

**RFO RECRUITMENT-2011-12 – PRELIMINARY EXAM - APTITUDE**

**(Answers are shown in Red)**

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1. Which of the following is not a greenhouse gas?
  - (A) Trichlorofluoromethane (CFC-11 that is  $\text{CFCl}_3$ ).
  - (B) Tetrachloromethane (Carbon tetrachloride that is  $\text{CCl}_4$ ).
  - (C) Methane ( $\text{CH}_4$ ).
  - (D) Nitrous oxide ( $\text{N}_2\text{O}$ ).
  - (E) Argon.
  
2. Biological Magnification (also called Bioamplification) means-
  - (A) Disproportionate increase in population of primary producers in a food chain.
  - (B) Disproportionate increase in size of an animal in response to high food intake.
  - (C) Increase in population of prey animals due to decline of predator animals.
  - (D) Increase in population of predator animals due to increase of prey animals.
  - (E) Increase in concentration of non degradable pollutant substance occurring in the food chain.
  
3. In agriculture, “organic farming” **does not** rely on the following technique-
  - (A) Crop rotation.
  - (B) Biological pest control.
  - (C) Compost usage.
  - (D) Genetically modified organism usage.
  - (E) Green manure.
  
4. If the “total coliform count” of the water of a river is very high, it indicates that river water is-
  - (A) Having decreased Biological Oxygen Demand.
  - (B) Having high content of heavy metals.
  - (C) Ideal to be used for drinking.
  - (D) Contaminated by fecal matter of animals and human population.
  - (E) Getting polluted by medical wastes.
  
5. Which of the following disorders/maladies in human population is least attributable to the combination of sedentary lifestyle and high intake of fatty food-
  - (A) Hypertension (high blood pressure).
  - (B) Allergy.
  - (C) Diabetes.
  - (D) Obesity.
  - (E) Cardiovascular disease (heart disease).
  
6. When a shaving brush is dipped in water and then taken out, the hairs in the brush tend to cling to one another. This phenomena is due to-
  - (A) Electromagnetic forces between the hairs.
  - (B) Viscosity.
  - (C) Surface tension.
  - (D) Plastic forces between the hairs.
  - (E) Reduction of frictional forces between the hairs.

7. Scalding by steam causes more pain and damage to skin and tissue than that caused by boiling water because-
- (A) The temperature of steam is much higher than that of boiling water.
  - (B) The small particles of water in steam enter the skin pores and burns the skin from inside.
  - (C) Nerves of the body are more sensitive to gases and vapours than liquids.
  - (D) When steam condenses on the skin it releases its latent heat of vaporization that does not happen with boiling water.
  - (E) The entropy of steam is higher than water.
8. White light reflected from thin oil films and soap bubbles shows colours of white light spectrum. The phenomena responsible for colour formation is-
- (A) Scattering of light.
  - (B) Total internal reflection of light.
  - (C) Polarization of light.
  - (D) Diffraction of light.
  - (E) Interference of light.
9. It is easier to float and swim in sea water as compared to that in freshwater rivers. This is because-
- (A) Sea water has greater specific gravity than fresh river water.
  - (B) Sea water is uncontaminated whereas river water is not.
  - (C) Salt molecules of sea water repel living bodies aiding floating.
  - (D) The electrolytes lost in effort of swimming in sea is replenished by the salts present in sea water.
  - (E) Seas are deeper and bigger than rivers.
10. When a stationary bus in which we sit suddenly moves in a forward direction, we get thrown in the backward direction with a jerk. This phenomenon can be explained by -
- (A) Newton's first law of motion.
  - (B) Newton's second law of motion.
  - (C) Newton's third law of motion.
  - (D) Law of conservation of energy.
  - (E) Law of equipartition of energy.
11. Which chemical, that produces acetylene gas reacting with air moisture, is often used to ripen fruits (generally mangoes) artificially?
- (A) Calcium carbosulphide.
  - (B) Zinc sulphide.
  - (C) Calcium sulphide.
  - (D) Zinc carbide.
  - (E) Calcium carbide.
12. Which of the following **is not** a polymer?
- (A) Cellulose.
  - (B) Rubber.
  - (C) Soap.
  - (D) Nylon.
  - (E) Teflon.

13. Which of the following gases is dissolved under pressure in water to make drinking soda (also called club soda or carbonated water)?
- (A) Carbolic acid.  
 (B) Carbon monoxide.  
 (C) Carbon tetrachloride.  
 (D) Carbon dioxide.  
 (E) Ethyl alcohol.
14. Which of the following **statements is false** about LPG (Liquefied Petroleum Gas) supplied for cooking purposes in India?
- (A) It contains a mixture of butane ( $C_4H_{10}$ ) and propane ( $C_3H_8$ ).  
 (B) It is heavier in density than air.  
 (C) It contains an odorant so that it can be detected in case of a leak.  
 (D) It contains 52% methane ( $CH_4$ ) by volume along with oxygen.  
 (E) It is manufactured during the refining of crude oil.
15. Which of the following **is not** a colloidal suspension?
- (A) Smoke.  
 (B) Writing ink.  
 (C) Milk.  
 (D) Vinegar.  
 (E) Blood.
16. The correct match the diseases of left column with the body organs/ systems they afflict is

DISEASE	ORGAN/SYSTEM
1. Epilepsy	A. Nervous system
2. Cataract	B. Bone joints and muscles
3. Tuberculosis	C. Eye
4. Arthritis	D. Respiratory system

- (A) 1A    2D    3B    4C  
 (B) 1C    2A    3B    4D  
 (C) 1A    2C    3D    4B  
 (D) 1C    2D    3B    4A  
 (E) 1A    2B    3D    4C
17. Bacteria is unable to survive in a highly salted pickle because -
- (A) Bacteria get killed by plasmolysis (Plasma membrane pulling away from cell wall due to loss of water through osmosis).  
 (B) Salt prevents oxygen from reaching the bacteria which causes their death.  
 (C) Salt does not allow bacteria to multiply, so no second generation is formed.  
 (D) Bacteria cannot get nutrients from the pickle needed for their survival.  
 (E) Bacteria are killed by the strong electric charges present on the ions of salt.
18. 100 grams of which food item below will contain least amount of cholesterol?
- (A) Chicken liver.  
 (B) Potato.  
 (C) Butter.  
 (D) Eggs.  
 (E) Beef.

19. Of the SEVEN vegetables Beetroot, Ginger, Onion, Potato, Radish, Sweet potato and Turnip, the **correct and complete list** of stem modifications are-
- (A) Beetroot, Ginger and Turnip only.
  - (B) Ginger, Potato and Sweet potato only.
  - (C) Ginger, Onion and Potato only.
  - (D) Beetroot, Potato and Sweet potato only.
  - (E) Potato, Sweet potato and Turnip only.
20. Which of the following **is not a** mosquito borne disease?
- (A) Malaria.
  - (B) HIV/AIDS.
  - (C) Dengue fever.
  - (D) Filaria.
  - (E) Chikungunya.
21. A train went from Mangalore to Sakleshpur with a speed of 40 kilometers per hour and returned back with a speed of 60 kilometers per hour. The average speed of the train for the complete journey i.e. Mangalore-Sakleshpur-Mangalore is -
- (A) 46 kilometers per hour.
  - (B) 48 kilometers per hour.
  - (C) 50 kilometers per hour.
  - (D) 52 kilometers per hour.
  - (E) None of these.
22. If  $\alpha$  and  $\beta$  are two positive acute angles such that  $0 < \sin\alpha < 0.5$  and  $0 < \cos\beta < 0.5$ , Then one of the possible values of the angle  $(\alpha + \beta)$  is -
- (A) 30 degrees.
  - (B) 45 degrees.
  - (C) 90 degrees.
  - (D) 150 degrees.
  - (E) None of these.
23. If the volumes of (a) a cube of each side 'r' cms, (b) a sphere of radius 'r' cms, (c) a cylinder of radius as well as height 'r' cms and (d) a right circular cone of radius 'r' cms and vertical height 'r' cms are arranged in increasing order (smallest first, largest last) the correct sequence will be-
- (A) Cube, cone, cylinder, sphere.
  - (B) Cone, cube, cylinder, sphere.
  - (C) Cube, cone, sphere, cylinder.
  - (D) Cone, cube, sphere, cylinder.
  - (E) None of these.
24. If an error of 1% is made in measuring the side of a cube, the error in calculation of its volume will be most closely equal to-
- (A) 1%.
  - (B) 2%.
  - (C) 3%.
  - (D) 4%.
  - (E) None of these.

25. A train 100 meters long moving with a constant velocity crosses a railway platform 400 meters in one minute. The velocity of the train is-
- (A) 6 kilometers per hour.
  - (B) 24 kilometers per hour.
  - (C) 27 kilometers per hour.
  - (D) 30 kilometers per hour.
  - (E) None of these
26. A student appeared in PUC examination consisting of SIX subjects, each carrying maximum 100 marks. In TWO subjects the average of her marks was 48% and in the other FOUR subjects the average of her marks was 69%. What was the overall average percentage of marks she scored in the PUC examination (all six subjects)?
- (A) 58.50 %.
  - (B) 59.50 %.
  - (C) 61.00 %.
  - (D) 62.00 %.
  - (E) None of these.
27. The price of honey increased in February 2011 by 10 % over the January 2011 price. Falling demand caused a reduction of 10 % in March 2011 computed on its price of February 2011. The price in March 2011 after price reduction is, compared to the price in January 2011 -
- (A) 1 % less.
  - (B) Equal to January price.
  - (C) 1 % more.
  - (D) 2 % more.
  - (E) None of these.
28. I lent a certain sum of money for five years on simple interest at some annual rate of interest. I found that I would have earned the same interest on that lending in four years, if the rate of interest had been 2 % more. The rate of interest at which I had lent the money is-
- (A) 6 %.
  - (B) 8 %.
  - (C) 10%.
  - (D) Cannot be calculated unless amount lent is known.
  - (E) None of these.
29. In a stock of mortar cement, sand and gravel were mixed in the ration of 1:2:3. If while making the mortar 32 cubic meters of sand had been added extra, the ratio of cement, sand and gravel would have been 1:4:3. What is the original volume of mortar?
- (A) 60 cubic meters.
  - (B) 72 cubic meters.
  - (C) 84 cubic meters.
  - (D) 96 cubic meters.
  - (E) None of these.
30. If  $3(6a - b) = (9a + b)$  the ratio  $a : b$  is-
- (A) 4 : 9
  - (B) 4 : 27
  - (C) 2 : 9
  - (D) 2 : 27

- (E) None of these
31. Aman and Babu can do a job alone in 12 days and 24 days respectively. They start the work together but 6 days before the completion of job, Aman quits it, but Babu continues with it. In how many days will the job be completed from start to finish?
- (A) 6 days.  
(B) 12 days.  
(C) 18 days.  
(D) 24 days.  
(E) None of these.
32. The arithmetic mean of two numbers is 13 and the Geometric mean is 12. The difference of the two numbers is -
- (A) 6.  
(B) 8.  
(C) 10.  
(D) Data given is insufficient.  
(E) None of these.
33. The ratio of my age and that of my father today is 1 : 2. Six years later, this ratio will become 11 : 20. One of us today is aged -
- (A) 27 years.  
(B) 30 years.  
(C) 52 years.  
(D) 56 years.  
(E) None of these.
34. If  $a^m a^n = a^{m+n}$ , then the value of  $\{m(n-2) + n(m-2)\}$  is equal to-
- (A) -1  
(B) 0  
(C) 1  
(D) Indeterminate.  
(E) None of these.
35. A sum of money invested in a bank giving compound interest annually doubles itself in 5 years. If somebody wants to make his investment 8 times, for how much period will the investment have to be made?-
- (A) 10 years.  
(B) 15 years.  
(C) 20 years.  
(D) 25 years.  
(E) None of these
36. Inside a circle of radius 1 cm is drawn the square of the largest possible area. What will be the area of the square?
- (A) 2 sq.cms.  
(B) 3 sq.cms.  
(C)  $2\pi$  sq. cms.  
(D)  $3\pi$  sq.cms.  
(E) None of these.

37. The value of  $(2) \times (2^{1/2}) \times (2^{1/4}) \times (2^{1/8}) \times (2^{1/16}) \dots$  infinite times is  
(A) 1  
(B) 2  
(C) 4  
(D) Infinity.  
(E) None of these.
38. Pure milk costs Rs 36 a litre and good water costs Rs 12 per litre. In what ratio should milk and water be mixed, if the diluted milk is to be sold at Rs 30 per litre without any profit or loss?  
(A) 2:1  
(B) 3:1  
(C) 4:1  
(D) 3:2  
(E) None of these.
39.  $(4^{71} + 4^{72} + 4^{73} + 4^{74})$  is always divisible by-  
(A) 11  
(B) 13  
(C) 17  
(D) 19  
(E) None of these.
40. Amar, Bhikhu, Chander and Dinesh took a private forest on a one month lease paying Rs 3050 for grazing their cows. Amar grazed 24 cows for 15 days, Bhikhu 8 cows for 5 days, Chander 15 cows for 6 days and Dinesh 12 cows for 10 days. As per business partnership norms, share of Chander in lease amount is-  
(A) Rs 200  
(B) Rs 450  
(C) Rs 600  
(D) Rs750  
(E) None of these
41. If  $0.009 \div \beta = 0.01$ , the value of  $\beta$  is-  
(A) 9  
(B) 0.9  
(C) 0.09  
(D) 0.009  
(E) None of these.
42. In the series 0, 3, 8, 15, 24, 35, m, 63, 80, ..... the correct value of m is -  
(A) 42  
(B) 45  
(C) 48  
(D) 54  
(E) None of these.

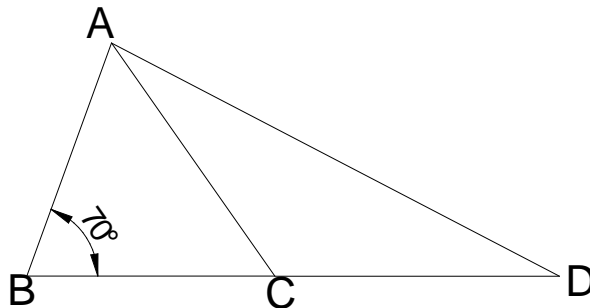
43. In the series 1, 3, 7, 15, 27, 63, 127, there is one number that does not belong to it as it does not follow the rule of series. That number is-
- (A) 7
  - (B) 15
  - (C) 27
  - (D) 63
  - (E) None of these.

44.  $\sqrt{20 + \sqrt{20 + \sqrt{20 + \dots}}}$  infinite times =

- (A) 3
  - (B) 4
  - (C) 5
  - (D) 6
  - (E) None of these.
45. If a% of b is N then b% of a will be-

- (A) aN
- (B) bN
- (C) N/a
- (D) N/b
- (E) None of these.

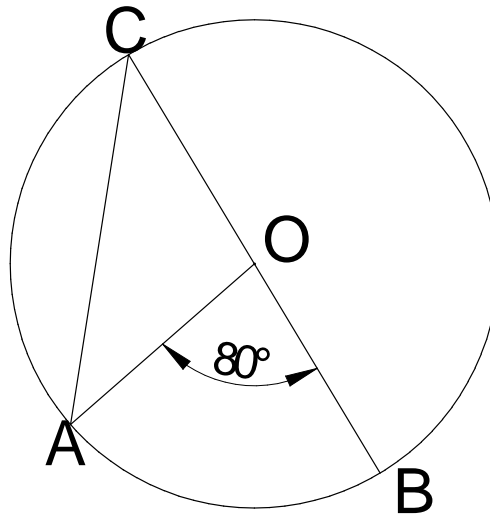
46. In the figure given below  $AB = BC$  and  $AC = CD$ . Then angle ADC is-



- (A) 25 degrees.
- (B) 27.5 degrees.
- (C) 30 degrees.
- (D) 32.5 degrees.
- (E) None of these.

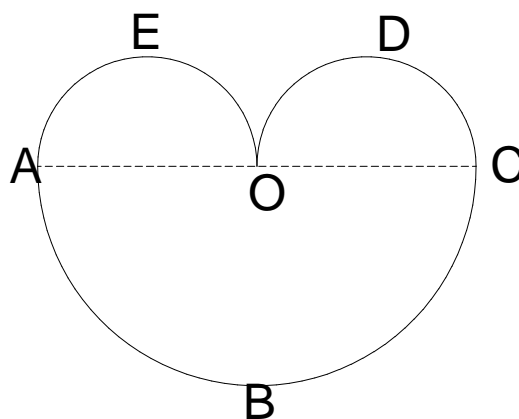


47. In the figure given below , if O is center of circle, angle CAO should be equal to-



- (A) 20 degrees.  
 (B) 25 degrees.  
 (C) 30 degrees.  
 (D) 35 degrees.  
 (E) None of these.
48. On a horizontal ground stand two vertical pillars of heights 20 mts. and 80 mts. some distance apart. The vertical height of the point of intersection of the lines joining the tip of each pillar to the base of other, will be -  
 (A) 12mts above ground.  
 (B) 14 mts above ground.  
 (C) 16 mts above ground.  
 (D) 18 mts above ground.  
 (E) Data is insufficient.

49. The rather heart shaped figure shown below is made up of three semicircles. O is middle point of AC. If  $AC = 2r$ , the area of the full figure AEODCBA is -



- (A)  $0.25\pi r^2$ .  
 (B)  $0.50\pi r^2$ .  
 (C)  $0.75\pi r^2$ .  
 (D)  $\pi r^2$ .  
 (E) None of these.
50. If I am travelling at 36 kilometers per hour on my bike, how many meters am I covering every second-

- (A) 600.
- (B) 100.
- (C) 60.
- (D) 10.
- (E) None of these

51. The arithmetic mean of  $n$  real numbers is 'a' and standard deviation is 's'. If to each of the  $n$  real numbers, 5 is added, the following statement is correct about the new series of numbers formed.

- (A) Their arithmetic mean is 'a' and standard deviation is 's'.
- (B) Their arithmetic mean is '(a + 5)' and standard deviation is 's'.
- (C) Their arithmetic mean is '(a + 5)' and standard deviation is more than 's'.
- (D) Their arithmetic mean is 'a' and standard deviation is more than 's'.
- (E) None of these

52. The data of marks scored by students in a tuition group are as follows-

MARKS	12	14	15	16	17
NO. OF STUDENTS	3	2	5	4	2

The median of the marks is-

- (A) 12
- (B) 14
- (C) 15
- (D) 16
- (E) 17

**Data for questions 53 to 58**

The revenue realized in Harigram forest division for three years from sale of timber of various species is given in table below. All rates are in Rupees per cubic meters without taxes and revenues are in lakh rupees rounded off to the nearest ten thousand.

**TABLE SHOWING TIMBER EARNINGS**

Sno	Timber specie	Year 2008		Year 2009		Year 2010	
		RATE	REVENUE	RATE	REVENUE	RATE	REVENUE
1	Rosewood	75000	103.5	83000	120.4	91000	202.0
2	Teakwood	60000	128.2	63000	196.6	68000	277.5
3	Xylia	10000	72.0	12000	96.0	15000	135.0
4	Honne	18000	59.5	21000	72.2	30000	89.8
5	Matthi	11000	112.0	15000	231.0	17000	304.1
6	Acacia	3000	10.0	3500	23.0	4500	36.8

Based upon this data answer the following five questions-

53. What is the total revenue (without tax and in lakh rupees) from timber for the year 2009?
- (A) 738.2
  - (B) 739.2
  - (C) 740.2
  - (D) 741.2
  - (E) None of these.

54. The rate of which species of timber grew the fastest between the years 2008 and 2010?  
 (A) Matthi  
 (B) Xylia  
 (C) Acacia  
 (D) Rosewood  
 (E) Honne
55. The average volume of Xylia timber sold for the period years 2008 to 2010 is closest to -  
 (A) 760 cubic meters per year.  
 (B) 787 cubic meters per year.  
 (C) 806 cubic meters per year.  
 (D) 826 cubic meters per year  
 (E) 860 cubic meters per year.
56. The volume of timber sold of which species in 2010 was highest when compared with that sold in 2008?  
 (A) Matthi  
 (B) Xylia  
 (C) Teakwood  
 (D) Rosewood  
 (E) Acacia
57. The government of Karnataka levies a tax of 12% on rate value of Rosewood and 8% on rate values timber of all other species. The tax so receivable in year 2010 in lakh rupees is closest to-  
 (A) 83.61  
 (B) 86.32  
 (C) 87.77  
 (D) 91.70  
 (E) 95.12

**Data for questions 58 and 59**

The data of forest offences (nature wise) of Raigarapura forest division is given below in tabular form.

**DETAILS OF FOREST OFFENCES**  
**YEAR: 2009-10**

TYPE OF OFFENCE	NUMBER OF OFFENCES
Illegal grazing	138
Illicit felling	225
Poaching animals	57
Encroachment	300
Illegal mining	19
Littering	21
Poisoning waterholes	3

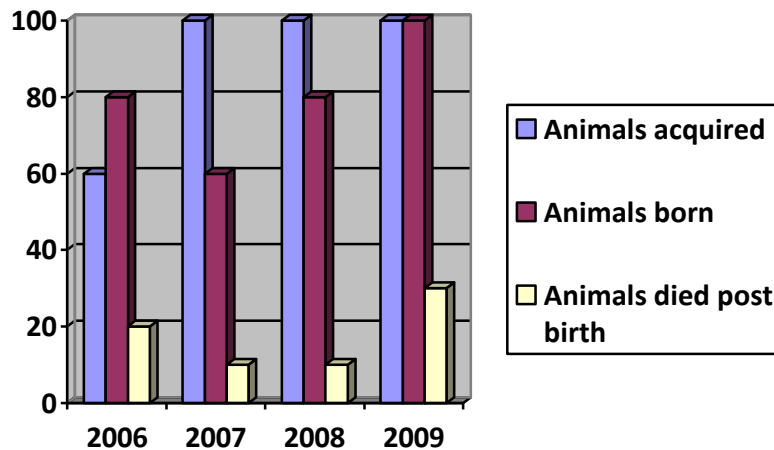
Based on this answer the following two questions-

58. If the above data is represented in a pie diagram, the angle of sector showing Encroachments will be closest to-  
 (A) 102 degrees.  
 (B) 112 degrees.  
 (C) 122 degrees.  
 (D) 132 degrees.  
 (E) 142 degrees.

59. If 60% of illicit fellings are in Malki lands, should the offence of Malki land fellings be shown in the above pie diagram separately, the angle of its sector will be closest to –
- (A) 48 degrees.  
 (B) 52 degrees.  
 (C) 56 degrees.  
 (D) 60 degrees.  
 (E) 64 degrees.

**Data for questions 60 to 62**

The bar diagram given below depicts the data of Bhimpura zoo of the years 2006 to 2009. “Animals acquired” means animals which are given to the zoo by NGO’s, Volunteers, Rescue centers etc. “Animals born” are those which are born of animals already in the zoo. And “Animals died post birth” refers to those “animals born” which die within the calendar year of being born. Based on these explanations and data answer the following questions. (All figures of animals given in Y axis are in numbers.)



60. The population of animals in the zoo increased maximum in numbers added in the year/years -
- (A) 2006  
 (B) 2007  
 (C) 2008  
 (D) 2007, 2008 and 2009  
 (E) 2008 and 2009
61. “Animal infant mortality”, which is the ratio of “Animals died post birth” to “Animals born” is highest in the year/years--
- (A) 2009  
 (B) 2008  
 (C) 2007  
 (D) 2006  
 (E) 2007 and 2008
62. If “Animals acquired” number in 2006 had been the same as in 2009, , the “All Animal mortality” for the year 2006, defined as ratio of “Animals died post birth” to the sum of “Animals acquired “and “Animals born”, expressed as percentage, would have been closest to -
- (A) 9.99%.  
 (B) 11.11%.

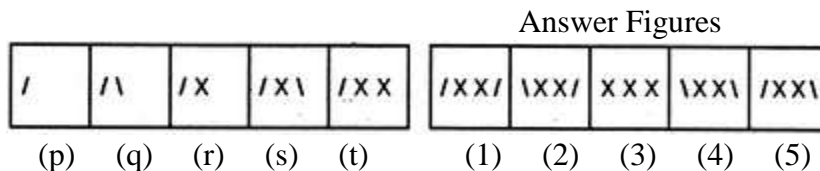
- (C) 13.13%.  
 (D) 15.15%.  
 (E) 17.17%.
63. For the eight numbers **9,13,5,3,11,1,15** and **7**, the arithmetic mean is -  
 (A) 5  
 (B) 7  
 (C) 9  
 (D) 11  
 (E) **8**
64. For the same eight numbers i.e. **9,13,5,3,11,1,15** and **7**, the variance is -  
 (A) 19  
 (B) 20  
 (C) **21**  
 (D) 22  
 (E) None of these.
65. For which of the following statistical measures, the algebraic sum of its deviation from the variable values of the full data is zero?  
 (A) **Arithmetic mean.**  
 (B) Median.  
 (C) Mode.  
 (D) Variance.  
 (E) Standard deviation.
66. The following is the information known about the intelligence quotient(IQ) of SIX persons X, Y, Z, A, B and C. (a) X has more IQ than A. (b) Y's IQ is equal to that of B. (c) Z has less IQ than C and B. (d) A has higher IQ than Y.  
 Thus the person with highest intelligence quotient is-  
 (A) X  
 (B) Y  
 (C) Z  
 (D) A  
 (E) B
67. In the series  
 ..... bcc.....ac.....aabb.....ab.....cc  
 The combination of alphabets that should be filled up in the blanks in the order in which they appear so as to make the series conform to a rule is-  
 (A) bacab  
 (B) abaca  
 (C) aabca  
 (D) bcaca  
 (E) abbac

**Directions for questions 68 and 69.**

In a certain code '219' means "*life from water*"; '732' means "*light from sun*" and '69' means "*salt water*". Based on this, answer the next two questions.

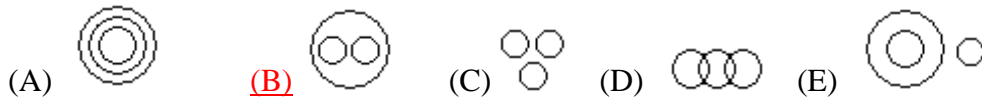
68. Which of the following is the correct code for "life"?  
 (A) 1  
 (B) 2

- (C) 9  
 (D) Either 2 or 9.  
 (E) Insufficient data to find this.
69. Which of the following is the correct code for 'light'?
- (A) 2  
 (B) 3  
 (C) 7  
 (D) Either 3 or 7.  
 (E) None of the above four choices.
70. Amongst the five flying living beings given against the choices below one of them is odd as it cannot be grouped with other four. Which is this flying living being?
- (A) Crow.  
 (B) Sparrow.  
 (C) Parrot.  
 (D) Pigeon.  
 (E) Bat.
71. Amongst the five words related to human body given against the choices below one of them is odd as it cannot be grouped with other four. Which one is this?
- (A) Neck.  
 (B) Brain.  
 (C) Liver.  
 (D) Spleen.  
 (E) Pancreas.
72. The relationship *Murder : Crime* is most similar to -
- (A) Corruption : Cancer.  
 (B) Cancer : Radiation.  
 (C) Radiation ; X rays.  
 (D) Xrays : Tuberculosis.  
 (E) Tuberculosis : Disease.
73. Please select the figure amongst answer figures (numbered 1 to 5) which will correctly continue the series of figures (named p to t) below-

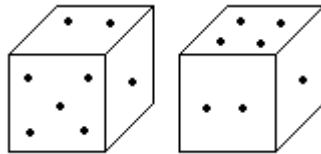


- (A) 1  
 (B) 2  
 (C) 3  
 (D) 4  
 (E) 5

74. Which of the following Venn diagrams correctly indicates the relationship among Tiger, Leopard and Carnivore?



75. Two positions of a regular dice are shown in the diagrams below. Based upon this, please answer as to how many points will be seen on the face opposite to the face containing five points.



- (A) 4  
 (B) 3  
 (C) 6  
 (D) 1  
 (E) 2

76. If ‘÷’ sign stands for “addition”, the sign ‘x’ for “subtraction”, the sign ‘+’ for “multiplication” and the sign ‘-’ for “division”, the correct value of  $\{ 1 \div 2 \times 3 + 4 - 3 \}$

will be-

- (A) 5/2  
 (B) 1  
 (C) 0  
 (D) -1  
 (E) None of these.

77. In the figure given below there are certain letters which are placed according to a rule/pattern. The letter that can replace the mark ‘?’ in the figure is-

F	I	O
A	J	K
E	M	?

- (A) P  
 (B) Q  
 (C) R  
 (D) S  
 (E) None of these.

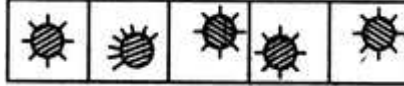
78. Govinda starts from his house and walks 9 kms towards North. Then he walks a distance of 5 kms towards South. After that, he takes a turn and walks 3 kms towards East. How far and in which direction he is from his house?

- (A) 5 kms West of his house.

- (B) 5 kms almost South west of his house.
- (C) 5 kms almost North west of his house.
- (D) 5 kms almost North east of his house.
- (E) 5 kms East of his house.

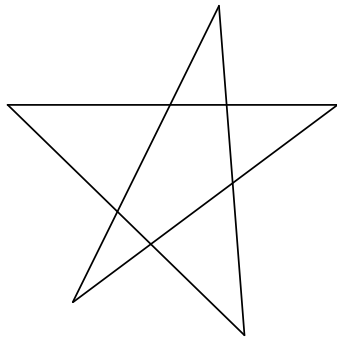
79. From the five figures given below, which is different from the other four?

(P) (Q) (R) (S) (T)



- (A) P
- (B) Q
- (C) R
- (D) S
- (E) T

80. How many triangles can be found contained in the diagram below?



- (A) 7
- (B) 8
- (C) 9
- (D) 10
- (E) None of these.

Please read the following statements

- (P) Every person in the world knows Sachin Tendulkar is an Indian cricketer.
- (Q) There are seven days in a week.
- (R) They who work hard always succeed.
- (S) The peacock is a beautiful bird.
- (T) Honey is sweet in taste.

Among the above, statement/ statements that is/are fact/facts will be-

- (A) Only P, Q, S and T.
- (B) Only Q, S and T.
- (C) Only S and T.
- (D) Only Q and T.
- (E) All, that is, P,Q,R,S and T.

**Directions for questions 82 to 85.**

In each question below are given two (three in case of question number 85 only) followed by conclusions. You have to take the given statements to be totally true, even if they seem to be at variance from well known facts. Read the conclusions and decide as to which of them logically follow from the given statements, disregarding commonly and well known facts. Then answer questions about conclusions.



Based on these, please answer questions 82 to 85.

81. **Statements:** (a) Some bats are tables.  
(b) All tables are donkeys.

- Conclusions:** (P) Some bats are donkeys.  
(Q) All donkeys are tables.

Mark your answers as follows-

- (A) If only conclusion P follows.  
(B) If only conclusion Q follows.  
(C) If either conclusion P or conclusion Q follows.  
(D) If neither conclusion P nor conclusion Q follows.  
(E) If both conclusions P and Q follow.

82. **Statements:** (a) Some fools are alligators.  
(b) Some alligators are stalwarts.

- Conclusions:** (P) No fool is a stalwart.  
(Q) All alligators are stalwarts.  
(R) Some stalwarts are fools.  
(S) No alligator is a fool.

Mark your answers as follows-

- (A) If only either conclusion P or conclusion R follows.  
(B) If only conclusion P and conclusion S follow.  
(C) If conclusion Q and conclusion R follow.  
(D) If conclusions P, R and S follow.  
(E) None of the conclusions follow.

83. **Statements:** (a) Some traders are sellers.  
(b) No seller is a cheat.

- Conclusions:** (P) No fool is a cheat.  
(Q) No seller is a trader.  
(R) Some traders are cheats.  
(S) Some sellers are traders.

Mark your answers as follows-

- (A) If only conclusion R follows.  
(B) If only conclusion S follows.  
(C) If conclusion Q and conclusion R follow.  
(D) If conclusions P, Q and S follow.  
(E) None of the conclusions follow.

84. **Statements:** (a) All Americans are Bhutanese.  
(b) All Bhutanese are Landlords.  
(c) All Landlords are Omanese.

- Conclusions:** (P) Some Omanese are Bhutanese.  
(Q) All Bhutanese are Americans.  
(R) Some Americans are Omanese.  
(S) All Landlords are Americans.

Mark your answers as follows-

- (A) If only conclusion P follows.  
(B) If only conclusion S follows.  
(C) If conclusion Q and conclusion R follow.  
(D) If conclusions P, Q and S follow.  
(E) None of the conclusions follow.

**Directions for questions 86 to 90**

Each question below consists of a statement followed by two arguments related to it. You have to analyze and rate the arguments and rate them as “**strong**” or “**weak**”. Please mark your options in the following way.

Mark (A) if only first argument is strong.

Mark (B) if only second argument is strong.

Mark (C) if either first or second argument is strong, but which one is not evident.

Mark (D) if neither first argument nor second argument is strong.

Mark (E) if only both the arguments are strong.

85. Should loyalty be the only criterion for promotion in any organization?

*First argument:* Yes. Without loyal personnel no organization can function.

*Second argument:* No. This will promote hypocrisy and partiality.

86. Should fashionable dresses be banned in India?

*First argument:* Yes. Fashions keep changing and cloth consumption increases by people trying to stay in trend.

*Second argument:* No. This kills a person’s right of self expression.

87. Should interviews be banned as being a part of recruitment?

*First argument:* Yes. It is a very subjective assessment of the candidate.

*Second argument:* No. It is an excellent instrument of judging a candidate’s motives and personality.

88. Should there be a ban on product advertising?

*First argument:* Yes. The money spent on advertising is large and inflates the cost of the product.

*Second argument:* No. It is an age of advertising. Unless your advertisement is better than your competitors, your product will not be known or sold.

89. Should students be allowed to take part in politics?

*First argument:* Yes. It inculcates qualities of leadership in them.

*Second argument:* No. It deviates their attention away from studies.

**Background information for questions 91 to 93**

A wild animal is defined as an animal that satisfies two conditions, namely, (a) It should not be owned or kept as a pet by any person, company, trust etc for any purpose and (b) It should be capable of moving on its own will only anywhere. If a human being is harmed by any wild animal, Forest department gives compensation subject to the following conditions-

- (a) The harm/damage should have occurred outside forest area. In case the harm/damage had taken place in a forest area, the suffering person should have had valid reasons for entering the forest.
- (b) The wild animal should not have been teased or provoked by the person who has suffered.
- (c) The sufferer should have, as far as it is possible, resisted the attack or at least tried to escape it.
- (d) All clear cut compensation cases are decided by Range Forest Officers.

Based upon the above, assuming that you are the Range Forest Officer of a range, what will be your **best decision with correct and complete reasoning** regarding compensation in the following cases?

90. Gangu, a snake charmer, was removing the fangs of a cobra snake in his hut in his village. He was bitten by the snake and died.
- (A) Snake charmers are entitled to keep snakes. The snake which bit was a wild animal, hence recommended for compensation.
  - (B) The snake cannot be called a wild animal. Hence compensation denied.
  - (C) The snake is a wild animal and it bit Gangu outside forest area. Hence recommended for compensation.
  - (D) The snake was in illegal possession of Gangu and he was teasing and injuring the Wild animal. Hence compensation denied.
  - (E) Gangu being a snake charmer living in a hut is poor. For the sake of his family recommended for compensation.
91. Jadeya's village was on the border of a forest. One morning stray dogs of the village chased him. He ran to escape them, entered the forest, where an elephant in "musth" attacked him. He was trampled by the elephant and died.
- (A) The scene of incident is inside forest area. Hence compensation denied.
  - (B) The scene of incident is inside forest area but Jadeya did not enter that on his own will. Hence recommended for compensation.
  - (C) There is no evidence of the victim fighting the elephant. Hence compensation denied.
  - (D) Jadeya should have tried to escape the elephant by dodging it. Since he did not do that, it is evident that he was either drunk or wanted to kill himself. Hence compensation denied.
  - (E) Jadeya was not expected to run to or inside a forest fearing stray dogs. Hence compensation denied.
92. A leopard came to a village from a forest and got trapped in a room in the village. Nandu, a terminally ill HIV patient entered the room by opening the door for no reason. He was mauled to death by the leopard. A suicide note was found, written by Nandu, hours before the incident, in his house after his death.
- (A) The leopard is a wild animal and it killed Nandu outside forest area. Hence recommended for compensation
  - (B) The leopard trapped by villagers ceases to be a wild animal. Damage caused by the leopard is not damage by wild animal. Hence compensation denied.
  - (C) This is a case where a wild animal has been used for embracing death. Therefore death is self inflicted. Hence compensation denied.

- (D) The compensation rules of the department are insufficient to deal with this case. Hence matter to be submitted to Government for clarification/ decision.
- (E) Committing suicide by Nandu is an offence. Compensation, if given for it, will be like supporting offences. Hence compensation denied.

93. Please read the following four statements carefully.

- (P) Of the statements P,Q,R and S, the number of false statements is one.
- (Q) Of the statements P,Q,R and S, the number of false statements is two.
- (R) Of the statements P,Q,R and S, the number of false statements is three.
- (S) Of the statements P,Q,R and S, the number of false statements is four.

Which of the statements is actually true?

- (A) P
- (B) Q
- (C) **R**
- (D) S
- (E) All are false.

**Directions for questions 95 to 97**

Each question below consists of a statement followed by two assumptions numbered (P) and (Q). Consider the statement and decide which of the assumptions are implicit. Please mark your options in the following way.

*Mark (A) if only assumption P is implicit.*

*Mark (B) if only assumption Q is implicit.*

*Mark (C) if either assumption P or Q is implicit but which is unclear.*

*Mark (D) if neither of the two assumptions are implicit.*

*Mark (E) if both the assumptions are implicit.*

94. Statement: Computer education should start at school level itself.

- (P) Learning computers is easy.
- (Q) Computer education fetches jobs easily.

95. Statement: "An uniform for all forest department employees will help us identify the employees from all others."- A suggestion of Forest Department.

- (P) Wearing uniforms is a fashion all staff wants to go with.
- (Q) The department needs to identify its employees.

96. Statement: Most people who quit smoking gain weight. .

- (P) If one quits smoking he/she will gain weight.
- (Q) If one keeps smoking, he/she will not gain weight.

**Directions for questions 98 and 99.**

In each question below are given statement/ statements followed by conclusions. Read the conclusions and decide as to which of them logically follow from

the given statement/statements. Then answer questions about conclusions.  
Based on these, please answer questions 98 and 99.

97. **Statements :** (a) None but the rich can afford to travel by air.  
(b) Some of those who travel by air become sick  
(c) Some of those who become sick need treatment.

- Conclusions:** (P) All the rich persons travel by air.  
(Q) Those who travel by air become sick.  
(R) All the rich people become sick.  
(S) All those who travel by air are rich.

Mark your answers as follows-

- (A) If only conclusion P follows.  
(B) If only conclusion Q follows.  
(C) If only conclusion R follows.  
(D) If only conclusion S follows.  
(E) None of the conclusions follow.

98. **Statements :** A forest has Sandalwood and Ashoka trees in equal number. Three-fourths of all the trees are old and half the trees are in flowering.

- Conclusions:** (P) All Ashoka trees are flowering in the forest.  
(Q) All Sandalwood trees are flowering in the forest.  
(R) At least half the Ashoka trees are old.  
(S) Half of the Sandalwood trees are flowering in the forest

Mark your answers as follows-

- (A) If only conclusion P follows.  
(B) If only conclusion Q follows.  
(C) If only conclusion R follows.  
(D) If only conclusion S follows.  
(E) None of the conclusions follow.

99. The Gol Gumbaz is in Bijapur. Bijapur is in India. Thus the conclusion “*Gol Gumbaz is in India*” is--

- (A) Definitely true.  
(B) Probably true.  
(C) Cannot be commented upon.  
(D) Probably false.  
(E) Definitely false.

-----END OF TEST QUESTIONS-----