

**ENTRANCE EXAMINATION-2017**

**MASTER OF BUSINESS ADMINISTRATION (FULL TIME) -  
SET A**

ROLL NO.

[illegible]

**Signature of Investigator**

**Time: 3 Hours**

**Total Marks: 170**

### Instructions to Candidates

1. Do not write your name or put any other mark of identification anywhere in the OMR Answer Sheet. IF ANY MARK OF IDENTIFICATION IS DISCOVERED ANYWHERE IN OMR ANSWER SHEET, the OMR sheet will be cancelled, and will not be evaluated.
2. This Question Booklet contains the cover page and a total of 170 Multiple Choice Questions of 1 mark. Space for rough work has been provided at the beginning and end. Available space on each page may also be used for rough work.
3. Each correct answer carries one mark.
4. There is negative marking for Multiple Choice Questions. For each wrong answer, 0.25 marks will be deducted.
5. USE OF CALCULATOR IS NOT PERMITTED.
6. USE/POSSESSION OF ELECTRONIC GADGETS LIKE MOBILE PHONE, iPhone, iPad, pager ETC. is not permitted.
7. Candidate should check the serial order of questions at the beginning of the test. If any question is found missing in the serial order, it should be immediately brought to the notice of the Invigilator. No pages should be torn out from this question booklet.
8. Answers must be marked in the OMR answer sheet which is provided separately. OMR answer sheet must be handed over to the invigilator before you leave the seat.
9. The OMR answer sheet should not be folded or wrinkled. The folded or wrinkled OMR/Answer Sheet will not be evaluated.
10. Write your Roll Number in the appropriate space (above) and on the OMR Answer Sheet. Any other details, if asked for, should be written only in the space provided.
11. There are four alternative answers to each question marked A, B, C and D. Select one of the answers you consider most appropriate and fill up the corresponding oval/circle in the OMR Answer Sheet provided to you. The correct procedure for filling up the OMR Answer Sheet is mentioned below.
12. Use Black or Blue Ball Pen only for filling the ovals/circles in OMR Answer Sheet while answering the Questions. For your choice of answers darken the correct oval/circle completely. If the correct answer is 'B', the corresponding oval/circle should be completely fill and darkened as shown below.

CORRECT  
METHOD

Ⓐ ● Ⓒ Ⓓ

### WRONG METHOD

**WRONG METHOD**

(A)	(X)	(C)	(D)	(A)	(P)	(C)	(D)	(A)	(●)	(C)	(D)	(A)	(●)	(C)	(D)	(○)	(●)	(C)	(D)	(A)	(●)	(C)	(●)
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$$2^x + 2^{x+1}$$

1. Which one of the following does the expression  $(2^x + 2^{x+1})$  divided by  $(2^{x+1} - 2^x)$  equal?

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

$$\frac{2^x + 2^{x+1}}{2^{x+1} - 2^x}$$

$$\frac{4^{2x+1}}{0}$$

2. If  $42.42 = k(14 + m/50)$ , where  $k$  and  $m$  are positive integers and  $m < 50$ , then what is the value of  $k + m$ ?

A. 10  
B. 8  
C. 6  
D. 9

$$42.42 = k \left( 14 + \frac{m}{50} \right)$$

$$k \left( \frac{700 + m}{50} \right)$$

$$\frac{14}{50}$$

3. The number  $m$  yields a remainder  $p$  when divided by 14 and a remainder  $q$  when divided by 7. If  $p = q + 7$ , then which one of the following could be the value of  $m$ ?

A. 53  
B. 45  
C. 85  
D. 72

4.  $a, b, c, d$ , and  $e$  are five consecutive integers in increasing order of size. Which one of the following expressions is not odd?

A.  $ab + d$   
B.  $ac + e$   
C.  $ab + e$   
D.  $ac + d$

$$1, 2, 3, 4, 5$$

$$2 + 4 = 6$$

$$3 + 4 = 7$$

$$5 + 0 = 5$$

5. Which one of the following could be an integer?

A. Average of four consecutive integers.  
B. Average of six consecutive integers.  
C. Average of three consecutive integers.  
D. Average of two consecutive integers.

$$\frac{41}{2} \quad (21)$$

6. If  $p$  and  $q$  are both positive integers such that  $p/9 + q/10$  is also an integer, then which one of the following numbers could  $p$  equal?

A. 9  
B. 4  
C. 3  
D. 11

7. If the probability that Mike will miss at least one of the ten jobs assigned to him is 0.55, then what is the probability that he will do all ten jobs?

A. 0.1  
B. 0.85  
C. 0.45  
D. 0.55

8. (The average of five consecutive integers starting from  $m$ ) - (the average of six consecutive integers starting from  $m$ ) =

A. 0  
B.  $1/2$   
C.  $-1/2$   
D.  $-1/4$

9. Define  $x^*$  by the equation  $x^* = \pi/x$ . Then  $((-\pi)^*)^* =$

A.  $1/\pi$   
B.  $-1/\pi$   
C.  $-\pi$   
D.  $\pi$

10. If  $x^2 + 4x + 3$  is odd, then which one of the following could be the value of  $x$ ?

A. 9  
B. 16  
C. 5  
D. 13 ✓

11. If  $(a+2)(a+3)(a+4) = 0$  and  $a > 0$ , then  $a =$

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

12. In a country, 60% of the male citizen and 70% of the female citizen are eligible to vote. 70% of male citizens eligible to vote voted, and 60% of female citizens eligible to vote voted. What fraction of the citizens voted during the election?

A. 0.48  
B. 0.42  
C. 0.54  
D. 0.49

13. A precious stone was accidentally dropped and broke into 3 stones of equal weight. The value of this type of stone is always proportional to the square of its weight. The 3 broken stones together are worth how much of the value of the original stone?

A. 1  
B.  $1/9$  ✓  
C.  $1/3$   
D. 3

14. How many positive integers less than 500 can be formed using the numbers 1, 2, 3 and 5 for the digits?

A. 66  
B. 68  
C. 52  
D. 84

15. If  $0 < x \leq 1$ , then which one of the following is the maximum value of  $(x-1)^2 + x$ ?

- A. 0
- B. -1
- C. -2
- D. 1

16. Hose A can fill a tank in 5 minutes, and Hose B can fill the same tank in 6 minutes. How many tanks would Hose B fill in the time Hose A fills 6 tanks?

- A. 5.5
- B. 4
- C. 5
- D. 6

17. There are 87 balls in a jar. Each ball is painted with at least one of two colors, red or green. It is observed that  $\frac{2}{7}$  of the balls that have red color also have green color, while  $\frac{3}{7}$  of the balls that have green color also have red color. What fraction of the balls in the jar has both red and green colors?

- A.  $\frac{6}{35}$
- B.  $\frac{6}{29}$
- C.  $\frac{6}{14}$
- D.  $\frac{6}{42}$

$$\frac{2}{7} \times \frac{3}{7} = \frac{6}{49}$$

18. Which one of the following is the first number greater than 200 that is a multiple of both 6 and 8?

- A. 216 ✓
- B. 212
- C. 208
- D. 224

19. The sum of two numbers is 13, and their product is 30. What is the sum of the squares of the two numbers?

- A. 139
- B. 109
- C. -109
- D. 229

$$5 \times 6$$

$$5 \times 4 = 20$$

$$6 \times 7 = 42$$

$$8 \times 3$$

20. If  $a$ ,  $b$ , and  $c$  are not equal to 0 or 1 and if  $a^x = b$ ,  $b^y = c$ , and  $c^z = a$ , then  $xyz =$

- A. 2
- B.  $a$
- C.  $abc$
- D. 1

21. In a zoo, the ratio of the number of cheetahs to the number of pandas is 1 : 3 and was the same five years ago. If the increase in the number of cheetahs in the zoo since then is 5, then what is the increase in the number of pandas?
- A. 5  
B. 3  
C. 2  
D. 10
22. The average ages of the players on team A and team B are 20 and 30 years, respectively. The average age of the players on the teams together is 26. If the total number of players on the two teams is 100, then which one of the following is the number of players on team A?
- A. 50  
B. 20  
C. 40  
D. 60
23. If  $x/a = 4$ ,  $ay = 6$ ,  $a^2 = 9$ , and  $ab^2 = -8$ , then  $x + 2y$ .
- A. -13  
B. -10  
C. -5  
D. -15
24. The number 3 divides  $a$  with a result of  $b$  and a remainder of 2. The number 3 divides  $b$  with a result of 2 and a remainder of 1. What is the value of  $a$ ?
- A. 21  
B. 23  
C. 17  
D. 27
25. A group of 30 employees of Cadre A has a mean age of 27. A different group of 70 employees of Cadre B has a mean age of 23. What is the mean age of the employees of the two groups together?
- A. 23  
B. 24.2  
C. 26.8  
D. 25
26. The remainder when the positive integer  $m$  is divided by 7 is  $x$ . The remainder when  $m$  is divided by 14 is  $x + 7$ . Which one of the following could  $m$  equal?
- A. 45  
B. 72  
C. 53  
D. 85

27. Kate ate  $\frac{1}{3}$  of a cake, Fritz ate  $\frac{1}{2}$  of the remaining cake, and what was left was eaten by Emily. The fraction of the cake eaten by Emily equals

A.  $\frac{2}{3}$   
 B.  $\frac{1}{2}$   
 C.  $\frac{1}{3}$   
 D.  $\frac{1}{5}$

$$1 - \frac{1}{3} = \frac{2}{3} \times \frac{1}{2} = \frac{2}{6} \quad \frac{2}{3} = \frac{2}{6} \\ = \frac{4-2}{6}$$

28. The list price of a commodity is the price after a 20% discount on the retail price. The festival discount price on the commodity is the price after a 30% discount on the list price. Customers purchase commodities from stores at a festival discount price. What is the effective discount offered by the stores on the commodity on its retail price?

A. 50%  
 B. 20%  
 C. 44%  
 D. 30%

$$100 \times \frac{20}{100} = 80\%$$

29. If  $p$  is the sum of  $q$  and  $r$ , then which one of the following must equal  $q - r$ ?

A.  $p + r$   
 B.  $p - 2r$   
 C.  $p - r$   
 D.  $p + 2r$

$$p = q + r \\ q = p - r \quad q - r = p - 2r$$

30. A survey of  $n$  people in the town of Eros found that 50% of them preferred Brand A. Another survey of 100 people in the town of Angie found that 60% preferred Brand A. In total, 55% of all the people surveyed together preferred Brand A. What is the total number of people surveyed?

A. 150  
 B. 200  
 C. 100  
 D. 250

$$\frac{50 + 60}{2} = \frac{110}{2}$$

$$55\%$$

31.  $\frac{3}{8}$  of a number is what fraction of 2 times the number?

A.  $\frac{3}{8}$   
 B.  $\frac{1}{2}$   
 C.  $\frac{4}{6}$   
 D.  $\frac{3}{16}$

$$\frac{3}{8} \times \frac{1}{2} = \frac{3}{16}$$

$$2 \times \frac{55}{100} = 110$$

32. A piece of string 35 inches long is cut into three smaller pieces along the length of the string. The length of the longest piece is three times the length of the shortest piece. Which one of the following could equal the length of the medium-size piece?

A. 7  
 B. 20  
 C. 10  
 D. 16

$$3x + x = 35$$

$$2 \times 16 = 32 \quad 35 - 32 = 3$$

33. A car traveled 65% of the way from Town A to Town B at an average speed of 65 mph. The car traveled at an average speed of  $v$  mph for the remaining part of the trip. The average speed for the entire trip was 50 mph. What is  $v$  in mph?

A. 35  
B. 45  
C. 50  
D. 40

$$\frac{65 + v}{2} = 50$$

34. The probability that Tom will win the Booker prize is 0.5, and the probability that John will win the Booker prize is 0.4. There is only one Booker prize to win. What is the probability that at least one of them wins the prize?

A. 0.7  
B. 0.4  
C. 0.9  
D. 0.8

Answer questions 35-38 on the basis of the information given below

Five Companies A, B, C, D and E saw growth rates ranging from 10% to 50% in the year 2015. The company A with the least revenues of Rs. 600 crores in 2015 saw the maximum growth rate of 50% and the Company D with the highest revenue saw the least growth rate of 10%. Company B's revenues in 2016 was equal to that of Company D in 2015, while Company C's 2016 revenue was equal to that of Company B's in 2015, Company A's 2016 revenue was equal to that of Company E in 2015.

John, an accountant observes that one of the companies has twice the growth rate of another. Mathew, his colleague corrects him and says that this is the case in two different instances.

Company E has a revenue equal to the average seen in Company A and D, and growth rate equal to the average growth rate of A and D. <https://www.jamiastudy.com>

Ram, known for his cryptic-speak mentioned that if company C had grown at the rate seen by company A in 2015 would have reached the revenues seen by Company B in 2016.

35. Which company had the third highest growth rate?

A. E ✓  
B. B  
C. C  
D. D

36. In absolute terms, which company added the maximum revenue in 2016?

A. B ✓  
B. E  
C. A  
D. D

37. What is the overall average growth rate seen by all 5 companies put together?

A. 23.5% ✓  
B. 28.5%  
C. 24.2%  
D. 27%

38. Which company had the median revenue in 2016?

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

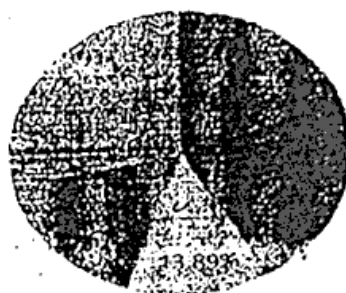
Answer questions 39-41 on the basis of the information given below

Total revenues are Rs. 1800 crores. Overall profit margin is 10%. The division with the largest revenue has the least profit margin but not the least profits. The division with the profit margin higher than all others generates the least profit. Exactly one division has the same profit margin as the overall Company. Company D generates more profits than Company E.

Revenues



Profits



39. What was the profit margin for company B?

- A. 12.33%
- B. 11.11%
- C. 8.33%
- D. 12.5%

40. How much profit did company E make?

- A. Rs. 35 Crores
- B. Rs. 40 Crores
- C. Rs. 50 Crores
- D. Rs. 60 Crores

41. How much profit did Company A make?

- A. Rs. 30 Crores
- B. Rs. 50 Crores
- C. Rs. 25 Crores
- D. Rs. 60 Crores

50 mph →

40 → mph

500 mph →

20 →

650 →

$180 \times \frac{20}{100}$   
36

450

$\frac{450}{100} \times 100$

$450 \times \frac{10}{100}$   
45

$28 \times \frac{134}{100}$   
2.5

$25 \overline{) 126}$   
5  
125  
1  
25

$1800 \times \frac{10}{100} = 1800 \times 0.10$

180 crore

$\frac{45}{450} \times 100$

9  
 $180 \times 22.22$

$\frac{199.98}{5}$

9 833  
 $180 \times 19.44$   
5

5 ) 174.96

= 20



Answer questions 42-45 on the basis of the information given below

The following table gives the percentage distribution of population of five states, P, Q, R, S and T on the basis of poverty line and also on the basis of sex.

State	Percentage of Population below the Poverty Line	Proportion of Males and Females	
		Below Poverty Line	Above Poverty Line
		M : F	M : F
P	35	5 : 6	6 : 7
Q	25	3 : 5	4 : 5
R	24	1 : 2	2 : 3
S	19	3 : 2	4 : 3
T	15	5 : 3	3 : 2

42. What will be the number of females above the poverty line in the State S if it is known that the population of State S is 7 million?

- A. 5.7 million
- B. 3 million
- C. 2.43 million
- D. 1.33 million

43. If the population of males below poverty line for State Q is 2.4 million and that for State T is 6 million, then the total populations of States Q and T are in the ratio?

- A. 3:7
- B. 1:3
- C. 2:5
- D. 4:9

44. If the male population above poverty line for State R is 1.9 million, then the total population of State R is?

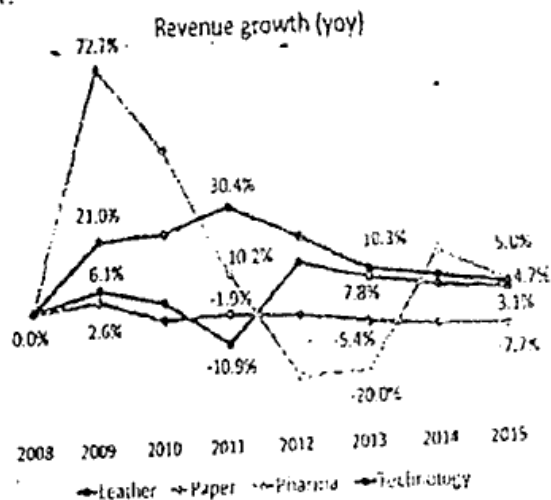
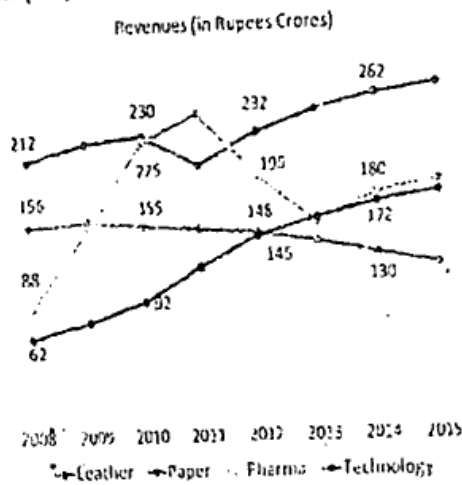
- A. 5.35 million
- B. 6.25 million
- C. 4.85 million
- D. 4.5 million

45. What will be the male population above poverty line for State P if the female population below poverty line for State P is 2.1 million?

- A. 3.3 million
- B. 2.3 million
- C. 2.1 million
- D. 2.7 million

Answer questions 46-48 on the basis of the information given below

The following graphs give the revenues and growth rates of 4 divisions of Garbage Inc, an interesting company that specializes in waste management:



46. In the year 2013, what was the share of revenues of the division Pharma?

- A. 35%
- B. 22% ✓
- C. 27%
- D. 19%

47. The profit margins by division in the years 2014 and 2015 are given in the table below. Find the yoy percentage growth in profits in 2015.

Profit Margin	2014	2015
Leather	10%	8%
Paper	12%	10%
Pharma	15%	12%
Technology	24%	28%

- A. -6%
- B. 0%
- C. -3%
- D. 2.4%

48. What was the total revenue in 2011?

- A. Rs. 680 Crores
- B. Rs. 640 Crores
- C. Rs. 725 Crores ✓
- D. Rs. 760 Crores

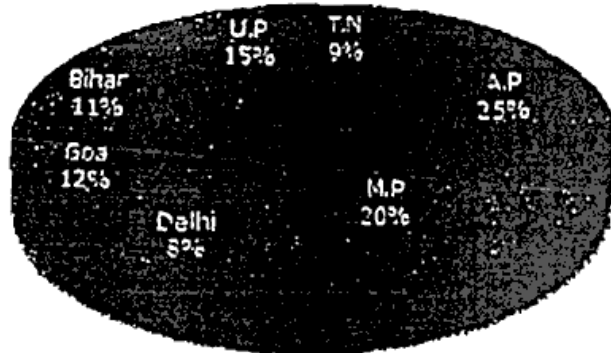
M55

SET A

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Answer questions 49-53 on the basis of the information given below

Data of different states regarding population of states in the year 1998



Total population of the given States = 3276000.

States	Sex and Literacy wise Population Ratio			
	Sex		Literacy	
	M	F	Literate	Illiterate
A.P.	5	3	2	7
M.P.	3	1	1	4
Delhi	2	3	2	1
Goa	3	5	3	2
Bihar	3	4	4	1
U.P.	3	2	7	2
T.N.	3	4	9	4

49. What was the total number of illiterate people in A.P. and M.P. in 1998?

- A. 932170  
 B. 1161160 ✓  
 C. 876040  
 D. 981550

50. What was the number of males in U.P. in the year 1998?

- A. 254650  
 B. 341200  
 C. 294840 ✓  
 D. 321470

51. If in the year 1998, there was an increase of 10% in the population of U.P. and 12% in the population of M.P. compared to the previous year, then what was the ratio of populations of U.P. and M.P. in 1997?

- A. 48 : 55  
 B. 4 : 5 ✓  
 C. 42 : 55  
 D. 7 : 11

52. What will be the percentage of total number of males in U.P., M.P. and Goa together to the total population of all the given states?

- A. 28.5%  
B. 27.5%  
C. 25%  
D. 31.5%

53. What is the ratio of the number of females in T.N. to the number of females in Delhi?

- A. 9 : 7  
B. 15 : 14  
C. 7 : 5  
D. 13 : 11

Answer questions 54-58 on the basis of the information given below

The following table shows the number of new employees added to different categories of employees in a company and also the number of employees from these categories who left the company every year since the foundation of the Company in 1995.

Year	Managers		Technicians		Operators		Accountants		Peons	
	New	Left	New	Left	New	Left	New	Left	New	Left
1995	760	-	1200	-	880	-	1160	-	820	-
1996	280	120	272	120	256	104	200	100	184	96
1997	179	92	240	128	240	120	224	104	152	88
1998	148	88	236	96	208	100	248	96	196	80
1999	160	72	256	100	192	112	272	88	224	120
2000	193	96	288	112	248	144	260	92	200	104

54. What was the total number of Peons working in the Company in the year 1999?

- A. 968  
B. 1312  
C. 1192  
D. 1088

55. What is the pooled average of the total number of employees of all categories in the year 1997?

- A. 1235  
B. 1265  
C. 1195  
D. 1325

56. During the period between 1995 and 2000, the total number of Operators who left the Company is what percent of total number of Operators who joined the Company?

- A. 21%  
B. 29%  
C. 19%  
D. 27%

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SET A

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57. What is the difference between the total number of Technicians added to the Company and the total number of Accountants added to the Company during the years 1996 to 2000?
- A. 112  
 B. 88 ✓  
 C. 128  
 D. 96

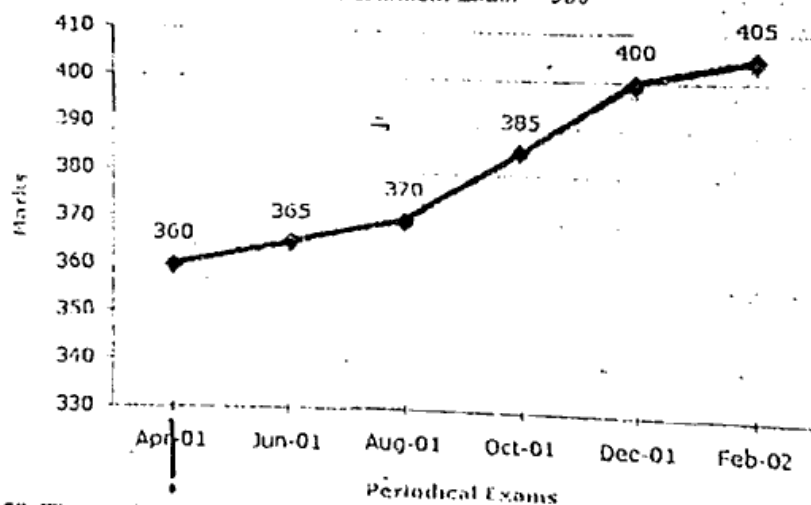
58. For which of the following categories the percentage increase in the number of employees working in the Company from 1995 to 2000 was the maximum?
- A. Technicians ✓  
 B. Accountants  
 C. Managers  
 D. Operators

Answer questions 59-63 on the basis of the information given below

In a school the periodical examinations are held every second month. In a session during April 2001 - March 2002, a student of Class IX appeared for each of the periodical exams. The aggregate marks obtained by him in each periodical exam are represented in the line-graph given below.

Marks Obtained by student in Six Periodical Exam Held in Every Two Months During the Year in the Session 2001 - 2002.

Maximum Total Marks in each Periodical Exam = 500



59. The total number of marks obtained in Feb. 02 is what percent of the total marks obtained in April 01?
- A. 116.5%  
 B. 110%  
 C. 112.5% ✓  
 D. 115%

60. What are the average marks obtained by the student in all the periodical exams during the last session?

- A. 379  
 B. 381 ✓  
 C. 373  
 D. 385

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SET A

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61. In which periodical exams there is a fall in percentage of marks as compared to the previous periodical exams?

- A. June, 01
- B. Feb, 02
- C. None ✓
- D. Oct, 01

62. In which periodical exams did the student obtain the highest percentage increase in marks over the previous periodical exams?

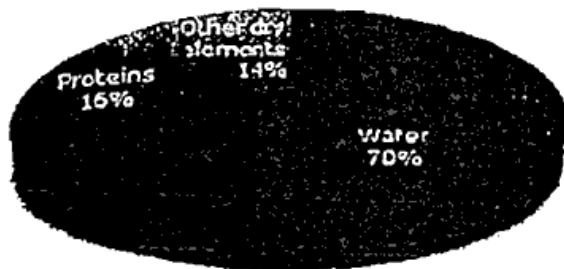
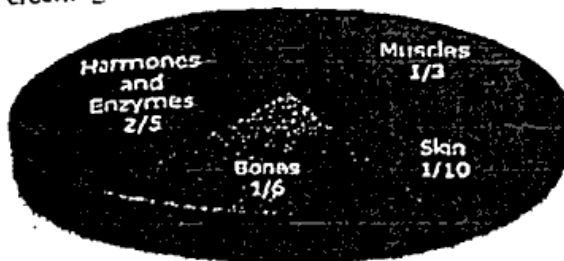
- A. August, 01 ✓
- B. Oct, 01
- C. June, 01
- D. Dec, 01

63. What is the percentage of marks obtained by the student in the periodical exams of August, 01 and Oct, 01 taken together?

- A. 78.75%
- B. 77%
- C. 75.5% ✓
- D. 73.25%

Answer questions 64-68 on the basis of the information given below

Percentage Composition of Human Body



$$\begin{array}{r} 5000 \\ - 220 \\ \hline 2280 \\ - 6 \\ \hline = 381 \end{array}$$

64. What will be the quantity of water in the body of a person weighing 50 kg?

- A. 42.5 kg
- B. 41 kg
- C. 35 kg ✓
- D. 20 kg

$$\frac{5}{30} \times 100 = 16.6\%$$

$$\frac{32}{52} = \frac{4}{10}$$

$$\frac{1}{6} + \frac{1}{10} = \frac{8}{30}$$

$$\frac{2 \times 16}{5 \times 16} = \frac{32}{80}$$

$$\frac{1 \times 80}{3 \times 10} = \frac{80}{30}$$

$$\frac{32}{80}$$

$$\frac{1}{6}$$

$$\frac{1}{3}$$

$$\frac{15}{370} \times 100$$

$$\frac{1}{6} \times 40$$

$$\frac{1}{10}$$

$$\frac{80}{240}$$

$$\frac{32}{158}$$

$$\frac{15}{385} \times 100$$

$$\begin{array}{r} 9 \times 180 : 40 : 24 \\ 24 : 20 : 10 : 6 \end{array}$$

$$\frac{32}{385} \times 100$$

$$\frac{32}{1540}$$

$$4.$$

$$\begin{array}{r} 370 \\ - 385 \\ \hline 755 \end{array}$$

65. To show the distribution of proteins and other dry elements in the human body, the arc of the circle should subtend at the centre an angle of:
- A.  $126^\circ$  ✓
  - B.  $108^\circ$
  - C.  $54^\circ$
  - D.  $252^\circ$
66. In the human body, what part is made of neither bones nor skin?
- A. None of these
  - B.  $3/80$
  - C.  $1/40$
  - D.  $2/5$
67. What percent of the total weight of human body is equivalent to the weight of the proteins in skin in human body?
- A. Data inadequate
  - B. 0.016
  - C. 1.6
  - D. 0.16 ✓
68. What is the ratio of the distribution of proteins in the muscles to that of the distribution of proteins in the bones?
- A. 1 : 2
  - B. 2 : 1
  - C. 1 : 18
  - D. 18 : 1
69. A program instituted in a particular state allows parents to prepay their children's future college tuition at current rates. The program then pays the tuition annually for the child at any of the state's public colleges in which the child enrolls. Parents should participate in the program as a means of decreasing the cost for their children's college education.
- Which of the following, if true, is the most appropriate reason for parents NOT to participate in the program?
- A. The annual cost of tuition at the state's public colleges is expected to increase at a faster rate than the annual increase in the cost of living.
  - B. the parents are unsure about which public college in the state the child will attend.
  - C. The amount of money accumulated by putting the prepayment funds in an interest-bearing account today will be greater than the total cost of tuition for any of the public colleges when the child enrolls. ✓
  - D. Some of the state's public colleges are contemplating large increases in tuition next year.

70. The average life expectancy for the United States population as a whole is 73.9 years, but children born in Hawaii will live an average of 77 years, and those born in Louisiana, 71.7 years. If a newlywed couple from Louisiana were to begin their family in Hawaii, therefore, their children would be expected to live longer than would be the case if the family remained in Louisiana. Which of the following, if true, would most seriously weaken the conclusion drawn in the passage?
- A. The governor of Louisiana has falsely alleged that statistics for his state are inaccurate.
  - B. The longevity ascribed to Hawaii's current population is attributable mostly to genetically determined factors.
  - C. Insurance company statisticians do not believe that moving to Hawaii will significantly lengthen the average Louisianan's life.
  - D. Thirty percent of all Louisianans can expect to live longer than 77 years.
71. Company Alpha buys free-travel coupons from people who are awarded the coupons by Bravo Airlines for flying frequently on Bravo airplanes. The coupons are sold to people who pay less for the coupons than they would pay by purchasing tickets from Bravo. This making of coupons results in lost revenue for Bravo. To discourage the buying and selling of free-travel coupons, it would be best for Bravo Airlines to restrict the
- A. amount of time that the coupons can be used after they are issued ✓
  - B. days that the coupons can be used to Monday through Friday
  - C. use of the coupons to those who were awarded the coupons and members of their immediate families
  - D. number of coupons that a person can be awarded in a particular year
72. Insurance Company X is considering issuing a new policy to cover services required by elderly people who suffer from diseases that afflict the elderly. Premiums for the policy must be low enough to attract customers. Therefore, Company X is concerned that the income from the policies would not be sufficient to pay for the claims that would be made. Which of the following strategies would be most likely to minimize Company X's losses on the policies?
- A. Insuring only those individuals who did not suffer any serious diseases as children ✓
  - B. Insuring only those individuals who were rejected by other companies for similar policies
  - C. Attracting middle-aged customers unlikely to submit claims for benefits for many years.
  - D. Including a greater number of services in the policy than are included in other policies of lower cost
73. Which of the following best completes the passage below?
- In a survey of job applicants, two-fifths admitted to being at least a little dishonest. However, the survey may underestimate the proportion of job applicants who are dishonest, because \_\_\_\_\_.
- A. some generally honest people taking the survey might have claimed on the survey to be dishonest
  - B. some people who claimed on the survey to be dishonest may have been answering honestly ✓
  - C. some dishonest people taking the survey might have claimed on the survey to be honest
  - D. some people who claimed on the survey to be at least a little dishonest may be very dishonest



74. The average life expectancy for the United States population as a whole is 73.9 years, but children born in Hawaii will live an average of 77 years, and those born in Louisiana, 71.7 years. If a newlywed couple from Louisiana were to begin their family in Hawaii, therefore, their children would be expected to live longer than would be the case if the family remained in Louisiana. Which of the following statements, if true, would most significantly strengthen the conclusion drawn in the passage?
- A. Over the last decade, average life expectancy has risen at a higher rate for Louisianans than for Hawaiians.
  - B. Twenty-five percent of all Louisianans who move to Hawaii live longer than 77 years.
  - C. Environmental factors tending to favor longevity are abundant in Hawaii and less numerous in Louisiana. ✓
  - D. As population density increases in Hawaii, life expectancy figures for that state are likely to be revised downward.
75. To prevent some conflicts of interest, Congress could prohibit high-level government officials from accepting positions as lobbyists for three years after such officials leave government service. One such official concluded, however, that such a prohibition would be unfortunate because it would prevent high-level government officials from earning a livelihood for three years. The official's conclusion logically depends on which of the following assumptions?
- A. Lobbyists are typically people who have previously been high-level government officials. ✓
  - B. High-level government officials who leave government service are capable of earning a livelihood only as lobbyists. ✓
  - C. Laws should not restrict the behavior of former government officials.
  - D. Low-level government officials do not often become lobbyists when they leave government service.
76. The fewer restrictions there are on the advertising of legal services, the more lawyers there are who advertise their services, and the lawyers who advertise a specific service usually charge less for that service than lawyers who do not advertise. Therefore, if the state removes any of its current restrictions, such as the one against advertisements that do not specify fee arrangements, overall consumer legal costs will be lower than if the state retains its current restrictions. If the statements in the passage are true, which of the following must be true?
- A. Some lawyers who now advertise will charge more for specific services if they do not have to specify fee arrangements in the advertisements.
  - B. More consumers will use legal services if there are fewer restrictions on the advertising of legal service.
  - C. If the restriction against advertisements that do not specify fee arrangements is removed, more lawyers will advertise their services. ✓
  - D. If more lawyers advertise lower prices for specific services, some lawyers who do not advertise will also charge less than they currently charge for those services.
77. The ice on the front windshield of the car had formed when moisture condensed during the night. The ice melted quickly after the car was warmed up the next morning because the defrosting vent, which blows on the front windshield, was turned on full force. Which of the following, if true, most seriously jeopardizes the validity of the explanation for the speed with which the ice melted?
- A. The warm air from the defrosting vent for the front windshield cools rapidly as it dissipates throughout the rest of the car. ✓
  - B. The side windows had no ice condensation on them.
  - C. Even though no attempt was made to defrost the back window, the ice there melted at the same rate as did the ice on the front windshield.

D. The speed at which ice on a window melts increases as the temperature of the air blown on the window increases

78. Meteorite explosions in the Earth's atmosphere as large as the one that destroyed forests in Siberia, with approximately the force of a twelve-megaton nuclear blast, occur about once a century. The response of highly automated systems controlled by complex computer programs to unexpected circumstances is unpredictable.

Which of the following conclusions can most properly be drawn, if the statements above are true, about a highly automated nuclear-missile defense system controlled by a complex computer program?

- A. The system would be destroyed if an explosion of a large meteorite occurred in the Earth's atmosphere. ✓
- B. It is not certain what the system's response to the explosion of a large meteorite would be, if its designers did not plan for such a contingency.
- C. Within a century after its construction, the system would react inappropriately and might accidentally start a nuclear war.
- D. It would be impossible for the system to distinguish the explosion of a large meteorite from the explosion of a nuclear weapon. ✓

79. The fewer restrictions there are on the advertising of legal services, the more lawyers there are who advertise their services, and the lawyers who advertise a specific service usually charge less for that service than lawyers who do not advertise. Therefore, if the state removes any of its current restrictions, such as the one against advertisements that do not specify fee arrangements, overall consumer legal costs will be lower than if the state retains its current restrictions.

Which of the following, if true, would most seriously weaken the argument concerning overall consumer legal costs?

- A. The state is unlikely to remove all of the restrictions that apply solely to the advertising of legal services.
- B. Most lawyers who advertise specific services do not lower their fees for those services when they begin to advertise.
- C. The state has recently removed some other restrictions that had limited the advertising of legal services.
- D. Lawyers who do not advertise generally provide legal services of the same quality as those provided by lawyers who do advertise. ✓

80. A conservation group in the United States is trying to change the long-standing image of bats as frightening creatures. The group contends that bats are feared and persecuted solely because they are shy animals that are active only at night. Which of the following, if true, would cast the most serious doubt on the accuracy of the group's contention?

- A. Bats are the chief consumers of nocturnal insects and thus can help make their hunting territory more pleasant for humans.
- B. Raccoons and owls are shy and active only at night; yet they are not generally feared and persecuted.
- C. Bats are steadily losing natural roosting places such as caves and hollow trees and are thus turning to more developed areas for roosting. ✓
- D. Bats are regarded as frightening creatures not only in the United States but also in Europe, Africa, and South America.

81. A proposed ordinance requires the installation in new homes of sprinklers automatically triggered by the presence of a fire. However, a home builder argued that because more than ninety percent of residential fires are extinguished by a household member, residential sprinklers would only marginally decrease property damage caused by residential fires. Which of the following, if true, would most seriously weaken the home builder's argument?
- A. Since new homes are only a tiny percentage of available housing in the city, the new ordinance would be extremely narrow in scope.
  - B. The largest proportion of property damage that results from residential fires is caused by fires that start when no household member is present.
  - C. Most individuals have no formal training in how to extinguish fires.
  - D. The installation of smoke detectors in new residences costs significantly less than the installation of sprinklers.
82. If there is an oil-supply disruption resulting in higher international oil prices, domestic oil prices in open-market countries such as the United States will rise as well, whether such countries import all or none of their oil. If the statement in the passage concerning oil-supply disruptions is true, which of the following policies in an open-market nation is most likely to reduce the long-term economic impact on that nation of sharp and unexpected increases in international oil prices?
- A. Decreasing oil consumption through conservation
  - B. Increasing the number of oil tankers in its fleet
  - C. Maintaining the quantity of oil imported at constant yearly levels ✓
  - D. Suspending diplomatic relations with major oil-producing nations
83. Opponents of laws that require automobile drivers and passengers to wear seat belts argue that in a free society people have the right to take risks as long as the people do not harm others as a result of taking the risks. As a result, they conclude that it should be each person's decision whether or not to wear a seat belt. Which of the following, if true, most seriously weakens the conclusion drawn above?
- A. The rate of automobile fatalities in states that do not have mandatory seat belt laws is greater than the rate of fatalities in states that do have such laws.
  - B. Passengers in airplanes are required to wear seat belts during takeoffs and landings. ✓
  - C. Automobile insurance rates for all automobile owners are higher because of the need to pay for the increased injuries or deaths of people not wearing seat belts.
  - D. Many new cars are built with seat belts that automatically fasten when someone sits in the front seat.
84. During the Second World War, about 375,000 civilians died in the United States and about 408,000 members of the United States armed forces died overseas. On the basis of those figures, it can be concluded that it was not much more dangerous to be overseas in the armed forces during the Second World War than it was to stay at home as a civilian. Which of the following would reveal most clearly the absurdity of the conclusion drawn above?
- A. Expressing the difference between the numbers of deaths among civilians and members of the armed forces as a percentage of the total number of deaths
  - B. Comparing death rates per thousand members of each group rather than comparing total numbers of deaths
  - C. Counting deaths among members of the armed forces who served in the United States in addition to deaths among members of the armed forces serving overseas ✓
  - D. Separating deaths caused by accidents during service in the armed forces from deaths caused by combat injuries ✕

85. Defense Department analysts worry that the ability of the United States to wage a prolonged war would be seriously endangered if the machine-tool manufacturing base shrinks further. Before the Defense Department publicly connected this security issue with the import quota issue, however, the machine-tool industry raised the national security issue in its petition for import quotas. Which of the following, if true, contributes most to an explanation of the machine-tool industry's raising the issue above regarding national security?
- A. The Defense Department is only marginally concerned with the effects of foreign competition on the machine-tool industry.
  - B. The machine-tool industry encountered difficulty in obtaining governmental protection against imports on grounds other than defense.
  - C. When the aircraft industries retooled, they provided a large amount of work for tool builders.
  - D. A few weapons important for defense consist of parts that do not require extensive machining.
86. The cost of producing radios in Country Q is ten percent less than the cost of producing radios in Country Y. even after transportation fees and tariff charges are added, it is still cheaper for a company to import radios from Country Q to Country Y than to produce radios in Country Y. The statements above, if true, best support which of the following assertions?
- A. labor costs in Country Q are ten percent below those in Country Y.
  - B. the fee for transporting a radio from Country Q to Country Y is more than ten percent of the cost of manufacturing the radio in Country Q.
  - C. the tariff on a radio imported from Country Q to Country Y is less than ten percent of the cost of manufacturing the radio in Country Y.
  - D. importing radios from Country Q to Country Y will eliminate ten percent of the manufacturing jobs in Country Y.
87. Increase in the level of high-density lipoprotein (HDL) in the human bloodstream lowers bloodstream-cholesterol levels by increasing the body's capacity to rid itself of excess cholesterol. Levels of HDL in the bloodstream of some individuals are significantly increased by a program of regular exercise and weight reduction. Which of the following can be correctly inferred from the statements above?
- A. Individuals who do not exercise regularly have a high risk of developing high levels of cholesterol in the bloodstream late in life.
  - B. A program of regular exercise and weight reduction lowers cholesterol levels in the bloodstream of some individuals.
  - C. Individuals who are underweight do not run any risk of developing high levels of cholesterol in the bloodstream.
  - D. Exercise and weight reduction are the most effective methods of lowering bloodstream cholesterol levels in humans.
88. Toughened hiring standards have not been the primary cause of the present staffing shortage in public schools. The shortage of teachers is primarily caused by the fact that in recent years teachers have not experienced any improvements in working conditions and their salaries have not kept pace with salaries in other professions. Which of the following, if true, would most support the claims above?
- A. Many teachers have cited low pay and lack of professional freedom as reasons for their leaving the profession.
  - B. Today more teachers are entering the profession with a higher educational level than in the past.
  - C. Many teachers already in the profession would not have been hired under the new hiring standards.
  - D. Some teachers have cited higher standards for hiring as a reason for the current staffing shortage.

89. Recent statistics make it seem unlikely that the total consumption of electricity determines its cost to individual consumers. Recent increases in total consumption, especially during the hot summer months, have sometimes been accompanied by a decrease in the cost per unit and at other times by an increase. Which of the following positions is best supported by the information presented above?
- A. Even though a correlation exists between the total consumption of electricity and its cost to consumers, no causal relation exists.
  - B. The cost of electricity depends upon something other than the total consumption of electricity.
  - C. It must be the case that the cost of electricity to consumers is what determines the total consumption.
  - D. Further investigation into the way these statistics were gathered is certainly called for.
90. Even though most universities retain the royalties from faculty members' inventions, the faculty members retain the royalties from books and articles they write. Therefore, faculty members should retain the royalties from the educational computer software they develop. The conclusion above would be more reasonably drawn if which of the following were inserted into the argument as an additional premise?
- A. In terms of the criteria used to award royalties, educational software programs are more nearly comparable to books and articles than to inventions.
  - B. Inventions bring more prestige to universities than do books and articles.
  - C. Faculty members are more likely to produce educational software programs than inventions.
  - D. Royalties from inventions are higher than royalties from educational software programs.
91. Which of the following best completes the passage below? People buy prestige when they buy a premium product. They want to be associated with something special. Mass-marketing techniques and price-reduction strategies should not be used because \_\_\_\_\_.
- A. expansion of the market niche to include a broader spectrum of consumers will increase profits
  - B. affluent purchasers currently represent a shrinking portion of the population of all purchasers
  - C. continued sales depend directly on the maintenance of an aura of exclusivity
  - D. purchasers of premium products are concerned with the quality as well as with the price of the products
92. When limitations were in effect on nuclear-arms testing, people tended to save more of their money, but when nuclear-arms testing increased, people tended to spend more of their money. The perceived threat of nuclear catastrophe, therefore, decreases the willingness of people to postpone consumption for the sake of saving money. The argument above assumes that:
- A. most people supported the development of nuclear arms
  - B. people's perception of the threat of nuclear catastrophe depends on the amount of nuclear-arms testing being done
  - C. the perceived threat of nuclear catastrophe has increased over the years.
  - D. the people who saved the most money when nuclear-arms testing was limited were the ones who supported such limitations

93. A cost-effective solution to the problem of airport congestion is to provide high-speed ground transportation between major cities lying 200 to 500 miles apart. The successful implementation of this plan would cost far less than expanding existing airports and would also reduce the number of airplanes clogging both airports and airways. Which of the following, if true, could be proponents of the plan above most appropriately cite as a piece of evidence for the soundness of their plan?
- A. The majority of travelers departing from rural airports are flying to destinations in cities over 600 miles away.
  - B. An effective high-speed ground-transportation system would require major repairs to many highways and mass-transit improvements.
  - C. One-half of all departing flights in the nation's busiest airport head for a destination in a major city 225 miles away.
  - D. Many new airports are being built in areas that are presently served by high-speed ground-transportation systems. ✓
94. The World Automobile Association (WAA) publishes a list of the "Best and Worst Drivers of the World," ranking the drivers of every nation according to the number of traffic deaths per mile driven in that country. Each of the following, if true, would by itself provide a logical objection to using the WAA's ranking as a representation of the quality of drivers in each nation EXCEPT:
- A. The average driver in industrialized countries can afford to maintain his or her car in better condition than can the average driver in less developed countries.
  - B. Some countries contain hundreds of thousands of miles of road while other countries contain relatively few miles of road.
  - C. The roads in some countries are in bad repair and are therefore more dangerous than roads in other countries.
  - D. Minor accidents that would cause little injury in many countries are often fatal when they occur in extremely mountainous countries.
95. Although recently introduced with a wave of publicity, combined audio/video receivers are proving tough to sell. As a result, the manufacturers keep advertising, and offering handsome discounts. What the manufacturers have yet to see is that the public's reluctance isn't due to the price of the product: the public is still debating the even more fundamental question of ----- Which of the following best completes the passage above?
- A. whether the uses for such a product outweigh its high cost ✓
  - B. whether the product is worth its price
  - C. whether the models will soon become obsolete
  - D. whether there is a use for such a product
96. Homeowner: Recent drops in the value of our homes are due to the undesirability of living near the recently opened 24-hour bus depot. Transportation official: The police, not the bus depot, are at fault. Survey data shows that most prospective homeowners avoid the community because of its high crime rate. Which of the following, if true, would be the most effective rebuttal that the homeowner could make to the argument put forward by the transportation official?
- A. Those homeowners whose homes are situated in the immediate area of the bus depot must endure constant noise
  - B. The constant activity and commerce generated by the bus depot has made the community a favored hangout for thieves and other criminals.
  - C. The community's crime rate has risen nearly as quickly as the value of homes has fallen, over the same period of time.
  - D. The community's police force has not seen a pay raise or increase in manpower for the last five years.

97. Plant Y thrives in environments of great sunlight and very little moisture. Desert X is an environment with constant, powerful sunlight, and almost no moisture. Although Plant Y thrives in the areas surrounding Desert X, it does not exist naturally in the desert, nor does it survive long when introduced there. Which of the following, if true, would be most useful in explaining the apparent discrepancy above?
- A. Plant Y cannot survive in temperatures as high as those normally found in Desert X.
  - B. The environment around Desert X is ideally suited to the needs of Plant Y.
  - C. For one week in the fall, Desert X gets consistent rainfall.
  - D. Desert X's climate is far too harsh for the animals that normally feed on Plant Y.
98. It has been against the law for federal agencies and federal contractors to discriminate against a qualified job applicant because of a disability. Now that Congress has approved legislation to expand these existing provisions to cover private industry as well, the number of disabled people who are involuntarily unemployed will drop substantially. The author of the above argument must be assuming which of the following?
- A. The federal government currently employs more disabled people than does private industry.
  - B. Some private employers in the past deliberately chose not to hire qualified but disabled job applicants.
  - C. Many congressmen were reluctant to pass the new legislation to prevent discrimination against the disabled.
  - D. The approved legislation would stop discrimination against the disabled in the public and private sectors.
99. The manufacturer of DTF claims its product reduces facial wrinkles and wishes to sell it as a pharmaceutical. The Food and Drug Administration (FDA), however, has ordered lengthy and costly experiments to determine whether DTF truly reduces facial wrinkles. The manufacturer, a small cosmetics firm, lacks the resources to carry out the required research and will probably comply with less rigorous FDA regulations by labeling DTF a cosmetic. Which of the following can be most reasonably inferred from the statements above?
- A. Only established pharmaceutical firms have the capital required to enter new products in the market.
  - B. The FDA regulates claims made about pharmaceuticals more strictly than claims made about cosmetics.
  - C. Cosmetics are among the products not regulated by the FDA.
  - D. The makers of DTF thought they would sell greater quantities of their product if it were a pharmaceutical rather than a cosmetic.
100. The population increase over a given year is always calculated as a percentage of the previous year's population, with a population decrease being recorded as a negative increase. In 1990 Essex County and Union County both experienced a population increase of more than 3 percent. In 1991 Essex County and Union County both experienced a population increase of 1.5 percent. In 1992 Union County experienced a negative increase in population of -1.7 percent. Essex County had 209,100 residents in 1990 and 209,000 residents in 1992. If the information above is accurate, which of the following must be true?
- A. In 1992 more people moved from Union County to Essex County than moved from Essex County to Union County.
  - B. Both counties experienced negative population increases in the years 1990 and 1991, yet both experienced positive population increases in 1992.
  - C. Both counties experienced positive population increases in the years 1990 and 1991, yet both experienced negative population increases in 1992.



D. In 1990 there were more people living in Union County than in Essex County, but in 1992 there were more people living in Essex County than in Union County.

101. Although statistics and definitions are inexact, educated guesses put the number of refugees worldwide at well over 10 million. The overwhelming majority prefer to return to their native land than to emigrate to a foreign one. The millions of refugees from Afghanistan are sufficient proof. Despite the toll the war and subsequent fighting have taken on their country, very few have applied for permission to emigrate. Which of the following, if true, would most strengthen the argument above?

- A. The refugees from Afghanistan fled what they considered political oppression rather than economic disaster.
- B. Although refugees flee their homes for a variety of different reasons, the overwhelming majority are looking for improved living conditions.
- C. Most refugees are as reluctant to emigrate as are the refugees from Afghanistan.
- D. Most of the children born to refugees prefer to remain in their adoptive country rather than return to the land their parents left.

102. Chef: An ordinance ought to be passed banning midtown street vendors from selling food within a certain proximity to restaurants. With their high rents and costs, restaurants cannot be expected to compete with the vendors. Even in cases where these vendors sell food completely different from the restaurant's bill of fare, the price differential is enough to attract to the vendors customers who would otherwise have eaten in the restaurants. Which of the following, if true, would most weaken the argument above? <https://www.jamiastudy.com>

- A. Most street vendors who sell food would suffer losses from being forced to move to other locations.
- B. Most customers who eat in midtown do so on expense accounts, and do not pay for their own meals.
- C. The food served in midtown restaurants is better than that sold by street vendors.
- D. There are not enough police officers to enforce regulations requiring street vendors to move a certain distance from restaurants.

Questions 103-112 consist of sentences that are either partly or entirely underlined. Below each sentence are four versions of the underlined portion of the sentence. Read the sentence and the four choices carefully, and select the best version.

103. Each of Johnson's children — Cedric, Ethan and Selena — were weak and ineffectual, very different from the great man himself.

- A. Cedric, Ethan and Selena -- each of them Johnson's children -- were weak and ineffectual
- B. Johnson's children -- Cedric, Ethan and Selena -- were all weak and ineffectual ✓
- C. Each of Johnson's children — Cedric, Ethan and Selena -- were weak and ineffectual
- D. Weak and ineffectual children -- Cedric, Ethan and Selena -- each a child of Johnson's, was

104. Child psychologists believe that as a child grows, their range of emotions and the way they expresses those emotions mature as well.

- A. hold the belief that when a child grows, his or her
- B. believe that as a child grows, their
- C. believe that as children grow, their
- D. hold the belief that when children grow, their ✓



105. The tennis committee has finally decided that grass will be the chosen surface for the final competition, like that when Australia lost to France two years ago.
- A. as that for Australia's loss
  - B. as it was when Australia lost ✓
  - C. like that when Australia lost
  - D. just as when Australia lost
106. Dr. Wilson's research has shown that the more business students work together and exchange ideas, their advantage is greater in the workplace in skills involved in cooperation.
- A. their advantage is the greater in the workplace in skills involving cooperation
  - B. their advantage is greater in the workplace in skills involved in cooperation
  - C. in skills involved in cooperation, their advantage is greater in the workplace
  - D. the greater their advantage in the workplace in skills involving cooperation
107. Though not all the economists are in agreement, the valuation of the July contracts seems like it is indicative that it may be a good time sell the maturity.
- A. as if to indicate
  - B. to indicate that ✓
  - C. like it is indicative that
  - D. indicative of
108. Of all the mentally ill patients hospitalized in the Raymond Institute, the mind of the psychopathic patient is maybe the more difficult for analysis.
- A. is probably the more difficult to analyze
  - B. is maybe the more difficult for analysis
  - C. is probably the most difficult to analyze ✓
  - D. is maybe the most difficult for analysis
109. Dr. Cunningham believed that the CFS treatment would appear the same to someone receiving a placebo as a person receiving an actual course of treatment.
- A. placebo as a
  - B. placebo as to a
  - C. placebo; as it would to the
  - D. placebo; just as it would to a
110. Although he dealt with a number of similar cases while being a lawyer, Judge Gutterman had yet to preside over an embezzlement case, certainly not one as complex as the case at hand.
- A. as a lawyer ✓
  - B. at the time of his being a lawyer
  - C. while in law
  - D. while being a lawyer

111. Military security personnel officers, being worried over leaks of military information through internet use, have decided to look beyond the solutions currently in use.
- A. worried about leaks of military information through internet use
  - B. worrying over leaks of military information through internet use
  - ☒ C. being worried over leaks of military information through internet use
  - D. in that they were worried over leaks of military information through the use of the internet
112. To be a leading producer in the computer industry, a company must be international, achieve a turnover that makes efficient large-scale production possible, and secure information about technical advances.
- A. and securing information about technical advances
  - B. and secure information of how to technically advance
  - C. and secure information about technical advances
  - D. while secure information about technical advances

Answer questions 113-118 on the basis of the passage given below

#### Passage 1

Archaeology as a profession faces two major problems. First, it is the poorest of the poor. Only paltry sums are available for excavating and even less is available for publishing the results and preserving the sites once excavated. Yet archaeologists deal with priceless objects every day. Second, there is the problem of illegal excavation, resulting in museum-quality pieces being sold to the highest bidder. I would like to make an outrageous suggestion that would at one stroke provide funds for archaeology and reduce the amount of illegal digging. I would propose that scientific archaeological expeditions and governmental authorities sell excavated artifacts on the open market. Such sales would provide substantial funds for the excavation and preservation of archaeological sites and the publication of results. At the same time, they would break the illegal excavator's grip on the market, thereby decreasing the inducement to engage in illegal activities.

You might object that professionals excavate to acquire knowledge, not money. Moreover, ancient artifacts are part of our global cultural heritage, which should be available for all to appreciate, not sold to the highest bidder. I agree. Sell nothing that has unique artistic merit or scientific value. But, you might reply, everything that comes out of the ground has scientific value. Here we part company. Theoretically, you may be correct in claiming that every artifact has potential scientific value. Practically, you are wrong.

I refer to the thousands of pottery vessels and ancient lamps that are essentially duplicates of one another. In one small excavation in Cyprus, archaeologists recently uncovered 2,000 virtually indistinguishable small jugs in a single courtyard. Even precious royal seal impressions known as *mehkh* handles have been found in abundance—more than 4,000 examples so far.

The basements of museums are simply not large enough to store the artifacts that are likely to be discovered in the future. There is not enough money even to catalogue the finds; as a result, they cannot be found again and become as inaccessible as if they had never been discovered. Indeed, with the help of a computer, sold artifacts could be more accessible than are the pieces stored in bulging museum basements. Prior to sale, each could be photographed and the list of the purchasers could be maintained on the computer. A purchaser could even be required to agree to return the piece if it should become needed for scientific purposes.

It would be unrealistic to suggest that illegal digging would stop if artifacts were sold on the open market. But the demand for the clandestine product would be substantially reduced. Who would want an unmarked pot when another was available whose provenance was known, and that was dated stratigraphically by the professional archaeologist who excavated it?

113. The author's argument concerning the effect of the official sale of duplicate artifacts on illegal excavation is based on which of the following assumptions?
- A. The price of illegally excavated artifacts would rise.
  - B. ~~Illegal~~ excavators would be forced to sell only duplicate artifacts.
  - C. Prospective purchasers would prefer to buy authenticated artifacts.
  - D. Computers could be used to trace sold artifacts.
114. The author implies that all of the following statements about duplicate artifacts are true EXCEPT:
- A. Such artifacts seldom have scientific value.
  - B. Such artifacts frequently exceed in quality than those already catalogued in museum collections.
  - C. A market for such artifacts already exists.
  - D. There is likely to be a continuing supply of such artifacts.
115. The author mentions the excavation in Cyprus to emphasize which of the following points?
- A. Artifacts that are very similar to each other present cataloguing difficulties to archaeologists.
  - B. Artifacts that are not uniquely valuable, and therefore could be sold, are available in large quantities.
  - C. Ancient lamps and pottery vessels are less valuable, although more rare, than royal seal impressions.
  - D. Cyprus is the most important location for unearthing large quantities of salable artifacts.
116. The primary purpose of the passage is to propose
- A. the governmental regulation of archaeological sites
  - B. an alternative to museum display of artifacts
  - C. a way to curb illegal digging while benefiting the archaeological profession
  - D. a way to distinguish artifacts with scientific value from those that have no such value
117. Which of the following is mentioned in the passage as a disadvantage of storing artifacts in museum basements?
- A. Artifacts discovered in one excavation often become separated from each other.
  - B. Such artifacts often remain uncatalogued and thus cannot be located once they are put in storage.
  - C. Space that could be better used for display is taken up for storage.
  - D. Museum officials rarely allow scholars access to such artifacts.
118. The author anticipates which of the following initial objections to the adoption of his proposal?
- A. Artifacts that would have been displayed in public places will be sold to private collectors.
  - B. An oversupply of salable artifacts will result and the demand for them will fall.
  - C. Museum officials will become unwilling to store artifacts.
  - D. Illegal excavators will have an even larger supply of artifacts for resale.

Answer questions 119-124 on the basis of the passage given below

Passage 2

Caffeine, the stimulant in coffee, has been called "the most widely used psychoactive substance on Earth." Snyder, Daly and Bruns have recently proposed that caffeine affects behavior by countering the activity in the human brain of a naturally occurring chemical called adenosine. Adenosine normally depresses neuron firing in many areas of the brain. It apparently does this by inhibiting the release of neurotransmitters, chemicals that carry nerve impulses from one neuron to the next.

Like many other agents that affect neuron firing, adenosine must first bind to specific receptors on neuronal membranes. There are at least two classes of these receptors, which have been designated A1 and A2. Snyder et al propose that caffeine, which is structurally similar to adenosine, is able to bind to both types of receptors, which prevents adenosine from attaching there and allows the neurons to fire more readily than they otherwise would.

For many years, caffeine's effects have been attributed to its inhibition of the production of phosphodiesterase, an enzyme that breaks down the chemical called cyclic AMP. A number of neurotransmitters exert their effects by first increasing cyclic AMP concentrations in target neurons. Therefore, prolonged periods at the elevated concentrations, as might be brought about by a phosphodiesterase inhibitor, could lead to a greater amount of neuron firing and, consequently, to behavioral stimulation. But Snyder et al point out that the caffeine concentrations needed to inhibit the production of phosphodiesterase in the brain are much higher than those that produce stimulation. Moreover, other compounds that block phosphodiesterase's activity are not stimulants.

To buttress their case that caffeine acts instead by pre-venting adenosine binding, Snyder et al compared the stimulatory effects of a series of caffeine derivatives with their ability to dislodge adenosine from its receptors in the brains of mice. "In general," they reported, "the ability of the compounds to compete at the receptors correlates with their ability to stimulate locomotion in the mouse; i.e., the higher their capacity to bind at the receptors, the higher their ability to stimulate locomotion." Theophylline, a close structural relative of caffeine and the major stimulant in tea, was one of the most effective compounds in both regards.

There were some apparent exceptions to the general correlation observed between adenosine-receptor binding and stimulation. One of these was a compound called 3-isobutyl-1-methylxanthine (IBMX), which bound very well but actually depressed mouse locomotion. Snyder et al suggests that this is not a major stumbling block to their hypothesis. The problem is that the compound has mixed effects in the brain, a not unusual occurrence with psychoactive drugs. Even caffeine, which is generally known only for its stimulatory effects, displays this property, depressing mouse locomotion at very low concentrations and stimulating it at higher ones.

119. The author quotes Snyder et al in fourth paragraph most probably in order to

- A. indicate that their experiments resulted only in general correlations
- B. reveal some of the assumptions underlying their theory
- C. summarize a major finding of their experiments
- D. point out that their experiments were limited to the mouse

120. In response to experimental results concerning IBMX, Snyder et al contended that it is not uncommon for psychoactive drugs to have

- A. inhibitory effects on enzymes in the brain
- B. depressive effects on mouse locomotion
- C. mixed effects in the brain
- D. close structural relationships with caffeine

121. According to Snyder et al, caffeine differs from adenosine in that caffeine

- A. has mixed effects in the brain, whereas adenosine has only a stimulatory effect
- B. permits release of neurotransmitters when it is bound to adenosine receptors, whereas adenosine inhibits such release
- C. stimulates behavior in the mouse and in humans, whereas adenosine stimulates behavior in humans only
- D. increases cyclic AMP concentrations in target neurons, whereas adenosine decreases such concentrations

122. The primary purpose of the passage is to

- A. present two explanations of a phenomenon and reconcile the differences between them
- B. describe an alternative hypothesis and provide evidence and arguments that support it
- C. discuss a plan for investigation of a phenomenon that is not yet fully understood
- D. summarize two theories and suggest a third theory that overcomes the problems encountered in the first two

123. Snyder et al suggest that caffeine's ability to bind to A1 and A2 receptors can be at least partially attributed to which of the following?

- A. The ability of caffeine to stimulate behavior
- B. The chemical relationship between caffeine and phosphodiesterase
- C. The structural relationship between caffeine and adenosine
- D. The structural similarity between caffeine and neurotransmitters

124. According to Snyder et al, all of the following compounds can bind to specific receptors in the brain EXCEPT

- A. Caffeine
- B. phosphodiesterase
- C. IBMX
- D. Adenosine

Read questions 125-136 carefully and select the word that is most similar or dissimilar in meaning to the word provided:

125. CAUTIOUS is most dissimilar to

- A. Careful
- B. reckless
- C. Reasonable
- D. Illogical

126. ACUTE is most dissimilar to

- A. Relevant
- B. Dull
- C. Conspicuous
- D. Aloof

127. DELIRIOUS is most similar to

- A. Calm
- B. suspicious
- C. Manic ✓
- D. Tasty

128. AMIABLE is most dissimilar to

- A. Insulted
- B. unfriendly ✓
- C. Faithful
- D. Distasteful

129. LURE is most similar to

- A. suspect
- B. Tickle
- C. Decoy
- D. Resist

130. RECANT is most dissimilar to

- A. Rectify
- B. ignore
- ✓ C. Affirm
- D. Offend

131. PERILOUS is most dissimilar to

- ✓ A. Safe
- B. Similar
- C. Disciplined
- D. Honest

132. ISOLATION is most similar to

- ✓ A. Solitude
- B. Plentitude
- C. Fear
- D. disease

133. PUNCTUAL is most dissimilar to

- A. precious
- B. Close
- ✓ C. Tardy
- D. Sloppy ✓

134. INFIRM is most similar to

- A. fortitude
- B. Hospital
- ☒ C. Weak
- D. Short

135. OUTFIT is most similar to

- A. Strong
- ☒ B. furnish
- C. Indoors
- D. Special

136. LULL is most similar to

- A. Noise
- B. mark
- C. Pause
- ☒ D. Boring

137. Seasonal unemployment refers to

- A. Banks
- B. Private Sector
- ☒ C. Agriculture
- D. Public Sector

138. Which of the following states is highly flood prone as well as drought prone?

- ☒ A. Bihar
- B. Madhya Pradesh
- C. Uttar Pradesh
- D. West Bengal

139. The Yellow Stone National Park is in

- A. France
- B. Maldives
- ☒ C. U. S. A.
- D. China

140. Where is the National Remote Sensing Agency situated?

- A. Dehradun
- ☒ B. Shadnagar
- C. Bangalore
- D. Chennai

141. The equator passes through which of the following continents?

- A. Australia
- B. North America
- ☒ C. Africa
- D. Europe

142. Ashok Pandit is known for his outstanding performance in which of the following?

- ☒ A. Shooting
- B. Wrestling
- C. Swimming
- D. Kabaddi

143. Which of the following cities is known as Electronic City of India?

- ☒ A. Hyderabad
- B. Bangalore
- C. Mumbai
- D. Gurgaon

144. The first underground railway in India was opened in 1984 in

- A. Bangalore
- B. Mumbai
- ☒ C. Kolkata
- D. Chennai

145. Who wrote Dragons Seed?

- A. Shakespeare
- B. Keats
- ☒ C. Pearl S. Buck
- D. Shelley

146. The Paratroopers Training School of the Indian Air Force, is located at

- A. Pune
- B. Dehradun
- ☒ C. Agra
- D. Nasik

147. Who was the first Indian to go into space?

- ☒ A. Ravi Malhotra
- B. Rakesh Sharma
- C. Satish Dhawan
- D. None of these



148. Bismillah Khan is associated with

- ☒ A. Shehnai ✓
- B. Flute
- C. Sarod
- D. Tabla

149. Which of the following personalities inspired Green Revolution in India?

- ☒ A. M.S. Swaminathan ✓
- B. K.M. Panikkar
- C. N.E. Borlaug
- D. R.A. Kidwai

150. Which of the following is a violin player?

- A. Mallikarjun Mansur
- ☒ B. None of these
- C. V.C. Jog
- D. Hariprasad Chaurasia

151. The famous Meenakshi-temple is in

- A. Gujarat
- ☒ B. Tamil Nadu
- C. Maharashtra
- D. Orissa

152. The headquarters of the National Power Training Institute is located in

- A. Bhopal
- B. Lucknow
- C. Faridabad
- D. Hyderabad

153. Guru Gopinath was an exponent of

- ☒ A. Kathakali
- B. Bharatnatyam
- C. Kuchipudi
- D. Kathak

154. The Indian Institute of Science is located at

- A. Madras
- ☒ B. Bangalore ✓
- C. New Delhi
- D. Kharagpur

155. Kishori Amonkar is famous in which of the following fields?

- A. Social service
- B. Film acting
- ☒ C. Music
- D. Dance

156. The world famous Ajanta caves are situated in the state of

- A. Karnataka
- B. Madhya Pradesh
- ☒ C. Maharashtra ✓
- D. Orissa

157. Who among the following was the first woman Chief Justice of a High Court?

- A. Sujata Manohar
- B. Rani Jethmalani
- ☒ C. Leila Seth ✓
- D. Geeta Mukherjee

158. Who receives Dronacharya Award?

- ☒ A. Sports Coaches ✓
- B. Movie actors
- C. Scientists
- D. Sportsmen

159. Which among the following ranks in Indian Air Force is the highest?

- A. Squadron Leader
- B. Flying Officer
- ☒ C. Air Commodore ✓
- D. Wing Commander

160. The first English newspaper in India was started by

- A. Lord William Bentinck
- ☒ B. Dadabhai Naoroji ✓
- ☒ C. J.A. Hickey ✓
- D. Rabindranath Tagore

161. In which year India Joined the United Nations?

- A. 1957
- B. 1954 ✓
- C. 1955
- D. 1956

162. Who discovered magnetic field of electric current?

- A. Edison
- ☒ B. Ampere
- C. Faraday
- D. Fleming

163. Who was the first Indian to be elected to the British Parliament?

- A. Motilal Nehru
- B. Gopalakrishna Gokhale
- ☒ C. Dadabhai Naoroji
- D. Mahatma Gandhi

164. A hole is made in a brass plate and it is heated. The size of the hole will

- A. decrease
- B. remain unchanged
- C. first increase and then decrease
- D. increase

165. The Panchayat Raj is a

- A. Two-tier System
- ☒ B. Three-tier System
- C. One-tier System
- D. Four-tier System

166. Headquarters of Amnesty International is at

- A. Berlin
- B. New York
- ☒ C. London
- D. Washington

167. Which country leads in the production of rubber?

- A. India
- ☒ B. Malaysia
- C. Australia
- D. Myanmar

168. Which is the most irrigated State in India?

- A. Andhra Pradesh
- B. Bihar
- ☒ C. Punjab
- D. Uttar Pradesh

169. Which of the following animals was not native to India?

- A. Tiger
- B. Elephant
- ☒ C. Horse
- D. Rhinoceros

170. Days and Nights are equal throughout the globe when the sun is above
- A. Equator
  - B. Tropic of cancer
  - C. Poles
  - D. Tropic of Capricorn