GENERAL KNOWLEDGE AND COMPUTER BASICS

Read the questions that follow and identify the correct choice (Questions 1-20).

1. Charles Townes, a Nobel Prize winner, is known for which of the following inventions?
   (A) ECG
   (B) X-ray
   (C) Xerox
   (D) Laser

2. Who among the following has won the men's single tennis title at Australian Open 2015?
   (A) Andy Murray
   (B) Novak Djokovic
   (C) Rafael Nadal
   (D) Roger Federer

3. The Maranjab desert is located in which one of the following countries?
   (A) Iraq
   (B) Iran
   (C) UAE
   (D) Qatar

4. Where is the headquarters of International Renewable Energy Agency (IRENA) located?
   (A) Abu Dhabi
   (B) Geneva
   (C) Amsterdam
   (D) Doha

5. Whose tagline is "The ultimate driving machine"?
   (A) Audi
   (B) Mercedes
   (C) Rolls Royce
   (D) BMW

6. Who has authored the book "Hungry Stones"?
   (A) Sri Aurobindo Ghosh
   (B) Tara Shankar Bandopadhyaya
   (C) Karan Thapar
   (D) Rabindra Nath Tagore

7. Which industrialist features in the first ever Indian coin commemorating an industrialist?
   (A) Dhirubhai Ambani
   (B) Jamsetji Tata
   (C) Aditya Vikram Birla
   (D) T. V. Sundaram Iyengar

8. Which of the following metals forms an amalgam with other metals?
   (A) Mercury
   (B) Lead
   (C) Tin
   (D) Zinc

9. Freetown is the capital of which country?
   (A) Cameroon
   (B) Sierra Leone
   (C) Liberia
   (D) Guinea

10. Which country is called as the 'Land of Poets'?
   (A) Canada
   (B) Ireland
   (C) Ukraine
   (D) Chile

11. Wilhelm Conrad Röntgen was the recipient of first Nobel prize in Physics for his discovery of
   (A) X-rays
   (B) Spontaneous radioactivity
   (C) Neutron
   (D) Positron

12. The territory of Porus who offered strong resistance to Alexander was situated between the rivers of
   (A) Ganga and Saraswati
   (B) Jhelum and Chenab
   (C) Sutlej and Jhelum
   (D) Yamuna and Jhelum

13. While working with Ms-Dos which command transfers a specific file from one disk to another?
   (A) Insert
   (B) Copy
   (C) Send to
   (D) Rename

14. What does GUID stand for?
   (A) Globally Unique Identifier
   (B) Global User Interface
   (C) Global User Identifier
   (D) Globally User Internet

15. Name the currency of Belgium.
    (A) Belgian Dollar
    (B) Lek
    (C) Euro
    (D) Dinar

16. Which Cricketer is associated with 'Udayan', a charity home in Kolkata?
    (A) Brian Lara
    (B) Bret Lee
    (C) Steve Waugh
    (D) Gary Kristen

17. What is the full form of ADSL?
    (A) Automated Digital Subscriber Line
    (B) Asymmetric Direct Subscriber Line
    (C) Asymmetric Digital Subscriber Line
    (D) Automated Direct Subscriber Line

18. The transfer of capital of British India from Calcutta to Delhi was effected during the period of
    (A) Lord Chelmsford
    (B) Lord Hardinge
    (C) Lord Minto
    (D) Lord Cornwallis

19. Who among the following has not been a Nobel Prize winner in Literature?
    (A) Elfriede Jelinek
    (B) Günter Grass
    (C) Joseph Brodsky
    (D) José Ramos-Horta

20. Which blood group is called Universal recipient?
    (A) AB
    (B) B
    (C) A^+
    (D) A^-

VERBAL REASONING

Identify the odd word in each of the following questions (21-26).

21. Identify the odd word
    (A) Melancholia
    (B) Cafard
    (C) Anxiety
    (D) Depression

22. Identify the odd word
    (A) Pessimism
    (B) Megalomania
    (C) Psudo-grandure
    (D) Narcissism

23. Identify the odd word
    (A) Raffish
    (B) Unconventional
    (C) Avant-garde
    (D) Obnoxious

24. Identify the odd word
    (A) Raffle
    (B) Poker
    (C) Draw
    (D) Lottery

25. Identify the odd word
    (A) Goodish
    (B) Benign
    (C) Compassionate
    (D) Malicious

26. Identify the odd word
    (A) Wretchedness
    (B) Dejection
    (C) Rejection
    (D) Glumness

In each of the following, arrange the words in a meaningful sequence (27-30).

27. A. Purify B. Collect C. Bottle D. Sell E. Seal
    (A) BADEC
    (B) BACED
    (C) BCEAD
    (D) BDEAC

28. A. Meditation B. Peace C. Yearning D. Learn E. Practice
    (A) CDEAB
    (B) CDBAE
    (C) CBDAE
    (D) CBDEA

29. A. Paper B. Bamboo C. Pulp D. Print E. Press
    (A) BCDEA
    (B) CBAED
    (C) BCEAD
    (D) CBADE

30. A. Type B. Finalize C. Check D. Save E. Pen Drive
    (A) ADBEC
    (B) ADCEB
    (C) ACBDE
    (D) ACBED

In each of the following questions four pairs of synonyms are supplied, out of which three pairs are alike/similar in certain ways and the fourth one is different (not a pair of synonyms). Choose the ODD pair out (31-34).

31. Identify the odd pair
    (A) Platonic: Spritiual
    (B) Gander: Swan
    (C) Cataclysmic: Utopian
    (D) Anti-climactic: Ironic

32. Identify the odd pair
    (A) Hanker: Yarn
    (B) Procrastinate: Delay
    (C) Fringe: Periphery
    (D) Factual: Authentic

33. Identify the odd pair
    (A) Symphony: Sonata
    (B) Rhythm: Percussion
    (C) Tempo: Dynamic
    (D) Disharmony: Dissonance

34. Identify the odd pair
    (A) Confluence: Convergence
    (B) Subsume: Encompass
    (C) Envelope: Embrace
    (D) Encircle: Enjoin

The following questions consist of two words each that have a certain relationship with each other, followed by four pairs of words. Select the pair which has the SAME relationship (or the most similar relationship) as the original pair of words (35-38).

35. Coconut: Coconut Oil
    (A) Work: Flow
    (B) Information: Knowledge
    (C) Worker: Industry
    (D) Light: Electricity

36. Blanket: Cover
    (A) Human: Life
    (B) Stairs: Steep
    (C) Jeans: Wear
    (D) Ring: Gold

37. Apple: Worm
    (A) Sea: Storm
    (B) Pen: Leak
    (C) Body: Wound
    (D) Computer: Virus

38. Wheel: Cart
    (A) Turbine: Jet
    (B) Water: Flow
    (C) Music: Instrument
    (D) Paper: Paint

In the following questions, there is a certain relationship between two given words on both sides of (::). Only one word is given on the other side of (::). Chose the MOST APPROPRIATE word from the alternatives given below and supply the fourth word (39-41).

39. Mother: Nourishment:: Doctor:
    (A) Injection
    (B) Tablet
    (C) Surgery
    (D) Drip

40. Confluence: Crossroads:: Convergence:
    (A) Intersection
    (B) Modularity
    (C) Essence
    (D) Crosstab

41. History: Myth:: News:
    (A) Scandal
    (B) Lies
    (C) Rumours
    (D) Documents

Choose the MOST APPROPRIATE definition for the following words (42-45).

42. Denouement
    (A) The final resolution in a fiction or drama
    (B) A state of uncertainty shown in movies
    (C) A state of decline, degradation or fall
    (D) The act of denouncing someone

43. Aside
    (A) The act of pushing one to the left
    (B) A negative digression in a literary text
    (C) A line by an actor meant for the audience but not for those on stage
    (D) Pertaining to direction while on a long journey or exodus

44. Probity
    (A) Complete and confirmed integrity
    (B) One who is sober
    (C) Negative pertaining to one's character
    (D) Arrogance in oneself

45. Casement
    (A) A window of a fortress
    (B) Cash transaction during one complete day
    (C) A window sash that is hinged
    (D) A legal injunction

In the questions below four words are provided at the beginning. If you add one of the four choices to one of the four words given at the beginning, you will get a new word. Find the correct choice (46-49).

46. Don/Con/Mon/Sun
    (A) Bathe
    (B) Scathe
    (C) What
    (D) Bat

47. Cut/But/Hot/Shot
    (A) By
    (B) Ray
    (C) Away
    (D) Say

48. Ban/San/Man/Han
    (A) Dolly
    (B) Polly
    (C) Holy
    (D) Ally

49. Don/Pun/Stun/Son
    (A) Runt
    (B) Ant
    (C) Pant
    (D) Aunt

In the following questions identity the word which has the OPPOSITE meaning to one of the three words presented at the beginning (50-54).

50. Almighty / Whitey / Frosty
    (A) Brownie
    (B) Mephistopheles
    (C) Cold
    (D) Autumn

51. Climb / Clamp / Close
    (A) Draw
    (B) Pull
    (C) Loose
    (D) Hoist

52. Persuade / Decry / Abandon
    (A) Applaud
    (B) Motivate
    (C) Enjoin
    (D) Force

53. Glitch / Filch / Mulch
    (A) Production
    (B) Consumption
    (C) Destruction
    (D) Solution
54. Obdurate / Obfuscate / Ornate
    (A) Stubborn
    (B) Simple
    (C) Old
    (D) New

In the questions below a word is given with a number of synonyms or related words in the option. Identify the option which is the LEAST APPROPRIATE (55-58).

55. Belle
    (A) Girl
    (B) Lady
    (C) Hag
    (D) Woman

56. Wistful
    (A) Thoughful
    (B) Melancholia
    (C) Pensive
    (D) Dejected

57. Pliant
    (A) Resilient
    (B) Rigid
    (C) Supple
    (D) Tractable

58. Ballast
    (A) Heavy
    (B) Light
    (C) Weight
    (D) Counterbalance

The questions that follow are based on codes. Read the instructions carefully and answer. In a certain code, "Tarzan is a Hero," is written as ABCD and "Who should help you," is written as EFGH (59-60).

59. "You should help Tarzan" will be written as
    (A) HFAG
    (B) HFGA
    (C) FGAG
    (D) HAGE

60. "Tarzan hero should help" is written as
    (A) AFGD
    (B) AGDE
    (C) ADFG
    (D) ADGE

COMPREHENSION

Read the text below carefully and answer the questions that follow. Choose the most appropriate choice for each question (61-68).

Classical economists such as Smith and Ricardo were well aware of the consequences—in competitive markets—of a price being well above that required to cover costs. The high level of profits would act as an incentive for new firms to enter the industry. The lack of barriers to entry in a perfect market allows any firm to enter the market easily. In our example it is easy to imagine farmers switching out of barley production and into wheat production if wheat is more profitable to produce. The impact of the new entrants would be to increase total supply, and through competitive pressure drive the price downward, so that in a short time firms would only be able to make a "normal" level of profit. This would be when the price just covered the costs of production— the excess profits would vanish. When the assumptions that underlie perfect competition are violated, firms can make large profits in the long run. For instance, if there are any barriers to entering an industry—such as technological or legal barriers—excess profits do not get competed away. The most extreme form of this is that of a monopoly. To maximize profits, a monopolist charges a higher price and produces less than would be the case in a perfectly competitive market. This is why economists believe that perfectly competitive markets are more socially beneficial than monopolized ones. Under conditions of lower output produced by a monopoly, consumers could gain from extra units of production. But in perfectly competitive markets, these extra units are produced as more firms enter the market—prices drop as high profits are competed away.

61. When do prices drop?
    (A) When low outputs are produced
    (B) When high profits are competed away
    (C) When social benefits exceed selfish interests
    (D) When market demands are high

62. Perfect market
    (A) Allows any firm to compete in the market
    (B) Is conducive to benefit for consumer
    (C) Is a hypothetical construct
    (D) Can happen for any product

63. Normal level of profit implies
    (A) Profits that are normal in nature
    (B) Normal for the firm
    (C) Minimum profit to keep the firm in business
    (D) Normalized profit

64. Identify the incorrect statement
    (A) Smith was a classical economist
    (B) High profits draw new firms to market
    (C) Perfect markets do not restrict entry to competition
    (D) Perfect markets allow for maximum profit

65. Monopoly is
    (A) A form of perfect market
    (B) A variant of perfect market
    (C) Different from a perfect market
    (D) The opposite of perfect market

66. Identify the correct statement
    (A) Monopolies charge high prices and large quantities
    (B) Monopolies are a form of oligopoly
    (C) Monopolies make less and price high
    (D) Monopolies aim at perfection

67. Monopolies are not considered good
    (A) Because they make more profit
    (B) Do not benefit consumers
    (C) Can make prices go down
    (D) Because they are idealistic

68. When do monopolies thrive
    (A) Where there is no perfect competition
    (B) Where there are technological or legal barriers
    (C) Where humans are not treated as equals
    (D) Where perfect competition is impossible

Read the text below carefully and answer the questions that follow. Choose the most appropriate choice for each question (69-75).

There are a number of controversies around Marshall's model of perfect competition. First, there are few—if any—real industries that come close to the assumptions required for the model to be useful. In fact, both currency markets and agriculture are unlikely to be good examples of the theory of perfect competition because of the existence of large firms that can influence price, and because governments can and do manipulate these markets. The defenders of perfect competition argue that the model represents a theoretical, ideal form of market structure that is useful for understanding how firms behave, even if there are no industries that actually meet its requirements. A more fundamental criticism is that perfect competition as described by Marshall has lost its real meaning; in fact, there is no "competition" in the model. Firms are seen as making identical products, responding passively to prices, and accepting that they will end up making normal profits. This is a long way from the situation suggested by Smith, where firms desperately try to make different, higher-quality products than their competitors, which they seek to sell at higher prices, while also intermittently introducing new technologies to reduce their costs and consistently raise profits. Attacks on perfect competition around this point continued through the 20th century. The Austrian-born British economist Friedrich Hayek argued that competition is a dynamic discovery process in which entrepreneurs seek new profit opportunities in a world of constant change—it is not simply the sterile copying of prices suggested by Marshall's model.

69. Why is Marshall's model not perfect?
    (A) Because such a market is only hypothetical
    (B) In real situations firms are passively competitive
    (C) Currency market is unstable
    (D) Agricultural produce are very different

70. Identify the incorrect statement
    (A) Governments can manipulate markets
    (B) Agriculture is a poor example of perfect competition
    (C) The theory is a good model of how things work
    (D) Marshall's model, according to many, is outdated

71. In real life firms
    (A) Confirm to government and economic trends
    (B) Use new technologies to reduce cost
    (C) Don't go for aggressive competition
    (D) Make identical products

72. Hayek argues that
    (A) The world is economy fluctuating
    (B) Entrepreneurs perpetually seek new opportunities
    (C) Sterile competition is a myth
    (D) Competition is not a dynamic process

73. Choose the most apt title for the piece.
    (A) The real world of competition
    (B) Competition now and then
    (C) Perfect competition
    (D) The competitive world

74. By 'dynamic discovery process' it is meant that…
    (A) Competitors discover their rivals
    (B) Change and opportunity are the keys
    (C) Discovery is dynamic in competition
    (D) Competition is always dynamic

75. Why does Marshall's model have no competition, according to criticism?
    (A) Because competition is imperfect
    (B) Because making identical products is no real competition
    (C) Since completion is always dynamic
    (D) Entrepreneurs sometimes respond to challenges actively

Read the text below carefully and answer the questions that follow. Choose the most appropriate choice for each question (76-80).

In 1921, US economist Frank Knight (p.163) published *Risk, Uncertainty, and Profit*, which analyzed the effects of uncertainty on Marshall's model of perfect competition. Knight defined risk as a measurable uncertainty, such as the chance of a champagne bottle exploding. The proportion of bottles that burst is practically constant, and the producer can therefore add it to costs or insure against it. For this reason risk does not disrupt the competitive equilibrium; entrepreneurs do not earn profits as a reward for taking predictable risks. On the other hand real uncertainty is immeasurable—it comes principally from not being able to see into the future. For Knight, entrepreneurs accept the responsibility of working with an uncertain future and take decisions on this basis. The amount that entrepreneurs will earn is unknown because the future is unknown.

76. Why should broken champagne bottles not be considered a risk?
    (A) Because the number is very small
    (B) Because it is predictable
    (C) Because it is cheap
    (D) Because it rare

77. Predictable risk is
    (A) Risk that can be accepted
    (B) Risk that can be calculated
    (C) Risk that is not taken into account
    (D) Risk that has a specific curve

78. What is one of the key dimensions of future in economics
    (A) It is unpredictable
    (B) It is in the arrow of forward time
    (C) It is inevitable
    (D) It is one-dimensional

79. What differentiates predictable from unpredictable risk is
    (A) Unreasonableness
    (B) Accepting the inevitable
    (C) Calculated decision
    (D) An unknown future

80. What is the most appropriate title for this piece?
    (A) Risks, predictable vs. unpredictable
    (B) Risks, risks and risks
    (C) The world of economic risks
    (D) What is risk?

81. If the ratio of two numbers is 15: 11 and their HCF is 13, find these numbers.
(A) 195 : 143
(B) 95 : 25
(C) 110 : 80
(D) 85 : 22

82. What is the value of $\left(\frac{1}{\sqrt{5}-2}+\frac{1}{\sqrt{5}+2}\right)^2$?

(A) 12
(B) 24
(C) 20
(D) 32

83. The sum two numbers is 25 and their product is 144. Find the difference between the numbers.
(A) 6
(B) 7
(C) 8
(D) 9

84. The average weight of four friends, Kishan, Suresh, Aman and Priya is 40 kg. With the inclusion of a new friend, Ashok, in the group, the average weight of the group is increased by 1 kg. Again another friend Rajan replaces Kishan and then the new average weight of 5 friends becomes 42 kg. What is the average weight of Suresh, Aman, Priya and Rajan?
(A) 40.50
(B) 41.25
(C) 41.75
(D) 42.25

85. In a mixture of 400 litres of milk and water, the ratio of milk and water is 9 : 1. What amount of water should be added to the milk such that the new mixture of milk and water maintains a ratio of 3 : 1?
(A) 57
(B) 66
(C) 84
(D) 90

86. In a management development programme, the ratio of industry and academic participants is 4 : 5. The ratio of the fees collected from each industry and academic participant is 25 : 16. If the total amount collected from all the participants is Rs 1.62 Lakh, find the amount collected from only academic participants.

(A) Rs 64,000
(B) Rs 68,000
(C) Rs 72,000
(D) Rs 76,000

87. In a Gram Panchayat election, only two candidates contested. While 20% of the voters did not cast their votes, 120 votes were declared as invalid. The winner got 200 more votes than his opponent and he secured 41% votes of the total votes as per the voter list. Find the percentage of votes the defeated candidate got out of the total votes cast.
(A) 25%
(B) 45%
(C) 54%
(D) 52%

88. A vegetable vendor loses Rs 20 if he sells some oranges at the rate of Rs 3 per piece. He gains Rs 30 if he sells them at Rs 3.25 per piece. How many oranges did he sell?
(A) 200
(B) 210
(C) 220
(D) 230

89. Abhay and Anita have to clear their respective loans by paying 3 equal instalments of Rs 30000 each. Abhay pays in simple interest @10 per annum and Anita pays in compound interest @ 10% per annum. Find the difference in their payments.
(A) Rs 235
(B) Rs 275
(C) Rs 300
(D) Rs 325

90. Ramesh is twice as efficient as Kishor is. Ramesh takes 6 days less than Kishor to finish the work individually. Ramesh and Kishor working together can complete the work in 4 days. Find the number of days required by Kishor to complete the work alone.
(A) 11
(B) 12
(C) 13
(D) 14

91. A train going in one direction takes 4 seconds to pass a girl standing on a platform. Another train of same length coming from the opposite direction takes 5 seconds to pass her. Find the time taken by both the trains to cross each other.
(A) $\frac{40}{9}$ seconds

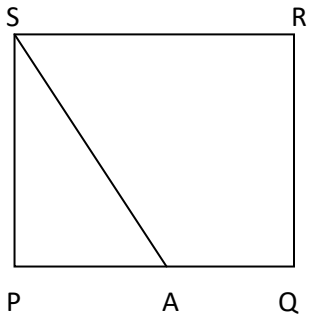
(B) $\frac{40}{7}$ seconds

(C) $\frac{40}{6}$ seconds

(D) $\frac{40}{11}$ seconds

92. If a square garden of 2 sq. km is to be divided into two equal parts by a wall which coincides with a diagonal, what is the length of the wall?
(A) 1 km
(B) 2 km
(C) 1.2 km
(D) 1.5 km

93. PQRS is a square. A is a point on PQ such that QA = 17 cm. The area of the triangle PSA is 84 cm^2. Find the area of the square.



(A) 472 cm^2
(B) 524 cm^2
(C) 576 cm^2
(D) 635 cm^2

94. If the diameters of two cones are equal and their slant height is in the ratio of 5 : 7, what is the ratio of their curved surface areas?
(A) 5 : 7
(B) 4 : 5
(C) 6 : 8
(D) 7 : 9

95. Find the number of ways Kohli can score 200 runs in a cricket match with fours and sixes only.
(a) 15
(b) 16
(c) 17
(d) 18

96. A bag contains 2 red, 3 white and 4 yellow balls. If the three balls are drawn in succession with replacement, what is the probability that the first ball is red, the second ball is white and the third ball is yellow?

(A) $\frac{4}{223}$

(B) $\frac{8}{223}$

(C) $\frac{6}{243}$

(D) $\frac{8}{243}$

97. If $k = \sqrt{2+\sqrt{2+\sqrt{2\sqrt{2+....\infty}}}}$, then k is:

(A) 0
(B) 1
(C) 2
(D) Cannot be defined

98. What is the sum of the infinite terms of the series $1+5a+7a^2+17a^3+.....$?

(A) $\frac{1+12a}{(1+2a)(1+a)}$

(B) $\frac{1+4a}{(1+2a)(1+a)}$

(C) $\frac{1+4a}{(1-2a)(1+a)}$

(D) $\frac{1+8a}{(1-2a)(1+a)}$

99. In a municipality election, $4/5^{th}$ of the voters promised to vote for Kailash and the rest promised to vote for Puja. Of these voters, 10% who had promised to vote for Kailash and 20% who had promised to vote for Puja did not vote on the Election Day. If Kailash received 216 votes, find the number of votes polled.
(A) 264
(B) 274
(C) 284
(D) 294

100. The difference between the interior and exterior angles of regular polygon is 60^0. Find the number of sides in the polygon.
(A) 6
(B) 5
(C) 7
(D) 8

101. If $(a+b+c)=6$, find the value of $(a^3+b^3+c^3)$.

(A) $3a^2b^2c^2$

(B) $3abc$

(C) $2abc$

(D) $3(a+b+c)$

102. If $a=7+4\sqrt{3}$ and $ab=1$, find the value of $\frac{1}{a^2}+\frac{1}{b^2}$.

(A) 126
(B) 156
(C) 194
(D) 187

103. A survey indicates that the viewers watching TV News Channels NDTV 24/7, Times Now and CNN IBN are 41%, 35% and 60% respectively. 27% of the viewers watch exactly two of the three Channels and 3% watch none. Find the percentage of viewers who watch all the three News Channels.
(A) 5%
(B) 8%
(C) 4%
(D) 6%

104. What is the n^{th} term of an A.P. whose 6^{th} and 8^{th} terms are 12 and 22 respectively?
(A) $5n-18$

(B) $7n-18$

(C) $5n-12$

(D) $7n-12$

105. If the sum of $153\frac{3}{5}$ terms of a progression is $3n^2+5$, find the number of terms that equals 123.
(A) 15
(B) 18
(C) 21
(D) 25

106. What is the common ratio of a G.P. whose first and last terms are 5 and $\frac{32}{625}$ respectively and the sum of the G.P. is $\frac{5187}{625}$?

(A) $\frac{1}{5}$

(B) $\frac{2}{5}$

(C) $\frac{1}{4}$

(D) $\frac{2}{7}$

107. In a meeting, every invitee has shaken hands with everyone else and a total of 66 handshakes were exchanged. Find the number of invitees present in the meeting.
(A) 9
(B) 10
(C) 11
(D) 12

108. If two dice are rolled simultaneously, what is the probability of getting a total of 9 or 11?
(A) $\frac{1}{3}$
(B) $\frac{1}{6}$
(C) $\frac{5}{6}$

(D) $\frac{1}{9}$

109. Find the number of numbers from 1 to 100 which are not divisible by any one of 2 and 3.
(A) 20
(B) 22
(C) 33
(D) 36

110. Find the greatest four digit number which if divided by any of the numbers 6, 9, 12 and 17 leaves a remainder of 1.
(A) 9793
(B) 9977
(C) 9845
(D) 9767

111. A wall clock strikes once at 1 o'clock, twice at 2 o'clock and twelve at 12 o'clock and again once at 1 o'clock and so on. In course of two days, how many times will the bell be struck?
(A) 56
(B) 154
(C) 286
(D) 312

112. Ramesh covers half of his journey by train at a speed of 60 km/h. He covers half of the remainder part of the journey by motor bike at 30 km/h and the rest by rickshaw at a speed of 10 km/h. Whst is his average speed during his entire journey?
(A) 20 km/h
(B) 24 km/h
(C) 28 km/h
(D) 30 km/h

113. A salesman buys spirit at Rs 8.5 per litre and dilutes it with water. He sells the mixture at the same rate and thus gains 11.11%. What is the quantity of water mixed by the salesman in every litre of spirit?
(A) 0.110 litres
(B) 0.101 litres
(C) 0.111 litres
(D) 0.001 litres

114. Anindita spends 20% of her salary on household expenditure, 15% of the rest on loan repayment, 30% of the rest as tutor's fees and saves the rest. If she saves Rs 9520, how much is her monthly salary?
(A) Rs 18000
(B) Rs 20000
(C) Rs 21000
(D) Rs 22000

115. Aniket has two digital calculators and one parker pen. The parker pen is worth Rs 96. If he sells the parker pen along with the first digital calculator, he gets an amount double that of the value of the second digital calculator. But if he decides to sell the parker pen along with the second digital calculator, he receives an amount which is less than the value of the first digital calculator by Rs 306. Find the value of the first digital calculator.
(A) Rs 800
(B) Rs 850
(C) Rs 900
(D) Rs 950

116. If $p:q=r:s$, what is the value of $\frac{p^2+q^2}{r^2+s^2}$?

(A) $\frac{p}{r}+\frac{q}{s}$

(B) $\frac{p+q}{r+s}$

(C) $\frac{p+r}{q+s}$

(D) $\frac{pq}{rs}$

117. The population of Bhubaneswar was 1283575 on 1 January 2011. The growth rate of population was 10% in the last year and 5% in the years proceeding last year. The only exception was the year 2009 when there was a decline in population by 20%. Find Bhubaneswar's population on January 1 2005.
(A) 12,00,000
(B) 11,50,000
(C) 12,60,000
(D) 11,90,000

118. Rupesh takes 4 days to finish 1/3rd of a work, Binay takes 3 days to finish 1/6th of the same work and Ramu takes 5 days to finish ½ the work. All of them worked together for 3 days and then Rupesh and Ramu left. Find the time required for Binay to finish the remaining work.
(A) 4.1 days
(B) 5.1 days
(C) 6.1 days
(D) 6.5 days

119. Two boats started simultaneously from the beach, one to the south and the other to the east. Two hours later, the distance between them was 100 km. If the speed of one of the boats was 75% of the speed of the other boat, what was the speed of the faster boat?
(A) 32 km/h
(B) 36 km/h
(C) 40 km/h
(D) 42 km/h

120. If the radius of a circle is 13 cm and the distance of the chord from the centre is 12 cm, what is the length of the chord?
(A) 8 cm
(B) 10 cm
(C) 9 cm
(D) 12 cm