AFCAT 1 2017 QUESTION PAPER

INSTRUCTIONS: TIME LIMIT : 2 HOURS

1. Total No. of Questions–100. Each Question is of three marks.
2. One mark will be deducted for every wrong answer.
3. Do not write or mark on the Question Paper.
4. Question Paper to be returned before leaving the Exam Hall.

DIRECTIONS (Qs. 1-3) : Choose the word which is nearest in meaning to the given word:

1.   Idiocy
     (a)   Madness   (b)   Happiness
     (c)   Wisdom   (d)   Repentance
2.   Harbinger
     (a)   Remarkable   (b)   Omen
     (c)   Meritorious   (d)   Overwhelming
3.   Passe
     (a)   Out of date   (b)   Forthcoming
     (c)   Fashionable   (d)   Predictable

DIRECTIONS (Qs. 4-6) : Choose the most appropriate option that explains the meaning of the following idioms:

4.   To hit the nail on head
     (a)   Find exactly the right answer
     (b)   To scold someone
     (c)   To show correct path to someone
     (d)   To be harsh in behaviour
5.   Halycon days
     (a)   Bad days   (b)   Sunny days
     (c)   Cloudy days   (d)   Happy days
6.   To keep the wolf from the door
     (a)   To remain alert
     (b)   To question others in case of doubt
     (c)   To have enough money to avert hunger or starvation
     (d)   To chase others to get something

DIRECTIONS (Qs. 7-10): Choose the correctly spelt word:

7.   (a)   Accreditation   (b)   Acreditation
     (c)   Accredtation   (d)   Accredation
8.   (a)   Vicarrious   (b)   Viccarious
     (c)   Vecarious   (d)   Vicarious
9.   (a)   Abbreviate   (b)   Abreviate
     (c)   Abrrviate   (d)   Abbreviat
10. (a)   Acquainttance   (b)   Acqquaintance
     (c)   Accquaintance   (d)   Acquaintance

DIRECTION (Qs. 11-13): Read the following passage and answer the following questions:

At this stage of civilisation, when many nations are brought in to close and vital contact for good and evil, it is important, as never before, that their gross ignorance of one another should be diminished, that they should begin to understand a little of one another's historical experience and resulting mentality. It is the fault of the English to expect the people of other countries to react as they do, to political and international situations.

Our goodwill and good intentions are often brought to nothing, because we expect other people to be like us. This would be corrected if we knew the history, not necessarily in detail but in broad outlines, of the social and political conditions which have given to each nation its present character.

11. According to the author, 'Mentality' of a nation is mainly product of its
     (a)   Present character   (b)   International position
     (c)   Politics   (d)   History
12. According to the author, his countrymen should
     (a)   read the story of other nations
     (b)   not react to other actions
     (c)   have a better understanding of other nations
     (d)   have vital contacts with other nations
13. The need for a greater understanding between nations
     (a)   is more today than ever before
     (b)   was always there
     (c)   is no longer there
     (d)   will always be there

DIRECTION (Qs. 14-15): Choose the word which is nearly opposite in meaning to the given word:

14. Amending
     (a)   Alter   (b)   Ameliorate
     (c)   Better   (d)   Debase
15. Entangle
     (a)   Untwist   (b)   Twist
     (c)   Hook   (d)   Impede

DIRECTION (Qs. 16-50): Choose the most appropriate option:

16. What is the old name of USA?
     (a)   United Colonies
     (b)   Turtle Islands
     (c)   Americas
     (d)   Great America
17. Which religion was founded by Akbar?
     (a)   Bahai   (b)   Taoism
     (c)   Shintoism   (d)   Din-e-Ilahi
18. Who was the Indian Army Chief in October 2016?
     (a)   Bipin Rawat   (b)   Dalbir Singh
     (c)   Bikram Singh   (d)   V K Singh
19. Who was the Indian Navy Chief in October 2016?
     (a)   Nirmal Kumar Verma
     (b)   Devendra Kumar Joshi
     (c)   Robin K Dhowan
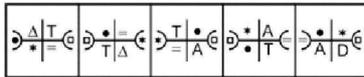   (d)   Sunil Lanba

20. Yarlung Zangbo is the name of which river?
    (a) Brahmaputra   (b) Ganga
    (c) Narmada   (d) Mahanadi
21. Which is the highest tower in the world?
    (a) Tokyo Skytree   (b) KVLY-TV mast
    (c) Burj Khalifa   (d) Abraj Al Bait Towers
22. Who was elected as the Prime Minister of India in the election held after the death of Rajiv Gandhi?
    (a) V. P. Singh   (b) Chandra Shekhar
    (c) P. V. Narasimha Rao   (d) H. D. Deve Gowda
23. Who defeated PV Sindhu in the final in Rio Olympics?
    (a) Carolina Marin   (b) Michelle Li
    (c) Akane Yamaguchi   (d) None of these
24. Which is the largest diamond producing country in the world?
    (a) Russia
    (b) Botswana
    (c) Democratic Republic of Congo
    (d) Australia
25. In which South Korean city the Asian Games 2014 were concluded?
    (a) Incheon   (b) Jecheon
    (c) Jeongeup   (d) Namwon
26. Who was the first Governor General of India after Independence?
    (a) C. Rajagopalachari
    (b) Lord Mountbatten
    (c) Viscount Wavell
    (d) Marquess of Linlithgow
27. What was the score of Dipa Kamarakar in the final round in Rio Olympics?
    (a) 15.253   (b) 15.966
    (c) 15.066   (d) 15.216
28. On which of the following rivers the Salal project was launched?
    (a) Narmada   (b) Godavari
    (c) Chenab   (d) Mahanadi
29. Which port in Iran has been built by India?
    (a) Chabahar Port   (b) Bandar Abbas
    (c) Bandar Anzali   (d) Bandar Khomeini
30. Which port in Pakistan has been built by China?
    (a) Karachi Port
    (b) Gwadar Port
    (c) Port Muhammad Bin Qasim
    (d) None of these
31. Which of the following is a classical dance of Kerala?
    (a) Bharatanatyam   (b) Kuchipudi
    (c) Sattriya   (d) Mohiniyattam
32. Which Indian state is the largest producer of banana?
    (a) Tamil Nadu   (b) Gujarat
    (c) Maharashtra   (d) Andhra Pradesh
33. Which Indian sportsperson has been appointed as a member of the International Olympic Committee?
    (a) Devendra Jhajharia   (b) Saina Nehwal
    (c) Abhinav Bindra   (d) Sakshi Malik
34. Who was the first tirthankara of Jainism?
    (a) Rishabhanatha   (b) Mahavira
    (c) Parshvanatha   (d) Sambhavanatha
35. Who was the 23rd tirthankara of Jainism?
    (a) Mahavira   (b) Neminatha
    (c) Sambhavanatha   (d) Parshvanatha
36. Who wrote the epic poem 'Padmavat'?
    (a) Malik Muhammad Jayasi
    (b) Tulsidas
    (c) Kalidas
    (d) Asaga
37. Who was the first governor general of India?
    (a) Warren Hastings   (b) John Macpherson
    (c) John Shore   (d) Alured Clarke
38. Which is the oldest active volcano of the world?
    (a) Chimborazo   (b) Mount Kilimanjaro
    (c) Mt. Etna   (d) Mount Buninyong
39. Which of the following is not an inert gas?
    (a) Argon   (b) Helium
    (c) Hydrogen   (d) Xenon
40. Which is the oldest refinery in India?
    (a) Guwahati Refinery
    (b) Vishakhapatnam Refinery
    (c) Digboi Refinery
    (d) Barauni Refinery
41. What was the old name of Myanmar?
    (a) Burma   (b) Newar
    (c) Nippon   (d) Sarawak
42. Aladdin is the character of which of the following books?
    (a) The One Thousand and One Arabian Nights
    (b) Cinderella
    (c) Snow White
    (d) The Frog Prince
43. Where is the office of the International Court of Justice located?
    (a) Hague   (b) Washington
    (c) Moscow   (d) Venice
44. What is sin bin in ice hockey game?
    (a) Penalty box   (b) Hockey sticks
    (c) Dust bin   (d) Rest room
45. Which is the deepest trench in the world?
    (a) Tonga Trench   (b) Mariana Trench
    (c) Romanche Trench   (d) Kermadec Trench
46. Who was the first cricket player to be declared out in a test cricket match by third umpire?
    (a) Rahul Dravid   (b) Saurabh Ganguly
    (c) Sachin Tendulkar   (d) VVS Laxman
47. Who was the first NSA of India?
    (a) Brajesh Mishra   (b) J N Dixit
    (c) M. K. Narayanan   (d) Shivshankar Menon
48. Satyajit Ray was a
    (a) Politician   (b) Dancer
    (c) Filmmaker   (d) Tabla player

49. Mandal Commission was established by which of the following Prime Ministers of India?
   (a) Jawahar Lal Nehru   (b) Morarji Desai
   (c) Rajiv Gandhi   (d) VP Singh

50. Which Cuban athlete is called 'horse'?
   (a) Dayron Robles   (b) Iván García
   (c) Alberto Juantorena   (d) Héctor Herrera

51. A man rows 1 km in 10 minutes, along the stream and 1 km in 20 minutes against the stream. The speed of the stream is
   (a) 1 km/hr   (b) 1.5 km/hr
   (c) 3 km/hr   (d) 2.5 km/hr

52. 10 years ago the average age of a family of 4 members was 24 years. Now two more babies were born with age difference of 2 years and average age of the family is still 24. What is the present age of the youngest child?
   (a) 4 years   (b) 6 years
   (c) 3 years   (d) 5 years

53. 3 years back the average age of a family of 4 members was 24 years. A baby having been born, the average age of the family is still same. What is the present age of the baby?
   (a) 14 years   (b) 16 years
   (c) 12 years   (d) 10 years

54. If A/B = 4/3 then what is the value of (9A–3B)/(9A+3B) is
   (a) 3/5   (b) 5/3
   (c) 2/5   (d) 3/7

55. The speed of a boat in standing water is 8 km/hr and the speed of the stream is 2 km/hr. If boat takes 3hr 12 minutes to a place and come back, then what is the distance?
   (a) 14 km   (b) 10 km
   (c) 24 km   (d) 12 km

56. A train 110m long running at the speed of 60 km/hr, how long it will take to cross a man running in the opposite direction at the speed if 10 km/hr.
   (a) 6 seconds   (b) 8 seconds
   (c) 12 seconds   (d) 10 seconds

57. If a sum of money placed at compound interest doubles itself in 4 years, In how many years will it amount to 4 times?
   (a) 6   (b) 8
   (c) 10   (d) 12

58. A man bought 240 chocolates at 9 per dozen. If he sold all of them at ₹ 1 each, what was his loss or gain percent?
   (a) $33\frac{1}{3}$%   (b) 25%
   (c) 20%   (d) 15%

59. A shopkeeper sold two articles at ₹ 12000 each. One sold at a loss of 25% and another one at a gain 20%. What is net total loss and gain?
   (a) 4%   (b) 8.5%
   (c) 6.5%   (d) 7.6%

60. If one student got 77/100, 96/150 and 103/350 in various subjects, what is the percentage average?
   (a) 15.33%   (b) 12.25%
   (c) 16.33%   (d) 18.15%

61. In an election between two candidates, Biku got 55% votes of the total valid votes, 25% of the votes were declared invalid. If total populations of the village were 6000. Find the valid votes that Mahtre got, was
   (a) 1575   (b) 2025
   (c) 2075   (d) 2175

62. If 30% of a number is subtracted from 91 gives the same number, find the number.
   (a) 80   (b) 90
   (c) 70   (d) 60

63. If 50% of a number is added to 84 gives the same number, what is the number?
   (a) 178   (b) 174
   (c) 158   (d) 168

64. If 381A is divisible by 9, what is the least natural number A?
   (a) 6   (b) 1
   (c) 9   (d) 4

65. A shopkeeper sell a T.V for ₹ 3000 and makes a profit of 15%, he sells a different T.V at a loss of 10%. Over all, he neither gains nor loses. What is cost price of the second T.V?
   (a) 3913   (b) 3923
   (c) 3833   (d) 3723

DIRECTIONS (Qs. 66-70): In each of the following questions, find the odd word /number/letters from the given alternatives.

66. (a) Cow   (b) Hen
   (c) Lioness   (d) Horse

67. (a) Chennai   (b) Hyderabad
   (c) Mohali   (d) Kolkata

68. (a) Red   (b) Yellow
   (c) Blue   (d) Green

69. (a) Australia   (b) Asia
   (c) Africa   (d) USA

70. (a) Assam   (b) Mizoram
   (c) West Bengal   (d) Nagaland

DIRECTION (Qs. 71-75): In each of the following questions, select the related letters/word/number from the given alternative.

71. Coconut : Shell : Letter : ?
   (a) Envelope   (b) Post
   (c) Postal Stamp   (d) Letter Box

72. Bismilla Khan : Clarinetist : : Birju Maharaj : ?
   (a) Kathak   (b) Bharatnatayam
   (c) Music   (d) Sitar

73. 678 : U : : 456 : ?
   (a) P   (b) O
   (c) Q   (d) R

74. CALL : ACLL :: COOL : ?
   (a) LOOC   (b) LCOO
   (c) OOLC   (d) OCLO

75. Punjab : Chandigarh :: Assam
   (a) Dispur   (b) Guwahati
   (c) Shillong   (d) Imphal

DIRECTION (Qs. 76-80): Each of the following questions consists of five figures marked 1, 2, 3, 4 and 5 called the Problem Figures followed by four other figures marked (a), (b), (c) and (d) called the Answer Figures. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.
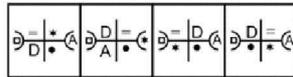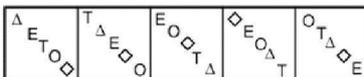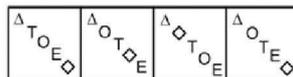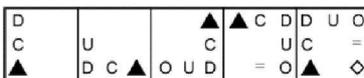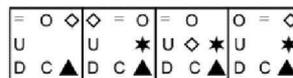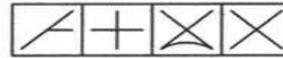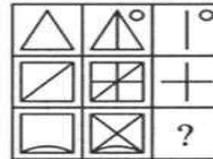
76. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

Problem Figures: Answer Figures:

| (1) | (2) | (3) | (4) | (5) | (a) | (b) | (c) | (d) |

77. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

Problem Figures: Answer Figures:

| (1) | (2) | (3) | (4) | (5) | (a) | (b) | (c) | (d) |

78. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

Problem Figures: Answer Figures:

| (1) | (2) | (3) | (4) | (5) | (a) | (b) | (c) | (d) |

79. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

Problem Figures: Answer Figures:

| (1) | (2) | (3) | (4) | (5) | (a) | (b) | (c) | (d) |

80. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

Problem Figures: Answer Figures:

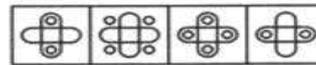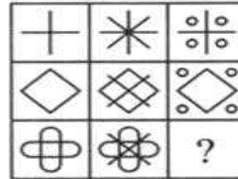| (1) | (2) | (3) | (4) | (5) | (a) | (b) | (c) | (d) |

DIRECTION (Qs. 81-85): In each of the following questions, find out which of the answer figures (a), (b), (c) and (d) completes the figure matrix?

81. Select a suitable figure from the four alternatives that would complete the figure matrix.
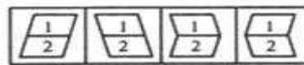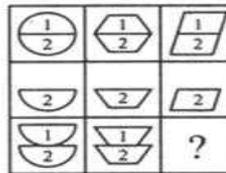
(a)   (b)   (c)   (d)

82. Select a suitable figure from the four alternatives that would complete the figure matrix.
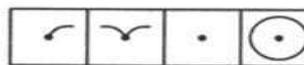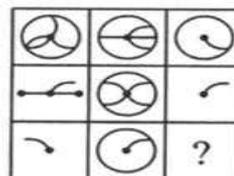
(a)   (b)   (c)   (d)

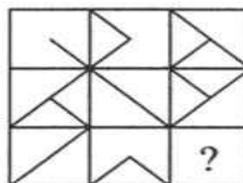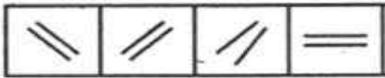83. Select a suitable figure from the four alternatives that would complete the figure matrix.

(a)   (b)   (c)   (d)

84. Select a suitable figure from the four alternatives that would complete the figure matrix.

(a)   (b)   (c)   (d)

85. Select a suitable figure from the four alternatives that would complete the figure matrix.

(a)   (b)   (c)   (d)

DIRECTION (Qs. 86-90): In each problem, out of the five figures marked (a), (b), (c) and (d), three are similar in a certain manner. However, one figure is not like the other three. Choose the figure which is different from the rest.

86. Choose the figure which is different from the rest.

(a)　　(b)　　(c)　　(d)

87. Choose the figure which is different from the rest.

(a)　　(b)　　(c)　　(d)

88. Choose the figure which is different from the rest.

(a)　　(b)　　(c)　　(d)

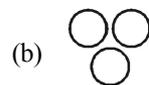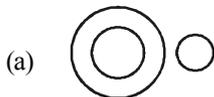89. Choose the figure which is different from the rest.

(a)　　(b)　　(c)　　(d)

90. Choose the figure which is different from the rest.

(a)　　(b)　　(c)　　(d)

DIRECTION (Qs. 91-95): Each of these questions given below contains three elements. These elements may or may not have some inter linkage. Each group of elements may fit into one of these diagrams at (a), (b), (c), and (d). You have to indicate the group of elements which correctly fits into the diagrams.
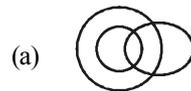
91. Which of the following diagrams indicates the best relation between Travelers, Train and Bus?
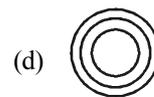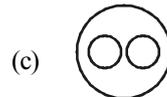

92. Which of the following diagrams indicates the best relation between Profit, Dividend and Bonus?
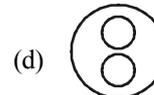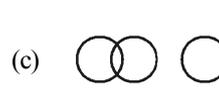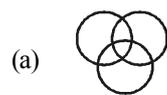

93. Which of the following diagrams indicates the best relation between Women, Mothers and Engineers?

94. Which of the following diagrams indicates the best relation between Author, Lawyer and Singer?

95. Which of the following diagrams indicates the best relation between Judge, Thieves and Criminals?

DIRECTION (Qs. 96-100): Each of the following questions consists of two sets of figures. Figures (1), (2), (3) and (4) constitute the Problem Set while figures (a), (b), (c), and (d) constitute the Answer Set. There is a definite relationship between figures (1) and (2). Establish a similar relationship between figures (3) and (4) by selecting a suitable figure from the Answer Set that would replace the question mark (?) in fig. (4).

96. Select a suitable figure from the Answer Figures that would replace the question mark (?).

Problem Figures:　　　　Answer Figures:

(1)　(2)　(3)　(4)　　(a)　(b)　(c)　(d)

97. Select a suitable figure from the Answer Figures that would replace the question mark (?).

Problem Figures:　　　　Answer Figures:

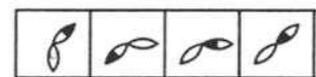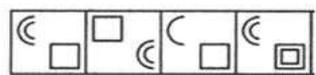(1)　(2)　(3)　(4)　　(a)　(b)　(c)　(d)

98. Select a suitable figure from the Answer Figures that would replace the question mark (?).

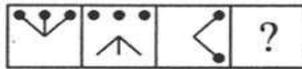Problem Figures:　　　　Answer Figures:

(1)　(2)　(3)　(4)　　(a)　(b)　(c)　(d)
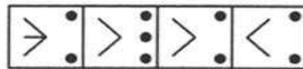
99. Select a suitable figure from the Answer Figures that would replace the question mark (?).

Problem Figures:
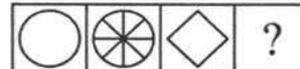

(1) (2) (3) (4)

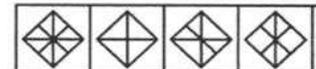Answer Figures:

(a) (b) (c) (d)

100. Select a suitable figure from the Answer Figures that would replace the question mark (?).

Problem Figures:

(1) (2) (3) (4)

Answer Figures:

(a) (b) (c) (d)

AFCAT 1 2017 QUESTION PAPER

ANSWER KEY									
1. (a)	2. (a)	3. (b)	4. (a)	5. (d)	6. (c)	7. (a)	8. (d)	9. (a)	10.(d)
11.(d)	12.(c)	13.(d)	14.(d)	15.(a)	16.(a)	17.(d)	18.(b)	19.(d)	20.(a)
21.(c)	22.(c)	23.(a)	24.(a)	25.(a)	26.(b)	27.(c)	28.(c)	29.(a)	30.(b)
31.(d)	32.(a)	33.(b)	34.(a)	35.(d)	36.(a)	37.(a)	38.(c)	39.(c)	40.(c)
41.(a)	42.(a)	43.(a)	44.(a)	45.(b)	46.(c)	47.(a)	48.(c)	49.(b)	50.(c)
51.(b)	52.(c)	53.(c)	54.(a)	55.(d)	56.(a)	57.(b)	58.(a)	59.(d)	60.(a)
61.(b)	62.(c)	63.(c)	64.(a)	65.(a)	66.(d)	67.(c)	68.(b)	69.(d)	70.(c)
71.(a)	72.(a)	73.(b)	74.(d)	75.(a)	76.(c)	77.(d)	78.(d)	79.(c)	80.(b)
81.(d)	82.(b)	83.(c)	84.(d)	85.(b)	86.(a)	87.(c)	88.(d)	89.(b)	90.(a)
91.(c)	92.(b)	93.(a)	94.(b)	95.(b)	96.(c)	97.(a)	98.(b)	99.(c)	100.(a)

1. (a) Idiocy is a noun which means madness or extremely unusual behaviour.

2. (a) Passe is an adjective which means no longer fashionable or out of date.

3. (b) Harbinger is a person or thing that announces or signals the approach of something. Omen also means a phenomenon that is believed to foretell the future.

4. (a) The idiom "To hit the nail on head" means to find the correct answer of something.

5. (d) The idiom "Halycon days" means a period of peace and happiness.

6. (c) The idiom "To keep the wolf from the door" means to have enough money to prevent hunger.

7. (a) Accreditation is a process of validation in which colleges, universities and other institutions of higher learning are evaluated.

8. (d) Vicarious means experienced in the imagination through the feelings or actions of another person.

9. (a) Abbreviate is a verb which means to put shorten a word, phrase or text.

10. (d) Acquaintance is a noun which means to have knowledge or experience of something.

11. (d) Mentality of a nation is reflected by the historical experience of that nation. For better relation, countries should understand one another's historical experience and resulting mentality.

12. (c) According to the author, his countrymen should have a better understanding of other nations. Better understanding averts political tension between nations and promote peaceful atmosphere.

13. (d) There will always be need for understanding between nations for better relations.

14. (d) Amending means to make changes for improvement and debase means degrade in value or quality.

15. (a) Entangle means twisted, opposite to the word untwist.

16. (a) In 1776, the Continental Congress formally declared the name of the new nation to be the "United States" of America, replacing the term "United Colonies," which had been in general use. Americas is the term used for the continents of North and South America. Turtle Islands is a group of seven islands in the province of Tawi-Tawi in the Southern Philippines.

17. (d) Din-e-Ilahi was founded by Mughal emperor Akbar in 1582 AD, intending to merge the best elements of the religions of his empire. Bahaullah was the founder of the Bahai faith. There is no known founder of Shintoism. Lao-Tzu was a Chinese philosopher credited with founding the philosophical system of Taoism.

18. (b) Dalbir Singh served as the Chief of the Indian Army from 1 August 2014 to 31 December 2016. Current Army Chief is Bipin Rawat (31 December 2016-present). Other former chiefs were Bikram Singh (1 June 2012-31 July 2014) and V K Singh (1 April 2010-31 May 2012).

19. (d) Sunil Lanba is the current Indian Navy Chief (31 May 2016-present). Other former chiefs were Robin K Dhowan (17 April 2014-31 May 2016), Devendra Kumar Joshi (31 August 2012-26 February 2014) and Nirmal Kumar Verma (31 August 2009-31 August 2012).

20. (a) The Brahmaputra is a trans-boundary river which flows through China, India and Bangladesh. It is also known by its Chinese name (Yarlung Zangbo) and by other local Tibetan names. Ganga is a trans-boundary river of Asia which flows through India and Bangladesh. Narmada, also called the Rewa, is a river in central India and the fifth longest river in the Indian subcontinent. Mahanadi is a major river in East Central India, which flows through the states of Chhattisgarh and Odisha.

21. (c) Burj Khalifa in Dubai (828 mts) is the tallest building in the world followed by Tokyo Skytree in Tokyo (643 mts), KVLY-TV mast in Blanchard (628.8 mts) and Abraj Al Bait Towers in Mecca (601 mts).

22. (c) P. V. Narasimha Rao (21 June 1991-16 May 1996) was elected as the 9th Prime Minister of India in the election held after the death of Rajiv Gandhi on 21 May 1991. Narasimha Rao succeeded Prime Minister Chandra Shekhar.

23. (a) Spanish badminton player Carolina Marin defeated PV Sindhu in the final in Rio Olympics to win Gold medal. PV Sindhu won a silver medal. Canadian player Michelle Li was defeated by PV Sindhu in the round of 16 in the women's singles badminton playdowns at the 2016 Summer Olympics.

24. (a) Russia is the largest diamond producing country of the world. In 2015, Russian miners extracted an estimated 41.9 million carats of diamonds.

25. (a) The 2014 Asian Games were held in Incheon, South Korea from September 19 - October 4, 2014, featuring 439 events in 36 sports. Incheon was the third city in South Korea after Seoul (1986) and Busan (2002) to host the Asian Games.

26. (b) Lord Mountbatten was the last Viceroy of India (1947) and the first Governor-General of independent India (1947-48). Marquess of Linlithgow (1936-43) and Viscount Wavell (1943-47) served as Governor Generals before independence. C. Rajagopalachari served as second Governor General of Independent India from 1948-50.

27. (c) Dipa Kamarakar's score was 15.066 in the final round in Rio Olympics. Scores of artistic gymnasts- Simone Biles (USA), Maria Paseka (Russia) and Giulia Steingruber (Switzerland)-were 15.966, 15.253 and 15.216, respectively.

28. (c) Salal Dam, also known as Salal Hydroelectric Power Station, is a power project on the Chenab River in the Reasi district of Jammu and Kashmir. Sardar Sarovar Dam is built on the Narmada River near Navagam, Gujarat. Upper Indravati hydro power station is located on Godavari. Hirakud Dam is built across the Mahanadi River in Odisha.

29. (a) Chabahar Port is a seaport in Chabahar located in southeastern Iran, on the Gulf of Oman. The port will make way for India to bypass Pakistan in transporting goods to Afghanistan using a sea-land route.

30. (b) Gwadar Port is a deep-sea port situated on the Arabian Sea at Gwadar in Balochistan province of Pakistan. The port features prominently in the China-Pakistan Economic Corridor (CPEC) plan, and is considered to be a link between the ambitious One Belt, One Road and Maritime Silk Road projects.

31. (d) Mohiniyattam is a classical dance of Kerala. Sattriya, Kuchipudi, and Bharatanatyam are classical dances of Assam, Andhra Pradesh, and Tamil Nadu, respectively.

32. (a) Tamil Nadu is the largest banana producing state in India followed by Gujarat, Maharashtra and Andhra Pradesh.

33. (b) Indian shuttler Saina Nehwal has been appointed as a member of the International Olympic Committee's (IOC) Athletes' Commission. The Athletes' Commission is chaired by Angela Ruggiero and it comprises nine vice presidents and 10 other members.

34. (a) Tirthankara is a saviour and spiritual teacher of the dharma. Rishabhanatha was the first tirthankara of Jainism. Mahavira, Parshvanatha and Sambhavanatha were 24th, 7th and 3rd tirthankara, respectively.

35. (d) Parshvanatha was the 23rd tirthankara of Jainism. He is the earliest Jain Tirthankara who is generally acknowledged as a historical figure. Mahavira, Parshvanatha and Sambhavanatha were 24th, 7th and 3rd tirthankara, respectively.

36. (a) Padmavat is an epic poem written in 1540 CE by Malik Muhammad Jayasi in the Awadhi language. The poem describes the historic siege of Chittor by Alauddin Khalji in 1303 CE.

37. (a) Warren Hastings (20 October 1773- 1 February 1785) was the first governor general of British-ruled India. Other governor generals were John Macpherson (1 February 1785-12 September 1786), John Shore (28 October 1793-18 March 1798) and Alured Clarke (18 March 1793-18 May 1798).

38. (c) Mt. Etna is the oldest active volcano of the world, located in Sicily, Italy. It lies above the convergent plate margin between the African Plate and the Eurasian Plate. It is the tallest active volcano in Europe. All other given volcanoes are dead.

39. (c) Hydrogen is the lightest reactive gas. All other gas-helium, argon and xenon-are passive gases as they have low affinity for chemical reaction.

40. (c) Digboi is a town in Tinsukia district in the north-eastern part of the state of Assam, India. Crude oil was discovered here in late 19th century. Guwahati Refinery was set up at Noonmati in Guwahati on January 1, 1962. Barauni Refinery was established in July 1964 in Barauni istrict of Bihar.

41. (a) The ruling military changed Burma's name to Myanmar in 1989, a year after thousands were killed in the suppression of a popular uprising. Rangoon also became Yangon. Japan's old name was Nippon. Sarawak is a state in Malaysia. Nepalese are also called Newar.

42. (a) 'One Thousand and One Nights' is a collection of Middle Eastern folk tales compiled in Arabic during the Islamic Golden Age. It is often known in English as the Arabian Nights. Aladdin is a famous character of the book.

43. (a) The office of the International Court of Justice is located in Hague, the Netherlands.

44. (a) A penalty box or sin bin is the area in ice hockey where a player sits to serve the time of a given penalty.

45. (b) Mariana Trench or Marianas Trench is the deepest part of the world's oceans. It is located in the western Pacific Ocean, an average of 200 kilometres to the east of the Mariana Islands, in the Western Pacific East of Philippines.

46. (c) Sachin Tendulkar became the first batsman to be dismissed (run out) by using television replays in the second day of the test match in November 1992 between South Africa and India in Kingsmead, Durban. Karl Liebenberg was the third umpire with Cyril Mitchley the on-field umpire.

47. (a) Brajesh Mishra was the first National Security Advisor (NSA) of India who served from November 1998 to May 2004. Other former NSAs were J N Dixit (2004-2005), M. K. Narayanan (2005-2010) and Shivshankar Menon (2010-2014).

48. (c) Satyajit Ray (2 May 1921 - 23 April 1992) was an Indian filmmaker and author, widely regarded as one of the greatest filmmakers of the 20th century. He was born in the city of Calcutta into a Bengali Brahmo family.

49. (b) The Mandal Commission was established in India in 1979 by the Janata Party government under Prime Minister Morarji Desai, to identify the socially or educationally backward.

50. (c) Alberto Juantorena is a former Cuban racer who is called El Caballo (the horse). Juantorena had been born with flat feet that caused feet and back problems, and he had to have corrective surgery in 1977. At the 1976 Summer Olympics, he became the only athlete to win both the 400 and 800 m Olympic titles.

51. (b) Speed of current = $\frac{1}{2}$ (Rate of downstream – Rate of upstream)

$$= \frac{1}{2} \times (6-3)$$

$$= \frac{1}{2} \times 3$$

$$= 1.5 \text{ km/hr}$$

52. (c) Let total age of family be G years.
10 years ago, total age = $G - 10 \times 4 = G - 40$
According to question

$$\frac{G-40}{4} = 24$$

$G = 24 \times 4 + 40 = 136$ years
Let present age of youngest child = x

Present age of older child = x + 2

$$\frac{G + x + x + 2}{6} = 24$$

$$\frac{136 + x + x + 2}{6} = 24$$

$2x + 138 = 24 \times 6$
$2x = 144 - 138 = 6$
$\therefore$ x = 6/2 = 3 years
$\therefore$ Present age of youngest child = 3 years

53. (c) Let total age of family be G years.
3 years back, total age = $G - 3 \times 4 = G - 12$
According to question,

$$\frac{G-12}{4} = 24$$

$\therefore$ $G = 24 \times 4 + 12 = 108$ years
Let present age of baby = x

$$\frac{G + x}{5} = 24$$

$$\frac{108 + x}{5} = 24$$

$\Rightarrow 108 + x = 120$
$\therefore$ x = 120 - 108 = 12 years

54. (a) Here, $\frac{A}{B} = \frac{4}{3}$

$$\therefore \frac{(9A - 3B)}{(9A + 3B)} = \frac{(9 \times 4 - 3 \times 3)}{(9 \times 4 + 3 \times 3)}$$

$$= \frac{36 - 9}{36 + 9} = \frac{27}{45} = \frac{3}{5}$$

55. (d) According to question

$$\frac{d}{(8+2)} + \frac{d}{(8-2)} = 3\frac{12}{60}$$

$$\frac{d}{10} + \frac{d}{6} = 3\frac{1}{5}$$

$$\frac{3d + 5d}{30} = \frac{16}{5}$$

$$\frac{8d}{30} = \frac{16}{5}$$

$$\therefore d = \frac{16 \times 30}{8 \times 5} = 12 \text{km}$$

56. (a) Distance = 110m
Relative speed = 60 + 10 = 70 kmph (since both the train and the man are moving in opposite direction)

$$= 70 \times \frac{5}{18} = \frac{350}{18} \text{m / sec}$$

$\therefore$ Time taken to pass the man

$$= 110 \times \frac{18}{350} = 5.65 \cong 6 \text{ seconds}$$

57. (b) Let principal $= 100$
Amount $= 200$
Rate $= r\%$
Time $= 4$ years
Now,

$$A = P\left(1 + \frac{r}{100}\right)^t$$

$$200 = 100\left(1 + \frac{r}{100}\right)^4$$

$$2 = \left(1 + \frac{r}{100}\right)^4 \quad ....(i)$$

If sum become 4 times in the time n years

then, $\quad 4 = \left(1 + \frac{r}{100}\right)^n$

$$2^2 = \left(1 + \frac{r}{100}\right)^n \quad ....(ii)$$

Using eqn (i) and (ii) we get

$$\left[\left(1 + \frac{r}{100}\right)^4\right]^2 = \left(1 + \frac{r}{100}\right)^n$$

$$\left(1 + \frac{r}{100}\right)^8 = \left(1 + \frac{r}{100}\right)^n$$

Thus, $n = 8$ years

58. (a) CP of 12 chocolates $= ₹\ 9$

CP of 1 chocolate $= \dfrac{9}{12} = 0.75$

Now,
SP $= ₹\ 1$, Profit $= 0.25$

Profit% $= \dfrac{0.25}{0.75} \times 100 = 33\dfrac{1}{3}\%$

59. (d) $SP_1 = 12,000$

$CP_1 = \dfrac{12,000}{0.75} = 16,000$

$SP_2 = 12,000$

$CP_2 = \dfrac{12,000}{1.2} = 10,000$

So, total CP $= 16000 + 10000 = 26,000$
total SP $= 24,000$
So loss $= 2000$

$\therefore$ loss percentage $= \dfrac{2000}{26,000} \times 100$

$= 7.6\%$

60. (a) Total marks in all subjects $= (100 + 150 + 350) = 600$
Total marks obtained by student $= 77 + 96 + 103 = 276$

$\therefore$ Obtain marks in percentage $= \dfrac{276 \times 100}{600}$

$= 46\%$

$\therefore$ Percentage average $= \dfrac{46}{3} = 15.33\%$

61. (b) Total valid votes $= 6000 - 6000 \times \dfrac{25}{100}$

$= 4500$

Votes obtained by Biku $= 4500 \times \dfrac{55}{100} = 2475$

Votes obtained by Mahtre $= (4500 - 2475) = 2025$.

62. (c) Let the number be x
According to question,

$$91 - \frac{x \times 30}{100} = x$$

$9100 - 30x = 100x$
$130x = 9100$

$\therefore x = \dfrac{9100}{130} = 70$

63. (d) Let the number be x
According to question,

$$84 + \frac{x \times 50}{100} = x$$

$8400 + 50x = 100x$
$100x - 50x = 8400$
$50x = 8400$

$\therefore x = \dfrac{8400}{50} = 168$

64. (a) A number is divisible by 9 when the sum of its digit is divisible by 9.
So, $(3 + 8 + 1 + A) =$ must be divisible by 9.
Thus smallest natural number be 6.
or, $(3 + 8 + 1 + 6) = 18$, this is divisible by 9.

65. (a) CP of 1st TV $= 3000 \times \dfrac{100}{115} = 2608.69$

Profit $=$ SP $-$ CP $= 3000 - 2608.69 = 391.31$
Loss on 2nd TV $= 391.31$
Loss percentage $= 10\%$

Loss percentage $= \dfrac{\text{Loss}}{\text{CP}} \times 100$

$10 = \dfrac{391.31}{\text{CP}} \times 100$

$\therefore$ CP $= \dfrac{391.31 \times 100}{10}$

$= 3913.10 \cong 3913$

66. (d) Except (d), all animals are females.
67. (c) Except (c), all are capital cities.

68. (b) Except (b), every colour is a primary colour.
69. (d) Except (d), all are continents.
70. (c) Except (b), all are North-Eastern states of India.
71. (a) As 'Coconut' is inside the 'Shell', similarly, 'Letter' is inside the "Envelope'.
72. (a) As 'Bismillah Khan' is a famous 'Clarinetist', similarly, 'Birju Maharaj' is a famous 'Kathak' dancer.
73. (b) $687 = 6 + 7 + 8 = 21$ is the place value of U in alphabetical sequence. Similarly, $456 = 4 + 5 + 6 = 15$ is the place value of O.
74. (d) In CALL, first two letters are interchanged among themselves and last two letters are interchanged among themselves to get ACLL. Similarly, COOL can be rearranged as OCLO.
75. (a) Punjab's capital is Chandigarh. Similarly, Assam's capital is Dispur
81. (d) The third figure in each row comprises of parts which are not common to the first two figures.
82. (b) In each row, the second figure is obtained from the first figure by adding two mutually perpendicular line segments at the centre and the third figure is obtained from the first figure by adding four circles outside the main figure.
83. (c) In each column, the second figure (middle figure) is obtained by removing the upper part of the first figure (uppermost figure) and the third figure (lowermost figure) is obtained by vertically inverting the upper part of the first figure.
84. (c) The third figure in each row comprises of the parts common to the first two figures.
85. (b) The third figure in each row comprises of parts which are not common to the first two figures.
86. (a) The pins, equal in number to the number of sides in the main figure are attached to the midpoint of a side of the main figure in case of figures (b), (c), and (d). In fig. (a), these pins are attached to a vertex of the main figure
87. (c) In all other figures, the two line segments are parallel to each other.
88. (d) In all other figures, the arrow and the V sign lie towards the black end of the main figure.
89. (b) The lines outside the shaded circle are not equally distributed along the circumference in fig. (b).
90. (a) In all other figures, the lower-right quarter portion is shaded.
91. (c) Bus and Train are different from each other but some travelers travel by bus and some travel by train.
92. (b) Bonus and Dividend are different from each other. But both these are parts of profit.
93. (a) All mothers are women and some mothers and some women may be engineers.
94. (b) All the three are different professions.
95. (b) All the thieves are criminals while judge is different from these.
96. (c) The half-shaded leaf rotates 135°ACW and the unshaded leaf rotates 135°CW.
97. (a) The upper element is converted to an element similar to the lower elements and each one of the lower elements is converted to an element similar to the upper element.
98. (b) Each one of the upper elements is replaced by an element similar to the lower element(s) and each one of the lower elements is replaced by an element similar to the upper element(s).
99. (c) Except for the dots, the remaining part of the figure rotates through 180° and shifts to the opposite side of the square boundary.
100. (a) The figure gets divided into eight equal parts.