

**Directions (Questions 1-30):** Study the following passages to answer the questions that follow each passage.

**Passage-I**

The term e-commerce embraces all the ways of transacting business via electronic data. But it is most closely identified with commerce transacted over the internet, and it is the internet that has put e-commerce near the top of the corporate agenda in the first years of the 21<sup>st</sup> century. E-commerce is merely an **elision** of electronic commerce, but it embodies a revolutionary idea: that electronic commerce is qualitatively different from ordinary time-worn commerce, that (in the jargon) there is a paradigm shift in the way that business is conducted in the world of e-commerce. Doing business via the internet is not only much quicker and much cheaper than other methods, it is also thought to overturn old rules about time, space and price. There is the much-vaunted death of distance: a customer 10,000 miles away becomes as accessible as one around the corner. And e-commerce has created the phenomenon of the long tail.

Furthermore, economies of scale are undermined. In its April 1999 report "Making Open Finance Pay", Forrester Research, an American research company gave examples of the way in which the internet had altered the pricing structure of a number of industries, particularly those with high information content. Before the advent of the internet it cost \$ 100 to make an equity market order. Afterwards it cost just \$ 15, an 85% fall in price, far more than could ever have been gleaned from traditional economies of scale. This is a revolution for organisations whose structures and strategies have built-in assumptions about relationships between price and volume. Electronic commerce has grown rapidly. Online sales in the United States are reckoned to have grown by some 18% in 2017. The country's five largest online retailers (often called e-tailers) were Amazon, Staples, Office Depot, Dell and Hewlett-Packard. Dell became a market leader in computers through early use of the internet to sell goods and services direct to consumers, and to buy components from suppliers.

Financial service offerings over the internet have also sprouted like mushroom, although security issues have imposed some restraint on the industry. At Charles Schwab, an American retail brokerage firm, it took just three years for online dealing to account for more than half of all its securities trading. For banks, the economic logic of e-commerce is compelling. It has been estimated that a banking transaction over the telephone costs half as much as the same transaction conducted over a counter in a traditional branch, and that an ATM transaction costs a quarter as much. But a banking transaction over the internet costs a mere 1% of an over-the-counter transaction at a branch. E-commerce also allows unknown firms to establish new businesses cheaply and rapidly, and to compete with old-timers. This they do not provide only by cutting prices and offering wider choices, but also by allowing consumers to make real-time price comparisons and to switch rapidly (and frequently) to the cheapest provider. This control that consumers have over prices has led some analysts to predict that e-commerce can at best only ever be a low-margin business, and at worst a no-margin business.

1. The word elision used in the passage means  
(1) Omission                      (2) Abbreviation                      (3) Contraption                      (4) Slang
2. Which of the following audiences would find the above passage most useful ?  
(1) Software engineers                      (2) Financial service providers  
(3) New entrepreneurs                      (4) Internet Service providers

3. Why does the writer state that in e-commerce economies of scale are undermined ?
- (1) Because it reinforces the built-in assumptions about the interconnection between price and volume.
  - (2) Because volumes cannot be expected in e-commerce, cost per transaction may remain more or less the same.
  - (3) Because e-commerce has the potential to create large volumes which may eventually push up the cost per transaction.
  - (4) Because the advantage that a business may derive through volume becomes available even at small scales.
4. Which of the following statements are not supported by the passage ?
- A. Transactions conducted using mobile phones do not qualify to be e-commerce.
  - B. The amount of trade conducted electronically has grown extraordinarily with widespread internet usage.
  - C. Modern commerce typically uses the World Wide Web at least at some point in the transaction's lifecycle.
  - D. Transaction conducted through email will not qualify to be e-commerce.
  - E. Electronic commerce involves the transportation of physical items in some way.
- (1) A, B, C and E      (2) A, C, D and E      (3) C and E      (4) B, D and E
5. Which of the following is the most appropriate antonym of the word 'gleaned' used in the passage?
- (1) Reduced      (2) Expected      (3) Executed      (4) Separated

#### Passage-II

In terms of the total energy consumed by different sectors, the largest consumer is understandably the industrial sector, which accounts for nearly half the total energy used in the country today. This is followed by the transport sector which consumes about 25%, the household sector (about 14%) and the agricultural sector (about 9%). This last sector has shown considerable increase in energy use over the last four decades. Among the primary fuels, the relative proportion of coal has dropped from nearly 80% to 40% and that of oil has gone up from 17% to 44% over the same period.

Total energy consumption in India today is equivalent to 291 million tons of oil of which 26% comes from wood. On a per capita basis it works out to about one litre of oil per day, which is extremely low by international standards. The future energy demand depends upon the level of development envisaged and also on the sections of people to be affected by it.

The energy disparity between the urban and the rural population is at present as wide as between nations on a worldwide scale. There is apparently a greater need to provide energy in the rural areas and to improve the efficiency of energy use than merely to increase the national figures for energy consumption limiting its use to those who are getting the bulk share already.

With the projected rate of population growth, improving upon the per capita energy consumption is a Herculean task as our coal reserves and the capacity to import oil cannot be increased beyond a point. There is clearly no escape from the utilisation of renewable energy sources in a big way if the gap between the desired levels of energy supply and available resources has to be kept at the minimum.

6. Which of the following shows correctly the different sectors consuming energy arranged in ascending order?  
 I. Agriculture  
 II. Household  
 III. Industrial  
 IV. Transport  
 (1) I, IV, II, III                      (2) I, II, IV, III                      (3) III, IV, II, I                      (4) III, II, I, IV
7. According to the passage, the energy requirement of the future will be decided on the basis of which of the following ?  
 A. Total energy already consumed by us in the past  
 B. Level of development of oil industry  
 C. Profile of the affected people  
 (1) Only A                      (2) Only B                      (3) Only C                      (4) Both B and C
8. The energy disparity ... as wide as ... worldwide scale, the first sentence of third paragraph means  
 (1) disparity in urban and rural is observed in all nations.  
 (2) in no other nation such disparity is observed.  
 (3) developed countries consume more energy than developing countries.  
 (4) worldwide scale is different for rural and urban areas.
9. Which of the following styles has been adopted by the author ?  
 (1) Data-based, objective, positive, solution-oriented  
 (2) Data-based, but coloured by socialism  
 (3) Highly subjective with bias for rural people  
 (4) Objective, descriptive, lacking clarity
10. The author is laying greater emphasis on which of the following ?  
 A. Efficient use of energy  
 B. Increasing national indices for energy consumption  
 C. Controlling population growth  
 (1) Only A                      (2) Only B                      (3) Only C                      (4) All these
11. The author feels that increasing per capita use of energy is  
 (1) not at all desirable.                      (2) a matter of great difficulty.  
 (3) not easy but certainly achievable.                      (4) rather difficult, but not impossible.
12. Which of the following statements is true ?  
 (1) Industrial sector uses 50% of total energy used in India.  
 (2) Energy consumption in India is 26% of world consumption.  
 (3) The household sector has shown considerable increase in energy use.  
 (4) Use of oil has increased from 40% to 80%.

13. Which of the following has been suggested by the author as the best possible solution to overcome energy crisis ?
- |                                        |                                       |
|----------------------------------------|---------------------------------------|
| (1) Exploration of oil reserves        | (2) Maximisation of renewable sources |
| (3) Importing large quantities of coal | (4) Reducing share of bulk users      |
14. Which of the following has been mentioned as a major hurdle in enhancing per capita consumption of energy in India ?
- (1) Present level of development in India
  - (2) International norm of 1 litre of oil per day per person
  - (3) Disparity in use of energy in rural and urban areas
  - (4) None of these

### Passage-III

Work expands so as to fill the time available for its completion. The general recognition of this fact is shown in the proverbial phrase, 'It is the busiest man who has time to spare.' Thus, an elderly lady at leisure can spend the entire day writing a postcard to her niece. An hour will be spent in finding the postcard, another hunting for spectacles, half an hour to search for the address, an hour and a quarter in composition and twenty minutes in deciding whether or not to take an umbrella when going to the pillar box in the street. The total effort that would occupy a busy man for three minutes, all told, may in this fashion leave another person completely exhausted after a day of doubt, anxiety and toil.

15. Who is the person likely to take more time to do work ?
- |                       |                         |
|-----------------------|-------------------------|
| (1) A busy man        | (2) A man of leisure    |
| (3) An elderly person | (4) An exhausted person |
16. What is the total time spent by the elderly lady in writing a postcard ?
- |                   |                                 |
|-------------------|---------------------------------|
| (1) Three minutes | (2) Four hours and five minutes |
| (3) Half an hour  | (4) A full day                  |
17. What does the expression 'pillar box' stand for ?
- |                                  |                            |
|----------------------------------|----------------------------|
| (1) A box attached to the pillar | (2) A box in the pillar    |
| (3) Box office                   | (4) A pillar-type post box |
18. What happens when the time to be spent on some work increases ?
- |                                    |                                    |
|------------------------------------|------------------------------------|
| (1) The work is done smoothly      | (2) The work is done leisurely     |
| (3) The work consumes all the time | (4) The work needs additional time |
19. Explain the sentence : 'Work expands so as to fill the time available for its completion'.
- (1) The more work there is to be done, the more the time needed.
  - (2) Whatever time is available for a given amount of work, all of it will be used.
  - (3) If you have more time, you can do more work.
  - (4) If you have some important work to do, you should always have some additional time.

#### Passage-IV

Recent technological advancement in manned and unmanned undersea vehicles, overcome some of the limitations of divers equipment. Without a vehicle, divers often became sluggish and their mental concentration was limited. Because of undersea pressure that affected their mind, concentration among divers was difficult or impossible. But today, most oceanographers make observations by means of instruments that are lowered into the ocean or from samples taken from the water. Direct observations of the ocean floor are made not only by the divers, but also by deep-diving submarines. Some of these submarines can dive to depths of more than several miles and cruise at depths of 15 thousand feet. Radio equipped buoys can be operated by remote control in order to transmit information back to land-based laboratories including data about water temperature, currents and weather. Some of mankind's most serious problems, especially those concerning energy and food may be solved with the help of observations made possible by these undersea vehicles.

20. This passage suggests that the successful exploration of the ocean depends upon
- (1) vehicles as well as divers.
  - (2) radio that divers use to communicate.
  - (3) controlling currents and the weather.
  - (4) removal of the limitations of diving equipment.
21. How is a radio-equipped buoy most likely to be operated ?
- (1) By operators inside the vehicle and underwater.
  - (2) By operators outside the vehicle on a ship.
  - (3) By operators outside the vehicle on a diving platform.
  - (4) By operators outside the vehicle in a laboratory on the shore.
22. With what topic is the passage primarily concerned ?
- |                                           |                                |
|-------------------------------------------|--------------------------------|
| (1) Recent technological advances         | (2) Communication among divers |
| (3) Direct observation of the ocean floor | (4) Undersea vehicles          |
23. Divers have had problems in concentrating underwater because
- (1) the pressure affected their minds.
  - (2) they got distracted.
  - (3) they did not think clearly.
  - (4) the pressure destroyed their mental processes.
24. Undersea vehicles
- (1) are too small for a man to fit inside.
  - (2) are very slow to respond.
  - (3) have the same limitations that divers have.
  - (4) make direct observations of the ocean floor.

### Passage-V

A new US study has warned that adolescents who take performance enhancing anabolic steroids are more likely to have adverse neural and behavioural consequences, like aggression and moodiness, because of the steroids' affect on the underdeveloped brain and the nervous system. The study by Northeastern University in the US, centred around a brain chemical called serotonin, which is linked to mood. Lower levels of serotonin are associated with depression and aggression. For the study, experiments were carried out on a strain of Syrian hamsters. This breed has similar neurological circuitry to humans, so experts felt it might be a good model for humans in this respect. The hamsters were given a high dose of anabolic steroids over the course of a month—which corresponded to five years' repeated dosage in humans. The researchers found that the hamsters were more aggressive than those not given steroids and these aggressive tendencies were mellowed if Prozac—a drug which boosts serotonin “uptake”—was given. However, subsequent analysis showed significantly lower than normal serotonin levels in the neural connections of the hamster's brains. This suggests there may be a longer-term effect of taking steroids while the brain is still developing. Professor Richard Melloni, who helped run the study, was quoted as saying by BBC : “We know testosterone or steroids affect the development of serotonin nerve cells, which, in turn, decreases serotonin availability in the brain. The serotonin neural system is developing during adolescence and the use of anabolic steroids during this critical period appears to have immediate neural and behavioural consequences.”

25. The drug that boosts serotonin uptake is  
(1) Prozac. (2) Melanin. (3) Erythrocytes. (4) Penicillin.
26. Which of the following is the most appropriate synonym of the word ‘mellowed’ used in the passage?  
(1) Harsh (2) Softened (3) Interim (4) Unpleasant
27. Why do adolescents develop neural disorders ?  
(1) The effect of steroids hampers the growth of the brain.  
(2) Prozac, if taken in excess by adolescents, makes them aggressive.  
(3) Due to a decrease in the level of serotonin in the blood.  
(4) None of these
28. Which of the following sentences is true, according to the passage ?  
(1) Adolescents are more likely to have neural and behavioural disorders.  
(2) Depression and aggression are caused by a lower intake of serotonin.  
(3) Those taking steroids are likely to face long-term neural and behavioral implications.  
(4) None of these
29. Upon which breed of mammals were the experiments carried out ?  
(1) Sicilian gangsters (2) Italian hamsters (3) Syrian hamsters (4) None of these
30. The thrust area of the research mentioned in the passage is  
(1) the effect of serotonin on the human brain.  
(2) the effect of high doses of anabolic steroids.  
(3) the immediate neural and behavioural consequences of the use of anabolic steroids.  
(4) All these

**Directions (Questions 31-35):** Fill in the blanks.

31. The Indian media has never been a monolith and for every \_\_\_\_\_ news outlet, there has been a \_\_\_\_\_ sensationalist tabloid as a counterpoint.  
(1) credible, corresponding (2) deceptive, emulated  
(3) imaginary, similarity (4) controversial, alternate
32. The government issued a \_\_\_\_\_ warning to the social media platform asking it to take immediate measures to prevent the spread of "irresponsible and \_\_\_\_\_ messages."  
(1) amiable, imploring (2) flinty, explosive  
(3) acquiescent, supplicate (4) static, implosive
33. \_\_\_\_\_ to clear the Civil Services preliminary examination twice in a row had severely \_\_\_\_\_ her self-esteem.  
(1) Dream, drowned (2) Negligence, sank  
(3) Failure, affected (4) Laxity, effected
34. After months of colder weather, the days get longer, the buds \_\_\_\_\_ in the trees, birds sing, and the world \_\_\_\_\_ a green dress.  
(1) come out, puts on (2) put off, comes around  
(3) take up, deals with (4) fall off, carries on
35. The most important use of petroleum or crude oil is as a fuel for heating for \_\_\_\_\_ electricity, and \_\_\_\_\_ for powering vehicles.  
(1) being generated, favourably (2) generating, especially  
(3) to generate, exclusively (4) generated, decisively

**Directions (Questions 36-40) :** In each of these questions, out of the given group of words, choose the correctly spelt word.

36. (1) Lackadaisical (2) Lackadasicial (3) Lakadaisicial (4) Lakadasicial
37. (1) Delaterious (2) Deleterious (3) Daleterious (4) Dalaterious
38. (1) Repertiore (2) Repartoire (3) Repertoire (4) Repartiore
39. (1) Ostantious (2) Ostantatious (3) Ostentetious (4) Ostentatious
40. (1) Nuance (2) Nuaence (3) Nuanice (4) Nueance

**Directions (Questions 41-45):** In each of these questions, choose the option which can be substituted for the given words.

41. A bicycle with seats and pedals for two riders, one behind the other.  
(1) Tricycle (2) Barrow (3) Toboggan (4) Tandem
42. A group of three people holding power in an organization  
(1) Triumvirate (2) Trivet (3) Tritium (4) Trio
43. A mournful poem or a song  
(1) Elegy (2) Hymn (3) Epic (4) Ode
44. A narrow stretch of land with sea on either side, connecting two large bodies of land  
(1) Peninsula (2) Island (3) Isthmus (4) Strait
45. Calmness and composure, especially in a difficult situation  
(1) Equanimity (2) Verbatim (3) Detachment (4) Charade

**Directions (Questions 46-50):** Choose the option that is the plural form of the given word.

46. Fish  
(1) Fishs (2) Fishess (3) Fish (4) Fishhes
47. Fungus  
(1) Fungusess (2) Fungusses (3) Fungi (4) Fungis
48. Aircraft  
(1) Aircraftes (2) Aircrafts (3) Aircraft (4) Aircrafttes
49. Goose  
(1) Geoses (2) Goosess (3) Geese (4) Goosess
50. Alumnus  
(1) Alumnuses (2) Alumni (3) Alumnusses (4) Alumnusess

**Directions (Questions 51-55):** Choose the option which best expresses the meaning of the underlined idiom/phrase in the sentence.

51. Nothing worthwhile can be accomplished by fits and starts.  
(1) by losing patience (2) by being in high spirits  
(3) by working intermittently (4) by getting confused
52. I am on the horns of a dilemma about the matter.  
(1) in suspense (2) in a terrible mood  
(3) in a difficult situation (4) in a nervous condition
53. My parents are running their business for the last five years, but now it is on its last legs.  
(1) about to take off (2) about to perish  
(3) about to produce results (4) about to fructify
54. I knew the boss was angry, so when I saw her come in, I made a beeline for my room.  
(1) to be at leisure (2) to do your own work  
(3) to head straight toward something (4) to work diligently
55. My sister sets my teeth on edge with her tall tales.  
(1) to cheer someone (2) to irritate someone  
(3) to praise someone (4) to help someone

**Directions (Questions 56-60):** Choose the word which is opposite in meaning of the underlined word.

56. The current of the river is fast flowing and treacherous.  
(1) delusive (2) loyal (3) precarious (4) perfidious
57. A serene mind can never be the pioneer of a great revolution.  
(1) tranquil (2) jocular (3) earnest (4) agitated
58. Our special offers are intended to entice people to buy.  
(1) allure (2) help (3) attract (4) repulse
59. Garima went to sleep in languor after coming back from work.  
(1) hate (2) vigour (3) ecstasy (4) fatigue
60. He has always been hard-working and frugal.  
(1) extravagant (2) crafty (3) thrifty (4) inane

61.  $\frac{3}{40}, \frac{7}{10}$  और  $\frac{19}{80}$  का लघुत्तम समापवर्त्य क्या होगा?  
 (1)  $20\frac{3}{25}$  (2)  $39\frac{9}{10}$  (3)  $27\frac{7}{20}$  (4)  $32\frac{7}{10}$
62. सुनीता का वेतन, उसकी बड़ी बहन अनीता के वेतन का  $62\frac{1}{2}\%$  है। यदि अनीता का वेतन ₹12,000 है तो सुनीता का वेतन है :  
 (1) ₹6950 (2) ₹7500 (3) ₹7280 (4) ₹7375
63. यदि किसी प्रबंधक की आय में 10% वार्षिक वृद्धि होती है तो उसकी आय में दो वर्ष बाद क्या परिवर्तन होगा?  
 (1) 21% वृद्धि (2) 22% वृद्धि (3) 23% वृद्धि (4) 25% वृद्धि
64. एक डीलर अपने सामान 4% हानि पर बेचने का दावा करता है लेकिन वह एक किलोग्राम की जगह 900 ग्राम के वजन का प्रयोग करता है। उसका वास्तविक लाभ या हानि प्रतिशत है :  
 (1)  $8\frac{2}{3}\%$  लाभ (2)  $6\frac{1}{2}\%$  हानि (3)  $6\frac{2}{3}\%$  लाभ (4) इनमें से कोई नहीं
65. 3 वर्ष पहले 5 सदस्यों वाले एक परिवार की औसत आयु 17 वर्ष थी। एक बच्चे के जन्म के बाद छह सदस्यों की औसत आयु आज भी इतनी है। बच्चे की आयु कितनी है?  
 (1) 1 वर्ष (2) 2 वर्ष (3) 3 वर्ष (4) 4 वर्ष
66. निम्नलिखित में से किस भिन्न का मान सबसे कम है?  
 $\frac{29}{57}, \frac{31}{85}, \frac{13}{38}, \frac{17}{42}$   
 (1)  $\frac{29}{57}$  (2)  $\frac{31}{85}$  (3)  $\frac{13}{38}$  (4)  $\frac{17}{42}$
67. एक व्यक्ति अपने वेतन का  $\frac{1}{5}$  भाग फुटकर व्यय पर और शेष का  $\frac{4}{5}$  भाग अन्य व्यय पर खर्च करता है। यदि उसके वेतन से मासिक बचत ₹1250 है तो उसका मासिक वेतन कितना है?  
 (1) ₹7711.50 (2) ₹7509.50 (3) ₹8721.25 (4) ₹7812.50
68.  $\frac{(0.75)^3}{1-0.75} + \{0.75 + (0.75)^2 + 1\}$  का मान क्या होगा?  
 (1) 4 (2) 3 (3)  $\frac{1}{4}$  (4) 1
69. यदि  $16^{x+1} = 64 \times 4^{-x}$  तो  $x^3$  का मान होगा :  
 (1)  $\frac{1}{27}$  (2)  $\frac{1}{729}$  (3)  $\frac{1}{8}$  (4) 1
70. एक पार्टी हॉल 17 मी. 28 सेमी. लंबा और 11 मी. 52 सेमी. चौड़ा है। इसके फर्श पर कम से कम संख्या में वर्गाकार टुकड़ों का उपयोग करते हुए मार्बल लगाने हैं। इसके लिए मार्बल के कितने टुकड़ों की जरूरत पड़ेगी?  
 (1) 4 (2) 5 (3) 6 (4) 7

61. The L.C.M. of  $\frac{3}{40}$ ,  $\frac{7}{10}$  and  $\frac{19}{80}$  is \_\_\_\_\_.
- (1)  $20\frac{3}{25}$  (2)  $39\frac{9}{10}$  (3)  $27\frac{7}{20}$  (4)  $32\frac{7}{10}$
62. The salary of Sunita is  $62\frac{1}{2}\%$  of what her elder sister Anita is getting. If Anita's salary is ₹12,000, the salary of Sunita is \_\_\_\_\_.
- (1) ₹6950 (2) ₹7500 (3) ₹7280 (4) ₹7375
63. If the income of a manager is increasing annually by 10%, what will be the change in his income after two years?
- (1) 21% increase (2) 22% increase (3) 23% increase (4) 25% increase
64. A dealer is professing to sell his goods at a loss of 4% but by means of his false balance, he weighs 900 grams in place of a kg. weight. His real gain or loss percent is \_\_\_\_\_.
- (1) gain  $8\frac{2}{3}\%$  (2) loss  $6\frac{1}{2}\%$  (3) gain  $6\frac{2}{3}\%$  (4) None of these
65. 3 years ago the average age of a family of 5 members was 17 years. With the birth of a baby, the average age of six members remains the same even today. Find the age of the baby.
- (1) 1 year (2) 2 years (3) 3 years (4) 4 years
66. Which one of the following fractions is the least?
- $\frac{29}{57}$ ,  $\frac{31}{85}$ ,  $\frac{13}{38}$ ,  $\frac{17}{42}$
- (1)  $\frac{29}{57}$  (2)  $\frac{31}{85}$  (3)  $\frac{13}{38}$  (4)  $\frac{17}{42}$
67. A man spends  $\frac{1}{5}$ th of his salary to meet pocket expenses.  $\frac{4}{5}$ th of the remainder of his salary he spends to meet his other expenses. If his monthly salary's savings amount to ₹1250, find his monthly salary.
- (1) ₹7711.50 (2) ₹7509.50 (3) ₹8721.25 (4) ₹7812.50
68. The value of  $\frac{(0.75)^3}{1-0.75} + \{0.75 + (0.75)^2 + 1\}$  is \_\_\_\_\_.
- (1) 4 (2) 3 (3)  $\frac{1}{4}$  (4) 1
69. If  $16^{x+1} = 64 \times 4^{-x}$ , the value of  $x^3$  is \_\_\_\_\_.
- (1)  $\frac{1}{27}$  (2)  $\frac{1}{729}$  (3)  $\frac{1}{8}$  (4) 1
70. A party hall is 17 m 28 cm long and 11 m 52 cm broad. It is required to pave the floor of the hall by using minimum number of square slabs of marble. How many such slabs are required?
- (1) 4 (2) 5 (3) 6 (4) 7

71. A और B अलग-अलग किसी काम को क्रमशः 20 और 15 दिनों में पूरा कर सकते हैं। उन्होंने 6 दिन तक साथ मिलकर काम किया, जिसके बाद B की जगह C आ गया। यदि वह काम अगले 4 दिनों में पूरा हुआ तो C अकेले उस काम को कितने दिनों में पूरा कर सकता है?  
 (1) 60 दिन (2) 40 दिन (3) 35 दिन (4) 30 दिन
72. एक व्यक्ति ₹15 में एक लीटर दूध खरीद कर इसमें पानी मिलाता है और मिश्रण को ₹12 में एक लीटर की दर पर बेच कर  $12\frac{1}{2}$  प्रतिशत लाभ कमाता है। एक लीटर मिश्रण में पानी की मात्रा कितनी है?  
 (1)  $\frac{1}{2}$  लीटर (2)  $\frac{11}{45}$  लीटर (3)  $\frac{13}{45}$  लीटर (4)  $\frac{17}{45}$  लीटर
73. 2 वर्ष, 4 वर्ष और 8 वर्ष आयु के तीन लड़के हैं। इनके बीच इनकी आयु के अनुपात में सत्तर रूपए बांटने हैं। हरेक को कितने रूपए मिलेंगे?  
 (1) ₹15, ₹20, ₹35 (2) ₹12, ₹22, ₹36 (3) ₹16, ₹24, ₹30 (4) ₹10, ₹20, ₹40
74. बिजली का एक पंखा बेचते समय एक डीलर 5% छूट देता है। यदि वह 8% की छूट दे तो उसे लाभ में ₹36 कम हो जाएंगे। पंखे का अंकित मूल्य है :  
 (1) ₹1000 (2) ₹1200 (3) ₹800 (4) इनमें से कोई नहीं
75. दो अंकों की ऐसी कितनी संख्याएं होंगी जिनके पलटने पर (अर्थात् उनके अंकों का स्थान आपस में बदलने पर) दो अंकों वाली पूर्ण वर्ग संख्या प्राप्त होगी?  
 (1) 1 (2) 4 (3) 6 (4) 10
76. जॉन ने एक बैंक में साधारण ब्याज की एक निश्चित दर पर एक निश्चित धनराशि 7 वर्षों के लिए निवेश की। 7 वर्ष पूरे होने पर उसे निवेश की गई राशि का दुगना मिलता है। दर प्रतिशत है :  
 (1)  $12\frac{1}{5}\%$  (2)  $10\frac{2}{3}\%$  (3)  $14\frac{2}{7}\%$  (4)  $17\frac{1}{5}\%$
77. एक बैंक में ₹8000 की राशि जमा की जाती है। बैंक में ब्याज की दर पहले वर्ष के लिए 5% और दूसरे वर्ष के लिए 8% है। चक्रवृद्धि ब्याज की राशि कितनी होगी?  
 (1) ₹1072 (2) ₹980 (3) ₹1124 (4) ₹1242
78. एक विवाह दल बस द्वारा 50 किमी. प्रति घंटा की चाल पर 3 घंटा 17 मिनट तक यात्रा करती है। इसके बाद बस में किसी खराबी की वजह से गंतव्य तक पहुंचने के लिए ट्रेन का प्रयोग किया जाता है और इसमें भी 3 घंटा 17 मिनट का समय लगता है। यदि ट्रेन की चाल 60 किमी. प्रति घंटा है तो पूरी यात्रा की औसत चाल है :  
 (1) 35 किमी. प्रति घंटा (2) 45 किमी. प्रति घंटा (3) 55 किमी. प्रति घंटा (4) 50 किमी. प्रति घंटा
79. 135 मीटर लंबी एक ट्रेन प्लेटफॉर्म पर खड़े एक लड़के को 7 सेकंड में पार कर जाती है लेकिन यह प्लेटफॉर्म को पूरी तरह 21 सेकंड में पार करती है। प्लेटफॉर्म की लंबाई है :  
 (1) 310 मीटर (2) 185 मीटर (3) 270 मीटर (4) 215 मीटर
80. एक नाव धारा की दिशा में  $1\frac{1}{2}$  किमी. की दूरी 15 मिनट में और धारा की विपरीत दिशा में इतनी ही दूरी  $22\frac{1}{2}$  मिनट में खेई जा सकती है। धारा के प्रवाह की दर है :  
 (1) 3 किमी. प्रति घंटा (2) 1 किमी. प्रति घंटा (3) 2 किमी. प्रति घंटा (4) 2.5 किमी. प्रति घंटा

71. A and B can separately do a piece of work in 20 and 15 days respectively. They worked together for 6 days, after which B was replaced by C. If the work was finished in next 4 days, then the number of days in which C alone could do the work will be \_\_\_\_\_.
- (1) 60 days                      (2) 40 days                      (3) 35 days                      (4) 30 days
72. A man buys milk at ₹15 a litre and mixes it with water. By selling the mixture at ₹12 a litre he gains  $12\frac{1}{2}$  percent on his outlay. How much water did each litre of the mixture contain?
- (1)  $\frac{1}{2}$  litre                      (2)  $\frac{11}{45}$  litre                      (3)  $\frac{13}{45}$  litre                      (4)  $\frac{17}{45}$  litre
73. Three boys are aged 2 years, 4 years and 8 years. They want to divide seventy rupees in the ratio of their ages. How much money would each get?
- (1) ₹15, ₹20, ₹35                      (2) ₹12, ₹22, ₹36                      (3) ₹16, ₹24, ₹30                      (4) ₹10, ₹20, ₹40
74. While selling an electric fan, a dealer gives a discount of 5%. If he gives a discount of 8%, he earns ₹36 less as profit. The marked price of the fan is \_\_\_\_\_.
- (1) ₹1000                      (2) ₹1200                      (3) ₹800                      (4) None of these
75. The number of two digit numbers which on being reversed (i.e., their digits exchanged the position) gives out perfect square two digit numbers is/are \_\_\_\_\_.
- (1) 1                      (2) 4                      (3) 6                      (4) 10
76. John invested a sum of money at a certain rate of simple interest in a bank for 7 years. He got double the sum he invested at the end of 7 years. The rate percent is \_\_\_\_\_.
- (1)  $12\frac{1}{5}\%$                       (2)  $10\frac{2}{3}\%$                       (3)  $14\frac{2}{7}\%$                       (4)  $17\frac{1}{5}\%$
77. A sum of ₹8000 is deposited in the bank. The rate of interest in the bank for first year is 5% and for the second year 8%. Find the compound interest.
- (1) ₹1072                      (2) ₹980                      (3) ₹1124                      (4) ₹1242
78. A marriage party travelled by bus at 50 km. per hour for 3 hours and 17 minutes. Due to some fault in bus, they decided to reach their destination by train which also took 3 hours 17 minutes. If the speed of the train is 60 km/hour, the average speed of the whole journey is \_\_\_\_\_.
- (1) 35 km/hr.                      (2) 45 km/hr.                      (3) 55 km/hr.                      (4) 50 km/hr.
79. A train 135 m long passes a boy standing on the platform in 7 seconds, but it passes the platform completely in 21 seconds. The length of the platform is \_\_\_\_\_.
- (1) 310 m                      (2) 185 m                      (3) 270 m                      (4) 215 m
80. A boat can be rowed with the stream  $1\frac{1}{2}$  km in 15 minutes and the same distance against the stream in  $22\frac{1}{2}$  minutes. The stream is flowing at the rate of \_\_\_\_\_.
- (1) 3 km per hour                      (2) 1 km per hour                      (3) 2 km per hour                      (4) 2.5 km per hour

निर्देश (प्रश्न 81-82) : इन प्रश्नों में दिए गए अंकों/अक्षर-समूह/अंक-अक्षर समूह में से कौन-सा एक अन्य से एक विशेष अर्थ में अलग है जबकि अन्य एक जैसे हैं?

81. F8G, G9H, H7I, I8H, I5K, K7L  
(1) G9H (2) I5K (3) I8H (4) K7L
82. ABC, BDF, CFI, DHL, EJM, FLR  
(1) BDF (2) DHL (3) FLR (4) EJM
83. सुषमा, विमल से विवाहित है। विमल, अमिता का ब्रदर-इन-लॉ है। लक्ष्मण, माधव का पुरुष कज़िन है जो विमल का बेटा है। अर्जुन, सुषमा की इकलौती बहन अमिता के बेटे का पिता है। लक्ष्मण का अर्जुन से क्या रिश्ता है?  
(1) ससुर (2) ब्रदर-इन-लॉ  
(3) नेफ़्यू (4) निर्धारित नहीं किया जा सकता
84. छह व्यक्ति अंकिता, मीनाक्षी, लैला, ओजस, निशा और दमन उत्तर की ओर चेहरा करके एक कतार में खड़े हैं (जरूरी नहीं है कि इसी क्रम में हों)। अंकिता बीच के दो स्थानों में से एक पर खड़ी है। दमन, ओजस के तीन स्थान दाएं है। मीनाक्षी और लैला, अंकिता की बाईं ओर कहीं खड़ी हैं। लैला, ओजस के ठीक बाएं खड़ी है। लैला और निशा के बीच दो व्यक्ति हैं। ओजस और मीनाक्षी के बीच कौन खड़ी है?  
(1) निशा (2) अंकिता (3) दमन (4) लैला
85. किसी खास कोड में MOBILE को OMIBEL लिखा जाता है। उस कोड में TELEPHONE को क्या लिखा जाएगा?  
(1) ETELHNPOE (2) LETEHPNOE (3) ETELHONPE (4) ETELHPNOE
86. किसी खास कोड में HIMALAYA को 201915271627327 और NILGIRI को 14191621191019 लिखा जाता है। उस कोड में ARAVALI को क्या लिखा जाएगा?  
(1) 2710276271619 (2) 2710276271620  
(3) 2710296271619 (4) 2711276271619
87. आयशा A स्थान से पूरब की ओर 800 मीटर चलती है। 800 मीटर चलकर वह B स्थान पर पहुंचती है। अब वह B स्थान से बाएं मुड़ती है और 500 मीटर चलकर C स्थान पहुंचती है। C स्थान से वह फिर बाएं मुड़ती है और 400 मीटर चलकर D स्थान पहुंचती है। स्थान D, स्थान A से किस दिशा में स्थित है?  
(1) उत्तर-पूरब (2) दक्षिण-पश्चिम (3) उत्तर-पश्चिम (4) दक्षिण-पूरब
88. A और B की वर्तमान आयु 9:4 अनुपात में है। अब से सात वर्ष बाद उनकी आयु का अनुपात 5:3 होगा। A और B की वर्तमान आयु कितनी है?  
(1) 18 और 8 वर्ष (2) 27 और 12 वर्ष (3) 45 और 20 वर्ष (4) 36 और 16 वर्ष
89. पिछले चुनाव में सत्ताधारी दल को कुल वैध मतों का 55% प्राप्त हुआ और 20% मत अमान्य थे। यदि मतों की कुल संख्या 7500 थी तो अन्य दलों को प्राप्त वैध मतों की संख्या कितनी है?  
(1) 2250 (2) 2700 (3) 2750 (4) 2800

**Directions (Questions 81-82) : Find the odd one out.**

81. F8G, G9H, H7I, I8H, I5K, K7L  
(1) G9H (2) I5K (3) I8H (4) K7L
82. ABC, BDF, CFI, DHL, EJM, FLR  
(1) BDF (2) DHL (3) FLR (4) EJM
83. Sushma is married to Vimal. Vimal is the brother-in-law of Amita. Lakshman is Madhav's male cousin who is son of Vimal. Arjun is the father of Sushma's only sister Amita's son. How is Lakshman related to Arjun?  
(1) Father-in-law (2) Brother-in-law  
(3) Nephew (4) Can't be determined
84. Six persons Ankita, Meenakshi, Laila, Ojas, Nisha and Daman are standing in a row facing north (not necessarily in the same order). Ankita stands in one of the middle two positions. Daman is standing three places right of Ojas. Meenakshi and Laila stand somewhere to the left of Ankita. Laila stands to the immediate left of Ojas. There are two persons between Laila and Nisha. Who is standing between Ojas and Meenakshi?  
(1) Nisha (2) Ankita (3) Daman (4) Laila
85. In a certain code MOBILE is written as OMIBEL. How is TELEPHONE written in that code?  
(1) ETELHNPOE (2) LETEHPNOE (3) ETELHONPE (4) ETELHPNOE
86. In a certain code HIMALAYA is written as 201915271627327 and NILGIRI is written as 14191621191019. How is ARAVALI written in that code?  
(1) 2710276271619 (2) 2710276271620  
(3) 2710296271619 (4) 2711276271619
87. Ayesha started travelling east from point A for 800 m. At the end of 800 m, she reached point B. She took a left turn from point B and travelled for another 500 m and reached point C. From point C she turned left again and travelled for 400 m to reach point D. In which direction is point D from point A?  
(1) North East (2) South West (3) North West (4) South East
88. The present ages of A and B are in the ratio of 9:4. Seven years hence, the ratio of their ages will be 5:3. Find the present ages of A and B?  
(1) 18 and 8 (2) 27 and 12 (3) 45 and 20 (4) 36 and 16
89. In the last election, the ruling party got 55% of the total valid votes and 20% of the votes were invalid. If the total number of votes was 7500, what is the number of valid votes that the other parties got?  
(1) 2250 (2) 2700 (3) 2750 (4) 2800

**निर्देश (प्रश्न 90-91):** नीचे दिए गए अभिकथन (A) और कारण (R) के लिए निम्नलिखित में से सही विकल्प चुनें। अपना उत्तर निम्नलिखित रूप में अंकित करें।

- (1) (A) और (R) दोनों सही हैं तथा (R), (A) की सही व्याख्या है।
- (2) (A) और (R) दोनों सही हैं किंतु (R), (A) की सही व्याख्या नहीं है।
- (3) (A) सही है किंतु (R) गलत है।
- (4) (A) गलत है किंतु (R) सही है।

90. **अभिकथन (A):** जेली फिश (मछली) किसी शिकार को दबोचने के लिए अपनी स्पर्शिका का प्रयोग करती है।  
**कारण (R):** जेली फिश की स्पर्शिका में डंक वाली कोशिकाएं होती हैं।

91. **अभिकथन (A):** एक सरकारी आंकड़े के अनुसार पिछले 7 वर्षों में विदेशी नस्ल की मिल्क (दुधारू) गाय की आबादी 60% बढ़ी है जबकि देसी नस्ल की दुधारू गाय की आबादी केवल 2% बढ़ी है।  
**कारण (R):** विदेशी नस्ल की दुधारू गाय अपेक्षाकृत अधिक मात्रा में दूध देती है।

**निर्देश (प्रश्न 92-93):** नीचे दिए गए इन प्रश्नों में दो कथन I और II हैं। ये कथन या तो स्वतंत्र कारण हो सकते हैं। अथवा स्वतंत्र कारणों के या एक आम कारण के प्रभाव हो सकते हैं। इन कथनों में से एक, दूसरे कथन का प्रभाव हो सकता है। दोनों कथन पढ़ें और निर्णय करें कि निम्नलिखित में से कौन-सा उत्तर विकल्प दोनों कथनों के बीच संबंध को सही तरीके से प्रस्तुत करता है। अपना उत्तर निम्नलिखित रूप में अंकित करें।

- (1) यदि कथन I कारण है और कथन II इसका प्रभाव है।
- (2) यदि कथन II कारण है और कथन I इसका प्रभाव है।
- (3) यदि कथन I और II दोनों स्वतंत्र कारणों के प्रभाव हैं।
- (4) यदि कथन I और II दोनों किसी आम कारण के प्रभाव हैं।

92. **कथन**

- I. इस वर्ष 10वीं कक्षा की अंतिम परीक्षा के दौरान नकल करने के काफी अधिक मामले सामने आए हैं।
- II. स्कूल प्राधिकारी परीक्षाओं के दौरान नकल करते पाए गए विद्यार्थियों के खिलाफ सख्त कार्रवाई कर रहे हैं और उन्होंने नकल के खिलाफ रोकथाम के उपाय अपनाने का फैसला किया है।

93. **कथन**

- I. मौसम विज्ञान विभाग ने देश के कई भागों में बुलबुल नामक एक तूफान के साथ भारी बारिश की चेतावनी जारी की है।
- II. सरकार ने समुद्र तटीय क्षेत्रों में रेड एलर्ट जारी किया है और सभी मछुआरों को समुद्र में न जाने की सलाह दी है।

**निर्देश (प्रश्न 94-95):** इन प्रश्नों में एक कथन और उसके बाद I तथा II संख्यांकित दो कार्य प्रणाली दी गई है। आपको कथन में दी गई हर बात को सत्य मानना है और फिर निर्णय करना है कि अनुसरण के लिए सुझाई गई दो कार्य प्रणालियों में से कौन-सी तार्किक रूप से सही लगती है। अपना उत्तर निम्नलिखित रूप में अंकित करें।

- (1) यदि केवल कार्यप्रणाली I सही लगती है
- (2) यदि केवल कार्य प्रणाली II सही लगती है
- (3) यदि कार्य प्रणाली I और II दोनों सही लगती है
- (4) यदि न तो कार्य प्रणाली I और न ही II सही लगती है

94. **कथन**

एक सार्वजनिक कंपनी ने चालू वित्त वर्ष में ₹12 करोड़ का अप्रत्याशित लाभ अर्जित किया है। वित्तीय टीम ने निदेशक बोर्ड को इस लाभ के सर्वोत्तम उपयोग के जो तरीके सुझाए हैं उनमें पहला है शेयरधारकों की प्रत्याशा पूरी करने के लिए उच्चतर लाभांश का भुगतान करना और दूसरा है बढ़ती हुई मांग पूरी करने के लिए उत्पादन क्षमता बढ़ाने में निवेश करना।

**कार्य प्रणाली**

- I. कंपनी को शेयर धारकों को खुश करने के लिए पूरा लाभ उनमें बांट देना चाहिए।
- II. कंपनी को पूरी राशि उत्पादन क्षमता बढ़ाने के लिए निवेश करने में लगानी चाहिए।

**Directions (Questions 90-91) :** For the Assertion (A) and Reason (R) below, choose the correct alternative from the following:

Mark answer as

- (1) if both (A) and (R) are true and (R) is the correct explanation of (A).
- (2) if both (A) and (R) are true but (R) is not the correct explanation of (A).
- (3) if (A) is true but (R) is false.
- (4) if (A) is false but (R) is true.

90. **Assertion (A):** Jelly fish uses its tentacles to subdue a prey.  
**Reason (R):** A jelly fish has stinging cells in its tentacles.

91. **Assertion (A):** According to a government data, the population of milch cow of foreign breed has increased by 60% while that of domestic breeds has increased by only 2% in the last 7 years in India.

**Reason (R):** Milch cow of foreign breed gives a much higher yield of milk.

**Directions (Questions 92-93):** The question given below has two statements I and II. These statements may be either independent causes or may be effects of independent causes or a common cause. One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choices correctly depicts the relationship between these two statements. Mark answer as

- (1) if statement I is the cause and statement II is its effect.
- (2) if statement II is the cause and statement I is its effect.
- (3) if both the statements I and II are effects of independent causes.
- (4) if both the statements I and II are effects of some common cause.

92. **Statements**

- I. There have been too many cases of cheating during 10<sup>th</sup> standard final year exams this year.
- II. The school authorities are taking strict action against students who are found cheating during exams and have decided to take preventive measures against cheating.

93. **Statements**

- I. The meteorological department has issued a warning of a cyclone named Bulbul with heavy rainfall in many parts of the country.
- II. The Government has declared red alert in the coastal areas and cautioned all fishermen against going to sea.

**Directions (Questions 94-95):** In each of these questions, a statement is followed by two courses of action numbered I and II. You have to assume everything in the statement to be true, and then decide which of the two suggested courses of action logically follows for pursuing. Mark the answer as

- (1) if only course of action I follows
- (2) if only course of action II follows
- (3) if both courses of action I and II follow
- (4) if neither course of action I nor II follows

94. **Statement**

A public company has earned a windfall gain of ₹12 crore in the current financial year. The financial team has advised the board of directors ways to best utilise this profit, one, to pay higher dividend to share-holders to meet their expectations and, two, to invest in increasing the production capacity to meet increasing demand.

**Courses of Action**

- I. The company should distribute all the profits to the shareholders in order to appease them.
- II. The company should invest the complete amount towards investing in increasing the production capacity.

95. कथन

आधुनिक कृषि उपस्कर और मशीनरी खरीद पाने में किसानों के सक्षम न होने के पीछे प्रमुख कारणों में से एक है निम्न ब्याज पर ऋण की व्यवस्था की कमी।

कार्य प्रणाली

- I. सरकार को देश भर में किसानों को कृषि उपस्कर और मशीनें मुफ्त मुहैया कराने के एक स्कीम की योजना बनानी चाहिए।
- II. सरकार को सस्ते ब्याज दरों पर किसानों को ऋण मुहैया कराने की एक स्कीम शुरू करनी चाहिए जो उन्हें उपस्कर और मशीनरी खरीदने में मदद करेगी।

**निर्देश (प्रश्न 96-97):** इन प्रश्नों में पहले एक कथन और उसके बाद दो तर्क I और II दिए गए हैं। आपको निर्णय करना है कि कौन-सा तर्क एक 'प्रबल' तर्क है और कौन-सा एक 'कमजोर' तर्क है।

अपना उत्तर निम्नलिखित रूप में अंकित करें।

- (1) यदि केवल तर्क I प्रबल है
- (2) यदि केवल तर्क II प्रबल है
- (3) यदि तर्क I और II दोनों प्रबल हैं
- (4) यदि न तो तर्क I और न ही II प्रबल है

96. कथन : भारत को RCEP से जुड़ने पर सहमत होना चाहिए, भले ही इसे अपने आंकड़ा स्थानिककरण अधिकारों को गंवाना पड़े।

तर्क :

- I. हां, आंकड़ा स्थानिककरण वैसे भी उपयोगी नहीं है क्योंकि आंकड़ा स्थानिककरण पर काम करने के लिए भारत में पर्याप्त आई टी फर्म नहीं हैं।
- II. नहीं, आंकड़ा नया संसाधन है और भारत को अपने नागरिकों के आंकड़ों को उनके सर्वोत्तम उपयोग के लिए प्रयोग करने का अधिकार नहीं छोड़ना चाहिए।

97. कथन : संविधान में केन्द्रीय मंत्रीमंडल द्वारा संशोधन जो सार्वभौमिक वयस्क मताधिकार के अंतर्गत मताधिकार को संशोधित करेगा।

तर्क :

- I. हां, मौजूदा कानून को संशोधित करने के लिए यह संशोधन पारित किया जाना चाहिए क्योंकि सार्वभौमिक वयस्क मताधिकार एक काफी पुराना प्रावधान है।
- II. नहीं, सार्वभौमिक वयस्क मताधिकार भारतीय संविधान और इसकी राज-व्यवस्था के लोकतांत्रिक ढांचे का एक अनिवार्य हिस्सा है।

**निर्देश (प्रश्न 98-102):** नीचे दी गई सूचना को ध्यान से पढ़कर इन प्रश्नों के उत्तर दें।

छह दोस्त एक गोल मेज के चारों तरफ बैठकर एक कार्निवल की योजना बना रहे हैं। ये दोस्त हैं A, B, C, D, E और F. ये अनिवार्य रूप से इसी क्रम में नहीं बैठे हैं। सभी का चेहरा अंदर की ओर है।

- i. A, B की बाईं ओर दूसरा व्यक्ति है।
- ii. F, D के ठीक दाईं ओर बैठे व्यक्ति के सामने बैठा है।
- iii. B एक ओर E और दूसरी ओर F के बीच बैठा है।
- iv. D, A और E के बीच नहीं बैठा है।
- v. F के बगल में बैठा दोस्त E के ठीक दाईं ओर नहीं है।

98. निम्नलिखित में से कौन A और C के बीच बैठा है?

- (1) E
- (2) B
- (3) D
- (4) निर्धारित नहीं किया जा सकता

95. **Statement**

Lack of access to low interest credit is one of the major reasons behind inability of farmers to buy modern agricultural equipment and machinery.

**Courses of Action**

- I. Government should plan a scheme to provide agricultural equipment and machines free of cost to farmers all across the country.
- II. Government should launch a scheme to provide farmers, loans at cheap interest rates which will help them buy equipment and machinery.

**Directions (Questions 96-97):** Each of these questions consists of a statement followed by two arguments I and II. You have to decide which of the arguments is a 'strong' argument and which is a 'weak' argument.

Mark the answer as

- (1) if only argument I is strong
- (2) if only argument II is strong
- (3) if both arguments I and II are strong
- (4) if neither argument I nor II is strong

96. **Statement:** India should agree to join RCEP even if it has to give up its data localisation rights.

**Arguments:**

- I. Yes. Data localisation is anyway not useful as India does not have enough IT firms to work on data localisation.
- II. No. Data is the new resource and India should not give up its right to use the data of its citizen for their best use.

97. **Statement:** The union cabinet amendment to the Constitution which will modify the right to vote under Universal Adult Franchise.

**Arguments:**

- I. Yes. The amendment should be passed to modify the existing law as Universal Adult Franchise is an age old provision.
- II. No. Universal Adult Franchise is an essential part of the democratic structure of the Indian Constitution and the polity.

**Directions (Questions 98-102):** Study the information carefully to answer these questions.

Six friends are sitting around a round table planning a carnival. The friends are—A, B, C, D, E and F. They are not necessarily sitting in the same order. All are facing inside.

- i. A is sitting second to the left of B.
- ii. F is sitting opposite to the person who sits to the immediate right of D.
- iii. B sits between E on one side and F on the other.
- iv. D doesn't sit between A and E.
- v. The friend sitting next to F doesn't sit to the immediate right of E.

98. Who among the following is sitting between A and C?

- (1) E
- (2) B
- (3) D
- (4) Can't be determined

99. F के सामने कौन बैठा है?

- (1) A  
(3) C

- (2) B  
(4) निर्धारित नहीं किया जा सकता

100. E के सामने बैठे व्यक्ति की बाईं ओर दूसरे स्थान पर कौन बैठा है?

- (1) B  
(3) D

- (2) A  
(4) निर्धारित नहीं किया जा सकता

101. यदि D और B आपस में अपनी जगह बदल लेते हैं तो E और F के बीच कौन बैठा होगा?

- (1) A  
(3) C

- (2) D  
(4) निर्धारित नहीं किया जा सकता

102. निम्नलिखित में से कौन-सा जोड़ा एक-दूसरे के बगल में बैठता है?

- (1) C और A  
(3) B और A

- (2) C और D  
(4) निर्धारित नहीं किया जा सकता

**निर्देश (प्रश्न 103-105):** नीचे कुछ प्रतीक-चिह्न दिए गए हैं जिनमें से हरेक दो व्यक्तियों के बीच कुछ रिश्ता दिखाता है। मान लें कि उल्लिखित रिश्ते सार्वभौमिक हैं और किसी समुदाय विशेष से किसी अपवाद को हिसाब में नहीं रखते। साथ ही उल्लिखित नामों से किसी व्यक्ति के लिंग का अनुमान न लगाएं।

- I.  $P + Q$  का अर्थ है कि P, Q का भाई है।  
II.  $P \% Q$  का अर्थ है कि P, Q का बेटा है।  
III.  $P \times Q$  का अर्थ है कि P, Q का पिता है।  
IV.  $P * Q$  का अर्थ है कि P, Q की पत्नी है।  
V.  $P - Q$  का अर्थ है कि P, Q की बहन है।

103. निम्नलिखित में से कौन-सा रिश्ता दिखाता है कि L, R की बहू है?

- (1)  $L * D \% R$   
(3)  $L + D \times R$

- (2)  $L * D - R$   
(4)  $L + D \% R$

104. यदि  $L * D \times R$  सही है तो L और R के बीच क्या रिश्ता है?

- (1) L, R का पिता है  
(3) L, R की आंटी है

- (2) L, R की मां है  
(4) L, R का अंकल है

105. यदि  $L \times D * R$  सही है तो L और R के बीच क्या रिश्ता है?

- (1) ससुर  
(3) सास

- (2) ब्रदर-इन-लॉ  
(4) सिस्टर-इन-लॉ

99. Who is sitting opposite to F?  
 (1) A (2) B  
 (3) C (4) Can't be determined
100. Who among the following is sitting second to the left of the one sitting opposite to E?  
 (1) B (2) A  
 (3) D (4) Can't be determined
101. If D and B exchange their places, who will be sitting between E and F?  
 (1) A (2) D  
 (3) C (4) Can't be determined
102. Which among the following pairs sits adjacent to each other?  
 (1) C and A (2) C and D  
 (3) B and A (4) Can't be determined

**Directions (Questions 103-105):** Given below are some symbols each showing some relationship between two persons. Assume that the relationships mentioned are universal and do not take into account any exception from any particular community. Also do not assume the gender of a person from the name mentioned.

- I.  $P + Q$  means P is the brother of Q  
 II.  $P \% Q$  means P is the son of Q  
 III.  $P \times Q$  means P is the father of Q  
 IV.  $P * Q$  means P is the wife of Q  
 V.  $P - Q$  means P is the sister of Q

103. Which of the following relations shows that L is the daughter-in-law of R?  
 (1)  $L * D \% R$  (2)  $L * D - R$  (3)  $L + D \times R$  (4)  $L + D \% R$
104. If  $L * D \times R$  is true, what is the relationship between L and R?  
 (1) L is the father of R (2) L is the mother of R  
 (3) L is the aunt of R (4) L is the uncle of R
105. If  $L \times D * R$  is true, what is the relationship between L and R?  
 (1) Father-in-law (2) Brother-in-law  
 (3) Mother-in-law (4) Sister-in-law

106. मिश्रित अर्थव्यवस्था प्रणाली का क्या अभिप्राय है?
- (1) लघु उद्योगों और विशाल उद्योगों का सह-अस्तित्व
  - (2) धनी और निर्धन का सह-अस्तित्व
  - (3) निजी और सार्वजनिक क्षेत्र का सह-अस्तित्व
  - (4) कृषि और भारी उद्योग दोनों को बराबर महत्व देना
107. ज्वार सबसे ऊंचे होते हैं :
- (1) जब पृथ्वी, सूर्य के सबसे नजदीक होती है
  - (2) जब पृथ्वी, चंद्रमा के सबसे नजदीक होती है
  - (3) वसंत के मौसम में
  - (4) जब सूर्य, चंद्रमा और पृथ्वी एक सीधी रेखा में होते हैं
108. सुरक्षा माचिस तीली की नोक पर मौजूद दहनशील पदार्थ का नाम क्या है?
- (1) सल्फर
  - (2) मैंगनीज डाइऑक्साइड
  - (3) फॉस्फोरस
  - (4) ऐंटीमनी सल्फाइड
109. भारत के साथ व्यापार संबंध स्थापित करने की ब्रिटिशों को अनुमति देने वाला पहला मुगल शासक कौन था?
- (1) अकबर
  - (2) जहांगीर
  - (3) शाहजहां
  - (4) औरंगजेब
110. दिल्ली को राजधानी बनाए जाने से पहले ब्रिटिश राज के दौरान भारत की राजधानी \_\_\_\_\_ थी।
- (1) लखनऊ
  - (2) बम्बई
  - (3) कोलकाता
  - (4) पटना
111. संसद द्वारा पारित गैर-धन विधेयक को भारत के राष्ट्रपति कितनी बार लौटा सकते हैं?
- (1) एक बार
  - (2) दो बार
  - (3) तीन बार
  - (4) कभी नहीं
112. भारत के संविधान के अनुसार निम्नलिखित में से क्या एक मौलिक अधिकार नहीं है?
- (1) समानता का अधिकार
  - (2) शोषण के विरुद्ध अधिकार
  - (3) संपत्ति का अधिकार
  - (4) धर्म की स्वतंत्रता का अधिकार

106. What do you understand by the term 'Mixed Economy'?
- (1) Co-existence of small scale and large scale industries.
  - (2) Co-existence of the rich and the poor.
  - (3) Co-existence of private and public sector.
  - (4) Assigning equal importance to both agriculture and heavy industries.
107. Tides are the highest
- (1) when the Earth is at its nearest to the Sun.
  - (2) when the Earth is at its nearest to the Moon.
  - (3) in-the spring season.
  - (4) when the Sun, Moon and the Earth are in a straight line.
108. What is the name of combustible material at the tip of a safety match stick?
- (1) Sulphur
  - (2) Manganese dioxide
  - (3) Phosphorus
  - (4) Antimony sulphide
109. Who among the following was the first Mughal emperor to allow Britishers to establish trade links with India?
- (1) Akbar
  - (2) Jahangir
  - (3) Shah Jahan
  - (4) Aurangzeb
110. Where was the capital of India during the British rule in India before shifting to Delhi?
- (1) Lucknow
  - (2) Bombay
  - (3) Calcutta
  - (4) Patna
111. How many times can the President of India return a non-money Bill, passed by Parliament?
- (1) Once
  - (2) Twice
  - (3) Thrice
  - (4) Never
112. As per the Constitution of India, which of the following is not a Fundamental Right?
- (1) Right to Equality
  - (2) Right against Exploitation
  - (3) Right to Property
  - (4) Right to Freedom of Religion

113. भारत में पर्सनल केयर उत्पादों का एक प्रसिद्ध ब्रांड 'डव' \_\_\_\_\_ कंपनी का हिस्सा है।  
 (1) जॉन्सन एण्ड जॉन्सन (2) गोदरेज  
 (3) हिन्दुस्तान यूनीलिवर (4) आई टी सी लिमिटेड
114. सितम्बर 2019 में भारत के सर्वोच्च न्यायालय ने सर्वोच्च न्यायालय (न्यायाधीशों की संख्या) संशोधन विधेयक, 2019 के तहत चार नए न्यायाधीशों की नियुक्ति की जिससे न्यायाधीशों की कुल संख्या \_\_\_\_\_ हो गई।  
 (1) इकतीस (2) बत्तीस  
 (3) तीस (4) इनमें से कोई नहीं
115. अंतरराष्ट्रीय मुद्रा कोष (आई एम एफ) के नए प्रबंध निदेशक के रूप में किसका चयन किया गया है?  
 (1) अब्दुलकावी यूसुफ (2) क्रिस्तालीना जॉर्जिएवा  
 (3) ऑड्री अजौले (4) डेविड मालपास
116. किस एशियाई देश ने हाल ही में 350 मीटर, 17 मंजिल लंबी मीनार 'लोटस टावर' का अनावरण किया है, जिसका 80% खर्च बेल्ट एवं सड़क पहल (बी आर आई) के तहत चीन ने उठाया है?  
 (1) म्यांमार (2) श्रीलंका  
 (3) नेपाल (4) बांग्लादेश
117. यू एस ओपन 2019 टेनिस प्रतियोगिता का महिला एकल खिताब किसने जीता?  
 (1) सेरेना विलियम्स (2) बियांका आन्द्रेस्कू  
 (3) नाओमी ओसाका (4) विक्टोरिया अजारेंका
118. निम्नलिखित में से किस जोड़े का मेल सही नहीं है?  
 (1) एपिकल्चर – मधुमक्खी पालन (2) पिसिकल्चर – मछली पालन  
 (3) सेरिकल्चर – रेशमकीट पालन (4) हार्टिकल्चर – लाखकीट पालन
119. 96 वर्षीय महिला फैशन मॉडल और एशिया की सबसे उम्रदराज मॉडल 'एलिस पैंग' \_\_\_\_\_ की निवासी है।  
 (1) दक्षिण कोरिया (2) हॉन्ग कोंग  
 (3) म्यांमार (4) फिलिपीन्स
120. SPACES की बेड-लाइंस रेन्ज 'रंगना' \_\_\_\_\_ समूह का एक हिस्सा है।  
 (1) वेलस्पन वीव्स (2) बॉम्बे डाइंग  
 (3) रेमंड ग्रुप (4) डि 'डेकोर होमफैब्रिक्स

113. 'Dove', a well-known brand of personal care products in India belongs to \_\_\_\_\_ company.
- (1) Johnson & Johnson (2) Godrej  
(3) Hindustan Unilever (4) ITC Ltd
114. In September 2019, the Supreme Court of India has appointed four new judges under Supreme Court (No. of Judges) Amendment Bill, 2019 which now took the total strength of judges to \_\_\_\_\_.
- (1) thirty one (2) thirty two  
(3) thirty (4) None of these
115. Who has been selected as the new managing director of the International Monetary Fund (IMF)?
- (1) Abdulqawi Yusuf (2) Kristalina Georgieva  
(3) Audrey Azoulay (4) David Malpass
116. Which Asian country has unveiled "Lotus Tower", the 350 mtr, 17-story tall tower, 80% of its cost has been funded by China under Belt and Road Initiative (BRI)?
- (1) Myanmar (2) Sri Lanka  
(3) Nepal (4) Bangladesh
117. Who has won the women singles title of US Open 2019 tennis tournament?
- (1) Sarena Williams (2) Bianca Andreescu  
(3) Naomi Osaka (4) Victoria Azarenka
118. Which of the following pairs is *NOT* correctly matched?
- (1) Apiculture – Bee keeping (2) Pisciculture – Fish rearing  
(3) Sericulture – Silkworm rearing (4) Horticulture – Lac rearing
119. 'Alice Pang', the 96-year-old female fashion model and oldest model of Asia is a resident of \_\_\_\_\_.
- (1) South Korea (2) Hong Kong  
(3) Myanmar (4) Philippines
120. 'Rangana' the range of bed-lines by SPACES is from the house of \_\_\_\_\_.
- (1) Welspun Weaves (2) Bombay Dyeing  
(3) Raymond Group (4) D'decor Home Fabrics