1. If Sin A = $\frac{4}{5}$ and Sin B = $\frac{5}{13}$, then Sin (A+B) =?

   *A. $\frac{63}{65}$ B. $\frac{16}{65}$

   C. $\frac{33}{65}$ D. $\frac{56}{65}$

2. Function of control rod (rods of cadmium) in a nuclear reactor is to

   A. Absorb excessive heat produced during fission reaction and thus prevents excess rise of temperature.

   *B. Absorb the excess neutrons so as to control the chain reaction.

   C. Decrease the energy of neutrons so that they can be further use for fission reaction.

   D. Generate neutrons required for chain fission reaction.

3. Term AAU refers to Assigned Amount Units which caps the _____

   A. Emission of carbon

   *B. Emission of greenhouse gases

   C. Selling of carbon credits

   D. Savings in terms of carbon footprints

4. In a certain code language, if TEMPLE is coded as 187658 and CHURCH is coded as 439243,then PURE will be coded as?

   *A. 6928   B. 3982

   C. 6982   D. 9682

5. The value of $\frac{0.55 \times 0.81}{4.5}$ =?

   A. 0.99   *B. 0.099

   C. 9.9   D. 0.0099

6. What is the objective of "SAMANVAY" portal launched by Ministry of Rural Development?

   A. Facilitate enrolment under Social Security Scheme.

   B. Promote bank finance for Start-ups (an entrepreneurial venture)

   *C. Monitor progress & implementation of the Sansad Adarsh Oram Yojana.

   D. Monitor progress & implementation of "Pradhan Mantri Jan-Dhan Yojana"

7. Which Act provides for acquisition & loss of citizenship after the commencement of the constitution?

   A. The Citizenship Act, 1950

   B. The Citizenship Ad, 1952

   *C. The Citizenship Act, 1955

   D. The Citizenship Ad, 1954

8. Mr. Ranjan browed Rs.7,500 at 4% per annum compound interest. The compound interest compounded annually for 2 years is:

   *A. 612   B. 8112

   C. 8121   D. 621

9. A disorder when one cannot see the distant clearly is known as?

   A. Hypermetropia   B. Night blindness

   *C. Myopia   D. Strebismus

10. Sepoy Mutiny started in 1857 at _____.

    A. Agra   *B. Meerut

    C. Lucknow   D. Aligarh

11. Convert 29 to binary.

    A. 10101   B. 11110

    *C. 11101   D 11001

12. Name the monument which includes animpressive series of nine Hindu temples, as well as a Jain sanctuary with one masterpiece, the temple of Virupaksha and is located in Bagalkot, Karnataka?

    A. Group of monuments at Mahahalipuram

    B. Group of monuments at Hampi

    *C. Group of monuments at Pattadakal

    D. Khajuraho Group of monuments

13. Given k = -3. Find the value of $k^3 + 3k$.

    *A. -36   B. 36   C. 37   D. -37

14. A tube has two punctures. The 1st hole alone makes the tube empty m 29 minutes and 2nd hole alone makes the rube empty in 6 minutes. If air leaks out at a constant rate, how long in minutes does it take if both the holes together empty the tube?

A. $\frac{34}{35}$ B. $3\frac{34}{35}$ C. $4\frac{33}{35}$ *D. $4\frac{34}{35}$

D. Metals can't displace hydrogen from water.

15. Match the following:

a) Input device	p) ROM
b) Processing device	q) Touch screen
c) Storage device	r) Printer
d) Output device	s) Flash Memory

A. a-q, b-s, c-r, d-p

*B. a-q, b-p, c-s, d-r

C. a-r, b-p, c-s, d-q

D. a-p, b-q, c-r, d-s

16. If in a certain language, CHILLY is coded as HCLIYL, how is MANURE coded in that code?

A. AMREUN   *B. AMUNER

C. ARMUEN   D. ENARMU

17. Who has won a gold medal in 7th World Bodybuilding and Physique Championship (WBPF) held at Bangkok?

A John Michael Conlan

B. Yunfei Li

*C. Tfaakur Anoop Singh

D. Shiva Thapa

18. In the year 2009, TerreStar-1 launched for better communication to North America. From which country it was launched?

*A. France   B. USA

C. China   D. Russia

19. Name the Indian music maestro who haj teen named as the

A. Sonu Nigam   *B. A.R. Rahman

C. Ilaiyaraaja   D. Ravi Shankar

20. Which of the following is not an Input device?

A. Web Camera   B. BCR

C. Digitizer   *D. Processor

21. Only those metals can displace hydrogen from water which are _____ in the reactivity series of metals.

A. Below hydrogen

*B. Above hydrogen

C. Either above or below

22. _____is the largest tiger reserve in India.

A. Jim Corbett Tiger Reserve

B. Sunderbans Tiger Reserve

C. Satpura Tiger Reserve

*D. Nagarjunsagar-Srisailam Tiger Reserve

23. Rajdhani train starts from city Delhi. The number of women in the train is half of the number of men. In city Faridabad, 10 men leave the train and five women enter. Now number of men and women is equal. In the beginning, how many passengers entered the train?

A. 25   B. 35   *C. 45   D. 55

24. The angle subtended by an arc at the center of a circle is_____the angle subtended byit at the circumference.

A. Equal   B. Thrice

*C. Twice   D. Half

25. Divide Rs.198 in the ratio 2:3:5.8. The rupees in the respective ratios are given by:

A. 22, 33, 54 & 89   B. 22,33, 56 & 87

*C. 22, 33, 55 & 88   D. 22, 34, 54 & 88

26. **Read the statements and select a conclusion from die given alternatives**:

Statement:

State Government has agreed in principle to sanction more numbers of posts of secondary school teachers in rural and urban areas to improve the teacher-student ratio.

Conclusions:

I. Student-teacher ratio in urban areas is higher than that of rural areas

II. Student-teacher ratio in rural areas is higher than that of urban areas.

A. Only conclusion I follows.

B. Only conclusion II follows.

C. Either I or II follows.

*D. Neither I nor II follows.

Comprehension:

Answer the questions based on the following information:

Six friends Prem, Qazi, Ritvik, Sunny, Tinu and Utkarsh are sitting around the hexagonal table each at one corner and are facing the centre of the hexagonal. Prem is second to the left of Utkarsh. Qazi is neighbour of Ritvik and Sunny. Tinu is second to the left of Sunny.

Sub-Question No: 27

27. Who is sitting opposite to Tinu?
    A. Ritvik   *B. Qazi
    C. Prem   D. Sunny

Comprehension:
Answer the questions based on the following information:
Six friends Prem, Qazi, Ritvik, Sunny, Tinu and Utkarsh are sitting around the hexagonal table each at one corner and are facing the centre of the hexagonal. Prem is second to the left of Utkarsh. Qazi is neighbour of Ritvik and Sunny. Tinu is second to the left of Sunny.

Sub-Question No: 28

28. Who is the fourth person to the left of Qazi?
    *A. Prem   B. Utkarsh
    C. Ritvik   D. Sunny

Comprehension:
Answer the questions based on the following information:
Six friends Prem, Qazi, Ritvik, Sunny, Tinu and Utkarsh are sitting around the hexagonal table each at one corner and are facing the centre of the hexagonal. Prem is second to the left of Utkarsh. Qazi is neighbour of Ritvik and Sunny. Tinu is second to the left of Sunny.

Sub-Question No: 29

29. Who of the following are the neighbors of Prem?
    A. Utkarsh and Sunny
    *B. Tinu and Ritvik
    C. Utkarsh and Ritvik
    D. Tinu and Utkarsh

30. Aluminium objects like pressure cookers, saucepans etc. are anodised
    A. To increase their conductivity.
    B. To increase their tensile strength.
    *C. To protect them against corrosion.
    D. To make them light and more shining.

31. Ritvik said to a lady, "Your mother's husband's sister is my aunt" How is the lady related to Ritvik? Choose from the given options.
    A. Daughter   B. Grand Daughter
    C. Mother   *D. Sister

32. The only phenomenon which proves that light is a transverse wave is
    A. Scattering of light   B. Interference
    C. Diffraction   *D. Polarisation

33. **Direction:** Rend the statements and select a conclusion from the given alternatives:
    Statements:
    All radish are white.
    Some white are pink.
    Some pink are yellow.
    No yellow is cabbage.
    Conclusions:
    I. No cabbage is pink, n. Some pink arc radish.
    II. Some cabbage are radish.
    IV. Some cabbage are pink
    A. Only I and II follow
    *B. Either I or IV follows
    C. Only I and either III or IV follow
    D. Only I, II and either III or IV follow

34. Introducing Nitin to her husband, a woman said, "his brothel's father is the only child of my grandfather" How is the woman related to Nitin?
    A. Mother   B. Aunt
    *C. Sister   D. Daughter

35. What is the Risk coverage (sum assured) under the "Pradhan Mantri Suraksha Bima Yojana"?
    *A. Rs.2 lakhs   B. Rs.1 lakh
    C. Rs.1.5 lakhs   D. Rs.2.25 lakhs

36. Simplify: $3(x-2)-(x-2)$,
    A. $2x + 8$ B. $-2 + 4$
    C. $2x + 4$ *D. $2x - 4$

37. Complete the Figure X from the 4 alternatives 1, 2, 3, 4
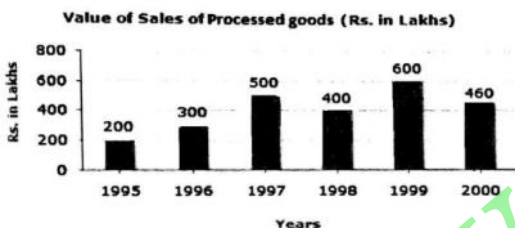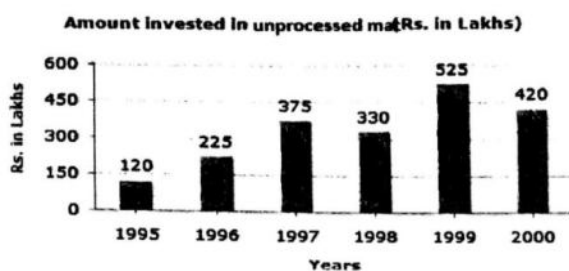
(X)   (1)   (2)   (3)   (4)

*A.1   B.2   C.3   D.4

Comprehension:
Study the graph and answer the following questions:

Out of the two bar graphs provided below, one shows the amounts (in Lakh Rs.) invested by a Company in purchasing unprocessed materials over the years and the other shows the values (in Lakh Rs.) of processed goods sold by the Company over the years.
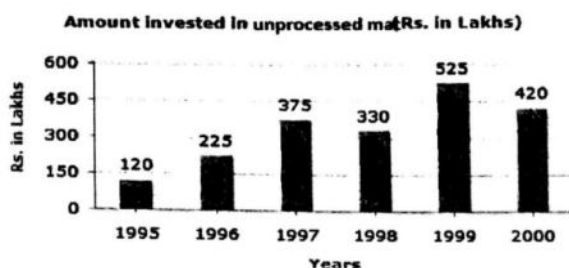
Amount invested in unprocessed mat(Rs. in Lakhs)

Value of Sales of Processed goods (Rs. in Lakhs)

Sub-Question No: 38

38.   What was the difference between the average amount invested in unprocessed materials during the given period and the average value of sales of processed goods during this period?
A. Rs.62.5 lakhs   B. Rs.68.5 lakhs
C. Rs.71.5 lakhs   *D. Rs.77.5 lakhs

Comprehension:
Study the graph and answer the following questions:

Out of the two bar graphs provided below, one shows the amounts (in Lakh Rs.) invested by a Company in purchasing unprocessed materials over the years and the other shows the values (in Lakh Rs.) of processed goods sold by the Company over the years.
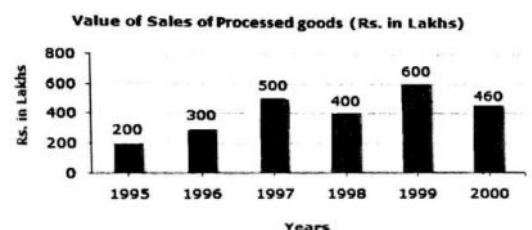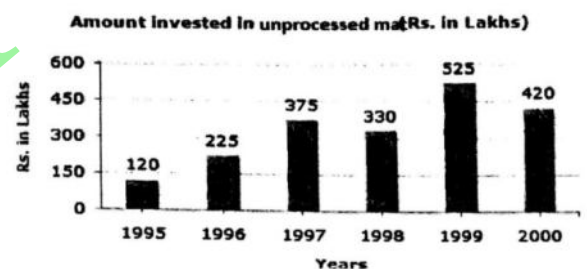
Amount invested in unprocessed mat(Rs. in Lakhs)

Value of Sales of Processed goods (Rs. in Lakhs)

Sub-Question No: 39

39.   The value of sales of processed goods in 1999 was approximately what percent of the sum of amount invested in unprocessed materials in the years 1997, 1998 and 1999?
A. 33%   B. 37%
C. 45%   *D. 49%

Comprehension:
Study the graph and answer the following questions:

Out of the two bar graphs provided below, one shows the amounts (in Lakh Rs.) invested by a Company in purchasing unprocessed materials over the years and the other shows the values (in Lakh Rs.) of processed goods sold by the Company over the years.

Amount invested in unprocessed mat(Rs. in Lakhs)

Value of Sales of Processed goods (Rs. in Lakhs)

Sub-Question No: 40

40.   In which year, the percentage change (compared to the previous year) in the investment on unprocessed material is same as that in the value of sales of processed goods?
A. 1996   *B. 1997
C. 1998   D. 1999

41.   Find the HCF of 27, 18, 45, 81.
*A. 9   B. 6   C. 3   D. 18

42. Read the statements and select a conclusion from the given alternatives:

Statements:

The use of renewable source of energy will eliminate the energy crisis in the world.

Conclusions:

I. Modern technology is gradually replacing the non-renewable source of energy.

II. The excessive exploitation of environment has led to the depletion of non-renewable sources of energy.

A. Only conclusion I follows.

B. Only conclusion II follows

C. Either 1 nor II follows

*D. Neither I nor II follows

43. Tungabhadra multipurpose project is established on the tributary of which of the following rivers?

A. Godavari   *B. Krishna

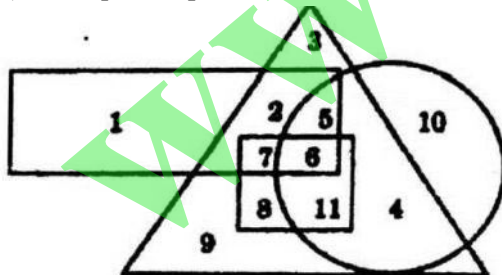C. Mahanadi   D. Indus

Comprehension:

Study the figure and answer the following questions:

(1) The rectangle represents software employees.

(2) The triangle represents rural people.

(3) The circle represents post graduates.

(4) The square represents PO.

Sub-Question No: 44

44. Which of the following statements is hue?

A. All rural people are post graduates.

B. Some PO are software employees but not rural.

C. All software employees are PO.

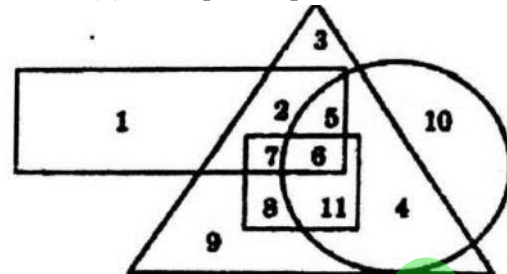*D. Some rural people are not post graduates.

Comprehension:

Study the figure and answer the following questions:

(1) The rectangle represents software employees.

(2) The triangle represents rural people.

(3) The circle represents post graduates.

(4) The square represents PO.

Sub-Question No: 45

45. Choose the correct statement:

*A. Some PO are software employees.

B. No PO is rural.

C. All post graduates are rural.

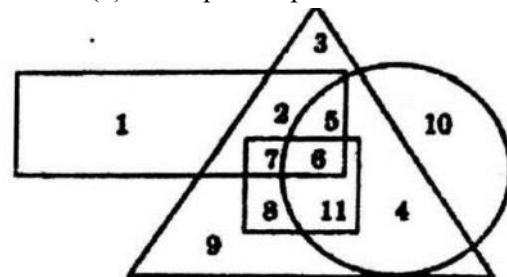D. All post graduates are software employees.

Comprehension:

Study the figure and answer the following questions:

(1) The rectangle represents software employees.

(2) The triangle represents rural people.

(3) The circle represents post graduates.

(4) The square represents PO.

Sub-Question No: 46

46. Which of the following statements is true? 6

A. All software employees are PO.

*B. Some software employees are post graduates as well as PO.

C. All software employees are post graduates.

D. All PO are software employees but not post graduates.

47. **Consider the following information:**

P means 'multiplied by', T means 'minus', M means 'added to' and B means 'divided by', then find the value of **28 B 7 P 8 T 6 M 4**.

*A. 30
B. 32
C. 34
D. None of the above

48. Mr. Vageesh invested money in FD. How much will he get on maturity, if Rs.1500 is invested at 20% per annum compound interest for 6 months, compounded quarterly?
A. 4961.5   *B. 4961.25
C. 4961.35   D. 4961

49. Ryder Cup is associated with which of the following sports?
A. Cycling   B. Horse racing
*C. Golf   D. Snooker

50. If Cot x $=\frac{5}{12}$, then Sinx - Sec x = ?
A. $-\frac{229}{65}$ B. $\frac{229}{65}$
C. $\frac{109}{65}$ *D. $-\frac{109}{65}$

51. Four pair of words are given below out of which three are alike in some manner and one pair is different. Which pair is different from the rest?
A Bottle: Wine   B. Cup: Ten
C. Pitcher: Water   *D. Ball: Bat

52. The mean of first 10 natural numbers is:
A 6.5   *B. 5.5   C. 7.5   D. 8.5

53. Which International airport became foe world's first airport to operate completely on solar power?
A Trivandrum International Airport
*B. Cochin International Airport
C. Goa International Airport
D. Amritsar International Airport

54. If in a certain language, STABLE is coded as TSBAEL, how is SCARCE coded in that code?
*A. CSRAEC   B. ACSRAC
C. CASARC   D. ARCCAS

55. Mr. Rithul sold a bus forRs.1870 with a loss of 15%. At what price should the bus be sold to get a profit of 15%?

A. 2560   B. 2550
C. 2540   *D. 2530

56. The cash difference between the selling price of an article at a profit of 8% and 18% is Rs.3. The ratio of two selling prices is:
*A. 54:59   B. 54:61
C. 59.61   D. 53.59

57. Pointing out to a lady. Urmi said, "she is the daughter-in-law of the grandmother of my father's only son". How is the lady related to Urmi? Choose from the given options.
A. Sister-in-law   *B. Mother
C. Sister   D. Mother-in-law

58. Two jeeps start from a house with a speed of 20 km/hr at interval of 10 minutes. With how much more speed (km/hr) the woman coming from the opposite direction towards the house has to travel to meet the jeeps at an interval of 6 minutes
A. 13   B. $13\frac{2}{3}$
*C. $13\frac{1}{3}$ D. 13.5

59. A shopkeeper cheats to the extent of 25% while buying and selling fruits, by using tampered weights. His total gain in percentage is.
A. 55.25   *B. 56.25
C. 56.75   D. 56.5

60. Name the Sarangi maestro who has passed away on 1st December 2015?
*A. Ustad Sabri Khan
B. Pandit Ram Narayan
C. Ustad Sultan Khan
D. Dhruba Ghosh

61. Solve for x: - x - 4 = -3
A. 7   *B. -1   C. -7   D. 1

62. Four pair of words arc given below out of which three are alike in some manner and one pair is different. Which is different from the rest?
*A. Principal: School   B. Soldier; Amy

C. Artist: Troupe   D. Singer: Chorus

63. Indian-Origin_____on 12 May 2015 became the first Asian woman to be elected as mayor in the United Kingdom (UK).
A. Ranjit Kaur Dheer
B. Inderjeet Singh
C. SukhwinderKaur
*D. Harbbajan Kaur Dheer

64. Shivangi takes 6 hrs 15 minutes in walking a distance and riding back to same place where she started. She could walk both ways in 7 hrs 45 minutes. The time taken by her to ride back both ways is:
*A. 4 hrs 45 mm   B. 4 hrs 15 min
C. 4 hrs 25 min   D. 4 hrs 35 min

65. Compute: $5886 \div 654 - 3$
A. -6   *B. 6
C. $\frac{1962}{217}$ D. $\frac{1926}{217}$

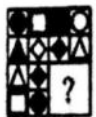66. **Consider the following information:**
'<means 'minus', '<means 'plus', '=' means 'multiplied by' and '$' means 'divided by', then find the value of **27 > 81 $ 9 < 6**.
A. 6   *B 30   C. 38   D. 64

67. Ullas is twice as good as salesman as Tejas and together they finish a piece of work in 18 days. In how many days willTejas alone finish the work?
A 36   *B. 54   C. 20   D. 72

68. Complete the Figure X from the given alternatives 1,2,3,4

*A. 1   B. 2   C. 3   D. 4

69. The Election Commission of India is not responsible for administering election processes to which of the following?
A. LokSabha
B. State Legislature

C. Offices of the President & Vice-President
*D. Election to the Panchayats.

70. When was the PSLV used in India for the first time?
A. 1980   B. 1987
C. 1994   D.2000
Note: For this question, discrepancy is found in question/answer. So, Th is question is ignored for all candidates.

71. Which stage of vehicle emission norms is presently applicable in India?
A. Bharat I   B. Bharat II
C. Bharat III   *D. Bharat IV

72. LCM of $\frac{2}{30}, \frac{20}{40}, \frac{4}{50}, \frac{8}{60}$
A. $\frac{40}{300}$ B. $\frac{2}{10}$
C. $\frac{1}{4}$ *D. 4

73. India has developed the first vaccine for blue tongue disease mainly found in:
A. Chicken   B. Dogs
*C. Sheep and Goats   D. Monkeys

74. A square has diagonals of length 26 cm, then the sides of the square in cm is.
*A. $13\sqrt{2}$ B. $\pm 13\sqrt{2}$
C. 13   D. $26\sqrt{2}$

75. The variance of a set of data is 81. Then the standard deviation of the data is:
A. ±9   *B. 9   C. 81   D. 40.5

76. _____was the world's first artificial satellite.
A. Apollo 11   *B. Sputnik 1
C. Sputnik 0   D. GSAT

77. Zoroastrian is an Indian religion mainly found in the state of:
*A. Maharashtra   B. Haryana
C. Bihar   D. Kerala

78. Who is credited with the invention of the World Wide Web?
*A. Tim Berners-Lee   B. John Napier
C. Allen B Dumont   D. J.P.Eckert

79. Who directed India's first publicly screened cinema RajaHarishchandra?
A. V G Damle
B. V Shantaram
C. Bimal Roy
*D.Dada Saheb Phalke

80. Which district of India has become the first one in the country to have high speed Rural Broadband Network under NOFN?
A. Bhopal
B. Chennai
*C. Idukki
D. Mysore

81. Two watches were sold for Rs.850 each. One at a loss of 15% and other at a profit of 1598. Find gam/loss%.
A. No Gain - No loss
*B. Loss, 2.25%
C. Gain, 2.25%
D. Loss, 2%

82. _____is a device that converts one form of energy to other, usually a signal in one form of energy to signal
A. Transmitter
B. Amplifier
*C. Transducer
D. Repeater

83. When was India's first aircraft carrier INS Vikrant decommissioned from Defence''
*A.1997
B. 1992
C. 2004
D. 2000

84. If$4x^2 = 25^2 - 15^2$, then find the value of x.
*A. 10
B. 50
C. 100
D. 25

85. What is total surface area of a cone where 'r' is radius and 'l' is slant height?
*A. $\pi r (l + r)$
B. $2\pi r (l+r)$
C. πrl
D. $2\pi rl^2$

86. The factors of$x^2 – 2x – 15$ are:
A. (x+5) (x–3)
B. (x–5) (x–3)
C. (x–3) (x–1)
*D. (x–5) (x+3)

87. Based on the following information, answer the following question:
In a language, 0,1,2,3,4,5,6, 7,8 and 9 is written asp, q,r, s,t, u, v, w,x and y respectively.
qtt+uv – (rp*w) is equal to
A. pv
*B. vp
C. uv
D. Up

88. Ramakrishna Mission was formed by
*A. Swami Vivekananda
B. Sri Ramakrishna Paramhamsa
C. Swami DayanandSaraswati
D. Raja Ram Mohan Roy

89. Who in Tennis is nicknamed as "can't-miss-Swiss"?
A. SaniaMirza
B. Maria Sharapova
*C. Martina Hingis
D. Serena Williams

90. Which of the following is NOT included in the list of "UNESCO World Heritage Sites"?
A.Kaziranga National Park
B.ChhatrapatiShivaji Terminus
C.Keoladeo National Park
*D.The Leaning temple of Huma

91. **Read the statement and select a conclusion from the given alternatives:**
Statement: In this century, no nation is absolutely independent.
Conclusions:
I. It is impossible to grow and produce all that a Nation needs.
II. Nation's men in general have become lazy.
*A. Only conclusion I follows
B. Only conclusion II follows
C. Either I or II follows
D. Neither I nor II follows

92. Jhelum, Chenab and Ravi are the tributaries of:
A. Ganga River
*B. Indus River
C. Brahmaputra River
D. Godavari River

93. If in a certain language, REPAIR is coded as ERAFRI, how is RESULT coded in that code ?
A. TLERSU
*B. ERUSTL
C. TRLESU
D. RTLESU

94. Lord GulamKaderbhoy Noon was a British business man from Mumbai, India who died on 27th October, 2015 is famous as _____
*A. Curry King
B. Masala King

C. Taste King   D. Food King

95. The ratio between two numbers 2:3 and their sum is 420, find the smaller number.
A. 84   *B. 168
C. 252   D. 200

96. The Ajanta Caves which are about 30 rock-cut Buddhist caves described as "the finest surviving examples of Indian art, particularly painting" is located in _____.
A. Amaravathi, Maharashtra
*B. Aurangabad, Maharashtra
C. Pune, Maharashtra
D. Ratnagiri, Maharashtra

97. Where is ISRO's rocket launching pad located in India?
*A. Sriharikota   B. Trombay
C. Bangalore   D. Mysore

98. Arrange the following states as per their current population in ascending order.

A. Maharashtra   B. Kerala
C. Bihar   D. Rajasthan
A. 1-2-3-4   *B. 2-4-3-1
C. 1-3-2-4   D. 2-4-1-3

99. The initiative "Anticipate, Absorb, Reshape" to build climate resilience m (be world's most vulnerable country has been launched by ____
A. World Trade Organization
*B. United Nations
C. World Meteorological Organization
D. UNESCO

100. Calculate the amount after 3 yean if Rs.5000 is invested at 10% per annum compound interest
*A. 6655   B. 6500
C. 6600   D. 6800

ANSWER KEY

1. A	2. B	3. B	4. A	5. B	6. C	7. C	8. A	9. C	10. B
11. C	12. C	13. A	14. D	15. B	16. B	17. C	18. A	19. B	20. D
21. B	22. D	23. C	24. C	25. C	26. D	27. B	28. A	29. B	30. C
31. D	32. D	33. B	34. C	35. A	36. D	37. A	38. D	39. D	40. B
41. A	42. D	43. B	44. D	45. A	46. B	47. A	48. B	49. C	50. D
51. D	52. B	53. B	54. A	55. D	56. A	57. B	58. C	59. B	60. A
61. B	62. A	63. D	64. A	65. B	66. B	67. B	68. A	69. D	70. 0
71. D	72. D	73. C	74. A	75. B	76. B	77. A	78. A	79. D	80. C
81. B	82. C	83. A	84. A	85. A	86. D	87. B	88. A	89. C	90. D
91. A	92. B	93. B	94. A	95. B	96. B	97. A	98. B	99. B	100. A