REASONING

Directions (1 – 5) Study the following information carefully to answer the questions given below.

A, B, C, D, E, F and G are 7 friends left for 7 different cities – Delhi, Chennai, Hyderabad, Bangalore, Kolkata, Chandigarh and Jaipur, each one on a different day of the week. C left for Jaipur on Monday. On the last day of the week, the person left for Bangalore. E left the next day of A who left for Chandigarh and on the previous day of G. D left for Kolkata on Friday. B didn't leave for either Hyderabad or Bangalore and G left for Delhi.

1. On which day of the week did B leave?
a) Sunday
b) Saturday
c) Monday
d) Tuesday
e) None of these

2. Who left for Bangalore?
a) E
b) B
c) G
d) F
e) None of these

3. Who left on Tuesday?
a) A
b) C
c) G
d) F
e) None of these

4. On which day of the week did E leave?
a) Friday
b) Sunday
c) Wednesday
d) Thursday
e) None of these

5. Which of the following Combination is not right?
a) C – Jaipur
   F – Bangalore
b) A – Chandigarh
c) E – Kolkata
d) None of these

6. If in a cricket one day match, there were no wide balls, no wides, no extras and no overthrows. What is the maximum number of runs that a batsman can score in an ideal case scenario?

a) 1552
b) 1653
c) 1854
d) 3000
e) None of The Above

Directions (7 – 11): In each below, is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statements and the following assumptions and decide which of the assumption (s) is/are implicit in the statement.

Give Answer

(a) If Only Assumption I is implicit
(b) If Only Assumption II is implicit
(c) If Either Assumption I or II is implicit
(d) If Neither Assumption I nor II is implicit
(e) If Both Assumptions I and II are implicit

7. **Statement** – The driver of the huge truck pulled the emergency brakes to avoid hitting the auto rickshaw which suddenly came in front of the truck

Assumptions

I. The auto rickshaw driver may be able to steer his vehicle away from the oncoming truck.
II. The truck driver may be able to stop the truck before it hits the auto rickshaw

a) Only Assumption I is implicit
b) Only Assumption II is implicit
c) Either Assumption I or II is implicit
d) Neither Assumption I nor II is implicit
e) Both Assumptions I and II are implicit

8. **Statement –** The doctor warned the patient against any further consumption of alcohol, if he desired to get cured from the ailment and live a longer life.

Assumptions

I. The patient may follow the doctor's advice and stop consuming alcohol.

II. The doctor may be able to cure the patient from the ailment, if the patient stops consuming alcohol.

a) Only Assumption I is implicit
b) Only Assumption II is implicit
c) Either Assumption I or II is implicit
d) Neither Assumption I nor II is implicit
e) Both Assumptions I and II are implicit

9. **Statement –** The chairman of the company urged all the employees to refrain from making long personal calls during working hours in order to boost productivity.

Assumptions

I. Majority of the employees may respond positively to the chairman's appeal.
II. Most of the employees may continue to make long personal calls during working hours.

a) Only Assumption I is implicit
b) Only Assumption II is implicit
c) Either Assumption I or II is implicit
d) Neither Assumption I nor II is implicit
e) Both Assumptions I and II are implicit

10. **Statement –** The local cultural club decided to organize a musical event to raise money for the construction of the club building.

Assumptions

I. The local residents may not allow the club to organize the musical event in the locality
II. The money allocated by organizing the musical event may be substantial enough for the club to start construction.

a) Only Assumption I is implicit
b) Only Assumption II is implicit
c) Either Assumption I or II is implicit
d) Neither Assumption I nor II is implicit
e) Both Assumptions I and II are implicit

11. **Statement –** The traffic police department has put up huge notice boards at all major junctions of the city, warning drivers to refrain from using cell phones while driving or else their licenses will be impounded.

Assumptions

I. The drivers of the vehicles may ignore the warning and continue using cell phones while driving.
II. The traffic police department may be able to nab most of the offenders and impound their licenses.

a) Only Assumption I is implicit
b) Only Assumption II is implicit
c) Either Assumption I or II is implicit
d) Neither Assumption I nor II is implicit
e) Both Assumptions I and II are implicit

12. A and B both are walking away from point 'X'. A walked 3m and B walked 4m from it, then A walk 4m North of X and B walked 5m of South of A. What is the distance between them now?
a) 9.5m
b) 9m
c) 16m
d) 11.40m
e) None of The Above

13. Seema walks 30m North. Then , she turns right and walks 30m then she turns right and walks 55m. Then, she turns left and walks 20m. Then, she again turn left and walks 25m. How many meters away is she from her original position?
a) 45m
b) 50m
c) 66m
d) 55m
e) None of The Above

14. Seema correctly remembers that she took leave after 21st October and before 27th October. Her colleague Rita took leave on 23rd October but Seema was present on that day. If 24th October was a public holiday and 26th October was Sunday, on which day in October did Seema take leave?
a) 22nd October
b) 25th October
c) 22nd or 25th October

d) Data Inadequate
e) None of The Above

15. **K M 5, 1 P 8, G S 11, E V 14 , ...**
    a) C Y 17
    b) B Y 17
    c) B X 17
    d) C Z 17
    e) None of The Above

16. **2B, ..., 8E, 14H, 22L**
    a) 4C
    b) 4D
    c) 6E
    d) 9F
    e) None of The Above

Directions (17 – 21): In each of the questions below is given a statement followed by three courses of action numbered I, II and III. A course of action is a step or administrative decision to be taken for improvement, follow up or further action in regard to the problem, policy etc. On the basis of the information given in the statement, you have to assume everything in the statements to be true, then decide which of the suggested course (s) of action is/are logically worth pursuing.

17. **Statement –** Many people in the locality have fallen sick and admitted in the local hospital after consuming sweets served during a community meal.

    Course of Action

    I. The police should immediately arrest all the people responsible for making the sweets.
    II. The people admitted in the local hospital should immediately be shifted to bigger hospitals
    III. The local food and drug authority should investigate to find out the cause of the sickness and take necessary action.

a) Both I and III follow
b) Both II and III follow
c) Only III follows
d) All follow
e) None follows

18. **Statement –** Many management institutes in the city have enrolled a large number of students for management courses which are not recognized either by the local university or by the department of technical education.

    Course of Action

    I. All these management institutes should immediately be derecognized by the university and the department of technical education.
    II. All these management institutes should be asked to refund fees to all such students and enroll them only for recognized courses.
    III. All such students should be advised to switch over to the recognized courses in other institutes.

    a) Only I follows
    b) Only II follows
    c) Only III follows
    d) Both II and III follow
    e) None of The Above

19. **Statement –** Large number of students have failed in the recently held SSC final examination due to their performance in the English Language paper.

    Courses of Action

    I. The Government should immediately issue a circular to all the schools to appoint competent English language teachers.
    II. The Government should immediately instruct all the schools to send their English language teachers for refresher courses to be conducted by the Government.
    III. The Government should instruct the examining body to lower the difficulty level of

the English language paper in the future examinations.

a) None follows
b) Only I follows
c) Only II follows
d) Both I and II follow
e) All follow

20. **Statement –** Every year during monsoon quite a few people get drowned and die while swimming in the sea on various beaches in the city.

Courses of Action

I. The civic administration should deploy at least two life guards on each of the beaches during monsoon.
II. The civic administration should make arrangements to caution people whole swimming in the sea during monsoon.
III. The civic administration should put up prominent sign posits near the treacherous parts of the beaches advising people not to venture into the sea in the monsoon season.

a) Both I and II follow
b) Both II and III follow
c) Both I and III follow
d) All follow
e) None of The Above

21. **Statement –** It is feared by the experts that there may be deficient rainfall in many parts of the country due to weak monsoon.

Courses of Action

I. The Government should immediately set up a committee of experts to study the amount of rainfall in various parts of the country.
II. The Government should make arrangement for providing relief supplies to the areas affected due to poor monsoon.
III. The farmers in the affected areas should be advised to switch over to crops requiring less water during the Kharif season.

a) Only I follows
b) Only II follows
c) Only III follows

d) Both I and III follow
e) None of The Above

22. Arti and Saurabh are the children of Mr and Mrs Shah. Ritu and Shakti are the children of Mr and Mrs Mehra. Saurabh and Ritu are married to each other and two daughter Mukti and Shruti are born to them. Shakti is married to Rina and two children Subhash and Reshma are born to them. How is Arti related to Shruti?
a) Mother
b) Mother – in – Law
c) Sister
d) Aunt
e) None of The Above

23. T, S and R are three brothers. T's son Q is married to K and they have one child Rahul blessed to them. M the son of S is married to H and this couple is blessed with a daughter Madhvi. R has a daughter N who is married to P and this couple has one daughter Karuna born to them. How is Madhvi related to S?
a) Daughter
b) Niece
c) Granddaughter
d) Aunt
e) None of The Above

24. Kamal told Vimal, "Yesterday I defeated the only brother of the daughter of my grandmother." Whom did Kamal defeated?
a) Father
b) Son
c) Brother
d) Father – in – law
e) None of The Above

25. **If in a certain code language "SIMILAR" is written as "IZORNRH" , then how will "BECTOR" be written in that language?**
a) ILGXYV
b) ILGXVY
c) ILXGYV
d) ILXYVG
e) None of The Above

26. 7, 15, ..., 167, 231
   a) 32
   b) 45
   c) 42
   d) 64
   e) None of The Above

27. 8, ..., 41, 74, 118
   a) 29
   b) 15
   c) 22
   d) 19
   e) None of The Above

28. 13, ..., 15, 21, 33
   a) 12
   b) 11
   c) 13
   d) 14
   e) None of The Above

29. 7, ..., 17, 42, 91
   a) 8
   b) 7
   c) 9
   d) 12
   e) None of The Above

30. ...., 11, 24, 75, 304
   a) 8
   b) 5
   c) 10

   d) 9
   e) None of The Above

QUANTITATIVE APTITUDE

31. On selling a pen at 5% loss and a book at 15% gain, Mohan gains Rs. 7, if he sells the pen at 5% gain and the book at 10% gain, then he gains Rs. 13. The actual price of the book is:
   a) Rs. 100
   b) Rs. 80
   c) Rs. 10
   d) Rs. 400
   e) None of The Above

32. Two musical instruments were purchased for Rs. 8000. The first was sold at a profit of 40% and second at a loss of 40%. If the sale price was the same in both the cases, then the cost price of the cheaper instrument was:
   a) Rs. 3600
   b) Rs. 5600
   c) Rs. 2400
   d) Rs. 3800
   e) Rs. 3500

33. If 8 men or 17 boys can do a piece of work in 26 days, how many days will it take for 4 men and 24 boys to complete a piece of work 50 × 0.9 time great?
   a) 680 days
   b) 612 days
   c) 68 days 80 days
   d) 50 days
   e) None of The Above

Directions for questions (34 – 38) – Refer to the following table and solve the questions based on it.

The table given below gives the marks obtained by six students in six subjects:

Students	History (150)	Science (200)	Geography (150)	English (200)	Hindi (100)	Math (200)
A	75	110	90	140	75	170
B	105	130	75	130	80	140
C	95	105	80	150	90	160
D	85	115	95	125	65	135
E	115	135	110	145	70	125
f	120	160	96	110	55	145
Marks in bracket are Total Marks

34. What is the difference between the percentage marks obtained by student B in History and the percentage marks obtained by student C in Hindi?
a) 25
b) 20
c) 35
d) 30
e) None of The Above

35. The marks obtained by student A in Math are how many times the percentage marks obtained by student F in Science?
a) 2.5
b) 4.125
c) 1.125
d) 2.125
e) None of The Above

36. What is the difference between the percentage marks obtained by student C in English and the average percentage marks of all the six subjects?
a) 82
b) 38
c) 7
d) 14
e) None of The Above

37. In how many of the given subjects has student D got more than seventy percent marks?
a) None
b) One
c) Two
d) Three
e) Four

38. Approximately, what is the average percentage marks obtained by the six students in English?
a) 67%
b) 72%
c) 80%
d) Data Inadequate
e) 75%

39. Anand and Deepak started a business investing Rs.22,500 and Rs.35,000 respectively. Out of a total profit of Rs.13,800, Deepak's share is :
a) Rs.5400
b) Rs.7200
c) Rs.8400
d) Rs.9600
e) None of these

40. A, B and C enter into a partnership. A initially invests Rs.25 lakhs and adds another Rs.10 lakhs after one year. B initially invests Rs.35 lakhs and withdraws Rs.10 lakhs after 2 years and C invests Rs.30 lakhs. In what ratio should the profits be divided at the end of 3 years?
a) 10 : 10 : 9
b) 20 : 20 : 19
c) 20 : 19 : 18
d) Data inadequate
e) None of these

41. A and B started a business jointly. A's investment was thrice the investment of B and the perkod of his investment was two times the period of investment of B. If B received Rs.4000 as profit, then their total profit is :
a) Rs.16,000
b) Rs.20,000
c) Rs.24,000
d) Rs.28,000
e) None of these

42. A, B and C started a shop by investing Rs.27,000, Rs.72,000 and Rs.81,000 respectively. At the end of the year, the profits were distributed among them. If C's share of profit be Rs.36,000, then the total profit was :

43. A and B are partners in a business. A contributes $\frac{1}{4}$ of the capital for 15 months and B received $\frac{2}{3}$ of the profit. For how long B's money was used?
    a) 6 months
    b) 9 months
    c) 10 months
    d) 1 year
    e) None of these

44. A, B, C enter into a partnership investing Rs.35,000, Rs.45,000 and Rs.55,000 respectively. The respective shares of A, B, C in an annual profit of Rs.40,500 are :
    a) Rs.10,500, Rs.13,500, Rs.16,500
    b) Rs.11,500, Rs.13,000, Rs.16,000
    c) Rs.11,000, Rs.14,000, Rs.15,500
    d) Rs.11,500, Rs.12,500, Rs.16,500
    e) None of these

45. In how many different ways can the letters of the word 'SOFTWARE' be arranged in such a way that the vowels always come together?
    a) 120
    b) 360
    c) 1440
    d) 13440
    e) 720

46. In how many different ways can the letters of the word 'AUCTION' be arranged in such a way that the vowels always come together?
    a) 30
    b) 48
    c) 144
    d) 576
    e) None of these

47. In how many ways can 21 books on English and 19 books on Hindu be placed in a row on a shelf so that two books on Hindi may not be together?
    a) 3990
    b) 1540
    c) 1995
    d) 3672
    e) None of these

48. Two numbers a and b are chosen at random from the set of first 30 natural numbers. The probability that $a^2 - b^2$ is divisible by 3 is :

a) Rs.80,000
b) Rs.95,600
c) Rs.1,08,000
d) Rs.1,16,000
e) None of these

a) $\frac{37}{87}$
b) $\frac{47}{87}$
c) $\frac{17}{29}$
d) Data inadequate
e) None of these

49. From a pack of 52 cards, two are drawn one by one without replacement. Find the probabilities that both of them are kings.
    a) $\frac{11}{21}$
    b) $\frac{13}{121}$
    c) $\frac{1}{221}$
    d) $\frac{1}{121}$
    e) None of these

50. A shopkeeper gives two successive discounts on an article marked Rs. 450. The first discount given is 10%, if the customer pays Rs. 344.25 for the article, then second discount is:
    a) 12%
    b) 11%
    c) 15%
    d) 10%
    e) None of The Above

51. A service provider purchases connections at the rate of 10 connections for Rs. 54 and sold them at 6 connections for Rs. 38? Find the number of connections he should sell to have a profit of Rs. 1120.
    a) 1480
    b) 1060
    c) 1240
    d) 1200
    e) None of The Above

52. Alaxender bought 5 packets of chicken and Stephen bought 2 packets of fried rice, per packet of fried rice costing twice that of chicken. John bought nothing but paid Rs. 120 for his share of food which they shared equally. If John's Rs. 150

covered his share, then what is the cost fried rice per packet?
- a) Rs. 40
- b) Rs. 100
- c) Rs. 80
- d) Rs. 60
- e) None of The Above

53. On selling a pen at 5% loss and a book at 15% gain, Mohan gains Rs. 7, if he sells the pen at 5% gain and the book at 10% gain, then he gains Rs. 13. The actual price of the book is:
- a) Rs. 100
- b) Rs. 80
- c) Rs. 10
- d) Rs. 400
- e) None of The Above

54. Akshay purchased a horse and a carriage for Rs. 1800. He sold the horse at a profit of 20% and the carriage at a profit of 30%. His total profit was $25\frac{5}{6}$ %. The cost price of the horse is:
- a) Rs. 1050
- b) Rs. 1200
- c) Rs. 750
- d) Rs. 975
- e) Rs. 1125

55. Rajan got married 8 years ago. His present age is 6/5 times his age at the time of his marriage. Rajan's sister was 10 years younger to him at the time of his marriage. The age of Rajan's sister is
- a) 32 years
- b) 36 years
- c) 38 years
- d) 40 years
- e) None of these

56. The ratio between the present ages of P and Q is 6 : 7. If Q is 4 years old than P, what will be the ratio of the ages of P and Q after 4 years?
- a) 3 : 4
- b) 3 : 5
- c) 4 : 3
- d) Data inadequate
- e) None of these

57. Present ages of X and Y are in the ratio 5 : 6 respectively. Seven years hence this ratio will become 6 : 7 respectively. What is X's present age in years?
- a) 35
- b) 42
- c) 49
- d) Data inadequate
- e) None of these

58. The ratio of the father's age to his son's age is 7 : 3. The product of their ages is 756. The ratio of their ages after 6 years will be :
- a) 5 : 2
- b) 2 : 1
- c) 11 : 7
- d) 13 : 9
- e) None of these

59. The age of father 10 years ago was thrice the age of his son. Ten years hence, father's age ill be twice that of his son. The ratio of their present ages is :
- a) 5 : 2
- b) 7 : 3
- c) 9 : 2
- d) 13 : 4
- e) None of these

60. At a game of billiards, A can give B 15 points in 60 and A can give C 20 points in 60. How many points can B give C in a game of 90?
- a) 30 points
- b) 20 points
- c) 10 points
- d) 12 points
- e) None of these

GENERAL AWARENESS

61. The _____edition of bilateral exercise by the Indian Coast Guard and its Japanese counterpart has begun off the coast of Chennai recently:
- a) 11th
- b) 13th
- c) 15th
- d) 19th
- e) None of The Above

62. The title of bilateral exercise by the Indian Coast Guard and its Japanese counterpart is:

a) Kalyan - Kaijin 2016

b) Sahayog - Kaijin 2016

c) Maitri - Kaijin 2016

d) Himmat - Kaijin 2016

e) None of The Above

63. What is the name of Anti - Tank Missile recently successfully test fired in Rajasthan?

a) Akash

b) Sarp

c) Brahamastra

d) Nag

e) None of The Above

64. Indian Army Day is being observed every year on _____ in India:

a) 14 January

b) 15 January

c) 16 January

d) 20 January

e) None of The Above

65. This year it will be the _____Indian Army Day:

a) 66th

b) 67th

c) 69th

d) 68th

e) None of The Above

66. Recently Union Government has inaugurated the first phase of permanent campus of the IISER at _____ in Kerala:

a) Thrissur

b) Nilambur

c) Vithura

d) Allapuzha

e) None of The Above

67. IISER stands for**:**

a) Improvement Initiative for Scientific Education & Research

b) Indian Initiative for Science Education & Research

c) International Institute of Scientific Educational Research

d) Indian Institute of Science Education & Research

e) None of The Above

68. Who is the Current C.M. of Kerala?

a) K. Karunakaran

b) Oommen Chandy

c) V.S. Achuthanandan

d) A.K. Antony

e) None of The Above

69. Who is the Current C.M. of Maharashtra?

a) Prithviraj Chavan

b) Devendra Fadnavis

c) Ashok Chavan

d) Vilasrao Deshmukh

e) None of The Above

70. Currency of Spain is:

a) Yen

b) Pound

c) Dollar

d) Euro

e) None of The Above

71. What is the new deadline set up by RBI for exchanging the pre 2005 currency notes ?
  a) 30th June 2016
  b) 30th May 2016
  c) 31st March 2016
  d) 25th December 2016
  e) None of The Above

72. UNGA adopted the resolution to ___ November as World Tsunami Awareness Day ?
  a) 3rd November
  b) 4th November
  c) 5th November
  d) 6th November
  e) None of The Above

73. National Good Governance Day is observed on which former PM of India ?
  a) S. Manmahon Singh
  b) Indira Gandhi
  c) Atal Bihari Vajpayee
  d) Lal Bahadur Shastri
  e) None of The Above

74. Recently, Who awarded with C.K. Naidu Lifetime Achievement Award?
  a) Nayan Mongia
  b) Sachin Tendulkar
  c) Sunil Gavaskar
  d) Syed Kirmani
  e) None of The Above

75. National Games of India 2019 will be held in which State?
  a) West Bengal
  b) Karnataka
  c) Himachal Pradesh
  d) Andhra Pradesh
  e) None of The Above

76. Recently, Gaofen-4, the Earth observation satellite, successfully launched by which country?
  a) India
  b) China
  c) Pakistan
  d) Bangladesh
  e) None of The Above

77. Recently, which African country declared as Ebola Free?
  a) Guyana
  b) Grenada
  c) Guinea
  d) Gabon
  e) None of The Above

78. Which State/team won Vijay Hazare Trophy of Cricket ?
  a) Punjab
  b) Gujarat
  c) Maharashtra
  d) Himachal Pradesh
  e) None of The Above

79. Who awarded with Jnanpith Award 2015 ?
  a) Raghuveer Chaudhary
  b) Rajvir Chaudhary
  c) Ranvir Chaudhary
  d) Raghudevman Chaudhary
  e) None of The Above

80. Pin Valley National Park is situated in which State of India ?
  a) Jammu & Kashmir
  b) Himachal Pradesh
  c) Uttarakhand
  d) West Bengal
  e) None of The Above

81. Where is the Headquarter of United Nations Industrial Development Organization (UNIDO)?
  a) Washington D.C. (USA)
  b) Nairobi (Kenya)
  c) Vienna (Austria)
  d) Geneva (Switzerland)
  e) None of The Above

82. 2nd All Light India International Film Festival (ALIIFF) will be held at which place?
  a) Hyderabad
  b) Mangalore
  c) Goa
  d) Shimla
  e) None of The Above

83. 12th South Asian Games 2016 will be held in which country ?
  a) Sri Lanka
  b) China
  c) India
  d) Nepal
  e) None of The Above

84. Who won Macau Open Grand Prix Gold Badminton Tournament ?
   a) P.V. Sindhu
   b) Minatsu Mitani
   c) Lee Chong Wei
   d) Lin Dan
   e) None of The Above

85. World Milk Day is observed on which date?
   a) 1st June
   b) 2nd June
   c) 3rd June
   d) 4th June
   e) None of The Above

86. Kerala became 2nd State to set up NRI Commission, which was the 1st ?
   a) Himachal Pradesh
   b) Punjab
   c) Haryana
   d) Uttar Pradesh
   e) None of The Above

87. Which organization awarded with E-India Award?
   a) Delhi Development Authority
   b) Shimla Development Authority
   c) Gujarat Development Authority
   d) Mumbai Development Authority
   e) None of The Above

88. 1st Anti-piracy police unit of India established in which State?
   a) Telangana
   b) Andhra Pradesh
   c) Uttar Pradesh
   d) Arunachal Pradesh
   e) None of The Above

89. Where is the headquarter of Asian Infrastructure Investment Bank (AIIB)?
   a) Beijing, China
   b) Nairobi, Kenya
   c) Geneva, Switzerland
   d) Washington DC, USA
   e) None of The Above

COMPUTER KNOWLEDGE

90. What is the Currency of Mexico?
   a) Rupiah
   b) Rufiah
   c) Peso
   d) Shilling

91. Internet's Initial development was supported by:
   a) ARPANET

   b) IBM
   c) Microsoft
   d) None of the Above

92. NAT stands for:
   a) Network Address Translation
   b) Network Address Transformation
   c) Network Access Translation
   d) None of The Above

93. Which among the following is correct?
   a) Network firewalls are a software appliance running on general purpose hardware or hardware based firewall computer appliances that filter traffic between two or more networks.
   b) Host based firewalls provide a layer of software on one host that controls network traffic in and out of that single machine
   c) Both of The Above
   d) None of The Above

94. The first type of firewall was the packet filter which looks at:
   a) Network addresses
   b) Ports of the packet and determines if that packet should be allowed or blocked
   c) Both of The Above
   d) None of The Above

95. Firewalls are often categorized as:
   a) Network Firewalls
   b) Host Based Firewalls
   c) Either Network firewalls or Host based firewalls
   d) None of The Above

96. _____ intercepts all messages entering and leaving the network. The _____effectively hides the true network addresses:
   a) Circuit Level Gateway
   b) Proxy Server
   c) Packet Filter
   d) None of The Above

97. Firewalls are used to protect:
   a) Home Networks
   b) Corporate Networks
   c) Both of The Above
   d) None of The Above

98. Firewalls are frequently used to prevent unauthorized internet users from accessing private networks connected to the internet especially _____:
   a) Intranets

b) Extranets
c) Both of The Above
d) None of The Above

99. MOD stands for:
a) Monitor of Deception
b) Master of Deception
c) Management of Deception
d) None of The Above

100. IRC stands for:
a) Internal Relay Chat
b) Internet Relay Chat
c) Information Relay Chat
d) None of The Above

101. Which among the following are Malicious Softwares:
a) Virus and Worms
b) Trojan Horse and Time Bomb
c) Logic Bomb and Rabbit and Bacterium
d) All of The Above
e) None of The Above

102. Credit Card Fraud includes:
a) Credit cars are illegally get and used to get movable or immovable property
b) Unauthorized and illegal use of credit cards
c) Both of The Above
d) None of The Above

103. Crime through internet includes:
a) Telemarketing
b) Internet Fraud
c) Identity Theft
d) Credit Card account thefts
e) All of The Above
f) None of The Above

104. Which among the following is correct about "Hacking":
a) Hacking is an illegal intrusion into a computer system and/or network.
b) Cracking term is equivalent to Hacking (In Indian Laws perspective there is no difference between the term hacking and cracking).
c) Every act committed towards breaking into a computer and/or network is hacking.
d) Hackers can hack or personal monetary gains, such as to stealing the credit card information, transferring money from various bank accounts to their own account followed by withdrawal of money.
e) All of The Above
f) None of The Above

105. What are the two parts of an E – mail address?
a) User Name and Street Address
b) Legal Name and Phone Number
c) User Name and Domain Name
d) Initials and Password
e) User Name and Recipient Name

106. Unauthorized copying of software to be used for personal gain instead of/for personal backup is called _____:
a) Program thievery
b) Data Snatching
c) Software Piracy
d) Program Looting
e) Data Looting

107. Hackers _____:
a) All have the same motive
b) After people who maintain
c) May legally break into computer
d) Are people who are allergic to computer
e) Break into other people's computers

108. A term related to sending data to a satellite is _____:
a) Down link
b) Modulate
c) Demodulate
d) Up Link
e) Interrelate

109. The issues that deal with the collection and use of data about individual is ____:
a) Access
b) Publicity
c) Accuracy
d) Property
e) Privacy

110. ERP is an acronym for:
a) Enterprise Retirement Planning
b) Enterprise Relationship Planning
c) Enterprise Resource Planning
d) Enterprise Reorder Planning'
e) None of The Above

111. The computer's capability of distinguishing spoken words is called ____:
a) Voice analysis
b) Speech Acknowledgement
c) Voice Recognition
d) Speech Interpretation
e) None of The Above

112. The patterns of printed lines on most products are called _____:
a) Striping
b) Scanners
c) OCR
d) Barcodes
e) None of The Above

113. An error in a computer program is known as _____:
a) Crash
b) Power Failure
c) Bug
d) Virus
e) Fatal Error

114. Watermarks is available on:
a) Insert
b) Page Layout
c) Format
d) None of The Above

115. What are Macros:
a) Small add on programs that are installed afterwards if you need them
b) Small programs created in MS – Word to automate repetitive tasks by using VBA
c) Automatic Virus Scanning programs
d) None of The Above

116. Soft Pages breaks _____:
a) Are induced by the user
b) Are inserted by word automatically at the end of the page
c) Can be deleted
d) Are the one to show end of paragraph
e) None of The Above

117. Which among the following statements are correct about footers:
a) All pages in a document need to have same footer
b) Different section can have different footers
c) Only two types of footers, one for even pages and one for odd pages
d) Can't say
e) None of The Above

118. What is output:
a) What the processor gives to the user
b) What the user gives to the processor
c) What the processor gets from the use
d) What the processor informs to the user
e) None of The Above

119. Why is it unethical to share copyright files with your friends:
a) It is not unethical because It is legal
b) It is unethical because the files are being given for free
c) Sharing copyrighted files without permission breaks copyright laws
d) It is not unethical because the files are being given for free
e) It is not unethical anyone can access a computer

120. The basic unit of a worksheet into which you enter data in excel is called a:
a) Tab
b) Cell
c) Box
d) Range
e) None of The Above

ENGLISH

Directions (121 – 127): Study the following information carefully and answer the questions below:

An expatriate's relationship with the host country is a shifting one, and during my eight years in Western Japan, I have run the whole gamut: Greenhorn – in – Wonderland, hypercritic, "Excuse –me 0 but – you're standing –in- my Japan," culture – intoxicate. I am returning to the U.K. at the end of March, but paradoxically, my tie with Japan is due to grow much stronger in mid May when my wife gives birth and I become the father of an infant Japanese – Briton.

This prospect changes everything. Many long – term western expatriates in Japan inhabit an Edenic state of bourgeois affluence with no strings attached. We enjoy a comfortable lifestyle, ye remain untroubled by civic duties. We can't vote, we may lack linguistic fluency, our opinions are presumed to derive from our national stereotypes, we rarely blip on the national radar, so we are absolved from caring overly about where we live. Japan's problems, except in a Japan watching way, are not our problems. However, as someone who intends to return in five years to put a child through

Japan's elementary – school system, the country's failings suddenly matter more.

My sharpest worry is that national homogeneity continues to be Japan's modern religion. There are no degrees of citizenship here: if you are not "a Japanese" your gaijin status is hammered home at every encounter with well – meant compliment on your chopstick skills. This is not an "Expat – as – Victim" article: I know that in the immigration authority's hierarchy of gaijinhood, Causasians have a far easier time than, say, Filipino "Japayukis," Russian exotic dancers or South American Laborers. My point is that foreignness is like a magical garment from a folktale, one with the sewn – in – curse that its wearers can't remove themselves. Only social consent will allow my child to feel at home in his or her Asian mother country.

Japan withholds this consent like a zealot withholds an admission of doubt. At the political level, there is no provision for dual nationality in adulthood, so on his or her twentieth birthday our child must go through the ritual of renouncing British citizenship in the eyes of British Law. On a civic level, even Hiroshima, my home for eight years and according to its tourist literate "the international city of peace," denies Korean conscripts killed in the A – bomb blast a monument in Peace Memorial Park because its foreign presence would sully the sanctum's purity. "Internationalization," as oft – quoted a mantra here as anywhere, means little on street level beyond flag – bunting, expressway signs in English and more Starbucks franchises.

The sea – change necessary to update Japanese society's relationship with the rest of the world and its people is not on the horizon, not yet. Gerontocracy keeps younger talent away from powers of decision making, resulting in a US – bound brain drain, a Europe/New York City – bound arts drain and more depressing for a father – to – be, a "dream drain" : a pervasive acceptance that a creative and fulfilled life in a human – friendly environment lies only in the Paris of Amelia, the Rome of Audrey Hepburn's Holiday and the Canada or Hawaii of Japan Travel Bureau brochures. An economy gnawed by deflation produces a climate where xenophobia heats up, not cools down.

Education should propagate multiculturalism but instead fosters cookie – cutter conformity in a marathon sprint to brand name universities which offer a woefully shoddy product. If my wife and I have a daughter, she may well need to sacrifice all hope of a rewarding career should she elect to stay in Japan as it is now. The political forces that steered Japan to global dominance in the 1980s are now to kick start the country back to life, but not dead enough to roll over, expire, and allow their 21st century successors to take over.

This pessimism may be too murky. Japan changes more by revolution than evolution. The Meiji Restoration of 1868 catapulted Japan into the industrial age in the blink or a historian's eye, as did the post – war economic "miracle" – a word employed by Western commentators who failed to see rapid growth coming. It may be that the demographic and financial meltdowns Japan faces protect the environment, modernize the economy, strangle the Yakuza, muzzle corruption and crucially for my family's future, usher in a broader definition of what it is to be Japanese. I hope, so I have a strong affection for our child's Asian homeland, an affection that I want him or her to share as a native and not a curio. "Ah, so your child will be a Half, "I was told by my colleagues when they learned of my wife's pregnancy. "No, "I said, "my child will be a both."

121. When the author says his 'child will be both' , he implies:
   a) That the child is both Japanese and British
   b) That his child should get the best of both the worlds – America and Japan.
   c) That his child should be equally accepted by both the English and the Japanese Society
   d) That his child should be looked upon as an individual in his own right.
   e) Both (a) and (b)

122. The author gives examples of 'expressways signs in English' and 'Starbucks franchisees' to
   a) Show the internationalization of Japan
   b) Prove that famous brands like Starbucks have outlets in Japan

c) Show that getting around in Japan is not a problem or a foreigner
d) None of the Above
e) Only (b) and (c)

a) Japan suffers from an acute Xenophobia
b) Most Western expatriates in Japan hold blue-collar jobs
c) Japan does not acknowledge dual nationality upon adulthood
d) In Japan politics is the domain of the old
e) None of The Above

124. What does the word 'Gerontocracy' means?
a) A distrust of foreigners
b) A distrust of political leaders
c) A government ruled by old men
d) A mistrust of young talent
e) Both (c) and (d)

125. Which of the following can be inferred from the passage?
a) Japan does not provide a conducive atmosphere for the nurturing of young talent in any field of study.
b) Japan would maintain its status quo unless a natural calamity hits it
c) The author's attitude would not have changed were he not to become a father
d) None of The Above
e) All of (a), (b) and (c)

126. The style of the passage can be best described as:
a) Analytical
b) Expository
c) Factual
d) Argumentative
e) Humorous

127. The main purpose of the passage is to:
a) Voice out the alienation that a foreigner feels in Japan
b) Protest against the unfair treatment meted out to foreigners in Japan
c) Emphasize the need for multiculturalism and internationalization in their true meanings in Japan
d) All of The Above
e) Only (a) and (c)

123. Which of the following is the author least likely to agree with?

Directions(128 – 132): In the sentence below a word is given as blank, below the sentence five words/group of words are suggested, one of which can replace the blank. Find the appropriate word/group of words in each case.

The objectives of this article is to _____**(128)** interventions for diabetes according to their economic impact. We conducted a review of the literature to select articles that performed a cost – benefit analysis for 17 widely practiced interventions for diabetes. A scale for categorizing interventions according to their economic _____**(129)** was defined. The 17 interventions were classified as follows: (1) clearly cost saving; (2) clearly cost – effective; (3) possibly cost effective; (4) Non – cost effective or (5) unclear. Clearly cost – saving interventions included eye care and pre – conception care. Clearly cost effective intervention included nephropathy prevention in type 1 diabetes and improved glycemic control. Possibly cost – effective interventions included nephropathy prevention in type 2 diabetes and self management training. Non cost effective interventions were not identified. Interventions with unclear economic impact included case management, medical nutrition therapy, self – monitoring of blood glucose, foot care, blood pressure control, blood lipid control, smoking cessation, exercise, weight loss, [(Hba)sub.Ic] measurement, influenze _____**(130)** and pneumococcus vaccination. Widely practiced interventions for patients with diabetes can be clearly cost – saving and clearly cost effective. These practices are attractive from a medical and an economic perspective.

Interventions for diabetes use _____**(131)** economic resources to obtain future benefits. Cost saving or cost effective interventions can prevent the economic impact of long term complications such as blindness, end – stage renal disease (ESRD) and lower extremity

amputation (LEA), as well as short – term complications, such as hospitalization well as short term complications, such as hospitalizations for poor glycemic control. Is _____**(132)** care of diabetes a prudent allocation of society's assets?

128.
a) Split
b) Zone
c) Fragment
d) stratify
e) None of The Above

129.
a) Praise
b)Thump
c) Brunt
d)Impact
e) None of The Above

130.
a) Inoculation
b) Shot
c)Dose
d) Vaccination
e) None of The Above

131.
a) Old
b) Accustomed
c) Mod
d) Current
e) None of The Above

132.
a) Relevance
b) Preventive
c) Regular
d) Attentional
e) None of The Above

Directions (133 – 137) – Read these sentences to find out whether there is any grammatical mistake/error in them. The error, if any, will be in one part of the sentence. Mark the part with the error as your answer. If there is no error, mark 'No Error' as your answer. (Ignore, errors of punctuation, if any).

133. After his term in the Department of Defense (a)/ he was appointed Secretary of Energy (b)/ a job in which he was strongly supported the use (c)/ of alternate sources of energy such as nuclear energy (d)/ No Error (e)

134. As GDP growth is half of what it (a)/ is just a few years ago, the country (b)/ desperately needs to cut red tape and improve (c)/ infrastructure to boost investment and growth (d)/ No Error (e)

135. When elections in the country due shortly (a)/ people are determined to register as voters and to vote for (b)/ candidates based on their track record and the programs (c)/ that they intend to implement for the betterment of the country(d)/ No Error (e)

136. At least a quarter of the world's corals have lost (a)/ over the past twenty – five years and as climate change warms (b)/ the oceans the additional carbon dioxide will make (c)/ the water more acidic further destroying coral reefs (d)/ No Error (e)

137. The Prime Minister's speech laid out how (a)/ it is important to encourage female participated (b)/ in the economy yet the percentage of female lawmakers in (c)/ the lower house of parliament has fallen to 8%(d)/ No Error (e)

Directions (138 – 152): In these questions, a part of the sentence is bold. Below are given alternatives to the bold part at a, b and c which may improve the sentence. Choose the correct alternative. In case no improvement is needed, your answer is d.

138. For most people who exercise **at the morning**, there is no getting around the question: Eat and run? or Run and eat later?

    a) in the

    b) in

    c) at the time of

    d) No Improvement

139. Are ad agencies even attempting to peer into the keyhole of this indulgence sanctum to garner consumer insights **ahead of** the curve?
    a) Above
    b) over
    c) within
    d) No Improvement

140. Too many people rush into the world of credit and don't stop to think about how their actions could affect their credit score and ability to quality for credit in the future.

    a) their actions may affect their

    b) their actions might affect their

    c) their actions will affect their

    d) No Improvement

141. According to the report, number of deal with vaccines were energized by concerns around avian flu, SARS and bio - defense products, while looming patent expiration led to more deals in generics.

    a) number of deals in

    b) number of deal in

    c) number of deals with

    d) No Improvement

142. This is how the Bombay High Court responded to the state government's purposed moral stand which dance bars were causing grave harm to society.

    a) moral stand in

    b) moral stand at

    c) moral stand that

    d) No Improvement

143. If you have a high credit limit, use at least a third of it.

    a) at least a

    b) at last a

    c) utmost a

    d) No Improvement

144. Fitness experts will say that first eating provides fuel for a proper workout.

    a) eating in the beginning provides

    b) first eat provides

    c) eating first provides

    d) No Improvement

145. One study that examined the claim directly found that a group of people did burned much calories from fat on days when they exercised on an empty stomach than on days when they had a small breakfast first.

    a) burn more calories from fat on days

    b) burn more calorie from fat on days

    c) burnt more calories from fat on days

    d) No Improvement

146. Carefree children spent their afternoons to run about barefoot, their clothes dusty, and telltale twigs of the neighbor's mango tree in their hair.

    a) running barefoot in the sun

    b) run about barefoot in the sun

    c) running about barefoot in the sun

    d) No Improvement

147. Discreet salience is extremely important to create that 'irresistible - yet - unattainable' image for brands that want to take India seriously.

    a) was extremely important

    b) is mainly important

    c) was important extremely

    d) No Improvement

148. This, over a designer outfit that he wanted for a friend's party and that his sensitive parents refused him.

    a) which his sensitive

    b) which his insensitive

    c) that his insensitive

    d) No Improvement

149. Goa was full of non - Goa property hunters rushing about buying up the place like tomorrow was an expired lease.

    a) rushing in buying up the place

    b) rushed about buying up the place

    c) rushing about to buy up the place

    d) No Improvement

150. Property hunting is a tired and hungry making business.

    a) is a tiresome and hungry

    b) is a tiring and hungry

    c) is a tiring and waste

    d) No Improvement

151. Cultural differences aside, till luxury need speaks in a manner that befits.

    a) luxury still needs to speak

    b) luxury still need to speak

    c) luxury till need to speak

    d) No Improvement

152. Indian food - the culinary avatar of the subcontinent's social history presented on a platter - is without doubt the best food in the world.

    a) is undoublty the greatest food

    b) is without doubt greatest food

    c) is best food without doubts

    d) No Improvement

Directions (153 – 160): Following are the some words in the options, You have to find the suitable one for questions:

153. Differentiate
    a) vary randomly
    b) disagree
    c) create
    d) identify differences between
    e) None of the above

154. Elaborate
    a) Internal
    b) Detailed
    c) Infected
    d) Struggling
    e) None of The Above

155. Catalyst
    a) Cause of a process
    b) Bright color
    c) Ancestor
    d) Guarantee
    e) None of The Above

156. Constraint
    a) Limit
    b) Anxiety
    c) Defense
    d) Tightness
    e) None of The Above

157. Laborious
    a) Knowledgeable
    b) Demanding
    c) Skilled
    d) Radical
    e) None of The Above

158. Economical
    a) Rich
    b) Avoiding waste
    c) Religious
    d) Common
    e) None of The Above

159. Irrefutable
    a) Blocked
    b) Certain
    c) Strange
    d) Inferior
    e) None of The Above

160. Modicum
    a) Dishonestly
    b) Playful Behavior
    c) A small amount
    d) An average size
    e) None of The Above

SOLUTION

Answers (1 – 5)

Day	Person	City
Monday	C	Jaipur
Tuesday	A	Chandigarh
Wednesday	E	Hyderabad
Thursday	G	Delhi
Friday	D	Kolkata
Saturday	B	Chennai
Sunday	F	Bangalore

1. **Option B**
2. **Option D**
3. **Option A**
4. **Option C**
5. **Option D**
6. **Option B**
    Maximum Scores = 1653
    For an ideal case, the batsman will hit a six on each ball. But if he hits six on the last ball of the over, the strike will change in the next over. Thus, the best he can do in the last ball is run 3 runs so that he retains the strike even in the next over. Thus the total runs that he can score in each over:
    6 * 5 + 3 = 33
    But this will have to go like it only till the 49th over. In the last over, he can hit a six in the last ball as well as that will be the last ball of the match.

    Thus runs for the last over will be 6 * 6 = 36.
    Hence the maximum runs = 33 * 49 + 36 = 1653

7. **Option B**

    The driver does not have control on what the auto driver will do. Hence, Assumption I is invalid. But Assumption II is a valid assumption because if one takes an action he assumes its outcome

8. **Option E**

    I Assumption is implicit in the very giving of the advice. Assumption II is implicit in the condition attached.

9. **Option A**

    When we urge someone to do something we assume a positive response. Hence, Assumption I is implicit while for the same reason Assumption II becomes invalid.

10. **Option B**

Assumption I were implicit, such a decision would not be taken. Assumption II is implicit the purpose of fund raising that has been mentioned in the statement.

11. **Option D**

    Assumption I is invalid because when a warning is given it is assumed that it will be heeded to. Further, Assumption II is not believed to be the motive behind a warning. Hence, it is also invalid.
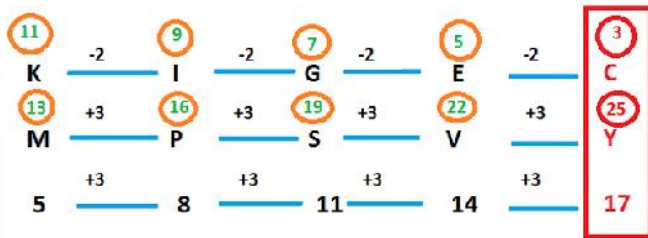
12. **Option D**

Required distance, AB = $\sqrt{7^2 + 9^2}$ = $\sqrt{130}$ = 11.40m

Required Distance = 30 + 20 = 50m

13. **Option B**

Hence, possible date may be either 22nd or 25th October.

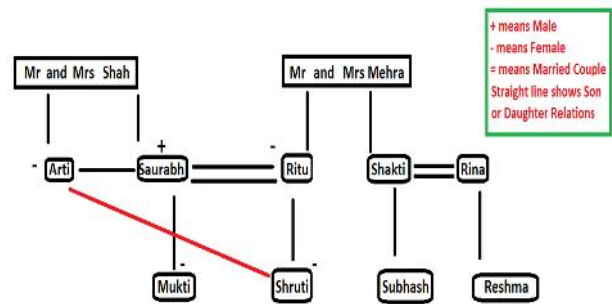**15.** **Option A**

16. **Option A**

17. **Option C**

Only III follows. After finding the cause of the sickness, necessary action should be taken.

18. **Option A**

The prime and effective course of action is de – recognition of such institutes by the university. Hence I course of action is appropriate.

14. **Option C**

According to	Leave Date
Seema	22, 23, 24, 25, 26

But Seema was present on 23rd. Also, it was holiday on 24th October. 26th October was Sunday.

19. **Option D**

To improve the standard in English language, the Courses of action I and II are necessary.

20. **Option D**

In order to save the people from getting drowned, all the courses of action are necessary.
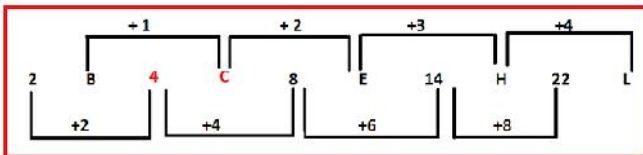
21. **Option B**

Only, the course of action II is appropriate because providing relief supplies to the affected areas is necessary.
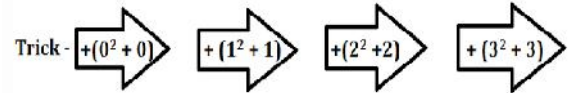
22. **Option D**

It is clearly shown that Arti is Aunt of Shruti. Option D is the Correct Answer.

23. Option C
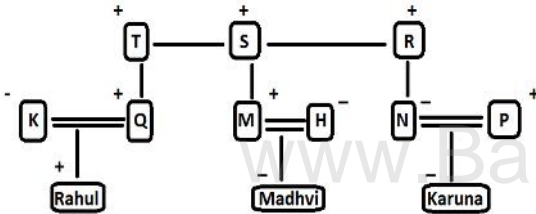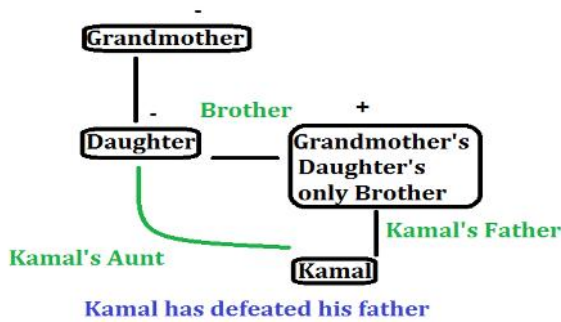

From the above generation tree, we see that
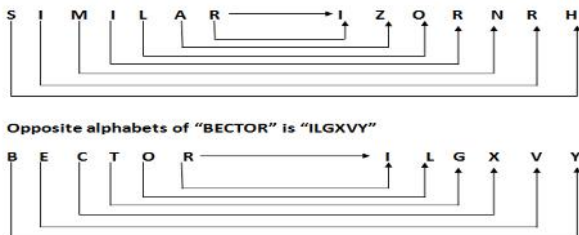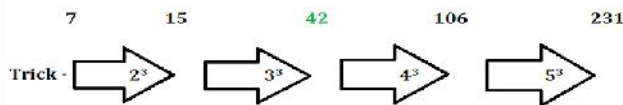Madhvi is the Granddaughter of S

24. Option A

Kamal's Aunt

Kamal has defeated his father

25. (Option B)

Opposite alphabets of "BECTOR" is "ILGXVY"

26. Option C

| 7 | 15 | 42 | 106 | 231 |

Trick - 2^3 3^3 4^3 5^3

27. Option D

| 8 | 19 | 41 | 74 | 118 |

Trick - $+11$ $+22$ $+33$ $+44$

28. Option C

| 13 | 13 | 15 | 21 | 33 |

Trick - $+(0^2 + 0)$ $+(1^2 + 1)$ $+(2^2 + 2)$ $+(3^2 + 3)$

29. Option A

| 7 | 8 | 17 | 42 | 91 |

Trick - $+(1)^2$ $+(3)^2$ $+(5)^2$ $+(7)^2$

30. Option C

| 10 | 11 | 24 | 75 | 304 |

Trick - $(*1+1)$ $(*2+2)$ $(*3+3)$ $(*4+4)$
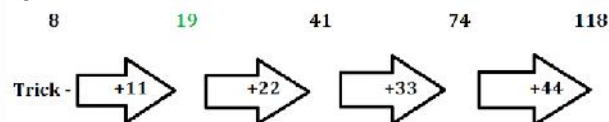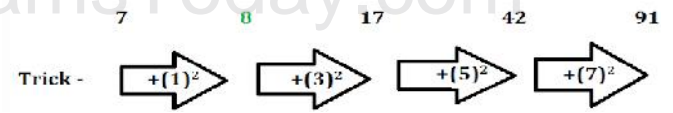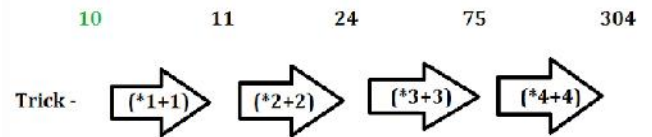
31. Option B

$0.95x + 1.15y = (x + y) + 7$

$1.05x + 1.1y = (x + y) + 13$

$y = 80$

$x = $ CP of Pen

$y = $ CP of book

32. Option C

Sale price = Cost Price$_1$ / (100 + 40) = C_1 / 140

Cost Price $_2$ / (100 – 40) = same, Sale price C_1 /7 = C_2 /3

C_1 / C_2 = 7/3

Cheaper cost price = 3 / (7 + 3) × 8000 = 2400

33. Option B

Use the formula as given below:

4 men + 24 boys can do it in $\frac{26}{\frac{4}{8}+\frac{17}{24}}$ days

For 50 × 0.9 times great, they can do in $\frac{26 \times 34}{65} \times \frac{9}{10}$ × 50 = 612 days

34.   Option B

The difference in percentage marks of B (History) and C (Hindi) = 90 − 70 = 20

35.   Option D

The percentage of marks obtained by F in Science = 160/200 × 100 = 80%

Required Value = 170 / 80 = 2.125

36.   Option C

Average percentage of marks of C= 680/1000 × 100 = 68%

Percentage of marks of C in English = 150/200 × 100 = 75%

Required difference = 75 − 68 = 7

37.   Option A

38.   Option A

Average percentage of marks in English

= (140 + 130 + 150 + 125 + 145 + 110) / 6 × 100 / 200

= 67%

39.   Option C

Ratio of their shares = 22500 : 35000 = 9 : 14

Deepak's share = Rs. [13800 × $\frac{14}{23}$] = Rs.8400

40.   Option E

A : B : C = (25 lakhs × 1) + (35 lakhs × 2) : (35 lakhs × 2 + 25 lakhs × 1) : (30 lakhs × 3)

= 95 lakhs : 95 lakhs : 90 lakhs = 19 : 19 : 18

41.   Option D

Suppose B invested Rs. x for y months. Then, A invested Rs.3x for 2y months.

So, A : B = (3x × 2y) : (x × y) = 6xy : xy = 6 : 1

So, B's profit : total profit = 1 : 7

Let the total profit be Rs. x. Then, $\frac{1}{7}$ = $\frac{4000}{x}$ or x = 28000

42.   Option A

A : B : C = 27000 : 72000 : 81000 = 3 : 8 : 9

So, C's share : total profit = 9 : 20

Let the total profit be Rs. x. Then, $\frac{9}{20} = \frac{36000}{x}$ or x = $\frac{36000 \times 20}{9}$ = 80000

43.   Option C

Let the total profit be Rs. z. Then,

B's share = Rs. $\frac{2z}{3}$, A's share = Rs. [z $\frac{2z}{3}$] = Rs. $\frac{z}{3}$

So, A : B = $\frac{z}{3} : \frac{2z}{3}$ = 1 : 2

Let the total capital be Rs. x and suppose B's money was used for x months. Then,

$$\frac{\frac{1}{4}x \times 15}{\frac{3}{4}x \times y} = \frac{1}{2}$$

y = [$\frac{15 \times 2}{3}$] = 10

Thus, B's money was used for 10 months.

44.   Option A

A : B : C = 35000 : 45000 : 55000 = 7 : 9 : 11

A's share = Rs. [40500 × $\frac{7}{27}$] = Rs.10500

B's share = Rs. [40500 × $\frac{9}{27}$] = Rs.13500

C's share = Rs. [40500 × $\frac{11}{27}$] = Rs.16500

45.   Option E

The word 'SOFTWARE' contains 8 different letters.

When the vowels OAE are always together, they can be supposed to form one letter.

Thus, we have to arrange the letters SFTWR (OAE).

Now, 5 letters can be arranged in 6! = 720 ways

The vowels (OAE) can be arranged among themselves in 3! = 6 ways.

Required number of ways = (720 × 6) = 4320

46. Option D

The word AUCTION has 7 different letters.

When the vowels AUIO are always together, they can be supposed to form one letter.

Then,we have to arrange the letters CTN (AUIO).

Now, 4 letters can be arranged in 4! = 24 ways.

The vowels (AUIO) can be arranged among themselves in 4! = 24 ways.

Required number of ways = (24 × 24) = 576

47. Option B

In order that two books on Hindi are never together, we must place all these books as under:

X E X E X E X …. X E X

Where E denotes the position of an English book and X that of a Hindi book.

Since there are 21 books on English, the number of places marked X are therefore, 22

Now, 19 places out of 22 can be chosen in 22C19 = 22C3 = $\frac{22 \times 21 \times 20}{3 \times 2 \times 1}$ = 1540 ways

Hence, the required number of ways = 1540

48. Option B

Out of 30 numbers 2 numbers can be chosen in 30C2 ways.

So, exhaustive number of cases = 30C2 = 435

Since $a^2 - b^2$ is divisible by 3 if either a and b are divisible by 3 or none of a and b is divisible by 3. Thus, the favourable numbers, of cases = 10C2 + 20C2 = 235

Hence, required probability = $\frac{235}{435} = \frac{47}{87}$

49. Option C

Required probability = $\frac{4}{52} \times \frac{3}{51} = \frac{1}{221}$

50. Option C

Let x% is second discount, then 45 × 450 × 90/100 × (100 – x/100) = 344.25

= 405 (100 - x/100) = 344.25 = 100 – x = 85

x = 15

51. Option D

CP of 60 connections = 54 / 10 × 60 = 324

SP = 38/6 × 60 = 380

For gain of (380 – 324) = 56, no. of connections = 60 for 1120, connections = 60 × 20 = 1200

52. Option C

5x + 2 × (2x) = 120 × 3   40

2x = 80

53. Option B

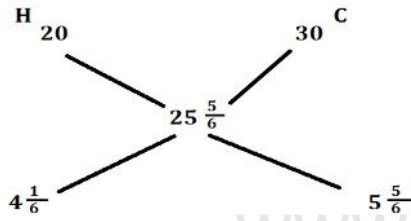0.95x + 1.15y = (x + y) + 7

1.05x + 1.1y = (x + y) + 13

y = 80

x = CP of Pen

y = CP of book

54. Option C

Here, the rule of allegation is to be used

$\frac{Horse}{Carriage} = \frac{25/6}{35/6} = \frac{5}{7}$

Cost of Horse = $\frac{4\frac{1}{6}}{4\frac{1}{6}+5\frac{5}{6}}$ × 1800 = $\frac{5}{12}$ × 1800 = Rs. 750

55.   Option C

Let Rajan's present age be x years

Then, his age at the time of marriage = (x - 8) years

Therefore
x= $\frac{6}{5}$ (x - 6)

5x = 6x - 48

x = 48

Rajan's sister's age at the time of his marriage = (x - 18) = 30

= (x - 8) - 10

Rajan's sister's present age
= (30 + 8)

= 38 years

56. Option E

Let P's age and Q's age be 6x years and 7x years respectively.

Then,   7x - 6x = 4

x = 4

So, required ratio = (6x + 4) : (7x + 4) = 28 : 32 = 7 : 8

57.   Option A

Let the present ages of X and Y be 5x years and 6x years respectively.

Then, $\frac{5x + 7}{6x + 7} = \frac{6}{7}$

7 (5x + 7) = 6 (6x + 7)

x = 7

So, X's present age = 5x = 35 years

58.   Option B

Let the present ages of the father and son be 7x and 3x years respectively.

Then, 7x × 3x = 756

21x² = 756

x² = 36

x = 6

So, required ratio = (7x + 6) : (3x + 6) = 48 : 24 = 2 : 1

59.   Option B

Let the ages of father and son 10 years ago be 3x and x years respectively.

Then, (3x + 10) + 10 = 2 [(x + 10) + 10]

3x + 20 = 2x + 40

x = 20

So, required ratio = (3x + 10) : (x + 10) = 70 : 30 = 7 : 3

60. Option C

A : B = 60 : 45 and A : C = 60 : 40

So, $\frac{B}{C} = [\frac{B}{A} \times \frac{A}{C}] = [\frac{45}{60} \times \frac{60}{40}] = \frac{45}{40} = \frac{90}{80}$ = 90 : 80

So, B can give C 10 points in a game of 90.

61. **Option C**
62. **Option B**
63. **Option D**
64. **Option B**
65. **Option D**
66. **Option C**
67. **Option D**
68. **Option B**
69. **Option B**
70. **Option D**
71. **Option A**
72. **Option C**
73. **Option C**
74. **Option D**
75. **Option D**
76. **Option B**
77. **Option C**
78. **Option B**
79. **Option A**
80. **Option B**
81. **Option C**
82. **Option A**
83. **Option C**
84. **Option A**
85. **Option A**
86. **Option B**
87. **Option A**
88. **Option A**
89. **Option A**
90. **Option C**
91. **Option A**
92. **Option A**
93. **Option C**
94. **Option C**
95. **Option C**
96. **Option B**
97. **Option C**
98. **Option A**
99. **Option B**
100. **Option B**
101. **Option D**
102. **Option C**
103. **Option E**
104. **Option E**
105. **Option C**
106. **Option C**
107. **Option E**
108. **Option D**
109. **Option E**
110. **Option C**
111. **Option C**
112. **Option D**
113. **Option C**
114. **Option B**
115. **Option B**
116. **Option B**
117. **Option A**
118. **Option A**
119. **Option C**
120. **Option B**
121. **Option C**
122. **Option D**
123. **Option B**
124. **Option C**
125. **Option C**
126. **Option A**
127. **Option D**
128. **Option D**
129. **Option D**
130. **Option D**
131. **Option D**
132. **Option B**
133. **Option C**

Part (c) has error in this sentence instead of saying 'he was strongly supported, 'it should be written as 'he strongly supported the use of alternate source of energy'.

134. **Option B**

Remove 'is' and use 'was' when we are referring to past time – a few years ago.

135. **Option A**

Part (a) has error of not inserting any verb. After country 'are' should be written.

136. **Option A**

Part (a) has error. It should be world's corals have been lost.

137. **Option B**

Part (b) has error of part of speech. Instead of participated, it should read female participation.

138.	**Option A**
139.	**Option D**
140.	**Option C**
141.	**Option A**
142.	**Option B**
143.	**Option D**
144.	**Option C**
145.	**Option A**
146.	**Option C**
147.	**Option D**
148.	**Option C**
149.	**Option D**
150.	**Option C**
151.	**Option A**
152.	**Option D**
153.	**Option D**
154.	**Option B**
155.	**Option A**
156.	**Option A**
157.	**Option B**
158.	**Option B**
159.	**Option B**
160.	**Option C**