspaper was mobile power” is coded as “ero ljlb qwr nbc wea”  
“No Mobile was charging power” is coded as “qwr oes ljlb wea koq”  
“All charging may choice power” is coded as “qwr kof lkfl nbc oes”
64). What is the code for the word “no”?
a) kof  
b) koq  
c) jow  
d) rei  
e) lkf
65). What is the code for the word “Choice”?
a) lkf  
b) oes  
c) Kof  
d) Either b or c  
e) Either a or c

Directions (Q 66 - 69): Read the following passage carefully and answer the given questions
Total number of people using two different types of phones (Smart phone and Normal phone) in two different states is 2400. Number of people using phones in state A is twice that of state B. In state A, ratio of the number of males to females is 5:3 from that number of people not using smart phones is half of the total number of people in that state. In state B, number of females is 200 less than the number of males. The number of people not using normal phones is 9/16th of the total number of people in that state. Note: One of them uses only one phone (i.e. either smart phone or normal phone)
66) Find the ratio of the number of males using smart phones in state A to the number of females not using normal phones in the same state, if the number of females in state A not using smart phones is 400
a) 2:1  
b) 5:1  
c) 3:1
67) Total number of people using smart phones (both state A and B) is approximately what percentage of the total people in state B?
   a) 160%
   b) 156%
   c) 170%
   d) 175%
   e) 150%

68) What is the difference between the number of males not using normal phones in state B and the number of females not using smart phones in the same state, if the number of females using smart phones in state B is 150?
   a) 100
   b) 300
   c) 200
   d) 150
   e) 50

69) Number of people using normal phones in state B is approximately what percentage more/less than the total people in state A?
   a) 78%
   b) 82%
   c) 54%
   d) 68%
   e) 86%

Directions (Q. 70-72): Each question below contains a statement followed by Quantity I and Quantity II. Find the relationship among them and mark your answer accordingly.

70) There are 84 students in a class whose average age is 13 years. The average age of the girls in the class is 15 years while the average age of the boys is 12 years?
   Quantity I: No of boys in the class is?
   Quantity II: No of girls in the class is?
   a) Quantity I > Quantity II
   b) Quantity I ≥ Quantity II
   c) Quantity II > Quantity I
   d) Quantity II ≥ Quantity I
   e) Quantity I = Quantity II or Relation cannot be established

71) A boat covers 72 km upstream in 4 hours. The speed of stream is 2 km/hr. Find the distance covered by the boat in 3 hours along the stream?
   a) 78 km
   b) 66 km
   c) 54 km
   d) 60 km
   e) 82 km

72) 5^x+y = 3125 and 3125^x-y = 5
   Quantity I: The value of x?
   Quantity II: The value of y?
   a) Quantity I > Quantity II
   b) Quantity I ≥ Quantity II
   c) Quantity II > Quantity I
   d) Quantity II ≥ Quantity I
   e) Quantity I = Quantity II or Relation cannot be established

73) In a Town 54% of the population is male and remaining are females. Out of the males 50% are literate and remaining is illiterate. Out of females 40% are literate and remaining is illiterate. If total number of literate population is 68100, what is the population of the town?
76) Ragu’s mother’s present age is 5 times the present age the Ragu. Sum of the ages of Ragu’s mother and father, after 7 years is 91 years. Ragu’s father is 7 years elder than Ragu’s mother. Find the present age of Ragu?
   a) 10 years  
   b) 7 years  
   c) 12 years  
   d) 5 years  
   e) None of these

77) Ajay, Kathir and Sri started a business by investing in the ratio of 5: 8: 9. After 3 months, Ajay invested Rs. 10000 more and after another 5 months, Kathir invested Rs. 20000 more. At the end of the year, their profits are in the ratio of 69: 104: 108. Find the initial investment of Sri?
   a) Rs. 75000  
   b) Rs. 80000  
   c) Rs. 85000  
   d) Rs. 90000  
   e) None of these

Directions (Q.78-81): Study the following graph carefully and answer the following questions

The line graph shows the number of students applied for studying in abroad in different Countries

<table>
<thead>
<tr>
<th>Country Name</th>
<th>Rejected applicants</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>400</td>
</tr>
<tr>
<td>B</td>
<td>300</td>
</tr>
<tr>
<td>C</td>
<td>250</td>
</tr>
<tr>
<td>D</td>
<td>400</td>
</tr>
<tr>
<td>E</td>
<td>120</td>
</tr>
</tbody>
</table>

78) Find the ratio between the 45% of selected applicants in the country A and 60% of selected applicants in the country C
   a) 9: 11  
   b) 8: 15  
   c) 7: 11  
   d) 8: 13  
   e) 5: 9

79) Find the number of boys selected in the country D, if the ratio of the number of boys to girls applied is 7:3 and the number of girls rejected for studying abroad in the country D is 150
   a) 2450  
   b) 2500  
   c) 2550  
   d) 2250  
   e) 2550

80) What is the difference between the total number of selected students in the country A and C together and the total number of selected students in the country B and E together?
   a) 230  
   b) 220  
   c) 200  
   d) 240  
   e) 180

81) Find the average number of students selected to study abroad from all the countries together
   a) 264  
   b) 278  
   c) 252  
   d) 224  
   e) 294
Directions (Q. 82-83) what value should come in place of question mark (?) in the following number series?

82. 1512, 756, 252, 63, ?, 2.1
   a) 25
   b) 27
   c) 31
   d) 18.4
   e) 12.6

83) 36, 19, 27, 81, 388, ?
   a) 3229
   b) 1285
   c) 2156
   d) 2743
   e) 3078

Directions (Q. 84-86): Find the wrong term in the following number series?

84) 28, 15, 17, 38, 158, 1296
   a) 15
   b) 38
   c) 1296
   d) 158
   e) 17

85) 4582, 5543, 6632, 7788, 9226, 10747
   a) 5543
   b) 9226
   c) 7788
   d) 10747
   e) 6632

86) 85, 97, 123, 171, 243, 365
   a) 171
   b) 249
   c) 365
   d) 97
   e) 123

Directions (Q. 87-91) what approximate value should come in place of question mark (?) in the following questions?

87) 42 % of 801 – 58 % of 399 =? – 112 – (42.21)²
   a) 2150
   b) 1520
   c) 1630
   d) 1240
   e) 1380

88) 52 % of 2349.89 + 28 % of 6249.72 =? × 49.91 + 72.21
   a) 75
   b) 58

89) 64 % of 5899 + 65² ÷ 8 × 7 + 27² =? × 5
   a) 1750
   b) 1520
   c) 1630
   d) 1240
   e) 1380

90) (3/4) of? - (4/7) of (27/14) of 1329 = 64 % of 849
   a) 2750
   b) 2170
   c) 2360
   d) 1840
   e) 1630

91) (128.01)² × (64.21)¹/³ × (111.99)² ÷ (2⁸ × (6.97)²) = 2⁷
   a) 18
   b) 12
   c) 7
   d) 15
   e) 10

Directions (Q. 92-95): In the following questions, two equations I and II are given. You have to solve both the equations and give Answer as,

a) If x > y
b) If x ≥ y
c) If x < y
d) If x ≤ y
e) If x = y or the relation cannot be established

92) I. 3x + 5y = 30
    II. 2x + 3y = 19

93) I. x³/2 = x × 5
    II. √841 + y = √2704

94) I. 3x² - 6x - 45 = 0
    II. 2y² + 2y - 24 = 0

95) I. x² - 10√2 + 50 = 0
    II. y² - 11√3 + 90 = 0

Directions (96-100): Study the following graph carefully and answer the given questions.
The bar chart shows the number of pens sold in different days in a week from Monday to Friday.

96) Find the average number of pens sold on Monday to Thursday together
a) 65  
b) 70  
c) 80  
d) 50  
e) 60

97) What is the difference between the number of pens sold on Tuesday and Wednesday together and the number of pens sold on Thursday and Friday together?
a) 5  
b) 10  
c) 0

d) 15  
e) 20

98) If total number of pens sold on Monday is 20% more than the total number of pens sold on Saturday, then find the number of pens sold on Saturday
a) 40  
b) 55  
c) 40  
d) 50  
e) 30

99) Out of the total pens sold on Wednesday, 20% are violet pens. Out of the remaining 40% are black pens and the remaining are yellow pens. Find the number of yellow pens
a) 36  
b) 20  
c) 12  
d) 15  
e) 24

100) Out of the total number of pens sold on Tuesday and Friday, 25% and 30% are defectives pens respectively. Find the total number of non-defective pens sold on Tuesday and Friday together
a) 88  
b) 64  
c) 72  
d) 86  
e) 90