QUANTITATIVE

1. A mixture is formed by mixing two quantities of rice A and B in the ratio 5: 6 respectively. 10% mixture is replaced by quantity of rice A and the quantity of rice A in the new mixture becomes 112 kg. What is the initial quantity of the mixture?
1.176 kg   2.198 kg
3.220 kg   4.242 kg
5.264 kg

Directions (2-6):- In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

2. I. $x^2 -15x -154 = 0$
II. $y^2 +17y +70 = 0$
1. x< y   **2.** x > y
3. x ≤ y   **4.** x ≥ y
5. x = y or relationship cannot be established

3. I. $x^2 -10x -75 = 0$
II. $y^2 -30y +225 = 0$
1. x< y   **2.** x > y
3. x ≤ y   **4.** x ≥ y
5. x = y or relationship cannot be established

4. I. $x^2 +24x +119 = 0$
II. $y^2 -2y -440 = 0$
1. x< y   **2.** x > y
3. x ≤ y   **4.** x ≥ y
5. x = y or relationship cannot be established

5. I. $x^2 -33x +252 = 0$
II. $y^2 +y -56 = 0$
1. x< y   **2.** x > y
3. x ≤ y   **4.** x ≥ y
5 . x = y or relationship cannot be established

6. $10x^2 -31x -14 = 0$
II. $y^2 -19y +78 = 0$
1. x< y   **2.** x > y
3. x ≤ y   **4.** x ≥ y
5 . x = y or relationship cannot be established

7. The ratio of the present ages of P and Q is 6: 5 and that of R and S is 6: 5. If R is 16 years elder to Q and S is 6 years elder to P, then find the average of their present ages (years)?
1.21.5   2.23.5
3.25.5   4.27.5
5. None of these

8. Manish and Nalin entered into a partnership with Nalin investing Rs 1600 more than Manish. If the ratio of time period of investments of Manish and Nalin is 6:5, the profit is Rs 7840 and Manish's share of it is Rs 3840 what is the investment by Manish?
1. Rs 300   2.Rs 400
3. Rs 280   4.Rs 360
5. Rs 320

9. The number of marbles possessed by N is 40% less that possessed by D. If N steals 16 marbles from D, she would have 66.66% more marbles than D. What is the number of marbles possessed by N finally?
1.38   2.24
3.42   4.60

5.40

10. In January, the weight of two boys was same. In February, the weight of one boy was increased by 50% and of another was decreased by 40%. If the average weight was changed by 5 kg, then what is the sum of their weight in February?
1.200 kg   2.210 kg
3.172 kg   4.184 kg
5.164 kg

11. Narnia drives a bike at an average speed of 25 km/h and reach her destination in 6h. Lolita covers that distance in 5h. If Narnia increase her speed by 5 km/h and Lolita increase her speed by 10 km/h then what will be the difference in time by them to reach their destination?
1. 75 min   2. 1 hr
3. 40 min   4. 45 min
5. None of these

12. Distance of 800 km is to be covered by car and bus. If the first 200 km covered by car and the rest by bus, it takes 12 hours in all. If car is used for 300 km more, it takes 120 minutes less for the entire journey. What is the sum speeds of car and bus?
1. 160km/h   2. 60km/h
3. 80km/h   4. 100km/h
5. 50km/h

13. A train covers 1290 km in 15 hours. The speed of a bike is half the speed of the train. How much time will the bike take to cover a distance of 344 km?
1. 6 hours   2. 7 hours
3. 8 hours   4. 9 hours
5. None of these

14. Kamal runs 2 km in 2 min and Kritika in 2 min 30 sec. How many meters start must Kamal give Kritika so that the race may end in a dead heat?
1. 480 m   2. 472 m
3. 405 m   4. 410 m
5. 400 m

15. A train can travel 25% faster than a car. Both start from point A at the same time and reach point B, 450 kms away from A, at the same time. On the way, however, the train lost about 45 minutes while stopping at the stations. What is the half of the speed of the car?
1. 120 km/hr   2. 90 km/hr
3. 60 km/hr   4. 140 km/hr
5. 150 km/hr

16. A man can row 20 km/hr in still water and the river is running at 15 km/hr. If the man takes 8 hr to row to a place and back, how far is the place?
1. 120 km   2. 70 km
3. 35 km   4. 30 km
5. 20 km

17. A man can row three-quarters of a kilometer against the stream in 90/8 minutes and return in 30/4 minutes. The speed of water is?
1. 2 km/hr   2. 3 km/hr
3. 4 km/hr   4. 1 km/hr
5. 7 km/hr

18. Prince covers a total distance of 25 km on bicycle. At the starting of the journey he travels at a speed of 6kmph for 30 minutes, for next 8 hours he travels at a speed of 2kmph and the rest

of the journey he covers at a speed of 3kmph. Find the average speed of the whole journey?

1. 2 km/hr
2. $2\frac{10}{21}$ km/hr
3. $2\frac{8}{21}$ km/hr
4. 1 km/hr
5. 7 km/h

19. Alok goes to school at 15 km/h and reaches 7 minutes late. Next time he goes at 25 km/h and reaches the school 3 minutes earlier than the scheduled time. What is the distance of his house from his school?

1. 12 km
2. 15/4 km
3. 18 km
4. 25/4 km
5. None of these

20. A man takes 7 hours 25 minutes in walking to a certain place and riding back. He would have taken 3 hours less by riding both ways. What would be the time he would take to walk both ways?

1. 4 hours 35 minutes
2. 8 hours 35 minutes
3. 10 hours 25 minutes
4. 8 hours 25 minutes
5. None of these

REASONING

21. If the letters of the word THIRUVANTAPURAM are arranged in alphabetical order then how many letters position will be unchanged?

1. One
2. Two
3. Four
4. Three
5. Zero

Direction(22-24): Study the information given below carefully and answer the questions that follow.

Point Bita is 15m to the east of Point Alpha and 10m to the South of Point Coma. Point Dell is 10m to the east of Point Coma and 10 m to the north of Point Ela. Point Foil is $10\sqrt{2}$ m to the southwest of Point Ela such that Ela, Bita and Foil forms a right-angled triangle. Point Gama is 20m to the south of Point Hill and 20 m to the east of point Foil.

22. Point Gama is in which direction with respect to point Bita?

1. South East
2. North
3. South West
4. East
5. North East

23. Point Foil is in which direction with respect to point Coma?

1. South East
2. North
3. South
4. East
5. North East

24. If a person moves 10 m towards East from Point Bita then he reaches which point?

1. Alpha
2. Ela
3. Coma
4. Gama
5. Hill

25. A man wants to sell his house after just one week of buying it. He wants to sell his house for 30 lakhs since he bought it for 25 lakhs but people are finding the price too high.

What quality, other than the price can most encourage people to buy the house?

1. The location of the area and accessibility to shops.
2. Good neighbours.
3. Facilities like a gymnasium or pool.
4. Good parking space.
5. A lift in the building.

Direction(26-27): In a certain coding system,

P & Q means P is not greater than Q.
P % Q means P is neither smaller than nor greater than Q.
P @ Q means P is neither smaller nor equal to Q.
P $ Q means P is not smaller than Q.

Based on the information provided above, answer the following questions.

26. Statements:
1 @ 3 & D, Q % R @ 1, S % 3
Conclusions:
I. 3 % Q
II. D @ S

1. Only I follows
2. Only II follows
3. Either I or II follows
4. Neither I nor II follows
5. Both I and II follow

27. Statements:
1 $ V, 1 % G & D, M @ G
Conclusions:
I. M @ D
II. D % M

1. Only I follows
2. Only II follows
3. Either I or II follows
4. Neither I nor II follows
5. Both I and II follow

28. The critical reasoning question is based on a short argument, a set of statements, or a plan of action. For each question, select the best answer of the choices given and explain why the chosen answer is the right fit.

Question: A new hydroelectric power plant is being planned in India which could supply electricity to the whole of India but the costs of making and maintaining the power plant are a little more than the budget.

What would be the right decision to take?

1. To stop the project.
2. To take a loan for the project.
3. To cut down the costs of irrelevant things like elaborate statues, etc**.,** to put the money towards a better cause.
4. To supply electricity only to half the country.
5. To increase the taxes.

29. A statement is given followed by two inferences I and II. You have to consider the statement to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given inferences, if any, follow from the given statement.

Statement: Rahul ordered a bunch of books online and found that a few pages were missing, but the website refused to replace them.

Assumptions:
I: Rahul usually orders books from this website.
II: The pages were missing in only one of the books ordered by Rahul.

1. Only assumption I is implicit
2. Only assumption II is implicit
3. Both assumptions I and II are implicit
4. None of the assumptions is implicit
5. Either I or II is implicit

30. In each question below is given a statement followed by two assumptions numbered I and II. You have to consider the statement

and the following assumptions and decide which of the assumptions is implicit in the statement.

Statement: The teacher told the student that she will punish him if he troubles her.

Assumption I: All students are naughty

Assumption II: With that warning, the student might stop causing trouble.

1. Only assumption I is implicit
2. Only assumption II is implicit
3. Either I or II is implicit
4. Neither I nor II is implicit
5. Both I and II are implicit

31. In the following question, a given questions is followed by information in three statements. You have to find out the data in which statement (s) is sufficient to answer the question and mark your answer accordingly

How many females are there in the family?

I. Alka is wife of Bablu, who is the only son of Yami, who is the mother of Rovi.

II. Bablu is maternal uncle of Honi, who is the only sister of Vari, who is the only son of Rovi.

III. Dika is the only son of Alka, who is mother of Moli.

1. All the statements are required
2. Both I and II are sufficient.
3. Only II and any one of I and III are sufficient.
4. Both II and III are sufficient
5. All the statements together are not sufficient.

32. In the following question, a given question is followed by information in three statements. You have to find out the data in which statement(s) is sufficient to answer the question and mark your answer accordingly.

Eight members A1, B1, C1, D1, E1, F1, G1 and H1 are sitting around a circular table facing outward. Who sits third to the right of G1?

I. A1 is to the immediate right of E1, who is third to the right of B1.

II. G1is fourth to the right of H1, who is third to the left of A1.

III. H1 is not an immediate neighbor of G1.

1. All the statements are required.
2. Only I is sufficient
3. Only II is sufficient.
4. Both I and II together are sufficient.
5. Question cannot be answered even with the information in all three statements.

33. The following question consists of three statements numbered I, II, III. Decide if data given in the statements are sufficient to answer the questions below.

How many children are there in the row?

Statements:

I. In a row, there are equal number of people between Ishu and Rashi, Tanu and Ishita.

II. Rashi is 10th from the right and Ishita is 5th from the left.

III. Ishu and Tanu are neighbours.

1. All the statements are required
2. Only I and II are sufficient
3. Only I is sufficient
4. Only II and III are sufficient
5. Insufficient data

34. The question below consists of a question and 2 statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer.

What is L's position from left?

Statements:

I. Facing North, H is sitting between L and M, with M being third from left and on immediate left of H

II. Facing North, H is fourth from left with L and M on either side

1. The data in Statement I alone is sufficient to answer the question, while the data in Statement II alone is not sufficient to answer the question.
2. The data in Statement II alone is sufficient to answer the question, while the data in Statement I alone is not sufficient to answer the question.
3. The data in Statement I alone or the data in Statement II alone is sufficient to answer the question.
4. The data in both Statement I and Statement II together is necessary to answer the question.
5. The data in both Statement I and Statement II together is not sufficient to answer the question.

35. 8 teachers of different subjects sat around a circular table to discuss the time table for examinations. Chemistry teacher is sitting opposite to History teacher. Economics teacher who is closest to Math teacher is sitting in adjacent right of Biology teacher. History and Civics teachers are sitting together whereas Physics and Math teachers are sitting farthest from each other. Biology teacher is sitting in between Economics and Chemistry teacher. Who is sitting opposite to English teacher?

1. Economics teacher   2. Physics teacher
3. Civics teacher   4. History teacher
5. None of these

Directions (36-40): Study the following information carefully and answer the questions follows:

Eight different people – A, B, C, D, E, F, G and H work in eight different restaurants –MacD, KFC, Burger king, Subway, Starbucks, Pizza hut, Dominos and CCD. Each of them belongs to different cities – Delhi, Mumbai, Jaipur, Pune, Kolkata, Chennai, Indore and Bhopal.All the information given is not necessarily in the same order. E doesn't belong to Pune. H neither belongs to Mumbai nor works in Subway. F doesn't work in Subway. A either belongs to Delhi or Kolkata. The person who belongs to Pune works in Subway. G either works in Burger king or Dominos but doesn't belong to Mumbai. C works in KFC but doesn't belong to Jaipur. B neither belongs to Pune nor Mumbai. The person who works in KFC doesn't belong to Mumbai. F belongs to Indore but doesn't work in Starbucks. Neither the person who works in Burger king nor the one who works in Dominos belongs to Jaipur. Either A or E works in Pizza hut. H doesn't belong to Jaipur. The person who belongs to Bhopal works in MacD. The person who works in Starbucks doesn't belong to Jaipur. G neither belongs to Delhi nor Chennai. The person who belongs to Delhi doesn't work in Pizza hut. B neither works in CCD nor in Dominos.

36. Who works in Starbucks?

1. D
2. E
3. The person who belongs to Indore

4. The person who belongs to Delhi
5. None of the above

37. Which of the following combination(s) is/are correct?
1. B, Burger king, Jaipur   2. C, KFC, Indore
3. H, MacD, Bhopal   4. Both 1) &3)
5. All 1), 2) & 3)

38. E belongs to which city?
1. Mumbai   2. Indore
3. Bhopal   4. Delhi
5. Jaipur

39. Who belongs to Kolkata?
1. A
2. The person who works in Burger king
3. The person who works in Pizza hut
4. The person who works in KFC
5. The person who works in Dominos

40. Who among the following works in CCD?
1. A
2. D
3. F
4. The person who belongs to Kolkata
5. The person who belongs to Chennai

41. <H1> is an example of .
1. HTML   2. GML
3. SGML   4. NSGML
5. None of these

42. Which type of network requires HPNA adapters for communication between network nodes?
1. P hone line   2. Wireless
3. Power line   4. Ethernet
5. None of these

43. The free, open-source operating system that is becoming popular is:
1. Mac OS X   2. Microsoft Windows XP
3. UNIX   4. Linux
5. None of these

44. What term is used to describe software that monitors your online computer activities?
1. Snooper ware   2. Spyware
3. Tracker ware   4. Travel ware
5. None of these

45. The two major components of system software are:
1. The operating system and system utilities
2. Application software and system utilities
3. Primary memory and storage
4. The operating system and applications software
5. None of these

46. Which of the following may be necessary for you to do after you install new application software?
1. Turn the computer power switch off and then back on
2. Do a cold boot
3. Press Shift + Alt + Del
4. Do a warm boot
5. None of these

47. Input, processing, output, and storage are collectively referred to as:
1. The systems cycle

2. The information processing cycle
3. The system unit
4. Communication
5. None of these

48. Which of the following is NOT part of the motherboard?
1. System clock   2. Connector
3. CPU   4. Chipset
5. None of these

49. To reverse the effect of your last action in word ------------
1. Use the cut command   2. Use the Undo command
3. Press the delete key   4. Use the Redo command
5. None of these

50. Information that comes from an external source and fed into computer software is called ....
1. Output   2. Input
3. Throughput   4. Report

ENGLISH

Direction (Q. 51 - 60): In each of the questions, a sentence is divided into four parts labeled as (A), (B), (C) and (D). You have to identify fragment(s) which is/are incorrect in terms of grammar and usage. If there is no error in the sentence, mark option (5) as your answer.

51. The latest spell of conflict between the U.S. and Iran (A)/ turned full circle on Wednesday when Tehran launched ballistic missile attacks (B) /at American troops in two military bases in Iraq (C) / in retaliation for the assassinated of Maj. Gen. Qassem Soleimani. (D)
(1) Only A   (2) Only D
(3) Both B and D   (4) Both A and C
(5) No error

52. After a gap of 200 years, (A)/ Asian economies are again (B)/ large than the rest of (C)/ the world's combined. (D)
(1) Both C and D   (2) Only A
(3) Only C   (4) Both B and D
(5) No error

53. The fight for the Islamic State (IS) (A)/ was won with the help of three major forces on the ground, (B)/ for the Western coalition on its own (C)/ would not have managed to do much with remote controlled bombs.(D)
(1) Only A   2) Only B
(3) Both B and D   (4) Both C and D
(5) No error

54. Normal life was thrown out of gear (A)/ in Himachal Pradesh as the State received (B)/ heavy snowfall and showers, effecting road (C)/ connectivity, electricity and water supply.(D)
(1) Only B   (2) Both B and C
(3) Both A and D   (4) Only C
(5) No error

55. Normal life were affected in (A)/ West Bengal on Wednesday as the 24 hour(B)/ all India strike called by trade unions (C)/ affected rail and road transport services in the State.(D)
(1) Only D   (2) Only A
(3) Both A and D   (4) Both B and C
(5) No error

56. The State government will set up (A)/ a task force of experts from (B)/ the financial and banking sectors (C)/ to find a way out of their ballooning debt. (D)
(1) Only A   (2) Only D
(3) Both A and D   (4) Both A and C
(5) No error

57. The National Green Tribunal on Tuesday directed the Central Pollution Control Board (CPCB) (A)/ to obtain information from Chief Secretaries of all States and Union Territories (B)/ pertaining to compliance of solid waste management rules, (C)/ air quality management and restoration of pollute river stretches across the country.(D)
(1) Both A and B   (2) Only C
(3) Only D   (4) Both C and D
(5) No error

58. Kashmir will be connected (A)/ to the rest of India through railway network by(B)/ December next year as the government has set(C)/ an fresh deadline for completion of the world's highest railway bridge.(D)
(1) Both A and D   (2) Only D
(3) Only C   (4) Both B and C
(5) No error

59. The Supreme Court ordered that mining lease (A)/ holders should be held responsible for regrassing (B)/ mined areas, so that biodiversity gets a (C)/ second chance in these scarred landscape.(D)
(1) Both A and D   (2) Only B
(3) Both C and D   (4) Only A
(5) No error

60. Farm activist Kishore Tiwari demanded (A)/ setting up of a body on the lines (B)/ of human rights commissions to exclusive deal with (C)/ agrarian issues and suicide through farmers.(D)
(1) Both B and D   (2) Only B
(3) Only A   (4) Both C and D
(5) No error

Direction (Q. 61 - 70): Sentences including blanks are given below which are followed by options numbered (1), (2), (3), (4). Pick out the most effective words from the given options to fill in the blanks to make sentences meaningfully complete. If no option is suitable; choose the option (5).

61. An 18-year-old girl in the US has made a short film 'Singh' based on a true story of an Indian-American Sikh _____ whose campaign forced the authorities in the US to change their policy towards turban of the community.
1. eleemosynary   2. parsimonious
3. philanthropist   4. Both (1) and (3)
5. None of these

62. Jallianwala Bagh memorial was established by the central government to mark April 13, 1919, _____ under the British rule when troops under the command of Col Reginald Dyer fired on unarmed people who had gathered there on the occasion of Baisakhi festival.
1. desiccation   2. province
3. oblation   4. massacre
5. None of these

63. It _____ way for the leader of the single largest opposition party in the Lok Sabha to be a member of the trust.

1. stumble   2. discern
3. paves   4. Both (1) and (2)
5. None of these

64. It was a _____ challenge to nab the man, who was then a serving DSP and well versed with the policing.
1. discouraged   2. enticing
3. exhorting   4. daunting
5. None of these

65. The banks are after the farmers' life to return their loans and government is not _____ their debt.
1. waiving   2. pursuing
3. prosecuting   4. arraigning
5. None of these

66. Most of the _____ ensued because of a fire set off by a phosphorus grenade, not targeted firing.
1. casualties   2. suffering
3. assailants   4. muggers
5. None of these

67. The CM said the government will consider the proposal to allow _____ for groups of poor farmers.
1. subsidy   2. relinquishment
3. penance   4. forfeit
5. None of these

68. He said that this is an _____ of the freedom of expression and portrays a clear enemy-like attitude towards Sikhs.
1. restoration   2. annulment
3. enact   4. Both (1) and (2)
5. None of these

69. The accused man _____ the woman with a power wire and dumped the body in the fodder room with the help of his family members.
1. convoluted   2. strangled
3. explicated   4. Both (2) and (5)
5. None of these

70. The time period of renewal of licence has been _____ from existing two years to five years.
1. abbreviated   2. ephemeral
3. curtailed   4. extended
5. None of these

G.K

7171.The theme of 2019 edition of World Cities Day (WCD) is
1. Inclusive Cities, Shared Development
2. Changing the world
3. Better City, Better Life
4. Innovative Governance, Open Cities
5. None of these

72. The United Nations General Assembly has designated the _____ as World Cities Day.
1. 31st October   2. 29th October
3. 28th October   4. 27th October
5. None of these

73. Which of the following mission was launched with an objective to achieve 100% immunization?
1. Sansad Adarsh Mission Indradhanush (IMI) 2.0
2. Intensified Mission Indradhanush (IMI) 2.0
3. Suraksha Mission Indradhanush (IMI) 2.0

4. Bhartam Mission Indradhanush (IMI) 2.0
5. None of these

74. Which of the following country signed an MoU with India in the field of prevention of marine litter?
1. Thailand
2. Brazil
3. Germany
4. France
5. None of these

75. Name the golfer, who has won the 2019 Zozo Championship in Japan?
1. Brooks Koepka
2. Tiger Woods
3. Rory McIlroy
4. Phil Mickelson
5. None of these

76. John Witherspoon, who passed away recently, was the noted actor and comedian of which country?
1. South Africa
2. Russia
3. UK
4. USA
5. None of these

77. Name the person, who has been appointed as the new Deputy National Security Advisor of India?
1. Kuladhar Saikia
2. S. B. K. Singh
3. Damodar Gautam Sawang
4. Datta Padsalgikar
5. None of these

78. Who among the following has been appointed as the new Director-General of the International Atomic Energy Agency?
1. Rafael Mariano Gross
2. Dazhu Yang
3. Mohamed ElBaradei
4. Mary Alice Hayward
5. None of these

79. Name the two countries, who had recently signed a joint declaration of intent on cooperation in agriculture market development?
1. India and Germany
2. India and Russia
3. India and Japan
4. India and United States
5. None of these

80. Name the veteran CPI leader and former Member of Parliament has passed away recently?
1. K. Subramaniam
2. Binoy Biswas
3. Gurudas Dasgupta
4. D. Raja
5. None of these

81. Name the city, which is hosting 35th ASEAN Summit?
1. Mumbai
2. New Delhi
3. Shanghai
4. Bangkok
5. None of these

82. Name the German Minister of Food & Agriculture, who visited India recently.
1. Katarina Barley
2. Julia Klockner
3. Franziska Giffey
4. Jens Spahn
5. None of these

83. Name the first female UN refugee chief who passed away recently?
1. Angela Kane
2. Sadako Ogata
3. Valerie Amos
4. Helen Clark
5. None of these

84. Name the organization, which has released a report titled "Adolescents, Diets and Nutrition: Growing Well in a Changing World 2019"?
1. International Monetary Fund(IMF)
2. World Bank
3. UNESCO(United Nations Educational, Scientific and Cultural Organization)
4. UNICEF (United Nations Children's Fund)
5. None of these

85. Name the actors, who has been selected for the 'Icon of Golden Jubilee of IFFI' award?
1. Akshay Kumar
2. Kamal Haasan
3. Rajinikanth
4. Amitabh Bachchan
5. None of these

86. Name the actor, who will be honored with the Lifetime Achievement award at the Golden Jubilee of International Film Festival of India?
1. Isabelle Hupert
2. Meryl Streep
3. Catherine Deneuve
4. Miou‑Miou
5. None of these

87. Name the noted philanthropist, who has won the 2019 Sasthaaram Award?
1. Unni Menon
2. V A Shrikumar Menon
3. K P Nandakumar
4. M Padmakuma
5. None of these

88. Name the Chief Justice of Patna High Court, who was transferred to the Madras High Court on 30th October, 2019.
1. Sanjay Karol
2. Ajay Kumar Mittal
3. Amreshwar Pratap Sahi
4. Sanjay Yadav
5. None of these

89. The Madhya Pradesh government has decided to set up Sikh museum and research centre in which city?
1. Jabalpur
2. Gwalior
3. Bhopal
4. Indore
5. None of these

90. Which of the following is the first state in the country to enact a law on contract farming?
1. Tamil Nadu
2. Andhra Pradesh
3. Telangana
4. Kerala
5. None of these