Direction (1-5): Study the information given below and answer the questions based on it. Ten students namely viz E,F,G,H,I,J,K,L,M and N of ten different colleges but not necessarily in the same order have exam on five different days starting from Monday to Friday of the same week at either 07.00 AM or 10.00 A.M.
Only two people have exam between J and N . Neither I nor K have exam on Friday. M has exam on Tuesday at 07.00 A.M. L does not have exam at 10.00 AM . The number of people who have exam between K and H is same as the number of people who have exam between $G$ and $L$. H does not have exam on any one of the days after I. J does not have exam on any of the days after L. F has exam immediately before M. M does not have exam on any of the days before K. The one who has exam at 07.00 A.M is immediately before N. H has exam immediately after the day of one who has exam on Monday. J does not have exam at 10.00 A.M. Only three people have exam between K and I .

1. How many persons have the exam at $10^{\prime} 0$ clock between I and L?
A. 5
B. 6
C. 2
D. 4
E. None of these.
2. Who among the following person has exam at 7 A.M?
A. N
B. L
C. E
D. G
E. H
3. Four among the following form a group in a certain way. Which of the following does not belong to Group?
A. F - Tuesday
B. H - Wednesday
C. K - Tuesday
D. E - Friday
E. L - Friday
4. Which of the following is correctly matched?
A. M - Monday
B. H - Tuesday
C. F - Friday
D. K - Tuesday
E. M - Wednesday
5. Who among the following have exam on Friday?
A. $\mathrm{E}, \mathrm{F}$
B. $\mathrm{G}, \mathrm{H}$
C. I, K
D. L, N
E. K, M
6. Direction: In the question below are given three statements followed by three conclusions number I, II and III. You have to take the given statements to be true even if
they seem to be at variance from commonly known facts. Read the entire conclusion and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

## Statements:

All elephants are cat.
All cat are lion.
No dog is are elephant.
Conclusions:
I. Some lion is dog.
II. Some cat are dog is a possibility.
III. Some dog are elephant.
A. Only I follows
B. Only II follows
C. Only III follows
D. All follow
E. None of these
7. Direction: In the question below are given three statements followed by three conclusions number I, II and III. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read the entire conclusion and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

## Statements:

Some marker are sketch.
Some sketch are sharpner.
No sharpner is eraser.

## Conclusions:

I. Some eraser is sketch.
II. Some eraser is sharpner is a possibility.
III. All sketch can be eraser
A. None follows
B. only II follows
C. only III follows D. only I follows
E. only either II or III follow
8. Direction: In the question below are given three statements followed by three conclusions number I, II and III. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read the entire conclusion and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

## Statements:

All ruby are daimond.
Some ruby are gold.
No diamond is silver.

## Conclusions:

I. Some ruby are not silver.
II. All gold can be silver is a possibility.
III. Some silver can be gold is a possibility.
A. only I and II follow
B. only I and III follow
C. only II and III follow
D. All I, II and III follow
E. None of these
9. Direction: In each of the questions below are given three statements followed by three
conclusions number I, II and III. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read the entire conclusion and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
Statements: Some A are B
Some B are not C
Some D are C
Conclusions: I. All C can be B
II. All D can never be A
A. Only I and II follow
B. Only II follows
C. Only I follows
D. None follows
E. None of these

Direction (10-12): Study the following alphanumeric series carefully and answer the questions given below.
1 Z 6 H \& R \$ 4 Y Q \% T! 39 SIO 37 J LE U*K@3
STEP I- The letters which are immediately preceded and immediately followed by a symbol are arranged in the end of the series in the reverse alphabetical order. (They are arranged just after 3)
STEP II- The numbers which are immediately preceded by the letter and immediately followed by the Symbol are arranged between 9 and J in the increasing order.
STEP III- The numbers which are immediately followed by letter are interchanged its position with respect to the element just after it. All the steps are performed in order i.e I,II and III
10. How many letters are arranged at the end of the series in the step-2?
A. one
B. Three
C. Four
D. Five
E. More than five
11. Which among the following are the elements of the series which are second position from the left end and sixth position from the right end in step-III?
A. 63
B. 7\#
C. 1*
D. P6
E. 6\#
12. How many symbols are immediately followed by numbers in step-I?
A. one
B. Three
C. Four
D. Five
E. Two

Direction (13-15): 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 input and rearrangement.
Input- acon 8243 exam 16 acer loge 77 rope 22
Step I - care 82 acon 43 exam 16 loge 77 rope 22
Step II- cano 77 care 8243 exam 16 loge rope 22
Step III- emax 43 cano 77 care 8216 loge rope 22
Step IV- lego 22 emax 43 cano 77 care 82 16 rope
Step V- rpeo 16 lego 22 emax 43 cano 77 care 82
Input- 54 roll 39 back 8725 cash seat 46
beat beat
13. In which of the following step 25 and seat are placed immediately?
A. Step-III
B. Step-IV
C. Step-III and Step-IV
D. Step II
E. None of these
14. How many elements are there between 54 and 39 in step-II?
A. One
B. Two
C. Three
D. Four
E. None of these
15. Which elements are there between chsa and 54 in step-IV?
A. 46 , abck
B. ebta, 46
C. 87,25
D. rllo, seat
E. None of these

Direction (16-20): Study the following information carefully and answer the questions given below:
Eight persons from different countries Canada, Cuba, Japan, France, Angola, Bhutan, Denmark and Russia- are sitting in two parallel rows containing four people each in
such a way that there is an equal distance between adjacent persons. In row 1 A, B, C and $D$ are seated and all of them are facing north. In row $2, \mathrm{M}, \mathrm{N}, \mathrm{O}$ and P are seated and all of them are facing south. Therefore, in the given seating arrangement, each member is seated in a row facing another member of the other row. (All the information given above does not necessarily represent the order of seating as in the final arrangement).

* C sits second to right of the person from Russia. O is an immediate neighbour of the person who faces the person from Russia.
* Only one person sits between O and the person from France. The immediate neighbour of the person from France faces the person from Japan.
* The person from Canada faces the person from Bhutan. O is not from Bhutan. M is not from France. $M$ does not face the person from Russia.
* N faces the person from Angola. The one who faces $P$ sits on the immediate left of $A$. * $B$ does not sit at any of the extreme ends of the line. The person from Russia does not face the person from Cuba.

16. Who is sitting between O and the person from France?
A. The person from Bhutan
B. M
C. N
D. The person from Cuba
E. P
17. Who amongst the following sit at extreme ends of the rows?
A. D and the person from France
B. The persons from Canada and Denmark
C. The person from Angola and M
D. The person from Cuba and D
E. C and N
18. Who amongst the following faces the person from Russia?
A. The person from Denmark
B. M
C. 0
D. The person from Cuba
E. The person from Japan
19. Who amongst the following is from Cuba?
A. C
B. O
C. M
D. D
E. A
20. $\quad$ C is from which of the following country?
A. Canada
B. Cuba
C. Angola
D. Bhutan
E. Japan

Direction (21-23): Study the following alphanumeric series carefully and answer the questions given below:
24EAFR 63WBO 42ENDO 64TVZR 75GRTY
21. How many meaningful words can be formed from the letters of the words which are attached with the numbers in which at least one digit is odd digit in the given alphanumeric series?
A. one
B. two
C. three
D. four
E. More than four
22. The words are arranged according to the ascending order of the numbers which are attached to them from left to right, then what is the sum of the numerical value of the series which is third from the left and second from the right?
A. 105
B. 102
C. 127
D. 110
E. 112
23. The letters which are attached with the numbers in which at least one is odd digit are arranged according to the decending orders of their numbers from left to right and then all letters of the words are arranged in the alphabetical order individually, then which of the following is the 6th letter from the left end among letters?
A. M
B. O
C. N
D. R
E. None of these

Direction (24-28): Study the information carefully and answer the questions given below.
In a family there are 9 member $A, B, C, D, E, F, K, H$ and $J$ there are in which 3 couple having 4 generation and 5 male member. They all born in different years i.e. 2016, 2002, 2006, 2000, 1988, 1982, 1980, 1962 and 1960 but not necessarily in the same order. they earn different salaries per month i.e. 18000, 15000, 20000, 16000, 22000, 25000, 14000, 10000 and 27000 but not necessarily in the same order. F and K are a married couple. E is sister of D . B is a daughter in law F who is grandmother of E's
brother. C has two children. The oldest person in this family earn 18000 per month. E's husband born in the year 2002 and 16 years age gap between E and E's daughter. D born in the year 2006 and his father born in the year 1980. F has only two son and B's husband born in the year 1982 and his salary 22000 per month. The person who earn highest is husband of $E$ and there is 13000 rs gap between salary E and E's husband. There is 6 years gap between $B$ and $B^{\prime} s$ husband. $K$ has earn 15000 per month and his son earns 20000. K is not the oldest person in this family and H is brother in law of D and J is a female person. The youngest person earns lowest salary among all. D has earns second highest among all and F earns more than salary of her daughter in law. J is the daughter of E
24. Who among the following earn least money per month?
A. A
B. K
C. J
D. D
E. C
25. 'H' born in which of the following Year?
A. 2006
B. 2002
C. 1980
D. Can't be determine
E. None of these
26. How many person oldest of A?
A. 2
B. 4
C. 3
D. 1
E. none of these
27. Who among the following born in the year 2000?
A. A
B. C
C. D
D. E
E. none of these
28. Who among the following earn highest money per month?
A. A
B. C
C. H
D. K
E. D
29. Direction: The question below consists of a question and two statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.
The seven persons $P, Q, R, S, T, U$ and $V$ were born in different months from January to July not necessarily in the same order. Who among the following was born in January?
I. Q was born in a month which was having 31 days. Two persons were born between Q and P. P was born after Q.
II. U was born just after P. R was born in a month which was having least number of days. S was born after U. Q is not born in March.
III. Two persons were born between T and V . $S$ was born just after V. R was born before P.
A. I and II
B. II and III
C. From III
D. Any of two
E. All of them
30. Direction: The question below consists of a question and three statements numbered I, II and III given. You have to decide whether the data provided in which of the statements are sufficient to answer the question. Choose your answer from the options based on this.
Among $A, B, C, D, E, F$ and $G$, is $B$ greater than $F$ ?
I. A is either greater or equal to B which is lesser than $C$ which is equal to $D$ which is greater than $E$ which is either greater or equal to $F$ which is equal to $G$.
II. A is lesser or equal to $B$ which is equal to $C$ which is greater to $D$ which is greater to $E$ which is lesser to $F$ which is lesser to $G$.
III. A is greater to B which is greater to C which is equal to $D$ which is greater or equal to $E$ which is greater to $F$ which is lesser to $G$.
A. I and II
B. II and III
C. III
D. Any Two
E. All of the above

Direction (31-35): Study the information given below and answer the questions based on it.
There are 8 Boxes kept in a shelf namely A, B, C, D, E, F, G and H, not necessarily in the same order. They are colored in Grey, Pink, Green, Brown, Red, White, Orange and Blue papers, not necessarily in the same order. There is exactly one box between $B$ and $H$. The Blue Box is kept just below H. H is not colored in Green or Brown. G is kept adjacent to B but not adjacent to H . The Orange Box is four boxes above the Blue Box. A is kept just above $C$ and neither of them is orange or Blue in color. There are at least two boxes kept below C. The box colored in White is kept just above the Grey Box. F is neither colored in Blue nor is kept at the top. The Brown Box is not kept at the bottom. E which is colored in Red is kept four boxes below $A$.
31. What is the color of the Box H ?
A. Grey
B. Pink
C. White
D. Blue
E. None of these
32. Which Box colored in Blue?
A. A
B. C
C. D
D. G
E. None of these
33. The boxes kept at the top and the bottom respectively are colored in?
A. Brown and Red
B. Orange and Red
C. Grey and Pink
D. Green and Pink
E. White and Green
34. How many boxes are kept between $F$ and $E$ ?
A. Two
B. Three
C. Four
D. One
E. None of these
35. Which of the following statements is correct?
A. Box C is colored in White
$B$. The Red Box is third from the bottom.
C. There is only one box above the Orange box.
D. There are Two boxes between $G$ and the Pink Box
E. None of the above is correct.
36. Direction: In each question below is given a statement followed by two assumptions numbered $I$ and $I I$. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumption and decide which of the assumption is implicit in the statement.
Statement: A Government advertisement in public interest- "For a child's better mental health, admit him/her to a school only after five years of age."

## Assumptions :

I. A child cannot learn before he/she turns five.
II. Some school admit children who are below five years of age.
A. Only assumption I is implicit
B. Only assumption II is implicit
C. Either I or II is implicit
D. Neither I nor II is implicit
E. Both I and II are implicit
37. Direction: In each question below is given a statement followed by two assumptions numbered $I$ and $I I$. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumption and decide which of the assumption is implicit in the statement.
Statement: Government should deploy army to rehabilitate the people displaced due to earthquake.
Assumptions
I. Army can be used for purposes other than war also.
II. Only army can rehabilitate the displaced victims of earthquake.
A. Only assumption I is implicit
B. Only assumption II is implicit
C. Either I or II is implicit
D. Neither I nor II is implicit
E. Both I and II are implicit
38. Statement: A slump in home sales has pushed builders' inventory to "unsustainable levels" in the National Capital Region of Delhi, creating conditions for a real price correction that developers have so far avoided.
Which of the following statements is inferred on the basis of the given statement?
A. Demand for houses is quite low in most of the big cities.
B. The high inventory level will hamper the ability of launching new projects by the builders.
C. Builders in the market who have shown a good track record of delivering on time and on their promises, have been able to garner sales even in this slow market.
D. Unless this unsold stock gets absorbed, it will be difficult for consumer confidence to come back in this market.
E. High prices have pushed most of the onsale partments beyond the reach of average home buyers.
39. Direction: The question below consists of a question and three statements numbered I, II and III given. You have to decide whether the data provided in which of the statements are sufficient to answer the question. Choose your answer from the options based on this.
Four friends are sitting around a rectangle table named A, B, C and D. B is sitting opposite to whom?
I. A is sitting immediate of B and D. C is sitting immediate of $B$. $D$ is sitting immediate left of A
II. C is sitting second to right of A. A is facing center. D is sitting immediate right of C and A
III. B is sitting immediate left of $C$. $D$ is not sitting immediate of $B$. $D$ is sitting immediate right of A
A. Data in statement I alone or in the statement II alone or in the statement III alone is sufficient to answer the question
B. Data in statement II and III are sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
C. Data in all the statement I, II and III are necessary to answer the question.
D. Data in statement I and III are sufficient to answer the question, while the data in statement II is not sufficient to answer the question.
E. Data in statement I and II are sufficient to answer the question, while the data in statement III are not sufficient to answer the question.
40. Direction: The question below consists of a question and two statements numbered I,II and III given. You have to decide whether the data provided in which of the statements are sufficient to answer the question. Choose your answer from the options based on this.
Six Books Physics, Maths, Biology, Social, English and Hindi are to be stacked together. Bottom book is given number I, then II and so on. Which is given number 1 ?
I. There is only one book between Biology and Maths. Physics is giving even number place.
II. English is not given even number place. Maths is given even number place. Maths is not given in top place.
III. Social is given odd number place. There are 2 books placed between Physics and Social. English is placed immediate next to Biology from down.
A. Data in statement I alone or in the statement II alone or in the statement III alone is sufficient to answer the question
B. Data in statement II and III are sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
C. Data in all the statement I, II and III are necessary to answer the question.
D. Data in statement I and III are sufficient to answer the question, while the data in statement II is not sufficient to answer the question.
E. Data in statement I and II are sufficient to answer the question, while the data in statement III are not sufficient to answer the question.
41. Direction: The question below consists of a question and three statements numbered I,II and III given. You have to decide whether the data provided in which of the statements are sufficient to answer the question. Choose your answer from the options based on this.
Who is eldest among the six family members $A, B, C, D, E, F$ ?
I. A is the daughter-in-law of $D, E$ is grandson of $F$, who is the father of $B$.
II. $A$ is youngest while $E$ is not the eldest.
III. B is the father of $C$, who is grandson of $F$. $D$ is the wife of E's son and C's father.
A. Data in statement I alone or in the statement II alone or in the statement III alone is sufficient to answer the question
B. Data in statement II and III are sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
C. Data in all the statement I, II and III are necessary to answer the question.
D. Data in statement I and III are sufficient to answer the question, while the data in statement II is not sufficient to answer the question.
E. Data in statement I and II are sufficient to answer the question, while the data in statement III are not sufficient to answer the question.
Direction (42-44): Study the following information carefully and answer the questions given below.
There are nine persons namely $\mathrm{R}, \mathrm{S}, \mathrm{T}, \mathrm{U}, \mathrm{V}$, $\mathrm{W}, \mathrm{X}, \mathrm{Y}$ and Z live on three different floors from one to three. Ground floor is number 1 and top floor is number third but not necessarily in the same order. There are three flats on each floor- flat-1, flat-2 and flat-3 from west to east such that flat-1 of third floor is exactly above flat-1 of second floor which is exactly above flat-1 of first floor and other flats are placed in the same way. R lives in an even numbered flat. X lives just above $U$ in a flat numbered 3. R does not live on the
same floor on which $X$ lives. W lives just above Y.Y does not live on the same floor on which U lives. V lives below U.T lives left to Z .
42. Who lives in flat-3 of first floor?
A. R
B. S
C. X
D. V
E. None of these
43. Who among the following lives immediate left to X ?
A. $Z$
B. $T$
C. W
D. $Y$
E. None of these
44. How many persons live below U?
A. Two
B. No one
C. One
D. either A or C
E. None of these

Direction (45-47): Study the following information and answer the questions given below:
There are PQ axis in such a way that $P$ is in north and Q is in south direction. There is AB axis in such a way that $A$ is in west direction and $B$ is in east direction. $P Q$ axis and $A B$ axis intersect at a point $Z$ in such a way that $P Z$ is $15 \mathrm{~m}, \mathrm{ZQ}$ is $17 \mathrm{~m}, \mathrm{ZA}$ is $12 \mathrm{~m}, \mathrm{ZB}$ is 24 m . Ramesh starts from point $A$ and walks 20 m in south direction and then he turns his left and walks 32 m . Somesh starts from point $P$ and walks 20 m in east direction. Raju starts from point $B$ and walks 5 m in north direction and then he turns his left and walk 4 m and again he turns his left and walks 22 m .
45. Point Q is in which direction with respect to Somesh's current position?
A. south
B. south-east
C. south-west
D. west
E. north-west
46. Point $B$ is in which direction with respect to Ramesh's current position?
A. north
B. east
C. north-east
D. north-west
E. south
47. What is distance between Raju's current position and Ramesh's current position?
A. 3 m
B. 5 m
C. 13 m
D. 22 m
E. 27 m
48. Statement: Next time, when you lose your baggage or meet with an accident while travelling by train, you need not run from pillar to post and wait for years before the cheque lands at your door. Which of the
following can be inferred from the given information? (An inference is something that is not directly stated but can be inferred from the given information.)
A. There will be quick settlement of claims into the customer's account
B. All travellers' details will be linked with Aadhaar card
C. The loss will be covered by any insurance company through railways
D. There will be direct settlement of claim by the IRCTC

## E. None of these

49. In the following question, a statement is given followed by two courses of action numbered I and II. On the basis of the information given in the statement, you have to assume everything in the statement to be true, and then decide which of the suggested courses of action logically follow(s) the given statement.

## Statement:

A number of school children in the local schools have fallen ill after the consumption of their subsidized Tiffin provided by the school authority.

## Course of actions:

I. The Tiffin facility of all schools should be discontinued with immediate effect.
II. The government should implement a system to certify the quality of Tiffin provided by the school.
A. Only I follows.
B. Only II follows.
C. Either I or II follows.
D. Neither I nor II follows.
E. Both I and II follow.
50. Direction: In each question below, are given a statement followed by two courses of action numbered $I$ and $I I$. On the basis of the information given in the statement, you have to assume everything in the statement to be true, and then decide which of the suggested courses of action logically follow(s) for pursuing.

## Statement:

A huge rally will be organized by the people in the locality, on a religious occasion and the police was informed accordingly.
Course of action:
I. Adequate police force should be deployed to oversee the procession of the rally.
II. Vehicles on the road should be advised a diversion to avoid traffic congestion.
A. Only I follows.
B. Only II follows.
C. Either I or II follows.
D. Neither I nor II follows.
E. Both I and II follow.

Direction (51-58): Read the following passage carefully and answer the questions that follow.
The office has extended its roots beyond the pigeonhole. The number of telecommuting workers has increased $115 \%$ in a decade, according to a new report from Global Workplace Analytics and FlexJobs that translates to 3.9 million workers, or almost $3 \%$ of the total U.S. workforce, working from home at least half the time in 2015, an increase from 1.8 million in 2005. "The brunt of remote work is dynamic; employers really need to concentrate on it and not turn a blind eye to it any longer," Sara Sutton Fell, CEO of FlexJobs. While a majority of companies are presenting telecommuting options, larger companies are the most likely to offer the option to workers. In fact, it's Uncle Sam that has the largest percentage of telecommuters at $3.1 \%$."The federal government has been a really nice model in terms of setting the tone on why it's a benefit."
Far-flung working has become more commonplace, specifically in the mortgage and real estate industry, human resources and recruiting, and accounting and finance. Each industry saw remote job listings flourish more than $20 \%$ last year.
Employers in the Northeast, particularly in New England and Mid-Atlantic regions, are the most likely to offer flexible workplace options, the report found. "The middle class norm changed from one parent working and one staying at home to two working parents being more common and growth in single-parent families are big factors driving telecommuting to save time when and where you can," said Sutton Fell.
The Great Recession also played a role. "We saw a dramatic increase in the types of jobs that employers were hiring for that allowed telecommuting and other flexibility," said Sutton Fell. Telecommuters tend to be a little bit older than the average employee: half are 45 or older. They're also more
educated and earn more than nontelecommuters. The average yearly income for most telecommuters is $\$ 4,000$ more than non-telecommuters, according to the report. Remote work is gender neutral with $52 \%$ of work-at-home employees being female. "There is still this stigma associated with an antiquated view that telecommuting is just a work-from-home mom thing or for lower level jobs or not as dedicated workers," said Sutton Fell. "This is a very professional and viable option and it's not going anywhere." Telecommuting is most common among management positions. Professional, scientific and technical services industries have the highest percentage of telecommuters relative to their share of the workforce.
Being allowed to work outside the office is good for both workers and employers. Working outside the office allow employees to have better work-life balance and improves their health and wellness, according to the report. It also saves them time and money. Telecommuting full time brings in more than $\$ 4,000$ in savings each year thanks to reduced expenses on things like gas, parking and public transit costs and dry cleaning. By not having to go into the office every day, workers gain back the equivalent of 11 days per year. Employers also see savings from allowing flexible scheduling. Allowing a worker to telecommute half the time can save an employer more than $\$ 11,000$ a year. "It's a benefit when it comes to recruiting and retentions and offering competitive advantages with globalisation and the efficiency of being a forward-looking company," said Sutton Fell.
Source:
https://money.cnn.com/2017/06/21/pf/jobs/ working-from-home/index.html?category=pfjobs
51. Which of the following issues has been highlighted in this passage?
A. Brain Drain
B. The declining jobs in the United States
C. Work-from-home facility
D. Maternity leaves given to female employees
E. None of the above
52. Which of the following is a major advantage of the new age telecommuting option?
A. The employees get more income due to this option.
B. There is less dependency on office and its facilities and more self-analysis.
C. One gets more leaves which can be utilised by working from home.
D. It enhances the overall well being by improving the fitness quotient.
E. Resources are conserved since less is required to manage a smaller workforce in the office.
53. Which of the following statements from the passage defines that the fall-out of telecommuting is red-blooded?
A. The brunt of the remote work is dynamic.
B. Far-flung working has become more commonplace.
C. Being allowed to work outside the office if good for both workers and employers.
D. Employers see savings from allowing flexible scheduling.
E. The federal government has been a really nice model in terms of setting the tone on why it's a benefit.
54. "The office has extended its roots beyond the pigeonhole."
Which of the following best describes the given statement?
A. With growth, the office area is increasing.
B. The government has invested to provide funds to give lavish working spaces to individuals.
C. The office is just not confined to the fourwalled rigid infrastructure but has expanded its cover by including remote working options.
D. The remote working options has helped the employees deal with in-office disturbances.

## E. None of these

55. According to Sutton Fell, which of the following gave way to the new working conditions in the United States?
i. She regarded the Great Recession as the major precursor for the new and flexible job listings.
ii. The changing technology which pushed for the remote working.
iii. The change from single working parent to both of the people working in a household for better future prospects and hence flexibility given to them.
iv. People are leading a sedentary lifestyle and hence are able to give less time in the office leading to offices rolling out telecommuting options.
v. Women needed to be treated equally hence in order to give them equal say in the workplace, telecommute was provided.
A. Only i
B. Both iv and v
C. Only iii
D. Both i and iii
E. All of the above
56. Which common benefit does remote working bring to both the employees and the employers?
A. Lesser taxation- Due to a new rule being passed stating people who stay at home will be charged less taxes.
B. More savings- Reduced amount spent on travelling by employees while employers reduce their expenses on workers leading to more savings.
C. More comfort- Both the employees and employers have an ease of comfort. Employers don't have to deal with office laziness by workers and employees can rest and work at the same time.
D. More expenditure- The employees earn more and spend more while employers get more work done in less salaries.
E. Sustainable development- The less use of transportation, electricity in offices help judicious use of resources
57. "Telecommuting is just a work-from-home mom thing or for lower level jobs or not as dedicated workers". What is the subject's perspective regarding the statement?
A. The subject calls the statement in question by putting forth the perspective that telecommuting is a gender-neutral snap and will reap fruits to the entire workforce.
B. The subject backs the statement and calls telecommuting implausible for the individual as well as the employer.
C. The subject keeps up with the statement with the perspective that telecommuting would result in lesser productivity as not everyone can be relied upon.
D. The subject sticks by the statement and states that the efficiency of the individuals cannot be determined by their gender and that everyone should be treated equally.
E. None of these
58. Direction: In the following question, five statements have been given. Identify the pair of statements which are grammatically correct and also carry the same meaning.
1) As consumerism, especially at century's end, becomes an increased individualistic and private affair, we risk losing key virtues that stabilize and promote social life.
2) Consumerism is kindled, only when people, through the mediums of advertising and marketing, come to mythically believe they have certain "needs" that can only be satisfied through consumption.
3) Consumerists, as a character-cultivating way of life, encourage the least attractive human traits-avarice, aggression, and selfcenteredness.
4) We all fall prey to consumerism, and it is especially important for parents to have been teaching their children to discern the real messages behind airbrushed ads and images.
5) Consumerism comes into existence when various marketing strategies contribute to the creation of artificial wants among consumers.
A. 1 and 2
B. 2 and 3
C. 4 and 5
D. 2 and 5
E. 3 and 4
59. Direction: In the following question, five statements have been given. Identify the pair of statements which are grammatically correct and also carry the same meaning.
1) Each religion follows its own calendar for deciding the day on which the festival is to be celebrated, for example, the Hindu festivals is determined by the lunar Hindu calendar.
2) Diwali, one of the much prominent Hindu festivals of India, is celebrated with a lot of pomp and show.
3) Among all the countries of the world, India is the one with a large geographical area, supporting people from all communities and religions of the world and we celebrate festivals of each religion with equal zeal and vigour, making festivals a frequent occurrence in the Indian lives.
4) India could well be called the land of festivals and the amalgamation of difference cultures, languages and religions ensures that there is a festival being celebrated in some part of India almost every week.
5) India is still a predominantly rural nation and much of its festivals are characterized by the welcoming of seasons.
A. 1 and 2
B. 2 and 3
C. 4 and 5
D. 5 and 1
E. 3 and 4
60. Direction: In the following question, five statements have been given. Identify the pair of statements which are grammatically correct and also carry the same meaning.
1) Competitive advertisement is an aggressive form of marketing and is quiet different from creative advertisement, whose soul purpose is entertainment.
2) While creative advertisement might be entertaining, comparative advertisement, one of the aggressive forms of marketing, is a whole new ball game altogether.
3) Competitive advertisement is an aggressive form of marketing and is quite different from creative advertisement, whose sole purpose is entertainment.
4) While creative advertisement might entertaining, comparative advertisement, one of the aggressive form of marketing, is a whole new ball game altogether.
5) Even though creative advertisement might be entertaining, comparative advertisement, one of the aggressive forms of marketing, is a whole new ball game altogether.
A. 1 and 2
B. 2 and 3
C. 4 and 5
D. 2 and 5
E. 3 and 4
61. Direction: In the following question, five statements have been given. Identify the pair of statements which are grammatically correct and also carry the same meaning.
1) Little do people know, just like the rest of the country that there are hundreds in the North Eastern states of our country who have been displaced from their homes due to severe floods.
2) Just like the rest of the country that there are hundreds in the North Eastern states of our country who have been displaced from their homes due to severe floods and very less is known about them.
3) A very little is known about the hundreds of people in the North Eastern states of our country who have been rendered homeless due to severe floods.
4) Very little is known about the hundreds of people in the North Eastern states of our country who have been rendered homeless due to severe floods.
5) Misplaced from their homes due to severe floods, little is known that just like the rest of the country, there are hundreds in the North Eastern states of our country who have been misplaced.
A. 1 and 4
B. 2 and 3
C. 4 and 5
D. 2 and 5
E. 3 and 4
62. Direction: In the following question, a word is given followed by three statements. All
these three statements carry the given word. Identify the sentence(s) in which the word fits contextually to convey a logical meaning. Hamper
I. The Centre's move to direct oil marketing companies to lower auto fuel price hampers the confidence of oil companies in investments make in India.
II. Metro Railway services were hampered for 15 minutes Monday afternoon on Mahasashti, the first day of Durga Puja.
III. High street retailers Marks \& Spencer and John Lewis \& Partners have also released their own hampers which are far more affordable than the luxury offerings - though just as tempting.
A. Only I
B. Both I and II
C. Only III
D. Both II and III
E. All I, II and III
63. Direction: In the following question, a word is given followed by three statements. All
these three statements carry the given word which has been highlighted. Identify the sentence(s) in which the word fits contextually to convey a logical meaning.

## Century

1) Making a century and propelling his team to a win was a fitting reply from the captain.
2) Following a century-old tradition the husband decided to visit the hilltop temple with his wife.
3) The century was filled with a great diversity of animals.
A. Only 1
B. Only 2
C. Both 1 and 2
D. Both 2 and 3
E. All
64. Direction: In the following question, a word is given followed by three statements. All these three statements carry the given word which has been highlighted. Identify the sentence(s) in which the word fits contextually to convey a logical meaning.

## Date

1) Her date with her classmate had been uneventful and he hadn't asked her out since.
2) The poor kid didn't even have a real birthday, only an arbitrarily chosen date.
3) The shirt may be pricey but it will never date.
A. Only 1
B. Only 3
C. Both 1 and 2
D. Both 2 and 3
E. All 1, 2 and 3
65. Direction: In the given question, four words are given of which two are most nearly the same or opposite in meaning. Find the two words and indicate your answer by marking the option which represents the correct combination.
A) Audacity
B) Annoy
C) Assort
D) Amuse
A. $A-B$
B. B-D
C. A-D
D. $B-C$
E. A-C
66. Direction: Four words, out of which two are most nearly the same or opposite in meaning, are given. Find the pair and indicate the answer by marking the option that represents the correct combination.
A. Blame
B. Incarcerator
C. Blimey
D. Inculpate
A. A - B
B. $B-D$
C. $A-D$
D. $B-C$
E. A - C
67. Direction: Four words, out of which two are most nearly the same or opposite in meaning, are given. Find the pair and indicate the answer by marking the option that represents the correct combination.
A) Permit
B) Plough
C) Bar
D) Beacon
A. A-B
B. B-D
C. A-D
D. $\mathrm{B}-\mathrm{C}$
E. A-C
68. Direction: In the given question, four words are given of which two are most nearly the same or opposite in meaning. Find the two words and indicate your answer by marking the option which represents the correct combination.
A) Crave
B) Abjure
C) Exceed
D) Crass
A. $A-B$
B. $A-C$
C. $B-C$
D. $A-D$
E. B-D
69. Direction: A sentence with two blanks is given, each blank indicating that something has been omitted. Choose the words that best fit the meaning of the sentence as a whole.
In the $\qquad$ of its journey of 139 years, this newspaper has remained contemporary yet classic by effecting periodic design changes and taking a lead to $\qquad$ new technology without compromising its core values that are intrinsically wedded to the cardinal principles of journalism.
A. beauty, follow
B. totality, adapting
C. era, grab
D. entirety, embrace
E. whole, clasp
70. Direction: A sentence with two blanks is given, each blank indicating that something has been omitted. Choose the words that best fit the meaning of the sentence as a whole.
In the early 2000s, dozens of the world's premier experts on sports-related concussions started meeting to $\qquad$ studies about concussions, with plans to issue a consensus set of guidelines on how best to $\qquad$ and deal with the condition.
A. review, identify
B. ponder, debate
C. brood, establish
D. concentrate, organize
E. grasp, distract
71. Direction: A sentence with two blanks is given, each blank indicating that something has been omitted. Choose the words that best fit the meaning of the sentence as a whole. PM Modi's hectic external engagements were to $\qquad$ the notion that a former
Chief Minister with little diplomatic experience could not make it to the high table as well as counter a campaign by pro-Congress intellectuals to $\qquad$ him a visa to travel to the West because of his so-called role in Gujarat riots.
A. dispel, deny
B. scattered, approve
C. join, deny
D. dismiss, agree
E. congratulate, grant
72. Direction: A sentence with two blanks is given, each blank indicating that something has been omitted. Choose the words that best fit the meaning of the sentence as a whole.

If a startup founder could peer 8 years into the future and see a company that has become the symbol for $\qquad$ culture, one that has raised over $\$ 8$ billion on a valuation of $\$ 67$ billion, that has a worldwide presence in hundreds of cities, millions of app downloads, 12,000 full time employees and thousands more working for your service, are they would start it.
A. Disruptive, Chances
B. Vibrant, Excuses
C. Extinct, Possibilities
D. Big, Probabilities
E. None of the above
73. Direction: A sentence with two blanks is given, each blank indicating that something has been omitted. Choose the words that best fit the meaning of the sentence as a whole. Brokerage houses have given a mixed response to the consumer goods sector, with most saying GST taxes are neutral to positive, ___that since many companies enjoy excise duty exemption, clarity is $\qquad$ on these in the excise-free zones under GST.
A. Saying, Expected
B. Speaking, Demanded
C. Separating, Desired
D. Adding, Awaited
E. Separating, Awaited
74. Direction: The given question has a statement with two highlighted words/ phrases. Choose the most appropriate option from the given alternatives which can help replace the highlighted words to make the statement grammatically and logically correct. If the given sentence is correct as it is, mark 'no correction required' as the answer.
The remuneration for the services offered by the veterans is affectionate when compared with the monetary aspirations in other job sectors.
A. affiliate, probations
B. disproportionate, compensations
C. variable, policies
D. irrelevant, relevance
E. No correction required
75. Direction: The given question has a statement with two highlighted words/ phrases. Choose the most appropriate option from the given alternatives which can help replace the highlighted words to make the statement grammatically and logically correct.

If the given sentence is correct as it is, mark 'no correction required' as the answer.
Recordings of the financial data made it clear that the recurrence in the economy has very little to do with the hopes taken by the financial experts.
A. heightening, proposals
B. breakout, offers
C. flattening, drapes
D. improvement, measures
E. No correction required
76. The remuneration for the services offered by the veterans is affectionate when compared with the monetary aspirations in other job sectors.
A. affiliate, probations
B. disproportionate, compensations
C. variable, policies
D. irrelevant, relevance
E. No correction required
77. Direction: The given question has a statement with two highlighted words/ phrases. Choose the most appropriate option from the given alternatives which can help replace the highlighted words to make the statement grammatically and logically correct. If the given sentence is correct as it is, mark 'no correction required' as the answer.
Recovering from the drought was very difficult in itself, but when the bankers
started to act stringently for loan recovery, the farmers were distraught.
A. inspiring, reluctantly
B. disgusting, laxly
C. important, proportionately
D. easy, strictly
E. No correction required
78. Direction: Five statements labelled $A, B, C, 1$ and 2 are given below. Among them, statements $A, B$ and $C$ are in the correct order. Identify the positions of 1 and 2 so as to make a logically coherent paragraph.
A) It is disconcerting to see that, in recent times, serious questions are being raised about India's secularism.
B) It is for the first time since Independence that the Hindu Rashtra ideology is being talked about so openly, defiantly and persistently.
C) The Supreme Court itself has expressed apprehensions in this regard

1. India's survival as a multireligious, multilingual, multiracial, multicultural society will depend on how successful it is in working its secularism.
2. It opines that the country with the legacy of a successful secular fabric, faces the perils of losing one of her much-cherished credentials.
A. 21 ABC
B. 12 ABC
C. 2 ABC 1
D. ABC 12
E. 1 ABC 2
3. Direction: Five statements labelled $A, B, C, 1$ and 2 are given below. Among them, statements $A, B$ and $C$ are in the correct order. Identify the positions of 1 and 2 so as to make a logically coherent paragraph.
A) This has led to a growth of regionalism in the country where every region thinks it in terms of the number of regional political parties in different parts of the country.
B) These regional parties have a special appeal for the peoples of their areas.
C) They are thus able to send a sizeable chunk of their representatives to the Lok Sabha and the Rajya Sabha.
1) India is a land full of diversities and the people in different states of the country have their own ways of life, their languages and political views.
2) Every state contributes a limited number of representatives to the Lok Sabha.
A. 21 ABC
B. 12 ABC
C. 2 ABC 1
D. ABC 12
E. 1 ABC 2
80. Direction: Five statements labelled $A, B, C, 1$ and 2 are given below. Among them, statements $A, B$ and $C$ are in the correct order. Identify the positions of 1 and 2 so as to make a logically coherent paragraph.
A) An area drained by a river and its tributaries is called a drainage basin.
B) The drainage system is related to a number of factors like slope of land, geological structure, amount and velocity of water.
C) A river through its drainage system performs several tasks.
1) The drainage system refers to the system of flow of surface water mainly through rivers. 2) These are excess water removal from a particular area, transportation of sediments from one place to other, providing natural source for irrigation and maintaining the water table of a region.
A. ABC 21
B. 12 ABC
C. 2 ABC 1
D. ABC 12
E. 1ABC2
81. Direction: Five statements labelled $A, B, C, 1$ and 2 are given below. Among them, statements $A, B$ and $C$ are in the correct order. Identify the positions of 1 and 2 so as to make a logically coherent paragraph.
(A) The Swedish Academy, which awards the Nobel prize for literature, is meant to be a source of stability: Members are appointed for life.
(B) But it's been melting down rather spectacularly and publicly over the last year.
(C) Accusations of sexual harassment by more than a dozen women against photographer Jean-Claude Arnault, the husband of academy member Katarina Frostenson, have toppled the institution and revealed it to be riddled with cronyism and abuses of power.
(1) It's a fact so embarrassing that the Nobel prize in literature will not even be given out this year as the Academy attempts to salvage its prestige.
(2) Of the 18 chairs in the academy, there are only 10 remaining with active members-in large part because of departures in the wake of the scandal.
A. 21 ABC
B. 1 ABC 2
C. 2 ABC 1
D. ABC 12
E. ABC21
82. Direction: Select the phrase/connector from the given three options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences.
There is a United Nations meeting in Geneva next week on autonomous weapons. More than 20 countries have already called for a total ban on killer robots.
I. The boycott comes ahead of
II. Even though the use of AI in militaries around the world has sparked fears, III. While support builds for an outright ban on autonomous weapons,
Pick out the option which when used to start a sentence combines both the above sentences in one.
A. Both I and II
B. Both I and III
C. Both II and III
D. Only II
$E$. None of these
83. Direction: Select the phrase/connector from the given three options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences.
You may already know the professional teeth whitening cost can be high - much more expensive than at-home alternatives. In-office teeth whitening is one of the safest and most effective whitening methods.
I. If you've considered whitening your teeth,
II. Teeth whitening doesn't have to be expensive while
III. If you're looking for an alternative to professional bleaching in a dental office as Pick out the option which when used to start a sentence combines both the above sentences in one.
A. Only I
B. Only II
C. Only III
D. All of the above
E. None of these
84. Direction: Select the phrase/connector from the given three options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences.
A proposed resolution of impeachment of the Chief Justice of India is a matter of grave concern. It brings to the fore issues that directly impinge on the independence of the judiciary.
I. The euphoria in some circles over
II. There must be some safeguards before
III. Since a fearless judge is the bedrock of an independent judiciary,
Pick out the option which when used to start a sentence combines both the above sentences in one.
A. Both I and II
B. Both II and III
C. Both I and III
D. Only I
E. All of the above
85. Direction: Select the phrase/connector from the given three options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences. Pick out the option which when used to start a sentence combines both the above sentences in one.

The size of contingency funds at the disposal of the IMF to lend to countries in need of help, as well as the power of individual countries to influence lending decisions and tap into the funds themselves is determined by quotas. Though developing countries hold less than half the overall quota at the moment, with their rapidly increasing economic heft they have demanded a greater share.
I. Quotas determine
II. Economy determine
III. Development of a country determine
A. Option I
B. Option II
C. Option III
D. Both II and III
E. Both I and II

Direction (86-95): Read the given passage carefully and answer the questions that follow.
The need for more effective information security practices is increasingly evident with each security breach reported in the media. When adopting new technologies like cloud computing, virtualization, or IT outsourcing, enterprises are facing imminent security threats and must adjust their security processes, policies, and architectures accordingly. Among the many options available to help customers to achieve this goal, organizations should consider the value of ethical hacking services, which are rapidly gaining attention as an essential security practice that should be performed on a regular basis. "The elevated threat landscape therefore, urgently dictates the need for a comprehensive, real-world assessment of an organization's security posture. This assessment is a first vital step to enact effective security policies, procedures, and infrastructure that will prevent or mitigate the effects of a data breach." Ethical hacking offers an objective analysis of an organization's information security posture for organizations of any level of security expertise. The ethical hacking organization has no knowledge of the company's systems other than what they can gather. Hackers must scan for weaknesses, test entry points, priorities targets, and develop a strategy that best leverages their resources. The objectiveness of this kind of security assessment has a direct impact on the value of the whole evaluation. However, businesses
still remain skeptical about the risk inherent with inviting a third-party to attempt to access sensitive systems and resources. To reduce this fear, businesses should hire only ethical hacking companies that implement practices to ensure privacy and confidentiality. They should also be accredited by international trade organizations such as the EC-Council and ISC. Ethical hacking and ethical hacker are terms used to describe hacking performed by a company or individual to help identify potential threats on a computer or network. An ethical hacker attempts to bypass system security and search for any weak points that could be exploited by malicious hackers. This information is then used by the organization to improve the system security, in an effort to minimize or eliminate any potential attacks. The term "ethical hacker" has received criticism at times from people who say that there is no such thing as an "ethical" hacker. Hacking is hacking, no matter how you look at it and those who do the hacking are commonly referred to as computer criminals or cyber criminals. However, the work that ethical hackers do for organizations has helped improve system security and can be said to be quite effective and successful. Individuals interested in becoming an ethical hacker can work towards a certification to become a Certified Ethical Hacker, or CEH. In a search for ways to reduce the fear and worry of being hacked, organizations have come to the realization that an effective way to evaluate security threats is to have independent security exerts attempt to hack into their computer systems. In the case of computer security, these tiger teams or ethical hackers would use the same tools and techniques as an attacker, but rather than damage the system or steal information, they would evaluate the system security and report the vulnerabilities they found and provide instructions for how to remedy them. From the early days of computers, ethical hacking has been used as an evaluation of system security. Many early ethical hacks were conducted by the United States Military to carry out security evaluations on their operating systems to determine whether they should employ a two-level (secret/top secret) classification system. However, with the
growth of computing and networking in the early 1990's, computer and network vulnerability studies began to appear outside of the military organization. In December of 1993, two computer security researchers, Dan Farmer from Elemental Security and Wietse Venema from IBM, suggested that the techniques used by hackers can be used to assess the security of an information system. They wrote a report that was shared publicly on the Internet which described how they were able to gather enough information to compromise security and they provided several examples of how this information could be gathered and exploited to gain control of a system, and how such an attack could be prevented. An ethical hacker should set simple goals, such as finding unauthorized wireless access points or obtaining information from a wired network system. In any case, the goals should be articulate and well communicated. Written permission is required and should state that an ethical hacker is authorized to perform a test according to the plan. It should also say that the organization will provide legal and organizational support in case criminally charges or lawsuits arise. This is conditional on staying within the bounds of the approved plan. An ethical hacker is bound to confidentiality and non-disclosure of information they may uncover. Ethical hackers must also be compliant with their organization's governance and local laws. An ethical hack must not be performed when the company policy or the law for that matter, explicitly forbids it.
Source: https://www.varanoid.com/the-importance-of-ethical-hacking/
https://crescentke.com/2017/02/22/what-is-ethical-hacking-and-is-it-important/
86. What is the main idea of the passage?
A. Cyber threats are increasing with time.
B. Technology needs to be controlled in certain areas to provide more security.
C. Growing importance and methods of ethical hacking
D. Laws related to ethical hacking
E. Cyber crimes and the best way to handle them
87. Direction: Read the given passage carefully and answer the questions that follow.

The need for more effective information security practices is increasingly evident with each security breach reported in the media. When adopting new technologies like cloud computing, virtualization, or IT outsourcing, enterprises are facing imminent security threats and must adjust their security processes, policies, and architectures accordingly. Among the many options available to help customers to achieve this goal, organizations should consider the value of ethical hacking services, which are rapidly gaining attention as an essential security practice that should be performed on a regular basis."The elevated threat landscape therefore, urgently dictates the need for a comprehensive, real-world assessment of an organization's security posture. This assessment is a first vital step to enact effective security policies, procedures, and infrastructure that will prevent or mitigate the effects of a data breach." Ethical hacking offers an objective analysis of an organization's information security posture for organizations of any level of security expertise. The ethical hacking organization has no knowledge of the company's systems other than what they can gather. Hackers must scan for weaknesses, test entry points, priorities targets, and develop a strategy that best leverages their resources. The objectiveness of this kind of security assessment has a direct impact on the value of the whole evaluation. However, businesses still remain skeptical about the risk inherent with inviting a third-party to attempt to access sensitive systems and resources. To reduce this fear, businesses should hire only ethical hacking companies that implement practices to ensure privacy and confidentiality. They should also be accredited by international trade organizations such as the EC-Council and ISC. Ethical hacking and ethical hacker are terms used to describe hacking performed by a company or individual to help identify potential threats on a computer or network. An ethical hacker attempts to bypass system security and search for any weak points that could be exploited by malicious hackers. This information is then used by the organization to improve the system security, in an effort to minimize or eliminate any potential attacks.

The term "ethical hacker" has received criticism at times from people who say that there is no such thing as an "ethical" hacker. Hacking is hacking, no matter how you look at it and those who do the hacking are commonly referred to as computer criminals or cyber criminals. However, the work that ethical hackers do for organizations has helped improve system security and can be said to be quite effective and successful. Individuals interested in becoming an ethical hacker can work towards a certification to become a Certified Ethical Hacker, or CEH. In a search for ways to reduce the fear and worry of being hacked, organizations have come to the realization that an effective way to evaluate security threats is to have independent security exerts attempt to hack into their computer systems. In the case of computer security, these tiger teams or ethical hackers would use the same tools and techniques as an attacker, but rather than damage the system or steal information, they would evaluate the system security and report the vulnerabilities they found and provide instructions for how to remedy them. From the early days of computers, ethical hacking has been used as an evaluation of system security. Many early ethical hacks were conducted by the United States Military to carry out security evaluations on their operating systems to determine whether they should employ a two-level (secret/top secret) classification system. However, with the growth of computing and networking in the early 1990's, computer and network vulnerability studies began to appear outside of the military organization. In December of 1993, two computer security researchers, Dan Farmer from Elemental Security and Wietse Venema from IBM, suggested that the techniques used by hackers can be used to assess the security of an information system. They wrote a report that was shared publicly on the Internet which described how they were able to gather enough information to compromise security and they provided several examples of how this information could be gathered and exploited to gain control of a system, and how such an attack could be prevented. An ethical hacker should set simple goals, such as finding unauthorized wireless access points or obtaining
information from a wired network system. In any case, the goals should be articulate and well communicated. Written permission is required and should state that an ethical hacker is authorized to perform a test according to the plan. It should also say that the organization will provide legal and organizational support in case criminally charges or lawsuits arise. This is conditional on staying within the bounds of the approved plan. An ethical hacker is bound to confidentiality and non-disclosure of information they may uncover. Ethical hackers must also be compliant with their organization's governance and local laws. An ethical hack must not be performed when the company policy or the law for that matter, explicitly forbids it.
Source: https://www.varanoid.com/the-importance-of-ethical-hacking/
https://crescentke.com/2017/02/22/what-is-ethical-hacking-and-is-it-important/
87. What is the most ideal way of working for an ethical hacker?
A. Thinking like a malicious hacker and breaking into systems.
B. An ideal ethical hacker must regularly check the security of an organization.
C. An ideal ethical hacker must give proper importance to privacy and confidentiality.
D. An ethical hacker must always maintain the border line that one should not cross and this is what distinguishes an ethical hacker from a hacker.
E. Ethical hackers must work only when organizations have asked them to help them out.
88. Direction: Read the given passage carefully and answer the questions that follow.
The need for more effective information security practices is increasingly evident with each security breach reported in the media. When adopting new technologies like cloud computing, virtualization, or IT outsourcing, enterprises are facing imminent security threats and must adjust their security processes, policies, and architectures accordingly. Among the many options available to help customers to achieve this goal, organizations should consider the value of ethical hacking services, which are rapidly gaining attention as an essential security practice that should be performed on a
regular basis."The elevated threat landscape therefore, urgently dictates the need for a comprehensive, real-world assessment of an organization's security posture. This assessment is a first vital step to enact effective security policies, procedures, and infrastructure that will prevent or mitigate the effects of a data breach." Ethical hacking offers an objective analysis of an organization's information security posture for organizations of any level of security expertise. The ethical hacking organization has no knowledge of the company's systems other than what they can gather. Hackers must scan for weaknesses, test entry points, priorities targets, and develop a strategy that best leverages their resources. The objectiveness of this kind of security assessment has a direct impact on the value of the whole evaluation. However, businesses still remain skeptical about the risk inherent with inviting a third-party to attempt to access sensitive systems and resources. To reduce this fear, businesses should hire only ethical hacking companies that implement practices to ensure privacy and confidentiality. They should also be accredited by international trade organizations such as the EC-Council and ISC. Ethical hacking and ethical hacker are terms used to describe hacking performed by a company or individual to help identify potential threats on a computer or network. An ethical hacker attempts to bypass system security and search for any weak points that could be exploited by malicious hackers. This information is then used by the organization to improve the system security, in an effort to minimize or eliminate any potential attacks. The term "ethical hacker" has received criticism at times from people who say that there is no such thing as an "ethical" hacker. Hacking is hacking, no matter how you look at it and those who do the hacking are commonly referred to as computer criminals or cyber criminals. However, the work that ethical hackers do for organizations has helped improve system security and can be said to be quite effective and successful. Individuals interested in becoming an ethical hacker can work towards a certification to become a Certified Ethical Hacker, or CEH. In a search for ways to reduce the fear and
worry of being hacked, organizations have come to the realization that an effective way to evaluate security threats is to have independent security exerts attempt to hack into their computer systems. In the case of computer security, these tiger teams or ethical hackers would use the same tools and techniques as an attacker, but rather than damage the system or steal information, they would evaluate the system security and report the vulnerabilities they found and provide instructions for how to remedy them. From the early days of computers, ethical hacking has been used as an evaluation of system security. Many early ethical hacks were conducted by the United States Military to carry out security evaluations on their operating systems to determine whether they should employ a two-level (secret/top secret) classification system. However, with the growth of computing and networking in the early 1990's, computer and network vulnerability studies began to appear outside of the military organization. In December of 1993, two computer security researchers, Dan Farmer from Elemental Security and Wietse Venema from IBM, suggested that the techniques used by hackers can be used to assess the security of an information system. They wrote a report that was shared publicly on the Internet which described how they were able to gather enough information to compromise security and they provided several examples of how this information could be gathered and exploited to gain control of a system, and how such an attack could be prevented. An ethical hacker should set simple goals, such as finding unauthorized wireless access points or obtaining information from a wired network system. In any case, the goals should be articulate and well communicated. Written permission is required and should state that an ethical hacker is authorized to perform a test according to the plan. It should also say that the organization will provide legal and organizational support in case criminally charges or lawsuits arise. This is conditional on staying within the bounds of the approved plan. An ethical hacker is bound to confidentiality and non-disclosure of information they may uncover. Ethical hackers must also be compliant with their
organization's governance and local laws. An ethical hack must not be performed when the company policy or the law for that matter, explicitly forbids it.
Source: https://www.varanoid.com/the-importance-of-ethical-hacking/
https://crescentke.com/2017/02/22/what-is-ethical-hacking-and-is-it-important/
88. Which of the following can be inferred to be a major reason of increasing the problem of hacking?
A. Lack of ethics among people
B. Increased use and accessibility of technology
C. Lack of proper laws in the country
D. Excessive unauthorized access of some web pages
E. Lack of planning and privacy among people
89. Direction: Read the given passage carefully and answer the questions that follow.
The need for more effective information security practices is increasingly evident with each security breach reported in the media. When adopting new technologies like cloud computing, virtualization, or IT outsourcing, enterprises are facing imminent security threats and must adjust their security processes, policies, and architectures accordingly. Among the many options available to help customers to achieve this goal, organizations should consider the value of ethical hacking services, which are rapidly gaining attention as an essential security practice that should be performed on a regular basis."The elevated threat landscape therefore, urgently dictates the need for a comprehensive, real-world assessment of an organization's security posture. This assessment is a first vital step to enact effective security policies, procedures, and infrastructure that will prevent or mitigate the effects of a data breach." Ethical hacking offers an objective analysis of an organization's information security posture for organizations of any level of security expertise. The ethical hacking organization has no knowledge of the company's systems other than what they can gather. Hackers must scan for weaknesses, test entry points, priorities targets, and develop a strategy that best leverages their resources. The objectiveness of this kind of security assessment has a direct impact on the value
of the whole evaluation. However, businesses still remain skeptical about the risk inherent with inviting a third-party to attempt to access sensitive systems and resources. To reduce this fear, businesses should hire only ethical hacking companies that implement practices to ensure privacy and confidentiality. They should also be accredited by international trade organizations such as the EC-Council and ISC. Ethical hacking and ethical hacker are terms used to describe hacking performed by a company or individual to help identify potential threats on a computer or network. An ethical hacker attempts to bypass system security and search for any weak points that could be exploited by malicious hackers. This information is then used by the organization to improve the system security, in an effort to minimize or eliminate any potential attacks. The term "ethical hacker" has received criticism at times from people who say that there is no such thing as an "ethical" hacker. Hacking is hacking, no matter how you look at it and those who do the hacking are commonly referred to as computer criminals or cyber criminals. However, the work that ethical hackers do for organizations has helped improve system security and can be said to be quite effective and successful. Individuals interested in becoming an ethical hacker can work towards a certification to become a Certified Ethical Hacker, or CEH. In a search for ways to reduce the fear and worry of being hacked, organizations have come to the realization that an effective way to evaluate security threats is to have independent security exerts attempt to hack into their computer systems. In the case of computer security, these tiger teams or ethical hackers would use the same tools and techniques as an attacker, but rather than damage the system or steal information, they would evaluate the system security and report the vulnerabilities they found and provide instructions for how to remedy them. From the early days of computers, ethical hacking has been used as an evaluation of system security. Many early ethical hacks were conducted by the United States Military to carry out security evaluations on their operating systems to determine whether they should employ a two-level (secret/top secret)
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Source: https://www.varanoid.com/the-importance-of-ethical-hacking/ https://crescentke.com/2017/02/22/what-is-ethical-hacking-and-is-it-important/
89. Which of the following is the most important step in order to ensure that ethical hackers are not being a problem for the organization?
A. Certification to specialized people.
B. Security of the organization should be kept the topmost priority.
C. Computing and networking should be enhanced.
D. Completely following the laws.
E. Authorized access by ethical hackers.
90. What is the major difference between hackers and ethical hackers?
A. Hackers are not hired by organizations whereas the ethical hackers are hired by organizations for better security.
B. Hackers are the unprofessional, uncertified people whereas the ethical hackers are the professional certified ones.
C. Hackers have some malicious purpose whereas the ethical hackers report the weaknesses and vulnerabilities to the organization on finding any.
D. Hackers use specific techniques whereas the ethical hackers use a common set of techniques that had been popular for some time.
E. Hackers do not work for any specific organization whereas the ethical ones work for specific organizations.
91. Who among the following has won the Nobel Prize in Economic Sciences for the year 2017?
A. Daniel Kahneman
B. Richard H. Thaler
C. Friedrich Hayek D. Amartya Sen
E. None of these
92. What is the capital of Austria?
A. Addis Ababa
B. Helsinki
C. Vienna
D. Seoul
E. Nairobi
93. Vice President M. Venkaiah Naidu has inaugurated the third International Conference on Yoga in New Delhi. What was the theme for the year 2017?
A. Yoga for Wellness
B. Connect the Youth
C. Yoga for Naturopathy for Holistic Health
D. Yoga for Lifestyle Diseases
E. None of these
94. FATF stands for $\qquad$
A. Financial Action Task Force
B. Financial Asset Task Force
C. Financial Asset Trade Force
D. Financial Action Trade Force
E. None of the Above
95. Many times the word "CAGR" comes in news. What does this word stand for-?
A. Current avoided growth rate
B. Compound average growth rate
C. Compound annual growth rate
D. Compound accelerated growth rate
E. None of the above
96. Sanjeev Stalin is associated with which sports?
A. Cricket
B. Swimming
C. Kabaddi
D. Shooting
E. Football
97. 'Hand in Hand' is a joint military exercise between India and $\qquad$ .
A. USA
B. Japan
C. Russia
D. China
E. France
98. What does the letter ' $L^{\prime}$ ' stands for in the term LAF commonly used in financial/economic news?
A. Liquidity
B. Least
C. Liabilities
D. Long
E. Liquid
99. Money lent for one day is called:
A. Call money
B. Notice money
C. Term Money
D. All of the above
E. None of these
100. Interest Risk is which type of risk:
A. Static risk
B. Liability Pure Risk
C. Dynamic risk
D. Diversifiable risk
E. Market Risk
101. "Ukai" dam is in which state?
A. Maharashtra
B. Gujarat
C. Uttar Pradesh
D. Bihar
E. Karnataka
102. Where is the headquarter of UCO Bank located?
A. Mumbai
B. New Delhi
C. Kolkata
D. Chennai
E. Bengaluru
103. What does ' $\mathrm{A}^{\prime}$ stand for in ' NACH '?
A. Application
B. Arbitrage
C. Automated
D. Adjustment
E. Assets
104. Bharatiya Reserve Bank Note Mudran Private Limited (BRBNMPL) was established by Reserve Bank of India (RBI) as its wholly owned subsidiary on 3rd February 1995. BRBNMPL manages 2 Presses one at Mysore and the other in_.
A. Bengaluru
B. Madurai
C. Salboni
D. Kochi
E. Durgapur
105. What does 'P' stands for in 'MPC'?
A. Policy
B. Public
C. Partnership
D. Payment
E. None of these
106. Which body introduced Kisan Credit Card?
A. NABARD
B. KCC
C. GCC
D. RBI
E. None of these
107. The Working and operations of NBFCs are regulated by $\qquad$ _.
A. SEBI
B. RBI
C. Finance Ministry, GOI
D. IRDA
E. None of the above
108. What is the full form of CASA?
A. Capital Account Saving Account
B. Current Account Saving Account
C. Capital Adequacy Sovereign Account
D. Current Account Soviet Account
E. None of these
109. Which city has hosted the 2017 Shanghai Cooperation Organisation (SCO) summit?
A. Dushanbe
B. Astana
C. Beijing
D. Tashkent
E. None of the above
110. Who is the winner of China Open Men's Single title 2017?
A. Kei Nishikori
B. Andy Murray
C. Novak Djokovicry
D. Rafael Nadal
E. None of these
111. Currently who is the vice chairman of NITI Aayog?
A. Rajiv Kumar
B. Vinod Paul
C. Arvind Panagaria
D. Sanjeev Kumar
E. Sudeep Verma
112. What does the term 'ELSS' stand for?
A. Entry Load Shares Scheme
B. Entry Load Starting Shares
C. Equity Linked Savings Scheme
D. Equity Linked Shares Sold
E. Employee Level Salary Scheme
113. Which one of the following is a Credit Card Association?
A. India Card
B. Master Card
C. SBI Card
D. Citi Bank Cards
E. BOB Card
114. The NISM is a public trust established by $\qquad$ .
A. RBI
B. SEBI
C. NABARD
D. IRDAI
E. None of these
115. The Benghazi port is situated in which country
A. IRAN
B. IRAQ
C. Libya
D. Qatar
E. Other than given options
116. 'GDR' is a bank certificate issued in more than one country for shares in a foreign company. What does 'R' stands for in 'GDR'?
A. Ratio
B. Receipt
C. Revenue
D. Risk
E. Reserve
117. Varishtha Pension Bima Yojana is implemented through $\qquad$ .
A. Life Insurance corporation of India
B. New India Assurance
C. SBI Life Insurance Company
D. PNB MetLife India Insurance Company
E. Employees Provident Fund Organization
118. What does 'M' stands for in 'SFM'?
A. Mobile
B. Money
C. Magnetic
D. Messaging
E. Module
119. Where is the headquarter of Multilateral Investment Guarantee Agency (MIGA) located?
A. New York
B. Geneva
C. Brussels
D. Rome
E. Washington D.C.
120. The government has notified raising the threshold limit of PF withdrawal for deduction of tax (TD S) from existing Rs 30,000 to
A. Rs 40,000
B. Rs 50,000
C. Rs 80,000
D. Rs 1 lakh
E. Rs 2 lakh
121. What is the name of the guarantee scheme under PRADHAN MANTRI MUDRA YOJANA (PMMY)?
A. CGFMU
B. CGTMSE
C. CGMSE
D. CGMTF
E. NCGTC
122. What does 'CC' stand for in 'NAFCC'?
A. Climate Change
B. Cash Credit
C. Closed Capital
D. Complementary currency
E. Credit Card
123. Amortization refers to writing off :
A. Depleting assets
B. Wasting assets
C. Intangible assets
D. Fictitious assets
E. None of these
124. B.D Mishra is the governor of which state?
A. Tripura
B. Arunachal Pradesh
C. Haryana
D. Nagaland
E. Uttar Pradesh
125. The Balphakram National Park is situated at which state of India?
A. Meghalaya
B. Himachal Pradesh
C. Jharkhand
D. Punjab
E. Odisha
126. 'Achanakmar Wildlife Sanctuary' is located in which state?
A. Jharkhand
B. Chhattisgarh
C. Bihar
D. Madhya Pradesh
E. Odisha
127. What is the constituency of Union Agriculture Minister Radha Mohan Singh?
A. Hajipur, Bihar
B. Patna Sahib, Bihar
C. Purvi Champaran, Bihar
D. Vaishali, Bihar
E. Darbhanga, Bihar
128. The JRD Tata sports memorial situated in which city?
A. Jamshedpur
B. Bhopal
C. Kolkata
D. Patna
E. Lucknow
129. The Dhirubhai Ambani Solar Park is located in which state?
A. Rajasthan
B. Gujarat
C. Tamil Nadu
D. Maharashtra
E. Uttar Pradesh
130. Indian Institute of Rice Research has its national headquarters in $\qquad$ _.
A. Hyderabad
B. Kerala
C. Kashmir
D. Assam
E. None of these
131. Consider the following statements about cryptocurrencies and identify the incorrect statement:
A. A cryptocurrency is a basically a digital asset
B. It uses cryptography to ensure the security of transactions
C. This is different from cash in that cryptocurrencies have no physical form.
D. There is a cryptocurrency central bank that issues new currency.
132. What is meant by "Underwriting" the term frequently used in financial sector?
A. Under valuation of the assets
B. The act of taking on a risk for a fee
C. Giving a guarantee that a loan will not become a bad loan
D. The act of permission to float an IPO
E. None of the above
133. Lekh Tandon who recently passed away is associated with which field?
A. Economist
B. Film
C. Sports
D. Writer
E. Politician
134. Asian Development bank Board of governors $50^{\text {th }}$ meeting will be hosted by which country
A. India
B. China
C. Phillipines
D. Japan
E. Singapore
135. Which state became the first in the country to start adjournment online?
A. Tamil Nadu
B. Bihar
C. Kerala
D. Gujarat
E. Rajasthan
136. Union Govt. has constituted a committee for continuously monitor the solutions to air pollution. The committee has been headed by
A. Harsh Vardhan Committee
B. C K Mishra Committee
C. Surya Prakash Committee
D. Rajiv Kumar Committee
E. None of these
137. Which of the following risks are associated with the calculation of Capital to Risk (weighted) Assets Ratio (CRAR)?
I. Operational Risk
II. Market Risk
III. Credit Risk

Select the correct option from the given option:
A. Only I
B. Only I \& II
C. Only III
D. Only I \& III
E. All I, II \& III
138. Which of the following Credit Rating agency has launched an index to measure the performance of FPI's in fixed markets?
A. CRISIL
B. ICRA
C. ONICRA
D. CIBIL
E. SMERA
139. According to the government, after the abolition of the Foreign Investment Promotion Board (FIPB), now ministries will have to
decide on FDI proposals within how many days of the application and any rejection?
A. 30
B. 20
C. 90
D. 15
E. 60
140. Which bank became the third bank by the Reserve Bank of India into Domestic Systemically Important Banks (D-SIBs) list?
A. ICICI Bank
B. SBI
C. HDFC Bank
D. Axis Bank
E. Bank of Baroda
141. Directions: Each question below is followed by two statements $I$ and $I I$. You have to determine whether the data given in the statement is sufficient for answering the question. You should use the data and your knowledge of Mathematics to choose the best possible answer.
Determine if ' $Z$ ' is a positive integer or not?
i. $Z^{7}>Z$
ii. $Z^{8}>Z$
A. The data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question
B. The data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.
C. The data either in Statement I or in Statement II alone are sufficient to answer the question.
D. The data in both Statements I and II together are necessary to answer the question.
E. The data even in both Statements I and II together are not sufficient to answer the question.
142.

## ?

i. Sum of inverse of $a$ and $b$ is equals to $6 / 5$
ii. Multiplication 'a' and ' $b$ ' is equals to 5
A. The data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question
B. The data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.
C. The data either in Statement I or in Statement II alone are sufficient to answer the question.
D. The data in both Statements I and II together are necessary to answer the question.
E. The data even in both Statements I and II together are not sufficient to answer the question.
143. Find the number of days taken by 14 men to complete a piece of work?
i. If the same work is done by 18 women in 24 days.
ii. If the same work is done by 28 children in 56 days.
A. The data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question
B. The data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.
C. The data either in Statement I or in Statement II alone are sufficient to answer the question.
D. The data in both Statements I and II together are necessary to answer the question.
E. The data even in both Statements I and II together are not sufficient to answer the question.
144. If one ball is drawn at random from a urn containing 25 balls, find the probability of drawing a red ball,
i. The urn contains 10 yellow and 8 green balls.
ii. The urn contains all colored balls.
A. The data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question
B. The data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.
C. The data either in Statement I or in Statement II alone are sufficient to answer the question.
D. The data in both Statements I and II together are necessary to answer the question.
E. The data even in both Statements I and II together are not sufficient to answer the question.
145. Is 'w' an integer?
i. 3 w is an odd number.
ii. $2 w$ is an even number.
A. The data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question
B. The data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.
C. The data either in Statement I or in Statement II alone are sufficient to answer the question.
D. The data in both Statements I and II together are necessary to answer the question.
E. The data even in both Statements I and II together are not sufficient to answer the question.
Directions (146-150): Data regarding number of boys \& girls in both the colleges is as follows: -
Average no. of Girls in St. Xavier College and Vijaya College is 210 \& total number of boys in both the college is 810 . Number of Girls is $2 / 3$ of boys \& number of Girls is $2 / 5$ of number of Boys in St. Xavier College and in Vijaya College respectively.
146. Find the percentage of the number of girls in Vijay College with respect to the number of girls in St. Xavier College.
A. $50 \%$
B. $62.5 \%$
C. $75 \%$
D. $6623 \%$
E. 87.5\%
147. Find the total number of boys in $X$ College, if the average number of girls in St. Xavier College and ' X ' college is 320 . Also the total number of students in ' X ' college is $25 \%$ more than total number of students in St. Xavier college.
A. 450
B. 400
C. 375
D. 350
E. 300
148. Find the difference between the total numbers of students in Vijaya College to the total number of students in St. Xavier College.
A. 15
B. 20
C. 25
D. 30
E. 35
149. Ratio between numbers of boys in Vijaya College to number of boys in ' $Y$ ' College is 9: 13 and number of girls in ' $Y$ ' College is 20\% less than that in Vijaya College. Find the total number of students in ' $Y$ ' college?
A. 784
B. 794
C. 789
D. 798
E. 778
150. Number of boys in Vijaya College is what percent more than number of boys in St. Xavier College?
A. $32.5 \%$
B. $20 \%$
C. $50 \%$
D. $37.5 \%$
E. $25 \%$
151. 15 men can do a piece of work in ' $X$ ' days. 21 women can do a piece of work in ' $X-4^{\prime}$ days. 35 men can do a piece of work in ' $Y$ ' days and 63 women can do a piece of work in 'Y-4' days. Find the value of ' $X$ '?
A. 14
B. 18
C. 28
D. 24
E. 32
152. Cost price of article $A$ is double then that of article B and shopkeeper mark up both the article $20 \%$ more than the cost price. If at the time of sale shopkeeper gave Rs. 9 discount and earn $17 \%$ profit on total. Find the cost price of article A
A. 100
B. 200
C. 150
D. 250
E. 50
153. A committee of 5 people is to be formed among 4 girls and 5 boys. What is the probability that the committee will have less number of boys than girls
A. $3 / 14$
B. $7 / 13$
C. $3 / 5$
D. $5 / 14$
E. None of these
154. A train takes 18 seconds to cross a platform while running at $25 \mathrm{~km} / \mathrm{hr}$ and it takes 12 seconds to pass a men walking at $5 \mathrm{~km} / \mathrm{hr}$ in the opposite direction. Length of train in how much more than length of the platform (in m)
A. 50
B. 75
C. 100
D. 125
E. 150
155. Satish, Bhavya and Abhishek entered into a partnership with Rs 15000, Rs 18000 and Rs. 24000 respectively. Abhishek joined them after ' $x$ ' months and Bhavya left ' $x$ ' month before the end of year. If they share profit at the end of the year. If they share profit in the ratio 10: 9: 12 . Find the value of ' $x$ '.
A. 4 month
B. 6 month
C. 9 month
D. 3 month
E. 8 month
156. The present age of Sakshi is $5 / 4$ times her age at the time of her marriage and her son is $1 / 5$ of her age. Sakshi married 6 years ago. Find the ratio of Sakshi age to her son's age after 10 years?
A. $3: 1$
B. 5: 2
C. 5: 3
D. 3: 2
E. 4: 1
157. Rs 18000 is invested in scheme ' $A$ ' by ram which offers $15 \%$ p.a. at simple interest and Rs 15000 in scheme ' $\mathrm{B}^{\prime}$ which offers $18 \%$ p.a at compound interest. Find the difference between the interests earn from these two schemes after two years?
A. 468
B. 396
C. 456
D. 486
E. 482
158. An alloy of copper and aluminum has $40 \%$ copper. Another alloy of Copper and Zinc has Copper and Zinc in the ratio 2: 7. These two alloys are mixed in ratio 5:3. Quantity of aluminum is what percent more/less than the quantity of copper in final alloy.
A.
B. $11 \frac{1}{3} \%$
C. $12 \%$
D. $13 \%$
E. 12.5\%
159. Two boats, travelling at $5 \mathrm{Km} / \mathrm{h}$ and $10 \mathrm{Km} / \mathrm{h}$ respectively, head directly towards each other. They are now at a distance of 20 km from each other. How far apart are they (in Kms ) one minute before they collide?
A. $1 / 12$
B. $1 / 6$
C. $1 / 4$
D. $1 / 3$
E. None of these
160. Find the total surface area of the cylinder (in $\mathbf{m 2}$ ), if the volume and curved surface area of a cylinder 616 m 3 and 352 m 2 respectively.
A. 429
B. 419
C. 435
D. 421
E. 417
161. The respective ratio of zinc and copper in the first and second alloy are 1: 2 and 2: 3 respectively. In what ratio should these two alloys be mixed to form a new alloy in which the two elements are in ratio 5: 8?
A. 7: 11
B. 3: 10
C. 5: 11
D. 9: 11
E. None of these
162. First group consists of 40 men; working 8 hours a day can do a piece of work in 15 days. Find the number of days in which second group of 60 men working 4 hours a day can do twice the work. Assume that 3 men of the first group do as much work in 2 hour as 4 men of the second group do in 3 hrs.
A. 60 days
B. 40 days
C. 80 days
D. 70 days
E. 75 days
163. If a boat takes same time to travel 75 km downstream and 60 km in upstream. Then find speed of boat in downstream is what percent of the speed of boat in still water.
A. $111 \frac{1}{9} \%$
B. $112 \frac{1}{2} \%$
C. $113 \%$
D. $140 \%$
E. 110\%
164. There are two trains. The first train crosses a pole in 24 sec , The second train of length that of the first train crosses a platform in 30 sec but the speed of the second train is $20 \%$ more than the first train. Find out the ratio of length of train and length of platform.
A. 2: 1
B. 3: 1
C. 2: 3
D. 3: 2
E. 1: 2
165. Two pipes A and B can fill the tank in 36 minutes. If both the pipes work together for 30 minutes and then the pipe B was closed, the tank is filled in 40 minutes. Find the time taken by the pipe $B$ to fill the tank?
A. 45 minutes
B. 60 minutes
C. 75 minutes
D. 90 minutes
E. 85 minutes
166. Directions: What approximate value should come in place of question mark (?) in the following questions?
$(421.98+478.21) \div ?=60.029$
A. 6
B. 8
C. 9
D. 12
E. 15
167. $\sqrt{ } 256 \times 19.17+8.15 \times 13.78=$ ?
A. 406
B. 450
C. 432
D. 416
E. 392
168. $16.217 \times 23.88+$ ? $=18.98 \times 32.12$
A. 216
B. 224
C. 200
D. 228
E. 250
169. $27.897 \times 16.21=? \times 13.98+69.87$
A. 15
B. 22
C. 27
D. 32
E. 39
170. $272.112+189.98+84.101=? \times 12.89 \times$ 6.11
A. 5
B. 7
C. 9
D. 11
E. 13

Directions (171-175): What will come in the place of the question mark (?) in the following number series?
171. 117.5, 117, 119, 111, 143, ?
A. 9
B. 12
C. 15
D. 18
E. 21
172. $15,12,31,148$, ?
A. 1039
B. 1011
C. 1012
D. 1024
E. 1027
173. 1, 13, 83, 419, 1679, ?
A. 5029
B. 5039
C. 5019
D. 5049
E. 5059
174. $12,25,48,99,194,393$, ?
A. 780
B. 786
C. 792
D. 783
E. 789
175. 3, 11, 31, 69, 131, ?
A. 215
B. 217
C. 221
D. 223
E. 213

Directions (176-180): Table given below shows number of tickets sold in six different theatres, number of tickets sold to children and remaining ticket sold to adults [male and female]. Study the data carefully and answer the following questions.

| Theatre | Ticket sold <br> to children | Ticket sold to Adults <br> (Male : Female) |
| :---: | :---: | :---: |
| C1 | 15 | $06: 07$ |
| C2 | 10 | $03: 04$ |
| C3 | 20 | $02: 03$ |
| C4 | 14 | $06: 05$ |
| C5 | 8 | $05: 04$ |
| C6 | 12 | $09: 08$ |

Note: Total 80 tickets are sold in each theatre.
176. Find the ratio of number of tickets sold to males by C3 and C6 theatre together to number of tickets sold to females by C3 and C5 theatre together.
A. $14: 19$
B. $15: 17$
C. $20: 23$
D. $16: 19$
E. 14 : 17
177. Number of female who bought ticket from C2 and C4 Theater together is what percent more than number of males who bought ticket from C5 theatre.
A. $33-\%$
B. 50 \%
C. $66 \frac{2}{3} \%$
D. $75 \%$
E. 87.5 \%
178. If per ticket price for children, male and female are Rs. 150, Rs. 200 and Rs. 250 respectively.
Then find the total revenue earn by C4 theater.
A. 16600
B. 15400
C. 16800
D. 15800
E. 16400
179. Find the average number of male who bought tickets from C1, C2 and C3 theatre together.
A. 30
B. 28
C. 32
D. 34
E. 36
180. Number of males who bought ticket from C4, C5 and C6 together is how much more than number of females who bought ticket from same theatres.
A. 18
B. 20
C. 21
D. 24
E. 26

Directions (181-185): In each of these questions, two equations (i) and (ii) are given. You have to solve both the equations
181. (i) 2 give answer $=0$
(ii) $3 y^{2}-4 y+1=0$
A. $x>y$
B. $x \geq y$
C. $x<y$
D. $x \leq y$
E. $x=y$ or no relation can be established between $x$ and $y$.
182. (i) $x^{2}-17 x+72=0$
(ii) $y^{2}-27 y+180=0$
A. $x>y$
B. $x \geq y$
C. $x<y$
D. $x \leq y$
E. $x=y$ or no relation can be established between $x$ and $y$.
183. (i) $(x-12)^{2}=0$
(ii) $y^{2}-21 y+108=0$
A. $x>y$
B. $x \geq y$
C. $x<y$
D. $x \leq y$
E. $x=y$ or no relation can be established between $x$ and $y$.
184. (i) $2 x^{2}+7 x+5=0$
(ii) $3 y^{2}+12 y+9=0$
A. $x>y$
B. $x \geq y$
C. $x<y$
D. $x \leq y$
E. $x=y$ or no relation can be established between $x$ and $y$.
185. (i) $x^{2}+2 x-35=0$
(ii) $y^{2}+15 y+56=0$
A. $x>y$
B. $x \geq y$
C. $x<y$
D. $x \leq y$
E. $x=y$ or no relation can be established between $x$ and $y$.

Directions (186-190): Bar graph given below shows the time taken by two trains in hr, on different days. Study the data carefully and answer the following questions:

Note: Both Trains cover 450km distance on every day
186. Speed of train ' $X$ ' on Tuesday is what percent more than speed of train ' Y ' on Monday?
A. $66 \frac{2}{3} \%$
B. $75 \%$
C. $33 \frac{1}{3} \%$
D. $50 \%$
E. 87.5 \%
187. Find the average speed of train ' $Y$ ' on Tuesday and Train ' X ' on Wednesday?
A. 140
B. 130
C. 135
D. 120
E. 150
188. On Friday, speed of train ' $X$ ' increases by $60 \%$ and speed of train ' $Y$ ' increases by $25 \%$ as compared to Thursday, then find the sum of the time taken by both trains separately to cover the same distance?
A. 6.5 hr
B. 7.5 hr
C. 6 hr
D. 7 hr
E. 8 hr
189. Speed of train ' $X$ ' on Tuesday is how much less than the speed of train ' $Y$ ' on Wednesday?
A. $50 \mathrm{~km} / \mathrm{hr}$
B. $60 \mathrm{~km} / \mathrm{hr}$
C. $75 \mathrm{~km} / \mathrm{hr}$
D. $85 \mathrm{~km} / \mathrm{hr}$
E. $100 \mathrm{~km} / \mathrm{hr}$
190. Find in how much time train ' X ' can cover the given distance if speed of train ' X ' increases by $60 \%$ on Tuesday?
A. 3 hr
B. 2.5 hr
C. 1.5 hr
D. 1.25 hr
E. 1.75 hr

## Solution

1. Ans. C.

- M has exam on Tuesday at 07.00 A.M.
- F has exam immediately before M. (F must be on Monday at 10 A.M.)
- M does not have exam on any of the days before K. (K must be before M. So, K must be on Monday at 7 A.M)
- H has exam immediately after the day of one who has exam on Monday.
- H does not have exam on any one of the days after I.
- Only three people have exam between K and I.
- The number of people who have exam between K and H is same as the number of people who have exam between $G$ and $L$. ( H must be on Tuesday at 10 A.M.)

7 A.M.
Monday
K
10 A.M.
Tuesday
M
Wednesday I
Thursday
Friday

- J does not have exam on any of the days after L .
- Only two people have exam between J and N .
- Neither I nor K does not have exam on Friday.
- L does not have exam at 10.00 AM.
- The one who has exam at 07.00 A.M. immediately before N .
- J does not have exam at 10.00 A.M.

So according to the above statement, we conclude:

## Two people have their exam at 10'0 clock between I and L

2. Ans. B.

- M has exam on Tuesday at 07.00 A.M.
- F has exam immediately before M. (F must be on Monday at 10 A.M.)
- $M$ does not have exam on any of the days before K. (K must be before M. So, K must be on Monday at 7 A.M)
- H has exam immediately after the day of one who has exam on Monday.
- H does not have exam on any one of the days after I.
- Only three people have exam between K and I.
- The number of people who have exam between K and H is same as the number of people who have exam between $G$ and $L$. (H must be on Tuesday at 10 A.M.)

7 A.M.
Monday
Tuesday
Wednesday
Thursday
Friday

10 A.M.
F
H

- J does not have exam on any of the days after L.
- Only two people have exam between J and N .
- Neither I nor K does not have exam on Friday.
- L does not have exam at 10.00 AM.
- The one who has exam at 07.00 A.M. immediately before N .
- J does not have exam at 10.00 A.M.

So according to the above statement, we conclude:

L has the exam on 7 am .
3. Ans. E.

- M has exam on Tuesday at 07.00 A.M.
- F has exam immediately before M. (F must be on Monday at 10 A.M.)
- M does not have exam on any of the days before K. (K must be before M. So, K must be on Monday at 7 A.M)
- H has exam immediately after the day of one who has exam on Monday.
- H does not have exam on any one of the days after I.
- Only three people have exam between K and I.
- The number of people who have exam between K and H is same as the number of people who have exam between $G$ and $L$. (H must be on Tuesday at 10 A.M.) $\begin{array}{cc}7 \text { A.M. } & 10 \text { A.M. } \\ \mathrm{K} & \mathrm{F}\end{array}$
Monday
Tuesday M

Wednesday I
Thursday
Friday

- J does not have exam on any of the days after L.
- Only two people have exam between J and N.
- Neither I nor K does not have exam on Friday.
- L does not have exam at 10.00 AM.
- The one who has exam at 07.00 A.M. immediately before N .
- J does not have exam at 10.00 A.M.

So according to the above statement, we conclude:

- H does not have exam on any one of the days after I.
- Only three people have exam between K and I.
- The number of people who have exam between K and H is same as the number of people who have exam between $G$ and $L$. ( $H$ must be on Tuesday at 10 A.M.)

7 A.M.
10 A.M.
Monday
K
F
Tuesday
M
H
Wednesday
I
Thursday
Friday

- J does not have exam on any of the days after L.
- Only two people have exam between J and N.
- Neither I nor K does not have exam on Friday.
- L does not have exam at 10.00 AM.
- The one who has exam at 07.00 A.M. immediately before N .
- J does not have exam at 10.00 A.M.

So according to the above statement, we conclude:

H give his exam on Tuesday
5. Ans. D.

- M has exam on Tuesday at 07.00 A.M.
- F has exam immediately before M. (F must be on Monday at 10 A.M.)
- M does not have exam on any of the days before K. (K must be before M. So, K must be on Monday at 7 A.M)
- H has exam immediately after the day of one who has exam on Monday.
- H does not have exam on any one of the days after I.
- Only three people have exam between K and I.
- The number of people who have exam between K and H is same as the number of people who have exam between G and L. (H must be on Tuesday at 10 A.M.)


## 7 A.M.

Monday
Tuesday K

Wednesday M I

Friday

- J does not have exam on any of the days after L.
- Only two people have exam between J and N.
- Neither I nor K does not have exam on Friday.
- L does not have exam at 10.00 AM.
- The one who has exam at 07.00 A.M. immediately before N .
- J does not have exam at 10.00 A.M.

So according to the above statement, we conclude:

L \& N have their exam on Friday
6. Ans. B.

## 7. Ans. A.

## 8. Ans. B.


9. Ans. D.
10. Ans. B.

Step I : 1 Z 6 H \& \$ 4 Y Q \% ! 39 S I O 99 J L U * @ 3 TRK

Step II: 1 Z 6 H \& \$ 4 Y Q \% ! 39 SIO 99 JLE U * @ 3 TRK

Step III:Z 1 H 6 \& \$ Y 4 Q \% ! 3 S 9 I O 9 J 9 LE U * @ T 3 R K
11. Ans. C.

Step I : 1 Z 6 H \& \$ 4 Y Q \% ! 39 SIO 99 J E U * @ 3 TRK

Step II: 1 Z 6 H \& \$ 4 Y Q \%! 39 S I O 99 J E U * @ 3 TRK

Step III:Z 1 H 6 \& \$ Y 4 Q \% ! 3 S 9 I O 9 J 9 LEU * @ T 3 R K
12. Ans. B.

Step I: 1 Z 6 H\& \$ 4 Y Q \% ! 39 SIO 99 JLEU * @ 3 TRK

Step II: 1 Z 6 H \& \$ 4 Y Q \% ! 39 SIO 99 J E U * @ 3 TRK

Step III:Z 1 H 6 \& \$ Y 4 Q \% ! 3 S 9 I O 9 J 9 LE U * @ T 3 R K
13. Ans. C.

In this new pattern coding decoding question only one word and one number is arranged in each step. Let us understand the logic behind it- In each step the words and numbers are arranged from the left end.
For words- The word which comes first according to alphabetical series is arranged first and different arrangement is used in different step.
Step 1 and 2- first and second letter are interchanged and third and fourth letter are interchanged
Step 3 and 4- First letter is unchanged, rest are reversed.
Step 5- First letter is unchanged, second letter is shifted to fourth place, third letter is shifted to second place, fourth letter is shifted to third place. For numbers- Numbers start arranging as the highest number is arranged in 1st step then second highest number in second step and so on from left end after each word. And in the final step all the numbers are arranged in increasing order from left end.
Input- 54 roll 39 back 8725 cash seat 46 beat Step I- abkc 8754 roll 3925 cash seat 46 beat
Step II- ebta 54 abkc 87 roll 3925 cash seat 46
Step III- chsa 46 eata 54 abkc 87 roll 3925 seat

Step IV- rllo 39 chsa 46 eata 54 abkc 8725 seat Step V- sate 25 rllo 39 chsa 46 eata 54 abkc 87 14. Ans. C.

In this new pattern coding decoding question only one word and one number is arranged in each step. Let us understand the logic behind it- In each step the words and numbers are arranged from the left end.
For words- The word which comes first according to alphabetical series is arranged first and different arrangement is used in different step.
Step 1 and 2- first and second letter are interchanged and third and fourth letter are interchanged
Step 3 and 4- second and fourth letter are interchanged and rests are same. Step 5- First letter is unchanged, second letter is shifted to fourth place, third letter is shifted to second place, fourth letter is shifted to third place.
For numbers- Numbers start arranging as the highest number is arranged in 1st step then second highest number in second step and so on from left end after each word. And in the final step all the numbers are arranged in increasing order from left end.
Input- 54 roll 39 back 8725 cash seat 46 beat Step I- abkc 8754 roll 3925 cash seat 46 beat Step II- ebta 54 abkc 87 roll 3925 cash seat 46 Step III- chsa 46 eata 54 abkc 87 roll 3925 seat Step IV- rllo 39 chsa 46 eata 54 abkc 8725 seat Step V- sate 25 rllo 39 chsa 46 eata 54 abkc 87 15. Ans. B.

In this new pattern coding decoding question only one word and one number is arranged in each step. Let us understand the logic behind it- In each step the words and numbers are arranged from the left end.
For words- The word which comes first according to alphabetical series is arranged first and different arrangement is used in different step.
Step 1 and 2- first and second letter are interchanged and third and fourth letter are interchanged
Step 3 and 4 - second and fourth letter are interchanged and rests are same. Step 5- First letter is unchanged, second letter is shifted to fourth place, third letter is shifted to second place, fourth letter is shifted to third place.
For numbers- Numbers start arranging as the highest number is arranged in 1st step then second highest number in second step and so on from left end after each word. And in the final step all the numbers are arranged in increasing order from left end.

Input- 54 roll 39 back 8725 cash seat 46 beat Step I- abkc 8754 roll 3925 cash seat 46 beat Step II- ebta 54 abkc 87 roll 3925 cash seat 46 Step III- chsa 46 eata 54 abkc 87 roll 3925 seat Step IV- rllo 39 chsa 46 eata 54 abkc 8725 seat Step V- sate 25 rllo 39 chsa 46 eata 54 abkc 87 16. Ans. E.

- C sits second to right of the person from Russia.
- $\quad M$ is not from France.
- M does not face the person from Russia.
- $O$ is an immediate neighbour of the person who faces the person from Russia.
- The person from Russia does not face the person from Cuba.
- Only one person sits between O and the person from France.
- The immediate neighbour of the person from France faces the person from Japan.
- The person from Canada faces the person from Bhutan.
- O is not from Bhutan.
- N faces the person from Angola.
- The one who faces $P$ sits on the immediate left of $A$.
- B does not sit at any of the extreme ends of the line.

17. Ans. D.

- C sits second to right of the person from Russia.
- $\quad \mathrm{M}$ is not from France.
- M does not face the person from Russia.
- $O$ is an immediate neighbour of the person who faces the person from Russia.
- The person from Russia does not face the person from Cuba.
- Only one person sits between $O$ and the person from France.
- The immediate neighbour of the person from France faces the person from Japan.
- The person from Canada faces the person from Bhutan.
- O is not from Bhutan.
- $\quad N$ faces the person from Angola.
- The one who faces $P$ sits on the immediate left of $A$.
- B does not sit at any of the extreme ends of the line.

18. Ans. A

- C sits second to right of the person from Russia.
- $\quad \mathrm{M}$ is not from France.
- M does not face the person from Russia.
- $O$ is an immediate neighbour of the person who faces the person from Russia.
- The person from Russia does not face the person from Cuba.
- Only one person sits between $O$ and the person from France.
- The immediate neighbour of the person from France faces the person from Japan.
- The person from Canada faces the person from Bhutan.
- O is not from Bhutan.
- $N$ faces the person from Angola.
- The one who faces $P$ sits on the immediate left of $A$.
- B does not sit at any of the extreme ends of the line.

19. Ans. C.

- C sits second to right of the person from Russia.
- $\quad \mathrm{M}$ is not from France.
- M does not face the person from Russia.
- $O$ is an immediate neighbour of the person who faces the person from Russia.
- The person from Russia does not face the person from Cuba.
- Only one person sits between O and the person from France.
- The immediate neighbour of the person from France faces the person from Japan.
- The person from Canada faces the person from Bhutan.
- O is not from Bhutan.
- $\quad \mathrm{N}$ faces the person from Angola.
- The one who faces $P$ sits on the immediate left of $A$.
- B does not sit at any of the extreme ends of the line.

20. Ans. E.

- C sits second to right of the person from Russia.
- $\quad M$ is not from France.
- $\quad \mathrm{M}$ does not face the person from Russia.
- $O$ is an immediate neighbour of the person who faces the person from Russia.
- The person from Russia does not face the person from Cuba.
- Only one person sits between $O$ and the person from France.
- The immediate neighbour of the person from France faces the person from Japan.
- The person from Canada faces the person from Bhutan.
- O is not from Bhutan.
- $N$ faces the person from Angola.
- The one who faces $P$ sits on the immediate left of $A$.
- B does not sit at any of the extreme ends of the line.


## 21. Ans. A.

There can be two words that satisfy the given condition 63WBO and 75GRTY-----BOW.
22. Ans. C.

On arrangement we will get three words in between the given condition.
24EAFR 42ENDO 63WBO 64TVZR 75GRTY
$63+64=127$
23. Ans. B.

From the given condition we will get 63WBO and 75GRTY so on arranging in descending order 75 GRTY 63BOW
24. Ans. C.

F and K are a married couple
$E$ is sister of $D$
$B$ is a daughter in law $F$ who is grandmother of E's brother
C has two children.

E's husband born in the year 2002 and 16 years age gap between E and E's daughter D born in the year 2006 and his father born in the year 1980.
F has only two son and B's husband born in the year 1982 and his salary 22000 per month

The person who earn highest among husband of E and there is 13000 rs gap between salary E and E's husband
There is 6 years gap between $B$ and $B^{\prime} s$ husband $K$ has earn 15000 per month and his son earns 20000
K is not the oldest person in this family and H is brother in law of D and J is a female person

The youngest person earns lowest salary among all $D$ has earns second highest among all and $F$ earns more than salary of her daughter in law.
25. Ans. B.

F and K are a married couple
$E$ is sister of $D$
$B$ is a daughter in law $F$ who is grandmother of $E^{\prime}$ s brother
$C$ has two children.

E's husband born in the year 2002 and 16 years age gap between E and E's daughter D born in the year 2006 and his father born in the year 1980.
F has only two son and B's husband born in the year 1982 and his salary 22000 per month

The person who earn highest among husband of E and there is 13000 rs gap between salary E and E's husband
There is 6 years gap between $B$ and $B^{\prime} s$ husband $K$ has earn 15000 per month and his son earns 20000
K is not the oldest person in this family and H is brother in law of $D$ and $J$ is a female person

The youngest person earns lowest salary among all $D$ has earns second highest among all and $F$ earns more than salary of her daughter in law.
26. Ans. C.

F and K are a married couple
$E$ is sister of $D$
$B$ is a daughter in law $F$ who is grandmother of E's brother
C has two children.

E's husband born in the year 2002 and 16 years age gap between E and E's daughter D born in the year 2006 and his father born in the year 1980.
F has only two son and B's husband born in the year 1982 and his salary 22000 per month

The person who earn highest among husband of E and there is 13000 rs gap between salary E and E's husband
There is 6 years gap between $B$ and $B^{\prime} s$ husband $K$ has earn 15000 per month and his son earns 20000
K is not the oldest person in this family and H is brother in law of D and J is a female person

The youngest person earns lowest salary among all $D$ has earns second highest among all and $F$ earns more than salary of her daughter in law.
27. Ans. D.

F and K are a married couple
$E$ is sister of $D$
$B$ is a daughter in law $F$ who is grandmother of E's brother $C$ has two children.

E's husband born in the year 2002 and 16 years age gap between E and E's daughter D born in the year 2006 and his father born in the year 1980.
F has only two son and B's husband born in the year 1982 and his salary 22000 per month

The person who earn highest among husband of E and there is 13000 rs gap between salary E and E's husband
There is 6 years gap between B and B's husband $K$ has earn 15000 per month and his son earns 20000
K is not the oldest person in this family and H is brother in law of $D$ and $J$ is a female person

The youngest person earns lowest salary among all $D$ has earns second highest among all and $F$ earns more than salary of her daughter in law.
28. Ans. C.

F and K are a married couple
$E$ is sister of $D$
$B$ is a daughter in law $F$ who is grandmother of $\mathrm{E}^{\prime}$ s brother
C has two children.

E's husband born in the year 2002 and 16 years age gap between E and E's daughter D born in the year 2006 and his father born in the year 1980.
F has only two son and B's husband born in the year 1982 and his salary 22000 per month

The person who earn highest among husband of E and there is 13000 rs gap between salary E and E's husband
There is 6 years gap between B and B's husband $K$ has earn 15000 per month and his son earns 20000
K is not the oldest person in this family and H is brother in law of D and J is a female person

The youngest person earns lowest salary among all $D$ has earns second highest among all and $F$ earns more than salary of her daughter in law.

## 29. Ans. A.

From I and II,
Q was born in a month which was having 31 days. Two persons were born between Q and P . P was born after Q. So Q either born in January or March then P was born either in April or June. R was born in a month which was having least number of days. R was born in February. U was born just after P. So U was either born in May or July. S was born after U.

Q confirm born in January. Hence, option A.
30. Ans. C.

From I,
$A \geq B<C=D>E \geq F=G$
We can't compare B and F.
From II,
$\mathrm{A} \leq \mathrm{B}=\mathrm{C}>\mathrm{D}>\mathrm{E}<\mathrm{F}<\mathrm{G}$
We can't compare B and F.
From III,
$A>B>C=D \geq E>F<G$
Clearly $B$ is greater to $F$.
So Only III is sufficient.
Hence, option C.
31. Ans. B.

1. The Orange Box is four boxes above the Blue Box.
2. There is exactly one box between $B$ and $H$. The Blue Box is kept just below H . H is not colored in Green or Brown.
3. $G$ is kept adjacent to $B$ but not adjacent to H . A is kept just above $C$ and neither of them is orange or Blue in color.
4. There are at least two boxes kept below C.
5. The box colored in White is kept just above the Grey Box. F is neither colored in Blue nor is kept at the top.
6. The Brown Box is not kept at the bottom.
7. E which is colored in Red is kept four boxes below A.
Pink is the color of the Box H .

| Color | Box |
| :--- | :--- |
| White | A |
| Grey | C |
| Orange | G |
| Brown | B |
| Red | E |
| Pink | H |
| Blue | D |
| Green | F |

32. Ans. C.
33. The Orange Box is four boxes above the Blue Box.
34. There is exactly one box between $B$ and $H$. The

Blue Box is kept just below H . H is not colored in Green or Brown.
3. $G$ is kept adjacent to $B$ but not adjacent to H. A is kept just above $C$ and neither of them is orange or Blue in color.
4. There are at least two boxes kept below $C$.
5. The box colored in White is kept just above the

Grey Box. F is neither colored in Blue nor is kept at the top.
6. The Brown Box is not kept at the bottom.
7. E which is colored in Red is kept four boxes below A.
D box colour in blue.
33. Ans. E.

1. The Orange Box is four boxes above the Blue Box.
2. There is exactly one box between $B$ and $H$. The Blue Box is kept just below H . H is not colored in Green or Brown.
3. $G$ is kept adjacent to $B$ but not adjacent to H. A is kept just above $C$ and neither of them is orange or Blue in color.
4. There are at least two boxes kept below C.
5. The box colored in White is kept just above the Grey Box. F is neither colored in Blue nor is kept at the top.
6. The Brown Box is not kept at the bottom.
7. E which is colored in Red is kept four boxes below A.
The boxes kept at the top and the bottom respectively are colored in White and Green.
8. Ans. A.
9. The Orange Box is four boxes above the Blue Box.
10. There is exactly one box between $B$ and $H$. The

Blue Box is kept just below $\mathrm{H} . \mathrm{H}$ is not colored in Green or Brown.
3. $G$ is kept adjacent to $B$ but not adjacent to H . A is kept just above $C$ and neither of them is orange or Blue in color.
4. There are at least two boxes kept below C.
5. The box colored in White is kept just above the Grey Box. F is neither colored in Blue nor is kept at the top.
6. The Brown Box is not kept at the bottom.
7. E which is colored in Red is kept four boxes below A.
Two boxes are kept between F and E

| Color | Box |
| :--- | :--- |
| White | A |
| Grey | C |
| Orange | G |
| Brown | B |
| Red | E |
| Pink | H |
| Blue | D |
| Green | F |

35. Ans. D.
36. The Orange Box is four boxes above the Blue Box.
37. There is exactly one box between $B$ and $H$. The Blue Box is kept just below $\mathrm{H} . \mathrm{H}$ is not colored in Green or Brown.
38. $G$ is kept adjacent to $B$ but not adjacent to H . A is kept just above $C$ and neither of them is orange or Blue in color.
39. There are at least two boxes kept below C.
40. The box colored in White is kept just above the Grey Box. F is neither colored in Blue nor is kept at the top.
41. The Brown Box is not kept at the bottom.
42. E which is colored in Red is kept four boxes below A .

As per the solution figure, there are two boxes between $G$ and the Pink Box.
36. Ans. B.

A child can learn before he/she turns five. So, assumption I is not implicit.
Some schools admit children who are below five years of age, so government gives that advertisement.
So, assumption II is implicit.
37. Ans. A.

In the statement it is given that army should be deployed to rehabilitate the people displaced due to earthquake.
It means that army can be used for purposes other than war also. So, assumption I is implicit.
Assumption II is not implicit because the word 'only' is making it baseless as there may be some other measures which can rehabilitate the displaced victims of earthquake.
38. Ans. E.
(a) does not follow because the NCR phenomenon can't be extrapolated to "most of the big cities".
(b) and (d) are probable consequences. (c) shows us the other side.
(e) follows from the mention of "slump in home sales" and scope for "price correction". 39. Ans. A.

So from all 3 statements alone we can get that to whom $B$ is sitting opposite to.
40. Ans. B.

From 2 and 3 statements,
6. Physics
5.English
4.Biology
3.Social
2.Maths
1.Hindi
41. Ans. B.

From statement 1 and 2
$A$ is youngest while $E$ is not the eldest.
$B$ is the father of $C$, who is grandson of $F$. $D$ is the wife of E's son and C's father.
$\mathrm{F}===\mathrm{E}$
|
$B===D$
I
C,A
From the above diagram, it is clear that $F$ is the eldest in the family.
Hence, option B is the correct response.
42. Ans. D.

As given from the above conditions we will get the following two cases.
43. Ans. A.

As given from the above conditions we will get the following two cases.
44. Ans. C.

As given from the above conditions we will get the following two cases.
45. Ans. C.
46. Ans. C.

## 47. Ans. A.

## 48. Ans. A.

Note that the statement conveys to us that the delay in compensation is now a thing of the past. We can't infer about the specifics- 'insurance company' in statement (c) and 'IRCTC' in statement (d)
49. Ans. B.

Course of action I does not follows due to the words 'all' and 'immediate'.
Course of action II follows because a system should be implemented to certify the quality of tiffin provided by the school.
50. Ans. E.

Both the actions follow because adequate police force should be deployed and vehicles on the road should be advised a diversion to avoid traffic congestion.
51. Ans. C.

The passage revolves around telecommuting but builds the structure in such a way that it emphasizes on the work-from-home facility in the domain. It builds up the case that explains the good and bad of the same and how it has shaped the habits of the workforce and has impacted the overall growth.
52. Ans. D.

It can be inferred from paragraph 6 in which it is stated that being allowed to work outside the office is good for both workers and employers. Working outside the office allow employees to have better work-life balance and improves their health and wellness, according to the report. It also saves them time and money.
Saving time and money is, though, an indirect addition to the income but since it hasn't been explicitly stated, it will not be considered as the case. Hence, option D is the correct answer.
53. Ans. A.

Fall-out means effect/ impact/ consequence. Redblooded means dynamic.
Options B and E don't mention any consequence; hence they can be easily eliminated.
Options C and D don't mention a consequence which is dynamic; hence eliminated.
Brunt means impact. Option A is synonymous with the question statement.
Hence, option A is the correct answer.
54. Ans. C.

A pigeonhole is a compartment and here, refers to the cubicle working system of offices. 'To extend the roots beyond the pigeonhole' means to expand its working conditions beyond the in-office environment and infrastructure. This has, in the passage, been done in the form of 'work-fromhome' facility. Hence, option C is the correct answer.
55. Ans. D.
(i) and (iii) can be inferred from the following statements of the passage, 'The Great Recession also played a role. "We saw a dramatic increase in the types of jobs that employers were hiring for that allowed telecommuting and other flexibility," said Sutton Fell. Far-flung working has become more commonplace, specifically in the mortgage and real estate industry, human resources and recruiting, and accounting and finance. Each industry saw remote job listings flourish more than 20\% last year.
Employers in the Northeast, particularly in New England and Mid-Atlantic regions, are the most likely to offer flexible workplace options, the report found. "The middle class norm changed from one parent working and one staying at home to two working parents being more common and growth in single-parent families are big factors driving telecommuting to save time when and where you can," said Sutton Fell.'
Hence, option D is the correct answer.
56. Ans. B.

The advantages can be inferred from the last paragraph which states, 'Telecommuting full time brings in more than \$4,000 in savings each year thanks to reduced expenses on things like gas, parking and public transit costs and dry cleaning. By not having to go into the office every day, workers gain back the equivalent of 11 days per year. Employers also see savings from allowing flexible scheduling. Allowing a worker to telecommute half the time can save an employer more than $\$ 11,000$ a year. "It's a benefit when it
comes to recruiting and retentions and offering competitive advantages with globalisation and the efficiency of being a forward-looking company," said Sutton Fell.'
The mention of other options as mutual benefit can't be traced in the given passage. Hence, option B is the correct answer. 57. Ans. A.

The answer can be inferred from the following statements of the passage, '"There is still this stigma associated with an antiquated view that telecommuting is just a work-from-home mom thing or for lower level jobs or not as dedicated workers," said Sutton Fell. "This is a very professional and viable option and it's not going anywhere."'
Call in question means to argue or challenge. A snap means something that can be done easily or is feasible. Option A means that the subject opposes the statement and is of the perspective that telecommuting is feasible and gender-neutral and is beneficial for the entire workforce.
To back something means to support something; it is clear from the quoted statements that the author calls the societal view about telecommuting a stigma and says that it is, instead, a feasible option which is meant to stay. Hence, option B can be eliminated.
To keep up with something means to advocate/ support something; it can also be eliminated on the same grounds as option B.
To stick by the statement also means to advocate something; hence it can also be eliminated. Hence, option A is the correct answer.
58. Ans. D.

Statements 2 and 5 are both grammatically correct and carry the same meaning. Statement 2 states that Consumerism takes place when under the influence of advertising and marketing, wants to get created among people. The same idea is stated in statement 5 . Thus, option D is correct.
Let's look at the errors in the other statements:

1) "Individualistic" is an adjective, so is "increased" in the given context. But an adjective cannot modify an adjective and we need an adverb in its place. Therefore, "increasingly" should be written. 3) Here the usage of the word "consumers" is incorrect as it refers to a group of people who consume. The consumers cannot be called "a character-cultivating way of life". Hence, the abstract noun "consumerism" should be used. 4) The statement here talks about what parents should do in general. Hence, the verb "teach"
should be in the simple present tense instead of present perfect continuous. So, "have been teaching" should be replaced by "teach". 59. Ans. E.

Statements 3 and 4 are grammatically correct and similar in meaning. Statement 3 talks about how India's large geographical extent houses several different religions which in turn has led to several different festivals being celebrated all over the country and acts as a shining example of unity in diversity. Statement 4 supports this same sentiment in different words.
Let's look at the errors in the other statements:

1. 'Festivals' being plural should be followed by 'are' to maintain subject-verb agreement instead of 'is'.
2. The determiner 'much' is used with singular uncountable nouns. Since 'diwali' is a singular countable noun, the correct determiner to be used is 'most'.
3. As stated earlier 'much' is used with singular uncountable nouns. The correct determiner to be used here is 'many' as 'festivals' is a plural noun. 60. Ans. B.

Sentences 2 and 3 are grammatically correct and have similar meaning. Both of them are conveying the fact that the purpose of creative advertisement is to just entertain the viewer. But comparative advertisement is much more aggressive than that. Let's look at the errors in the other statements: Sentence 1: In this sentence two words- quiet and soul, are used incorrectly. Quiet means making little or no noise. Since an emphasis is being put on how different the two types of advertising are, the correct that should have been used is 'quite'. Quite means 'to a certain or fairly significant extent or degree'.
'Soul' means the spiritual or immaterial part of a human being or animal, regarded as immortal. Since we need an adjective for 'purpose', the correct word that should have been used here is 'sole', which means one and only.
Sentence 4: 'Might' indicates that the action(entertaining) is a future event. When we state future progressive events as such, we use be + ing-verb. Also, when pointing out one among many, the noun for many part (form) should be in plural form. So, it should be 'forms' not 'form'. Sentence 5: Even though is used in the sense of 'despite of'. Even though is used generally used when we are conceding a surprising outcome. 'While' is used when two actions are happening simultaneously. Since two conditions are being compared without any conceding, we should use
'while' instead of 'even though'.
Hence, the correct answer is B.
61. Ans. A.

Sentences 1 and 4 are grammatically correct and have similar meaning. Both of them are conveying the fact that the rest of the country knows very little about the flood victims of the north eastern states, who have been displaced from their homes due to severe floods.
Let's look at the errors in the other statements: Sentence 2: When we say we know something, we know facts or details. Both of them are countable nouns. So, we should use 'little' instead of 'less' as less is used for uncountable nouns.
Sentence 3: 'a' is an article for singular nouns. Since 'little' is definitely more than one, using 'a' is wrong.
Sentence 5: 'Misplaced' means placing something in the wrong position. It can happen unknowingly. The homeless flood victims are not exactly at a wrong place. They are most probably at a relief centre. The correct word that should've been used is 'displace', which means forced to move.
Hence, the correct answer is A.
62. Ans. E.

All the three statements use the word "hamper" in the correct form. In the first and the second sentence, the word has been used as a verb in the present and the past tense respectively. "Hamper" means to cause hindrance. The third sentence uses the word as a noun which means a basket or a container. The word fits appropriately in the given question. Since the word has been used correctly in all the sentences, option E is the correct answer. 63. Ans. C.

The numerical 100 is written as century in cricket and is used to refer to 100 years. In sentence 1 and 2 it makes perfect sense.
In sentence 3 however, the word must be sanctuary which refers to a nature reserve for wild animals. The correct answer is option C.
64. Ans. E.

The word Date carries several meanings:

1. The day of the month or year as specified by a number.
2. A social or romantic appointment or engagement.
3. Reveal someone or something as being oldfashioned.
Among these, the meaning given in 1, makes statement 2 correct. The one given in 2, makes statement 1 correct and the one given in 3, makes
statement 3 correct. Thus, option E is the correct answer.
4. Ans. B.

Audacity means aggressive boldness or unmitigated effrontery.
Annoy means disturb, especially by minor irritations.
Assort means to distribute or to classify.
Amuse means occupy in an agreeable, entertaining
or pleasant fashion.
B-D are antonyms.
66. Ans. C.

Blame means attribute responsibility to.
Incarcerator to confine, imprison.
Blimey British informal, used to express surprise.
Inculpate suggest that someone is guilty.
A-D are synonyms.
67. Ans. E.

Permit means consent to, give permission.
Plough (verb) turn up the earth of (an area of land)
with a plough, especially before sowing.
Bar means expel, as if by official decree.
Beacon means a fire (usually on a hill or tower)
that can be seen from a distance.
A-C are antonyms.
68. Ans. A.

Crave means plead or ask for earnestly.
Abjure means retract, or formally reject or renounce.
Exceed means go beyond what is allowed or stipulated
Crass means without sensitivity.
A-B are antonyms.
69. Ans. D.

The sentence is about a newspaper journey of 139 years. During these years the newspaper has changed with upcoming trends by adapting and embracing the new technological changes yet it never compromised with its core value. The first word must mean 'the whole'. The second word must mean 'to accept and adapt'. Therefore, option D is apt. 'Entirety' means the whole of something and embraces means to an act of accepting something willingly or enthusiastically. 70. Ans. A.

The first blank is followed by the word "studies", and no other word but "review" can fit before it while conveying a correct sense. In order for a condition to be dealt with, it needs to be identified first. Hence, option A is the correct answer. 71. Ans. A.

Dispel- to make (a doubt, feeling, or belief) disappear.

The term, hectic external engagements shows the PM's hard work and is a positive point. The segment after the blank (Chief Minister with little diplomatic experience could not make it to the high table...) points out a negative thing about the PM. So, the positive point that prevails in the present would negate a negative point of the past. Hence, either 'dispel' or 'dismiss' can fit in the first blank. A visa cannot be agreed to someone, hence option D gets eliminated. "Deny" fits appropriately in the second bank. Hence, option A is the correct answer. 72. Ans. A.

The second part of the sentences conveys the idea that seeing the thrust of the startup with respect to employment, app download, presence in cities, the founder would start the project. the only word that will fit in the blank and make the
sentence grammatically correct is chances.though the word probabilities convey the meaning same as 'chances', but given the choice of diction, we should choose chances.
The first part of the sentence conveys the idea that the idea of the startup founder is expected to bring in positive results. Disruptive means innovative or ground breaking.
Hence the correct answer is option A.
73. Ans. D.

The given sentence talks about the mixed responses given by brokerage houses. Since "saying" has been used once in the sentence, "adding" can be used as a connector to state another response. The usage of "saying" will make the sentence redundant, while "speaking" would be grammatically incorrect. "Awaited" fits appropriately in the second blank, indicating that there is still no clarity excise duty exemption. Thus, option $D$ is the correct answer.
74. Ans. B.

The statement tries to compare the salaries of the soldiers with those of the other professionals and focuses on the disparities in the same.
Corresponding to the context 'disproportionate' and 'compensations' are the most suitable words. Disproportionate highlights the disparity and compensation lays stress on the subject being discussed. So, option B is correct.
75. Ans. D.

Out Of all the available options, only 'improvement' and 'measures' satisfy the context of the sentence by replacing the irrelevant words in the sentence. The sentence means that the recordings of the financial data showed that the improvement in the
economy has little relation with the measures taken by the financial experts. So, option D is correct.
76. Ans. B.

The statement tries to compare the salaries of the soldiers with those of the other professionals and focuses on the disparities in the same.
Corresponding to the context 'disproportionate' and 'compensations' are the most suitable words. Disproportionate highlights the disparity and compensation lays stress on the subject being discussed. So, option B is correct.
77. Ans. E.

The statement makes perfect sense in itself. So, option E is correct.
78. Ans. E.

Statement 1 should be the opening sentence of the series. It lays down the theme of the passage which is the successful running of the Indian state and society being dependent on the ideals of secularism. It is followed by A which highlights the existing situation of secularism coming under the scanner and questions being raised against its credibility. B elaborates on what is stated in statement A . The unpleasant situation being noticed for the first time ever since independence is the idea of a Hindu Rashtra being openly mooted. C and 2 form a pair. C states that the Supreme Court has expressed its 'concerns' with the rising threat to secularism. The issue mentioned here is the apprehension with respect to the continuation of the successful working of Secularism. Statement 2 lays down the actual 'concern' around which the Supreme Court has expressed itself, i.e. the threat and danger of losing the ideals of secularism. Also, the usage of the pronoun "it" indicates that the Supreme Court is being talked about.
Hence, the correct sequence is 1 ABC 2 and option E is the correct answer.
79. Ans. B.

The given passage talks about how the diversity in India affects the political scenario in the country. This concept of diversity is well described in statement 1 making it the introductory sentence of the passage. And it leads to how states contribute to the political make up in the country. This makes statement 2 the second sentence of the passage. Hence, the correct sequence is 12 ABC and option B is the correct answer.
80. Ans. E.

The passage is about river drainage system. Sentence 1 should act as the introductory sentence as it defines what is a 'drainage system' while statement 2 should act as the concluding sentence
as it points out the several tasks performed by the drainage system as mentioned in statement C . Hence, the correct sequence is 1ABC2 and option E is the correct answer.
81. Ans. E.

The theme of the paragraph is the Nobel prize literature committee is having a public meltdown. The paragraph should start with statement A only as it introduces the academy as well as provide information about the committee. Hence, options A, $B$ and $C$ are eliminated. Statement $C$ talks about the scandal. Naturally, statement 2 follows statement C. Therefore, statement 2 comes at the end and option E is the apt answer.
82. Ans. B.

From '20 countries have already called for a total ban on killer robots,' one can consider that countries might have decided to boycott the upcoming meeting on autonomous weapons. This option can be used. 'Even though' is used to show contrast and means 'despite the fact that.' This option only fits with the first sentence and does not help in connecting the two sentences. From the second sentence, one can use option III to connect the sentences.
Therefore, option B is the apt answer.

## New statement:

The boycott comes ahead of a United Nations meeting in Geneva next week on autonomous weapons, and more than 20 countries have already called for a total ban on killer robots.
While support builds for an outright ban on autonomous weapons, there is a United Nations meeting in Geneva next week on autonomous weapons, since more than 20 countries have already called for a total ban on killer robots. 83. Ans. D.

All the options can be used to connect the sentences. Therefore, option D is the apt answer.

## New statements:

If you've considered whitening your teeth, you may already know the professional teeth whitening cost can be high - much more expensive than at-home alternatives, but in-office teeth whitening is one of the safest and most effective whitening methods. Teeth whitening doesn't have to be expensive while you may already know the professional teeth whitening cost can be high - much more expensive than at-home alternatives, but in-office teeth whitening is one of the safest and most effective whitening methods.
If you're looking for an alternative to professional bleaching in a dental office as you may already
know the professional teeth whitening cost can be high - much more expensive than at-home alternatives so in-office teeth whitening is one of the safest and most effective whitening methods. 84. Ans. C.

Option I: Euphoria refers to a feeling or state of intense excitement and happiness. It makes sense as the proposed resolution of impeachment of the Chief Justice of India will bring forward issues that directly have an effect, especially a negative one, on the independence of the judiciary.
Option II: 'Some safeguards' will make no sense in the context of the sentences.
Option III: It says that a fearless judge is the fundamental principles on which an independent judiciary is based. So, it can be used to connect sentences.
Therefore, option C is the apt answer.

## New statements:

The euphoria in some circles over a proposed resolution of impeachment of the Chief Justice of India is a matter of grave concern, for it brings to the fore issues that directly impinge on the independence of the judiciary.
Since a fearless judge is the bedrock of an independent judiciary, a proposed resolution of impeachment of the Chief Justice of India is a matter of grave concern, for it brings to the fore issues that directly impinge on the independence of the judiciary.
85. Ans. A.

We can clearly decipher from the statements that quotas determine the size of funds at the disposal. The countries having higher quotas or powerful countries influence the funds to be lent. The developing countries are demanding a greater share in quotas. Option II as well as III make no sense in the context of the statements. New statement:
Quotas determine the size of contingency funds at the disposal of the IMF to lend to countries in need of help, as well as the power of individual countries to influence lending decisions and tap into the funds themselves, though developing countries hold less than half the overall quota at the moment, with their rapidly increasing economic heft they have demanded a greater share.
86. Ans. C.

The passage states the problems and cyber threats to which every organization is exposed to. It mentions the importance of ethical hacking and the ways in which the ethical hackers deal with them. The dire need of regularly checking the security of
organizations is increasing with time. Thus option C is the correct answer.
87. Ans. A.

It can be well inferred from the passage that a successful ethical hacker is one who can think from the perspective of a hacker and create better security there. If one fails to think like a malicious person one would never be able to create proper security there. Thus option A is the correct answer. 88. Ans. B.

With the advent and progress of technology the problem of hacking too increased. Thus the major reason that contributed to the problem of hacking is technology. Option B is the correct answer. 89. Ans. E.

The most important step to protect the organization is that the hackers should be given proper authority to access the privacy of the organizations.
Unauthorized access is the most harmful thing done to the organization. Thus option E is the correct answer.
90. Ans. C.

It can be well inferred from the passage that the ethical hackers do not have any negative purpose and want to enhance the security of organizations whereas the normal hackers have an ill motive and want to gain personal benefits causing harm to others. Thus option C is the correct answer. 91. Ans. B.

The Nobel economics prize 2017 has been awarded to Richard Thaler of the University of Chicago for his contributions to behavioural economics.
Note: Thaler is an American economist \& the Ralph and Dorothy Keller Distinguished Service Professor of Behavioral Science and Economics at the University of Chicago Booth School of Business. 92. Ans. C.

Vienna is the capital and largest city of Austria. It is also one of the nine states of Austria and a primary city of the country with a population of about 1.8 million.
93. Ans. A.

Vice President M. Venkaiah Naidu has inaugurated the third International Conference on Yoga in New Delhi. The theme of this year's conference is 'Yoga for Wellness'.
94. Ans. A.

FATF stands for Financial Action Task Force. It is an inter-governmental body established in 1989 and is Headquartered at Paris, France. The objectives of the FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering,
terrorist financing and other related threats to the integrity of the international financial system.
95. Ans. C.

The compound annual growth rate (CAGR) is the mean annual growth rate of an investment over a specified period of time longer than one year.
96. Ans. E.

Sanjeev Stalin is an Indian professional footballer who plays as a defender for Indian Arrows in the I-League. 97. Ans. D.

Hand in Hand' is a joint military exercise between India and China held in Pune, Maharashtra in 2016.

- Factual information

98. Ans. A.

Liquidity Adjustment Facility (LAF) was introduced by RBI during June, 2000 in phases, to ensure smooth transition and keeping pace with technological up gradation.
99. Ans. A.

The money market primarily facilitates lending and borrowing of funds between banks and entities like Primary Dealers (PDs). Banks and PDs borrow and lend overnight or for the short period to meet their short term mismatches in fund positions. This borrowing and lending is on unsecured basis.
Note: 'Call Money' is the borrowing or lending of funds for 1day.
Where money is borrowed or lend for period between 2 days and 14 days it is known as 'Notice Money'. And 'Term Money' refers to borrowing/lending of funds for period exceeding

## 14 days.

100. Ans. E.

Interest rate risk is also known as Market risk. Interest rate risk is the risk of increased volatility due to a change of interest rates. 101. Ans. B.

The Ukai Dam, constructed across the Tapti River, is the largest reservoir in Gujarat.
102. Ans. C.

The headquarter of UCO Bank is located
in Kolkata.
103. Ans. C.

National Automated Clearing House (NACH). NACH is a web-based platform to facilitate interbank, high volume, electronic transactions for Banks, Financial Institutions, Corporates and Government. It basically functions like an electronic clearing service available especially for banks. NACH was launched by the National Payment Corporation of India (NPCI). It is very useful to clear bulk and repetitive transactions that take place among banks.
104. Ans. C.

The BRBNMPL manages 2 Presses one at Mysore in Karnataka and the other at Salboni in West Bengal. The present capacity for both the presses is 16 billion note pieces per year on a 2 -shift basis. 105. Ans. A.

MPS stands for - Monetary Policy Committee The Monetary Policy Committee of India is a committee of the Reserve Bank of India that is responsible for fixing the benchmark interest rate in India.
The committee comprises of six members - three officials of the Reserve Bank of India and three external members nominated by the Government of India.
The Reserve Bank of India Act, 1934 (RBI Act) has been amended by the Finance Act, 2016, to provide for a statutory and institutionalized framework for a Monetary Policy Committee, for maintaining price stability, while keeping in mind the objective of growth.
106. Ans. A.

The Kisan Credit Card (KCC) scheme is a credit scheme introduced in August 1998 by Indian banks. This model scheme was prepared by the National Bank for Agriculture and Rural
Development (NABARD) on the recommendations of R.V.GUPTA to provide term loans and agricultural needs.
107. Ans. B.

The working and operations of NBFCs are regulated by the Reserve Bank of India (RBI) within the framework of the [Reserve Bank of India Act, 1934] (Chapter III-B) and the directions issued by it. Non-bank financial companies(NBFCs) are financial institutions that provide banking services without meeting the legal definition of a bank, i.e. one that does not hold abanking license.
NBFCs include a loan company, an investment company, asset finance company (i.e. a company conducting the business of equipment leasing or hire purchase finance) and Residuary Non-Banking Companies. NBFCs are incorporated under the Companies Act, 1956.
108. Ans. B.

Solution: Full form of CASA - Current Account Saving Account.
109. Ans. B.

The 17th summit of Shanghai Cooperation Organisation (SCO) summit has started in Astana, Kazakhstan from June 8, 2017. In this summit, India and Pakistan has become full members of the organization.
110. Ans. D.

World number one Rafael Nadal produced a ruthless performance to thrash Australian Nick Kyrgios 6-2 in the China Open final for his 75th careersingles title.
111. Ans. A.

Economist Dr Rajiv Kumar named the new ViceChairman of NITI Aayog. The government also appointed Dr Vinod Paul, a paediatrician at AIIMS, as a member of the Aayog.
112. Ans. C.

ELSS stands for Equity Linked Saving Scheme.
An Equity Linked Savings Scheme (ELSS) is an open-ended Equity Mutual Fund that doesn't just help you save tax, but also gives you an opportunity to grow your money. It qualifies for tax exemptions under section (u/s) 80C of the Indian Income Tax Act. 113. Ans. B.

## MasterCard Incorporated or MasterCard

Worldwide is an American multinational financial services corporation headquartered in the MasterCard International Global Headquarters, Purchase, New York, United States, in Westchester County. The Global Operations Headquarters is located in O'Fallon, Missouri, United States, a suburb of Saint Louis, Missouri.
Throughout the world, its principal business is to process payments between the banks of merchants and the card issuing banks or credit unions of the purchasers who use the "MasterCard" brand debit and credit cards to make purchases. MasterCard Worldwide has been a publicly traded company since 2006. Prior to its initial public offering, MasterCard Worldwide was a cooperative owned by the 25,000+ financial institutions that issue its branded cards. 114. Ans. B.

The National Institute of Securities Markets (NISM) is a public trust established in 2006 by the Securities and Exchange Board of India (SEBI), the regulator of the securities markets in India. The institute carries out a wide range of capacity building activities at various levels aimed at enhancing the quality standards of and increase the participation in the securities markets.
115. Ans. C.

The Port of Benghazi is a major seaport in the city of Benghazi, Libya, on the Mediterranean Sea coast within the Gulf of Sidra.
Benghazi port in east Libya reopened on 10th October 2017 for the first time in three years after
being forced to cease operations because of clashes in the cradle of the 2011 revolution.
116. Ans. B.

GDR stands for Global Depository Receipt. A global depositary receipt (GDR) is a bank certificate issued in more than one country for shares in a foreign company. The shares are held by a foreign branch of an international bank. The shares trade as domestic shares but are offered for sale globally through the various bank branches.
117. Ans. A.

The scheme will be implemented through Life

## Insurance Corporation of India (LIC).

It aims to provide social security during old age and protect elderly persons aged 60 years and above against a future fall in their interest income due to uncertain market conditions.
The scheme is meant to provide an assured pension based on a guaranteed rate of return of $8 \%$ per annum for ten years, with an option to opt for the pension on a monthly/quarterly/half-yearly or annual basis.
118. Ans. D.

Structured Financial Messaging System (SFMS) is a secure messaging standard developed to serve as a platform for intra-bank and inter-bank applications.
119. Ans. E.

Multilateral Investment Guarantee Agency (MIGA) is a member of the World Bank Group and is headquartered in Washington, D.C.
MIGA was established in 1988 as an investment insurance facility to encourage confident investment in developing countries. World Bank group agencies-
International Bank for Reconstruction and Development (IBRD)
International Development Association (IDA)
International Finance Corporation (IFC)
Multilateral Investment Guarantee Agency (MIGA)
International Centre for Settlement of Investment Disputes (ICSID)
120. Ans. B.

No tax would be deducted at source for PF withdrawals of up to Rs 50,000 from June 1. The Finance Act, 2016 has amended section 192A of Income Tax Act, 1961 to raise the threshold limit of PF withdrawal from Rs $\mathbf{3 0 , 0 0 0}$ to Rs 50,000 for Tax Deducted at Source (TDS)," the notification stated.
121. Ans. B.

CGTMSE (Credit guarantee fund Trust for Micro and Small Enterprise) is a loan scheme launched by the government to help small and micro business entrepreneurs flourish. The scheme is aimed at offering assistance to business enterprises via different banks and financial institutions in the country.
It offers with required financial assistance from 5 lakhs to 65 lakhs for micro and small enterprises for establishing their business.

- The main objective of the CGTMSE scheme is to encourage new entrepreneurs for implementing new and innovative business ideas via SMEs.
- The scheme is also aimed at offering guarantee regarding availability of credit for both lenders and borrowers in the form of financial security for their business.
- Under this scheme it is certain that business owners will be provided with capital and term loan to invest in their business plans.

122. Ans. A.

The National Adaptation Fund for Climate
Change (NAFCC) is a Central Sector Scheme which was set up in the year 2015-16. The overall aim of NAFCC is to support concrete adaptation activities which mitigate the adverse effects of climate change.
123. Ans. C.

Amortization refers to writing off the value of "Intangible assets" over their useful life.
Example of Intangible assets can be goodwill, patents, copyrights, trademarks etc.
124. Ans. B.

Brigadier (Dr.) B. D. Mishra is a former Brigadier of the Indian Army. He is the present Governor of Arunachal Pradesh.
125. Ans. A.

Balphakram National Park, Meghalaya is one of the well known national parks in India.
It is home to wide species of plants and animals and is located in the midst of the Garo
Hills in Meghalaya. Balphakram National Park, Meghalaya is located around 3000 meters above sea level.
126. Ans. B.

The Achanakmar Wildlife Sanctuary is an Indian sanctuary in Mungeli district, Chhattisgarh State.
127. Ans. C.

Radha Mohan Singh was president of BJP's Bihar State unit from 2006 to 2009. He was elected to 11th Lok Sabha, 13th Lok Sabha, 15th Lok Sabha and is currently a member of the 16th Lok Sabha.
He represents Purvi Champaran constituency in Bihar state.
128. Ans. A.

JRD Tata Sports Complex. The JRD Tata Sports
Complex Stadium (Hindi: जेआरडी टाटा स्पोर्ट्स
कमल्लेक्स) is a stadium in Jamshedpur, Jharkhand. It is currently used mostly for football matches andathletics competitions.
129. Ans. A.

The Dhirubhai Ambani Solar Park at Dhursar village near Pokhran in the Jaisalmer district of Rajasthan is a 40 megawatt photovoltaic power station, commissioned in 2012
130. Ans. A.

Indian Institute of Rice Research is located in Hyderabad. It was established in 1965 by Indian Council of Agricultural Research (ICAR). It was formally known as Directorate of Rice Research (DRR).
131. Ans. D.

* A cryptocurrency is a basically a digital asset that has been created to function as a medium of exchange, like cash.
* It uses cryptography to ensure the security of transactions - authentication and prevention of duplicate transactions - and to control the creation of new units of currency.
* This is different from cash in that cryptocurrencies have no physical form. These blur the boundaries between fiat and non-fiat currencies. They are simply numbers on a screen and there is no central bank that issues new currency. However, bitcoin has emerged as the popular face of cryptocurrencies.

132. Ans. B.

In insurance, underwriting is to sign and accept liability and guaranteeing payment in case loss or damage occurs. Underwriting is provided by a large financial service provider such as a bank, insurer or investment house.
133. Ans. B.

Lekh Tandon was an Indian filmmaker and actor. He had directed numerous Bollywood movies and Indian TV Serials. He gained national fame due to success of his directorial ventures Professor, Prince, Ek Baar Kaho and Agar Tum Na Hote
134. Ans. D.

The Government of Japan is hosting the 50th annual meeting of the Asian Development Bank
(ADB) Board of Governors from May 4 to 7, 2017 in Yokohama, Tokyo. The theme of the meeting is 'Building Together the Prosperity of Asia 135. Ans. E.

The Rajasthan assembly has become
the first in India to call attention
and adjournment motions and
proposals online from legislators to send them to the state government.
136. Ans. B.

The Union Govt. has constituted a committee for continuously monitor the solutions to air pollution, headed by C K Mishra. He is the Secretary of Ministry of Environment, Forest and Climate Change.
137. Ans. E.

Capital Adequacy Ratio (CAR) is also known as Capital to Risk (Weighted) Assets Ratio (CRAR), is the ratio of a bank's capital to its risk. National regulators track a bank's CAR to ensure that it can absorb a reasonable amount of loss and complies with statutory Capital requirements.
Total capital ratio (CRAR) = Eligible Total Capital / RWA for (Credit risk + Market risk + Operational risk)
138. Ans. A.

The Crisil FPI index would serve as the benchmark for the performance of FPI investments in government securities, and ' $A A A$ ' as well as ' $A A^{\prime}$ rated corporate bonds with residual maturity greater than three years.
139. Ans. E.

According to the government, after the abolition of the Foreign Investment Promotion Board (FIPB), now ministries will have to decide on FDI proposals within 60 days of the application and any rejection. 140. Ans. C.

The Reserve Bank of India (RBI) has added HDFC Bank, the second largest private sector lender of country in list of Domestic Systemically Important Banks (D-SIBs). HDFC Bank is third bank in country to be added in list of D-SIBs after State Bank of India (SBI) and ICICI Bank which were added in 2016 and continue to be in that category.
141. Ans. A.

If $Z$ is positive then only $Z^{7}$ is positive
So, statement I alone is sufficient to answer the question
If $Z$ is positive then $Z^{8}$ is positive
If $Z$ is negative then $Z^{8}$ is positive

So, statement II alone is not sufficient to answer the question
142. Ans. D.
$\frac{1}{a}+\frac{1}{b}=\frac{6}{5}$
Here, we have 2 unknowns and one equation
So, statement I alone is not sufficient to answer the question
$a \times b=5$
Here, we have 2 unknowns and one equation
So, statement II alone is not sufficient to answer
the question
On combining both the statements
So, now we have two equations and two unknowns
So, option (d) is the correct answer.
143. Ans. E.

18 women can complete the same piece of work in
24 days
Here we don't know the capacity of work done by men
So, statement I alone is not sufficient to answer the question
28 children can complete the same piece of work in
56 days.
Here we don't know the capacity of work done by men
So, statement II alone is not sufficient to answer the question
On combining both the statements we still cannot determine the capacity of work done by men
So, option (e) is the correct answer.
144. Ans. E.

The urn contains 10 yellow and 8 green balls
Here we don't know the number of red balls
So, statement I alone is not sufficient to answer the question
The urn contains all colored balls
Here we don't know the number of red balls
So, statement II alone is not sufficient to answer
the question
On combining both the statements we still cannot determine the number of red balls.
So, option (e) is the correct answer.
145. Ans. B.

## Statement I

Let's say if $3 w=3$, then $w=1$, an integer. But if let's say, $3 w=5$ then $w=5 / 3$, is not an integer.
So, with Statement I we cannot determine the answer.

## Statement II

$2 w=2,4,6,8 \ldots$ any even number, in this case $w$ is always an integer.

So, case II alone can answer it.
So, option (b) is the correct answer.
146. Ans. C.

Given, total girls $=420$
Total boys $=810$
Let the number of boys in Xavier $=x$
So, the number of girls in Xavier $=2 / 3 \mathrm{x}$
Let the number of boys in Vijaya $=y$
So, the number of girls in Vijaya $=2 / 5$ y Given,
$x+y=810$

So,

So,

So,

So, the number of boys in Vijaya $=y=450$
So, the number of girls in Vijaya $=\frac{\mathbf{2}}{\mathbf{5}} \boldsymbol{y}=\mathbf{1 8 0}$
Let the number of boys in Xavier $=x=810-y=$ $810-450=360$
So, the number of girls in Xavier $=\frac{\mathbf{2}}{\mathbf{3}} \boldsymbol{x}=\mathbf{2 4 0}$
So,
So,
So, option (c) is the correct answer. 147. Ans. D.

The number of boys in Vijaya $=450$
And, the number of girls in Vijaya $=180$
Also, the number of boys in Xavier $=360$
And, the number of girls in Xavier $=240$
Number of girls in X college
$=640-240=400$
Total students in Xavier $=600$
So, total students in $X=600 \times \frac{\mathbf{1 2 5}}{\mathbf{1 0 0}}=\mathbf{7 5 0}$
Number of boys in X college $=750-400=350$
So, option (d) is the correct answer.
148. Ans. D.

The number of boys in Vijaya $=450$
And, the number of girls in Vijaya $=180$
Also, the number of boys in Xavier $=360$
And, the number of girls in Xavier $=240$
So, required difference $=630-600=30$
So, option (d) is the correct answer.
149. Ans. B.

The number of boys in Vijaya $=450$
And, the number of girls in Vijaya $=180$
Also, the number of boys in Xavier $=360$
And, the number of girls in Xavier $=240$
Number of boys in Y College $=$
Number of girls in Y College $=$
Total students $=650+144=794$
So, option (b) is the correct answer.
150. Ans. E.

The number of boys in Vijaya $=450$
And, the number of girls in Vijaya $=180$
Also, the number of boys in Xavier $=360$
And, the number of girls in Xavier $=240$
Required percentage =
So, option (e) is the correct answer.
151. Ans. C.
$15 \mathrm{M} * \mathrm{x}=21 \mathrm{~W} *(\mathrm{x}-4)$
$35 \mathrm{M} * \mathrm{y}=63 \mathrm{~W} *(\mathrm{y}-4)$
So, 21(x-4) $=63(y-4)$
$x=3 y-8$
$15 x=35 y$
$3 x=7 y$
So,
So,

So, option (c) is the correct answer.
152. Ans. B.

Let, $C P$ of $B=x$
CP of $A=2 x$
Total CP $=3 x$
MP =
Discount $=9$
SP $=3.6 x-9$
Profit\% =

So, $x=100$
CP of article $A=200$
So, option (b) is the correct answer.
153. Ans. D.

Two cases are possible
1)
2)

Required Probability $=\quad+$

So, option (d) is the correct answer.
154. Ans. B.

Let the length of the train $=\mathrm{L}$
And, the length of the platform $=P$
So,
$\mathrm{L}+\mathrm{P}=125$
And,
$\mathrm{L}=100$
$\mathrm{P}=25$
Required difference $=100-25=75$
So, option (b) is the correct answer.
155. Ans. D.

Satish: Bhavya: Abhishek
$15000 \times 12$ : $18000 \times(12-x): 24000 \times(12-x)=10$ :
9: 12
So,
$90=120-10 x$
$10 x=30 ; x=3$
So, option (d) is the correct answer.
156. Ans. B.

Let the age of Sakshi 6 years ago $=\mathrm{x}$
Present age of Sakshi $=5 / 4 \times$
So,

So, $x=24$
So present age of Sakshi = 30
Present age of her son $=\frac{\mathbf{1}}{\mathbf{5}} \boldsymbol{x}=\frac{\mathbf{3 0}}{\mathbf{5}}=\mathbf{6}$

Age of Sakshi after 10 years =
Age of her son after 10 years $=16$
So, required ratio $=40 / 16=5 / 2$
So, option (b) is the correct answer.
157. Ans. D.

SI in scheme $A=$
CI in scheme $B$
=
Required difference $=5886-5400=486$
So, option (d) is the correct answer.
158. Ans. E.

In $1^{\text {st }}$ alloy,
Copper $=40 \%$
Aluminum $=60 \%$
So, ratio $=2: 3$
In $2^{\text {nd }}$ allow,
Ratio $=2: 7$
Final mixture ratio $=5: 3$
So, total amount of copper
$=$
And, total amount of aluminum =
So, required percentage
$=$
So, option (e) is the correct answer.
159. Ans. C.

Relative speed of train $=15$
Distance between them $=20 \mathrm{~km}$
Time taken to cover that distance $=20 / 15=$ 4/3 hours
So, they will collide in 80 minutes
So, distance covered in 79 minutes
$=15 \times \frac{79}{60}=\frac{79}{4}$
So, distance left =
So, option (c) is the correct answer.
160. Ans. A.
$\pi r^{2} h=616 m^{3}$
and,
$2 \pi r h=352 m^{2}$
$\frac{\mathrm{So}_{\mathrm{S}^{2}}}{\frac{\pi r^{2}}{2 \pi r h}}=\frac{616}{352}$

So,

So, r = 3.5

So,

TSA =
TSA =
So, option (a) is the correct answer.
161. Ans. B.

Let the amount of mixture taken from $1^{\text {st }}$ allow $=x$
And, the amount of mixture from the second allow
$=\mathrm{y}$
So,

So,
$40 x+48 y=50 x+45 y$
$10 x=3 y ; x / y=3 / 10$
So, option (b) is the correct answer.
162. Ans. C.

3 men of the first group do as much work in 2 hour as 4 men of the second group do in 3 hours
So, $3 \times M 1 \times 2=4 \times M 2 \times 3$
So, M1 = 2 M2
Men Hours Days Work
408151
$4 \times 2$
So, $40 \mathrm{M} 1 \times 8 \times 15 \times 2=60 \mathrm{M} 2 \times 4 \times \mathrm{x}$
So, $x=$
So, option (c) is the correct answer.
163. Ans. A.

Let the speed of boat and stream be $u$ and $v$ respectively
So,
And,
So,
$75 u-75 v=60 u+60 v$
So, $u=9 v$
Required percentage =
So, option (a) is the correct answer.
164. Ans. A.

A train crosses a pole in 24 sec
Let, Speed of the train = s
So, length of the train (L) $=s \times 24$
A second train of same length crosses a platform in 30 sec with a speed $20 \%$ more than the first train.
Let, the length of the platform $=p$
So,
So,
So,
So, the ratio of length of train and length of
platform =

So,
So, option (a) is the correct answer.
165. Ans. D.
$A$ and $B$ can fill the tank in 36 minutes
Let the time taken by pipe A to fill the tank $=\mathrm{x}$ minutes
Ans, the time taken by pipe $B$ to fill the tank $=y$ minutes

So,
So, part filled in 30 minutes $=$
Remaining part $=$
So, $1 / 6^{\text {Th }}$ part is filled by $A$ alone in 10 minutes
So total time taken by A to fill the tank $=60$
minutes
And, time taken by $B$ to fill
=
So, pipe B can fill the tank in 90 minutes.
So, option (d) is the correct answer.
166. Ans. E.
$(422+478) \div ? \bumpeq 60$
$\Rightarrow 900 /$ ? $\simeq 60$
$\Rightarrow$ ?= 15
167. Ans. D.
$? \simeq \sqrt{ } 256 \times 19+8 \times 14$
$\Rightarrow ? \simeq 16 \times 19+8 \times 14=416$
168. Ans. B.
$16 \times 24+? \simeq 19 \times 32$
$\Rightarrow$ ? $=608-384=224$
169. Ans. C.
$28 \times 16 \simeq ? \times 14+70$
$\Rightarrow 448 \simeq$ ? $\times 14+70$
$\Rightarrow$ ? $=37814=27$
170. Ans. B.
$272+190+84 \simeq ? \times 13 \times 6$
$\Rightarrow$ ? $\simeq 13 \times 6546=7$
171. Ans. C.
$117.5-1 / 2=117$,
$117+2=119$,
$119-8=111$,
$111+32=143$,
$143-128=?=15$
172. Ans. E.
$15 \times 1-3=12$,
$12 \times 3-5=315$,
31
148
173. Ans. B.
$1 \times 7+6=13$,
13
83
419
1679
174. Ans. A.
$12 \times 2+1=25$,
$25 \times 2-2=48$,
48 99,
99
194
393
175. Ans. D.
$2^{3}+3=11^{\prime}$,
$3^{3}+4=31$,
$4^{3}+5=69$,
131,
176. Ans. B.

Required Ratio $=\quad=15 / 17$
177. Ans. D.

Number of female who bought ticket from C2 and C4 Theater together =

Number of males who bought ticket from C5 theatre $=$

## Required Percentage $=$

75\%
178. Ans. C.

Total revenue earned by theatre C4 =
179. Ans. B.

Number of male who bought ticket from C1
$\begin{array}{ll}= & 30\end{array}$
Number of male who bought ticket from C2
$=$
Number of male who bought ticket from C3 $=$
$=30+30+24=84$
Required average $=84 / 3=28$
180. Ans. A.

Number of males who bought ticket from C4, C5 and C6 together
$=$
$=36+40+36$
$=112$
Number of females who bought ticket from C4, C5 and C6 together
$=$
$=30+32+32$
$=94$
$\therefore$ Required difference $=112-94=18$
181. Ans. B.
(i) $2 x^{2}-5 x+3=0$
$2 x^{2}-2 x-3 x+3=0 \Rightarrow 2 x(x-1)-3(x-1)=0$
$\Rightarrow(x-1)(2 x-3)=0$
$x=1,3 / 2$
(ii) $3 y^{2}-4 y+1=03 y^{2}-3 y-y+1=0$
$3 y(y-1)-1(y-1)=0$
$(3 y-1)(y-1)=0 \Rightarrow y=1 / 3,1$
$\therefore \mathrm{x} \geq \mathrm{y}$
182. Ans. C.
(i) $x^{2}-17 x+72=0 \Rightarrow x^{2}-9 x-8 x+72=0$
$\Rightarrow x(x-9)-8(x-9)=0$
$(x-8)(x-9)=0 \Rightarrow x=8,9$
(ii) $y^{2}-27 y+180=0$
$y^{2}-12 y-15 y+180=0$
$\Rightarrow \mathrm{y}(\mathrm{y}-12)-15(\mathrm{y}-12)=0$
$\Rightarrow(y-15)(y-12)=0$
$\Rightarrow y=15,12$
$\therefore \mathrm{y}>\mathrm{x}$
183. Ans. B.
(i) $(x-12)^{2}=0$
$\Rightarrow x=12$
(ii) $\mathrm{y}^{2}-21 \mathrm{y}+108=0 \Rightarrow \mathrm{y}^{2}-12 \mathrm{y}-9 \mathrm{y}+108=0$
$\Rightarrow y(y-12)-9(y-12)=0$
$\Rightarrow(y-9)(y-12)=0 \Rightarrow y=9,12$
$\therefore \mathrm{x} \geq \mathrm{y}$
184. Ans. E.
(i) $2 x^{2}+7 x+5=0 \Rightarrow 2 x^{2}+2 x+5 x+5=0$
$\Rightarrow 2 x(x+1)+5(x+1)=0$
$\Rightarrow(2 x+5)(x+1)=0$
$x=$
(ii) $3 y^{2}+12 y+9=03 y^{2}+9 y+3 y+9=0$
$\Rightarrow 3 y(y+3)+3(y+3)=0(3 y+3)(y+3)=0$
$\Rightarrow y=-1,-3$
$\therefore$ No relation can be established.
185. Ans. B.
(i) $x^{2}+2 x-35=0 \Rightarrow x^{2}+7 x-5 x-35=0$
$\Rightarrow(x+7)-5(x+7)=0$
$\Rightarrow(x-5)(x+7)=0$
$x=5,-7$
(ii) $y^{2}+15 y+56=0 \Rightarrow y^{2}+7 y+8 y+56=0$
$\Rightarrow y(y+7)+6(y+7)=0$
$(y+8)(y+7)=0$
$\Rightarrow y=-8,-7$
$\therefore \mathrm{x} \geq \mathrm{y}$
186. Ans. B.

Speed of Train ' X ' on Tuesday $=450 / 2=225 \mathrm{~km} / \mathrm{hr}$
Speed of train ' Y ' on Monday $=450 / 3=150 \mathrm{~km} / \mathrm{hr}$
Required\% $=\quad \times 100=50 \%$
187. Ans. D.

Speed of train ' $Y$ ' on Tuesday $=450 / 4.5=100$ km/hr
Speed of train ' $X$ ' on Wednesday $=450 / 3=150$ km/hr
Average speed $=\quad=120 \mathrm{~km} / \mathrm{hr}$
188. Ans. A.

Speed of train ' $X$ ' on Friday
=
Speed of train ' $Y$ ' on Friday
$=\quad 112.5 \mathrm{~km} / \mathrm{hr}$

Required sum of time $=\frac{450}{180}+\frac{450}{112.5}=2.5+4=$ 6.5 hr
189. Ans. C.

Speed of train ' $X$ ' on Tuesday $=450 / 2=225$ km/hr
Speed of train ' $Y$ ' on Wednesday $=450 / 1.5=300$
km/hr
Required difference $=300-225=75 \mathrm{~km} / \mathrm{hr}$ 190. Ans. D.

Required time $=\frac{450}{\left(\frac{(50}{2} \times 1.6\right)}=1.25 \mathrm{hr}$

