MBA/MSc CET Sample Paper

QUANTITATIVE ABILITY

Direction (Questions 1-30): Choose the correct answer from the options given below.

1. If *x* is both cube and square of an integer and *x* is between 2 and 200, what is the value of *x?*

   A. 8
   B. 16
   C. 64
   D. 125

2. The smallest prime number greater than 53 is?

   A. 54
   B. 55
   C. 57
   D. 59

3. If the sum of two prime numbers *x* and *y* is odd, then the product of *x* and *y* must be divisible by

   A. 2
   B. 3
   C. 4
   D. 5

4. A number when divided by 12, gives a remainder of 7. If the same number is divided by 6, then the remainder must be ………..

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

5. Which one of the following could be the difference between two numbers both of which are divisible by 2, 3 and 4?

   A. 71

B. 72
C. 73
D. 74

6. The total age of A and B is 12 years more than the total age of B and C. How many years is C younger than A?

A. 13 years
B. 12 years
C. 14 years
D. 16 years

7. The sum of the ages of 5 children born at intervals of 4 years each is 80 years. What is the age of the youngest child?

A. 4 years
B. 8 years
C. 10 years
D. None of the above

8. A bag contains 400 coins of 25 paise denomination and 1000 coins of 50 paise denomination. If 25% of 25 paise coins and 50% of 50 paise coins are removed, find the percentage of money removed from the bag?

A. 19.1%
B. 19.6%
C. 20.1%
D. 20%

9. Salaries of Ram and Sanjay are in the ratio 2:3. If the salary of each is increased by Rs.4000, the new ratio becomes 40:57. What is Sanjay's salary?

A. Rs.17000
B. Rs.20000
C. Rs.25500
D. None of the above

10. A and B invest in a business in the ratio 3:7. If 1 percent of the total profit goes to charity and A's share is Rs. 29700, then the total profit is………….

A. Rs.150000

B. Rs.1,00,000
C. Rs.2,00,000
D. Rs.2,97,000

11. In simple interest on Rs. 2000 be more than the interest on Rs. 1500 by Rs. 100 in 5 years, find the rate per cent per annum.

A. 5%
B. 6%
C. 3%
D. 4%

12. Find the compound interest on Rs.4000 for 3 years at 10% per annum.

A. Rs.1324
B. Rs.2324
C. Rs.1424
D. Rs.1524

13. A sum of money placed at compound interest doubles in 5 years. It will amount to 8 times at the same rate of interest in ……………

A. 10 years
B. 15 years
C. 20 years
D. 16 years

14. Two mixtures of milk and water contain 10% and 20% of water. In what ratio should the two mixtures be mixed so that the new mixture has 16% water?

A. 2:3
B. 3:4
C. 1:5
D. 5:6

15. The diameter of a cycle's wheel is 70m. the number of times the wheel will revolve in order to cover a distance of 660m is

A. 9
B. 10
C. 3
D. 6

16. The students in a class can be divided into groups of 2, 3, 5, and 6. The least number of children this class can have

A. 30
B. 28
C. 32
D. 24

17. A merchant has three kinds of wine. Wine of first kind is 117 litres, second kind is 130 litres and third kind is 143 litres. The least number of cask of equal size in which wine can be stored

A. 11 litres
B. 13 litres
C. 12 litres
D. 14 litres

18. A vessel full of water weighs 16.5 kg., when the vessel is ¼ full, it weighs 5.25 kg. Find the weight of the empty vessel?

A. 1.5 kg
B. 2.5 kg
C. 2.75 kg
D. 1.55 kg

19. By how much is two fifths of 200 greater than three fifth of 125?

A. 15
B. 3
C. 5
D. 30

20. The average age of a group of 16 persons is 28 years and 3 months. Two persons each 58 years old left the group. The average age of the remaining persons is

A. 26
B. 24
C. 22
D. 20

21. A positive number, when increased by 10 equals 200 times its reciprocal. What is the number?

A. 100
B. 10
C. 20
D. 200

22. If the height of a right circular cone is increased by 200% and the radius of the base is reduced by 50%, then the volume of the cone

A. Remains unaltered
B. Decreases by 25%
C. Increases by 25%
D. Increases by 50%

23. A rectangular paper of 44cm long and 6cm wide is rolled to form a cylinder of height equal to width of the paper. The radius of the base of the cylinder so rolled is

A. 3.5 cm
B. 5 cm
C. 7 cm
D. 14 cm

24. The diameter of a metallic sphere is 6 cm. the sphere is melted and drawn into a wire of uniform circular cross section. If the length of the wire is 36 m, then what is its radius?

A. 0.1cm
B. 0.01cm
C. 0.001cm
D. 1.0 cm

25. If the radius of a sphere is increased by 10%, then the volume will be increased by

A. 33.1%
B. 30%
C. 50%
D. 10%

26. The combined mean of three groups is 12 and the combined mean of first two groups is 3. If the first, second and third groups have 2, 3, and 5 items respectively. Then mean of third group is

A. 10
B. 21
C. 12
D. 18

27. If the geometric mean of three observations 40, 50 and x is 10, then the value of x is

A. ½
B. 4
C. 6
D. 2

28. The middle item of the series arranged in ascending or descending order is called

A. Mean
B. Median
C. Mode
D. Standard deviation

29. In a class of 50 students, 10 have failed and their average marks is 28. The total marks obtained by the entire class are 2800. The average marks of those who have passed are

A. 43
B. 53
C. 63
D. 70

30. When 10 is subtracted from each of the given observations, the mean is reduced to 60%. If 5 is added to all the given observations, the mean will be

A. 25
B. 30
C. 60
D. 65

DATA INTERPRETATION

Directions (31-35): The following table gives the enrolment in Higher Secondary Schools in 1978. Study the table carefully and answer the questions that follow.

Enrolment	No. of schools
20-39	526
40-59	620
60-79	674
80-99	717
100-119	681
120-139	612
140-159	540
160-179	517
180-199	522
Total	5409

31. What is the approximate percentage of schools, where the enrolment was below 120?

A. 59.5
B. 58.5
C. 60.5
D. 61.5

32. What is the approximate percentage of schools where the enrolment was above 79, but below 180?

A. 54.3
B. 56.7
C. 57.5
D. 55.8

33. Under which class, the maximum number of schools fall?

A. 100-119
B. 60-79
C. 80-99
D. None of these

34. Under which class, the minimum number of schools fall?

A. 160-179
B. 180-199
C. 140-159
D. None of these

35. What is the approximate percentage of the least number of schools for the classes of enrolment?

A. 8
B. 9.5
C. 9
D. 10

Directions (36-40): Refer to the data below and answer the questions that follow:

The table here gives the distribution of students according to professional courses.

Courses	Students			
	English		Math	
	Males	Females	Males	Females
Part- time MBA	30	10	50	10
Full time MBA only	150	8	16	6
CA only	90	10	37	3
Full time MBA & CA	70	2	7	1

36. What is the percentage of Math students over English students?

A. 50.4
B. 61.4
C. 49.4
D. None of these

37. The average number of females in all the courses is (count people doing full time MBA and CA as a separate course)

A. Less than 12
B. Greater than 12
C. 12
D. None of these

38. The ratio of the number of girls to the number of boys is

A. 5:36
B. 1:9
C. 1:7.2
D. None of these

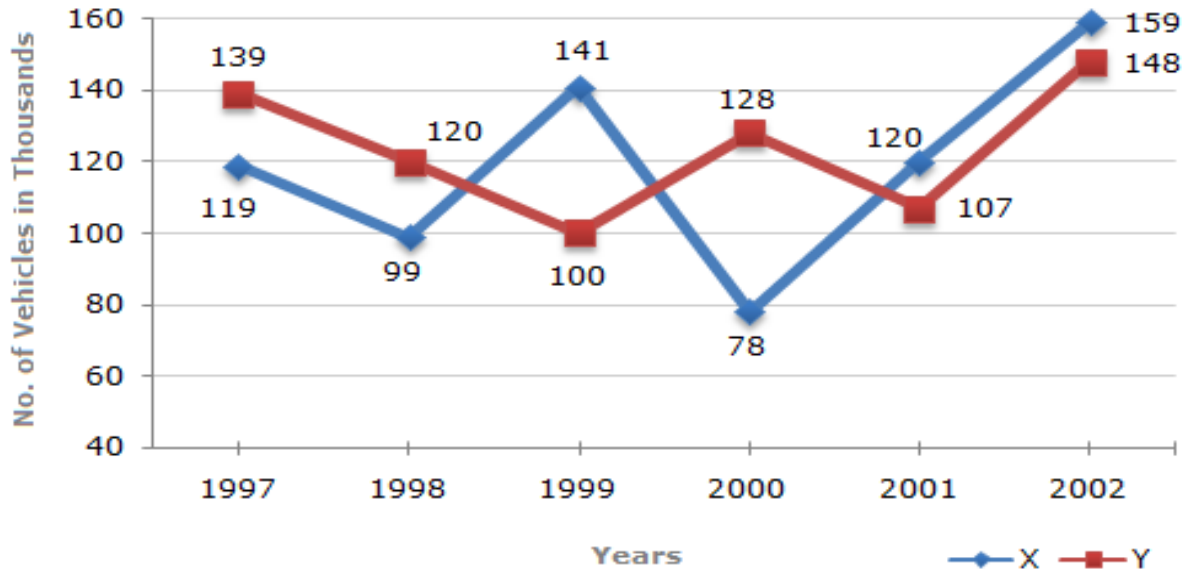39. The percentage increase in students of full time MBA only over CA only is

A. Less than 20
B. Less than 25
C. Less than 30
D. None of these

40. The number of students doing full time MBA or CA is

A. 320
B. 80
C. 160
D. None of these

Directions (41-45): Study the following line graph and answer the questions given below:

Title: Number of Vehicles Manufactured by Two Companies over the Years (Number in Thousands)

41. What is the difference between the number of vehicles manufactured by Company Y in 2000 and 2001?

   A. 50000
   B. 42000
   C. 33000
   D. 21000

42. What is the difference between the total productions of the two companies in the given years?

   A. 19000
   B. 22000
   C. 26000
   D. 28000

43. What is the average number of vehicles manufactured by company X over the given period? (rounded off to nearest integer)

   A. 119333
   B. 113666
   C. 112778
   D. 111223

44. In which of the following years, the difference between the productions of Companies X and Y was the maximum among the given years?
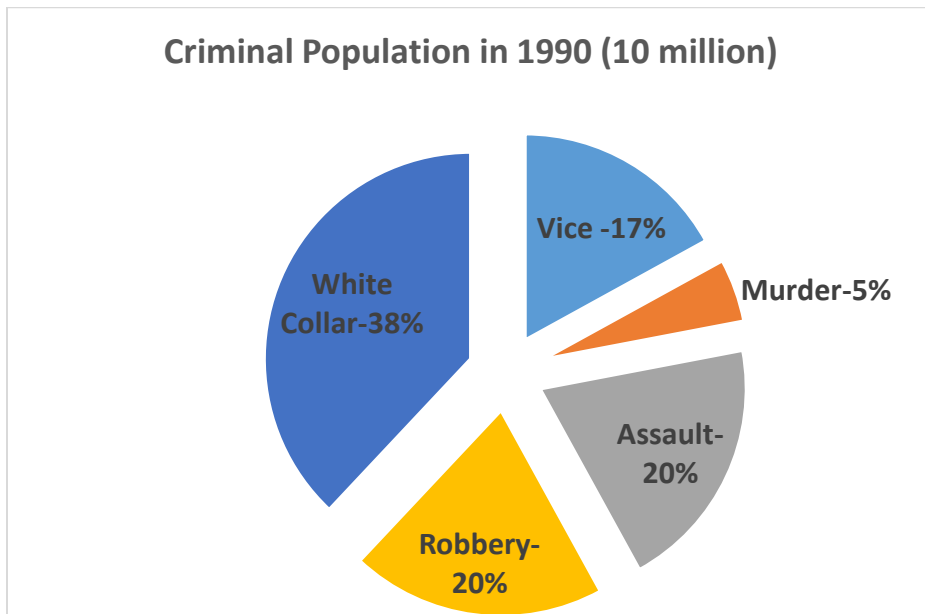
A. 1997
B. 1998
C. 1999
D. 2000

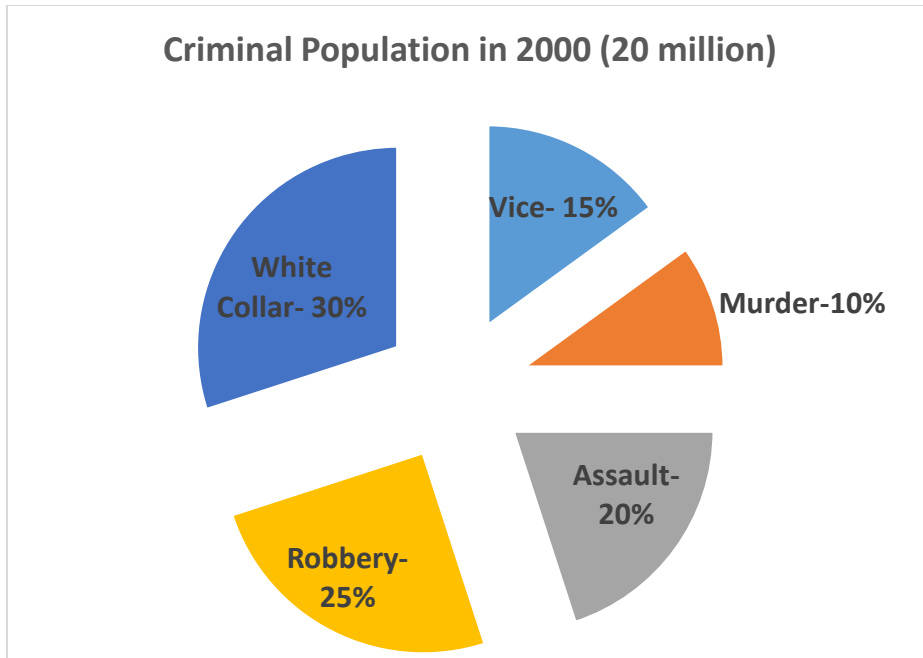45. In which year, the difference between the production of vehicles of Companies X and Y is the minimum?

A. 1997
B. 2001
C. 2000
D. 1999

Directions (46-50): Go through the following two pie diagrams (P1 and P2) and answer the questions given below.

P1: Distribution of criminal activity by category of crime for Country X in 1990

Criminal Population in 1990 (10 million)

Vice -17%
Murder-5%
White Collar-38%
Assault-20%
Robbery-20%

P2: Distribution of criminal activity by category of crime for Country X in 2000

Criminal Population in 2000 (20 million)

Vice- 15%

White Collar- 30%

Murder-10%

Assault- 20%

Robbery- 25%

46. What is the number of white collar criminals in 2000?

A. 1 million
B. 3.8 million
C. 6 million
D. 8 million

47. The ratio of the number of robbers in 1990 to the number of robbers in 2000 is ……..

A. 2/5
B. 3/5
C. 1
D. 3/2

48. From 1990 to 2000, there is a decrease in the number of criminals for which of the following categories?
I.   Vice
II.   Assault
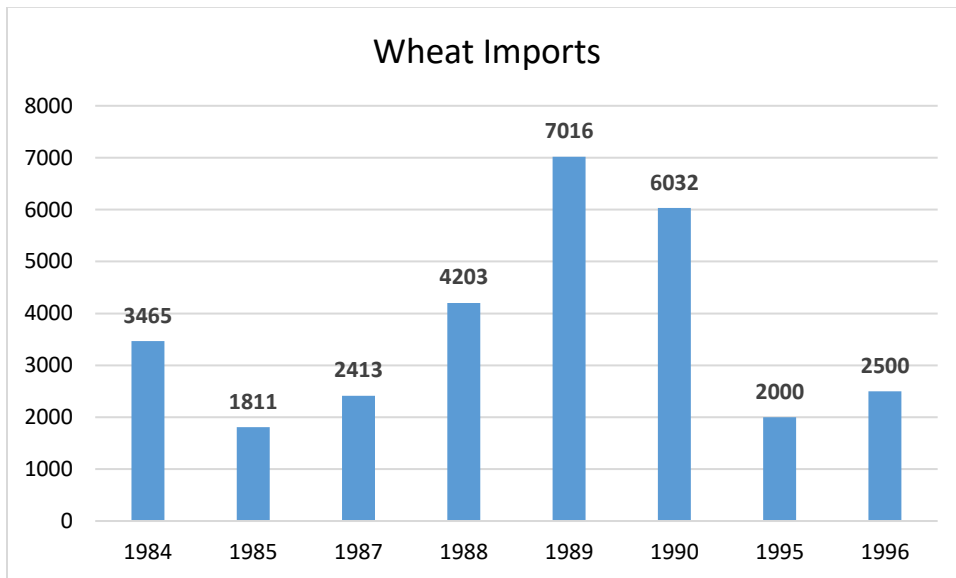III.   White collar

A. None
B. I only
C. II only
D. II and III only

49. What is the approximate percent increase between 1990 and 2000 in the number of criminals involved in vice?

A. 25%
B. 40%
C. 60%
D. 75%

50. The number of robbers in 2000 will exceed the number of white collar criminals in 1990 by

A. 1.2 million
B. 2.3 Million
C. 3.4 Million
D. 5.8 Million

Directions (51-55): The questions are to be answered on the basis of the bar chart given below, giving wheat imports (in thousand tonnes) for years 1984 to 1996.

Wheat Imports

51. In which year did the imports register the highest increase over its preceding years?

A. 1996
B. 1989
C. 1988
D. 1987

52. The imports in 1990 were approximately how many times to that of 1985?

A. 3.33
B. 2.41
C. 1.68
D. 0.31

53. What is the percentage growth of wheat imports in 1996?

A. 25%
B. 20%
C. 24%
D. 30%

54. As per the bar chart, indicate the range of imports of wheat?

A. 500
B. 5205
C. 965
D. 602

55. What is the ratio of the years which have above average imports to those which have below average imports?

A. 3:8
B. 8:3
C. 3:5
D. 5:3

Directions (56-60): Refer to Tables 1 & 2 and answer the questions that follow:

Table 1: Zone wise Export of Tea

Zones	Percentage break up in 1995-96
Zone 1	55
Zone 2	15
Zone 3	2
Zone 4	6
Zone 5	22

Table 2: Tea Exports

Year	1992-93	1993-94	1994-95	1995-96
Quantity ('000 tonnes)	1.89	1.92	2.55	3.5
Value (Rs. Million)	85.05	91.02	128.01	184.45

56. What is the percentage increase in the average price (Rs/kg) of tea in 1994-95 over 1993-94?

A. 3.2%
B. 7.3%
C. 5.3%
D. 10.5%

57. Tea exports in 1995-96 in Zone 4 were what percent of total tea exports in 1991-92?

A. 45.9%
B. 43.1%
C. 41.8%
D. Indeterminate

58. What was the total revenue (in Rs million) earned from Zone 2 from tea exports during the given period?

A. 1000
B. 1276
C. 1335
D. Indeterminate

59. By what percent did the volume of tea exported from zone 5 in 1995-96 exceed tea exports from Zone 2 in the same year?

A. 4%
B. 7%
C. 32%
D. 47%

60. Which year showed the highest growth in the total quantity of tea exported with repect to the previous year?

A. 92-93
B. 93-94
C. 94-95
D. 95-96

VERBAL ABILITY

Directions (61-65): Choose the correct answer from the options given below to fill up the blanks.

61. She has not recovered fully ----- the shock of his failure.

   A. Against
   B. From
   C. Of
   D. Off

62. The master dispensed ----- the services of his servant.

   A. Of
   B. With
   C. Off
   D. For

63. I have been informed that the two brothers have fallen -----.

   A. upon
   B. through
   C. in
   D. out

64. He has great affection ----- me.

   A. With
   B. On
   C. For
   D. In

65. My friend is really very good ------ cricket.

   A. On
   B. At
   C. In
   D. Over

Directions (66-70): Each of the following items consists of a sentence followed by four words or group of words. Select the antonym of the word (occurring in the sentence in capital letters) as per the context.

66. The students expected an EMINENT scientist to inaugurate the programme.

A. Illustrious
B. Notorious
C. Intelligent
D. Unknown

67. They are going to EMBARK UPON a mountaineering expedition.

A. Launch
B. Analyse
C. Break off
D. Conclude

68. He was deeply DEPRESSED over the news.

A. Satisfied
B. Elated
C. Impressed
D. Affected

69. The fallen trees BLOCKED our passage of freedom from the woods.

A. Facilitated
B. Started
C. Checked
D. Promoted

70. The evidence against the accused is CONCLUSIVE.

A. Powerful
B. Indecisive
C. Exclusive
D. Partial

Directions (71-75): Each of the following sentences in this section has a blank space. Select the word or group of words you consider the most appropriate for the blank space.

71. With less rapid expansion of the economy, we should make ………… progress toward stable price levels.

A. Detailed
B. Substantial
C. Definite
D. Infinite

72. His property was divided ……. his daughters and sons.

A. Between
B. Among
C. From
D. With

73. The clouds of suspicion will clear …………… soon

A. Up
B. Away
C. Off
D. By

74. If Mohan ………………… at 5 a.m., he would not have missed the train.

A. Started
B. Had started
C. Has started
D. Would start

75. Many people today have fallen into utter confusion of values with the result that they cannot ……….. the good from the bad.

A. Divide
B. Differentiate
C. See
D. Alter

Directions (76-80): In each of the following questions an idiomatic phrase is given followed by four alternatives. Choose the alternative that best expresses the meaning of the expression.

76. Between the devil and the sea

A. In a fix
B. A devil in the sea
C. In a worse situation
D. A compromising situation

77. At daggers drawn

A. Real cause
B. To be puzzled
C. At enmity
D. At friendship

78. Make no bones about

A. To make no effort
B. To admit something readily
C. To make fuss about
D. To create hindrance

79. Turn out crabs

A. End in failure
B. To be successful
C. To bring up crabs
D. To create hindrance

80. At one's wits end

A. Perplexed
B. Explain
C. Clear up
D. Enlighten

Directions (81-85): Fill in the blanks with the best option given below.

81. The principal asked the teacher to ………………… with the complaint.

    A. Attend
    B. Follow
    C. Deal
    D. Delve

82. Combining our funds will ………………… us to get a bigger loan from the creditors.

A. Ensure
B. Guarantee
C. Enable
D. Confirm

83. The banker realized that the signature on the document was a ……………… .

A. Forge
B. Forgery
C. Fake
D. Error

84. He exhibited no signs of ……………. From the responsibility that had been placed upon him.

A. Flinching
B. Invalidation
C. Variance
D. Subversion

85. Sally's behavior was ……………….. selfish.
A. Expeditiously
B. Jauntily
C. Egregiously
D. Fanatically

Directions (86-90): Choose the option that replace the underlined phrase with the correct idiomatic expression.

86. You need to stop <u>following your tail</u> and get some real work done.

    A. Following your tail
    B. Beating around your tail
    C. Pulling around your tail
    D. Chasing your tail

87. The police searched <u>every nook and each cranny</u> for the thieves.

A. Every nook and each cranny
B. Under each nook and cranny
C. All nooks and crannies
D. Every nook and cranny

88. He had an <u>ace in his sleeve</u> just for a time like this.

A. Ace under his sleeve
B. Ace in his sleeve
C. Ace up his sleeve
D. Ace on his sleeve

89. Sumit had his <u>back on the wall</u> on this occasion; there was no escape for him.

A. Back on the wall
B. Back at the wall
C. Back against the wall
D. Back rubbing with the wall

90. <u>The rank and the file</u> of the party was against the proposed amendments to the party constitution.

A. The rank and the file
B. The rank with the file
C. The ranks and files
D. The rank and file

LOGICAL REASONING

Direction (91-95): Read the information given below and answer the questions that follow:

There are seven members in a family, viz., P, Q, R, S. T, U and V and four of whom are females. The family runs into three generations and consist of two married couples, three daughters, and two mothers. S is the brother of R. R, who is a widow, is the mother of U. V is Q's son-in-law. R is the only daughter of P.

91. Who is the husband of Q?
A. P
B. V
C. S
D. T

92. Which of the following is not true?

A. Q is the mother of T
B. T is the wife of V
C. U is the granddaughter of P
D. S is the brother of V

93. How many children does P have?
    A. 1
    B. 2
    C. 3
    D. 4

94. How is T related to U?
    A. Real sister
    B. First cousin
    C. Mother
    D. Grandmother

95. S and Q are

A. Sisters
B. Aunt- niece
C. Husband- wife
D. Brother- sister

A is older than B. C is older than B, but younger than A. D is younger than E and B. B is older than E.

96. Whose age is between B and D?

A. E
B. C
C. A
D. None of these

97. Whose age is between A and B?

A. D
B. C
C. E
D. None of these

98. Who is eldest?

A. C
B. B
C. E
D. A

99. Who is in the middle?

A. B
B. C
C. E
D. D

100.   Who is the youngest?
A. A
B. B
C. C
D. D

Direction (101-105): Answer the following questions based on the information given below.

If in a certain language 853264 is coded as WISDOM and 1808172 is coded as AWKWARD, how would each of the following coded in that language?

101.   1245

A. ADAM
B. ADMI
C. WADI
D. DOMA

102.   8533

A. WISS
B. MISS
C. KISS
D. WIDD

103.   18172

A. MAMRD
B. WIWKM
C. SWSAP
D. AWARD

104.   38672

A. AWARD
B. SWAMD
C. DROPI
D. SWORD

105.   46325
A. ADIMR
B. WORDI
C. MODSI
D. MOSDI

Direction (106-110): Find the appropriate related words for the questions given below.

106.   BOTTLE:CORK

A. Pot: Lid
B. Door: Window
C. Cloth: Sack
D. Car: Steering

107.   BOOK: LITERATURE

A. Man: Beast
B. Song: Music
C. Dancer: Music
D. Species: Science

108.   FINGER: HAND

A. Match: Fire
B. Spoke: Wheel
C. Good: Excellent
D. Nail: Scissors

109.   COOL: COLD

A. Gold: Bronze
B. Stable: Volatile
C. Pretty: Beautiful
D. Length: Width

110.   SLIM: THIN

A. Brave: Timid
B. Red: Green
C. Healthy: Fat
D. Mad: Insane

Directions (111-115): Each question has a main statement, followed by four statements labelled A, B, C, and D. Choose the ordered pair of statements, where the first statement implies the second and the two statements are logically consistent with the main statement.

111.   I wear a cap every time I play.
(A) I played.
(B) I didn't play.
(C) I wore a cap.
(D) I didn't wear a cap.

A. BD
B. CA
C. DB
D. AD

112.   Whenever the villain makes an entry, the viewers boo.
(A) The villain made an entry.
(B) The viewers didn't boo.
(C) The villain didn't make an entry.
(D) The viewers booed.

A. BC
B. CB
C. DA
D. None of these

113.   I get cold feet whenever I see an examination paper.
(A) I saw an examination paper.
(B) I didn't see an examination paper.
(C) I got cold feet.
(D) I didn't get cold feet.

A. CA
B. BD
C. DB
D. BC

114.   Every player will become a champ.
(A) Rajesh is a player.
(B) Rajesh will become a champ.
(C) Rajesh is not a player.
(D) Rajesh will not become a champ.

A. AD
B. DA
C. CD
D. DC

115.   Ravan gets a mild flu whenever he eats ice creams.
(A) Ravan gets a mild flu.
(B) Ravan does not eat ice creams.
(C) Ravan does not get a mild flu.
(D) Ravan eats ice creams.

A. AB
B. DC
C. AC
D. BC

Directions (116-120): In this section each item consists of six sentences of a passage. The first and sixth sentences are given in the beginning as S1 and S6. The middle four sentences in each have been jumbled up and labelled P, Q, R, S. You are required to find the proper sequence of the four sentences and mark your response accordingly.

116.
S1. Issac's mother married again.
S6. He had a set of little tools and saw of various sizes made by himself.

P. but he was known to be very clever at making things.
Q. she sent him to school.

R. Issac was left to the care of his good old grandmother.
S. in his early years, Issac did not appear to be a very bright student.

The correct sequence should be
    A. RQSP
    B. QRSP
    C. SQRP
    D. RPQS

117.

S1. Phatik was a mischievous boy of fourteen.
S6. Ultimately he distinguished himself as a scholar.

P. it was then that Phatik's uncle offered to take the boy to Kolkata.
Q. She was much worried about his education.
R. His mother found it difficult to bring him up.
S. Away from his home, Phatik became sober and industrious.

The correct sequence should be
    A. PQRS
    B. SRQP
    C. RSPQ
    D. RQPS

118.

S1: A sportsman is noted for his sense of discipline.
S6: Once discipline is accrued in the play field, it can be applied and practiced in other spheres of life.

P: The first lesson in discipline is to win without pride and to lose without bitterness.
Q: One is no longer swayed by the sudden gusts of passion.
R: Then, one must learn that error or selfishness will disgrace and endanger the rest.
S: A sense of equanimity brings order and method into the life of the people.

The correct sequence should be
    A. QPRS
    B. RPSP
    C. PQSR
    D. PRSQ

119.

S1: Mr. and Mrs. Robert went home late last night.
S6: Mr. Robert rushed to the police station immediately.

P: Somebody had broken open the lock
Q: to their dismay they found all their things missing.
R: They got into the house with a lot of fear.
S: When they reached home, they found the front door open.

The correct sequence should be
 A. RSPQ
 B. SPRQ
 C. QSRP
 D. RQPS

120.

S1: The bus sped along the road
S6: The dog wailed for a long time.

P: but the bus could stop only after covering a few yards.
Q: It injured the dog in the leg.
R: The driver applied the brake.
S: Suddenly a stray dog ran on to the middle of the road.

The correct sequence should be
 A. SPRQ
 B. SRPQ
 C. RPQS
 D. PRSQ