ONLINE TEST SERIES
NIMCET -1

MATHEMATICS

1. How many proper subsets of {1,2,3,4,5,6,7} contain the numbers 1 and 7 ?
(1) 7 (2) 31 (3) 32 (4) 62

2. A survey shows that 63% of the Americans like cheese where as 76% like apples. If x% of the Americans lie both cheese and apples, then we have
(1) $x \geq 39$ (2) $x \leq 63$ (3) $39 \leq x \leq 63$ (4) None of these

3. Set A has 3 elements and set B has 4 elements. The number of injection that can be defined from A to B is
(1) 144 (2) 12 (3) 24 (4) 64

4. If $(1+x)^n = a_0 + a_1x + a_2x^2 + ...a_nx^n$, then $\left(1+\frac{a_1}{a_0}\right)\left(1+\frac{a_2}{a_1}\right)\left(1+\frac{a_3}{a_2}\right)....\left(1+\frac{a_n}{a_{n-1}}\right)$

(1) $\frac{n^n}{n!}$ (2) $\frac{(n+1)^n}{n!}$ (3) $\frac{(n+1)^n}{n!}$ (4) $\frac{(n-1)^n}{n!}$

5. A coin is tossed three times. The probabilities of getting head and tail alternatively is
(1) 1/11 (2) 2/3 (3) 3/4 (4) 1/4

6. One hundred identical coins, each with probability p of showing up a head, are tossed, If 0<p<1 and if the probability of heads on exactly 50 coins is equal to that of heads on exactly 51 coins then the value of p, is
(1) 1/2 (2) 49/101 (3) 50/101 (4) 51/101

7. In a Poisson distribution if $P[X=3] = \frac{1}{4}P[X=4]$ then $P[X=5] = k\,P[X=7]$ where k equals to

(1) 1/7 (2) 21/128 (3)128/21 (4) 21/256

8. The value of 'a' for which the system of equations

$$a^3x + (a+1)^3y + (a+2)^3z = 0$$
$$ax + (a+1)y + (a+2)z = 0$$
$$x + y + z = 0$$

has a non zero solution, is
(1) 1 (2) 0 (3) –1 (4) none of these

9. If $y = a\log x + bx^2 + x$ has its extremum value at $x = -1$ and $x = 2$, then

(1) a=2, b=-1 (2) $a = -2, b = \frac{1}{2}$ (3) a=2, b= $-\frac{1}{2}$ (4) $a = 1, b = -\frac{1}{2}$

10. If $a \neq p, b \neq q, c \neq r$ and $\begin{bmatrix} p & b & c \\ a & q & c \\ a & b & r \end{bmatrix}$ =0, then the value of $\frac{p}{p-a} + \frac{q}{q-b} + \frac{r}{r-c} =$ is

(1) 0 (2) 1 (3) –1 (4) 2

11. Let $\omega \neq 1$ be a cube root of unity and $i = \sqrt{-1}$. The value of the determinant

$$\begin{vmatrix} 1 & 1+i+\omega^2 & \omega \\ 1-i & -1 & \omega^2-1 \\ -i & -1+\omega-1 & -\omega^3 \end{vmatrix}$$ is

(1) 0 (2) ω (3) ω^2 (4) $1+\omega^2$

12. The point (4,1) undergoes the following three transformation successively:
(i) Reflection about the line y=x
(ii) Transformation through a distance 2 unit alone the positive direction of x-axis
(iii) Rotation through an angle of $\frac{\pi}{2}$ about the origin in the anticlockwise direction. The final position of the point is given by the coordinates.

(1) $\left(\frac{-1}{\sqrt{2}},\frac{7}{\sqrt{2}}\right)$ (2) $\left(\frac{1}{\sqrt{2}},\frac{7}{\sqrt{2}}\right)$ (3) $(-2,7\sqrt{2})$ (4) $(\sqrt{2},7\sqrt{2})$

13. The circle $x^2+y^2=9$ is contained in the circle $x^2+y^2-6x-8y+25=c^2$ if
(1) c=2 (2) c=3 (3) c=5 (d) c=10

14. The angle between the asymptotes of the hyperbola $27x^2-9y^2=24$ is
(1) 60º (2) 120º (3) 30º (4) 150º

15. If $f(x)=\begin{cases} x\sin\left(\frac{1}{x}\right) & \text{for } x\neq 0 \\ 0 & \text{for } x=0 \end{cases}$ then
(1) f is a continuous function (2) f'(0+) exits but f'(0-) does not exist (3) f'(0+) ≠ f'(0-) (4) f'(0+) and f'(0-) do not exist

16. The value of the integral $\int_3^6 \frac{\sqrt{x}}{\sqrt{9-x}+\sqrt{x}}dx$ is
(a) 1 (2) 1/2 (3) 3/2 (4) 2

17. The value of the integral $\int_0^{\frac{\pi}{4}} \frac{\sin x+\cos x}{3+\sin 2x}dx$ is
(1) log 2 (2) log 3 (3) 1/4 log 3 (4) 1/8 log 3

18. $\int \log_{10} x\,dx$ is
(1) $(x-1)\log_e x+c$ (2) $\log_e 10.x\log_e\left(\frac{x}{e}\right)+c$ (3) $\log_{10} e.x\log_e\left(\frac{x}{e}\right)+c$ (4) $\frac{1}{x}+c$

19. If $I_1=\int_0^1 2^{x^2}dx, I_2=\int_0^1 2^{x^3}dx, I_3=\int_1^2 2^{x^2}dx$ and $I_4=\int_0^2 2^{x^3}dx$ then
(1) $I_3=I_4$ (2) $I_3>I_4$ (3) $I_2>I_1$ (4) $I_1>I_2$

20. The area between the curves $y=2-x^2$ and $y=x^2$
(1) 8/3 (2) 4/3 (3) 2/3 (4) 5/3

21. The vectors $\vec{a},\vec{b}$ and $\vec{c}$ are equal in length and taken pairwise make equal angles. $\vec{a}=\hat{i}+\hat{j}$, $\hat{b}=\hat{j}+\hat{k}$ and $\vec{c}$ makan obtuse angle with the base vector *i*, then $\vec{c}$ is equal to
(1) $\hat{i}+\hat{k}$ (2) $-\hat{i}+4\hat{j}-\hat{k}$
(3) $-\frac{1}{3}\hat{i}+\frac{4}{3}\hat{j}-\frac{1}{3}\hat{k}$ (4) $\frac{1}{3}\hat{i}+\frac{4}{3}\hat{j}-\frac{1}{3}\hat{k}$

22. Let $\vec{a},\vec{b}$ and $\vec{c}$ be three non zero vectors, no two of which are collinear and the vector $\vec{a}+\vec{b}$ is collinear with $\vec{c}$, while $\vec{b}+\vec{c}$ is collinear with $\vec{a}$ then $\vec{a}+\vec{b}+\vec{c}.$, is equal to
(1) $\vec{a}$ (2) $\vec{b}$ (3) $\vec{c}$ (4) none of these

23. The value of $\sqrt{3}\cot 20^\circ-4\cos 20^\circ$ is
(1) 1 (2) –1 (3) 0 (4) none of these

24. If $\sin^{-1}\frac{2a}{1+a^2}-\cos^{-1}\frac{1-b^2}{1+b^2}=\tan^{-1}\frac{2x}{1-x^2}$ than x is equal to

(1) a (b) b (3) $\frac{a+b}{1-ab}$ (4) $\frac{a-b}{1+ab}$

25. In a triangle ABC, R is circumradius and $8R^2 = a^2 + b^2 + c^2$. The triangle ABC is

(1) Acute angled (2) obtuse angled (3) Right angled (4) none of these

26. A person stands at a point A due south of a tower and observes that its elevation is 60º. He then walks westwards towards B, where the elevation is 45º. At a point C on AB produced, he finds it to be 30º. Then AB/BC is equal to

(1)1/2 (2) 1 (3) 2 (4) 5/2

27. The point on the curve $y = 6x - x^2$, where the tangent is parallel to x-axis is

(a) (0,0) (b) (2,8) (c) (6,0) (d) (3,9)

28. The value of integral $\int_0^{\pi/2} \log \tan x \, dx$ is

(a) π (b) $\pi/2$ (c) $\pi/3$ (d) 0

29. If $\sin^2 x = 1 - x$, then $\cos^4 x + \cos^2 x =$

(a) 0 (b) 1 (c) 2/3 (d) –1

30. The value of $\int_0^{\sin^2 x} \sin^{-1} 5t \, dt + \int_0^{\cos^2 x} \cos^{-1} 5t \, dt$ is

(a) $\pi/4$ (b) $\pi/2$ (c) 1 (d) None of these

31. In a class of 100, 55 students have passed in Mathematics and 67 students have passed in Physics. Then the number of students who have passed in Physics only is

(a) 22 (b) 33 (c) 10 (d) 45

32. If $A - B = \frac{\pi}{4}$, then $(1 + \tan A)(1 - \tan B)$ is equal to

(a) 2 (b) 1 (c) 0 (d) 3

33. The number of different license plates that can be formed in the format 3 English letters (A...Z) followed by 4 digits (0,1,....9) with repetitions allowed in letters in and digits is equal to

(a) $26^3 \times 10^4$ (b) $26^3 + 10^4$ (c) 36 (d) 26^3

34. If two towers of heights h_1 and h_2 subtend angles 60º and 30º respectively at the mid point of the line joining their feet, then $h_1 : h_2$ is

(a) 1:2 (b) 1:3 (c) 2:1 (d) 3:1

35. What is the value of *a* for $f(x) = \begin{cases} \sin x & \text{if } x \le \frac{\pi}{2} \text{ is continuous ?} \\ ax \text{ if } x > \frac{\pi}{2} \end{cases}$

(a) π (b) $\pi/2$ (c) $2/\pi$ (d) 0

36. If $(\cos\alpha + \beta) = \frac{4}{5}$ sin $(\alpha - \beta) = \frac{5}{13}, 0 < \alpha, \beta < \frac{\pi}{4}$, then tan $(2\alpha) =$

(a) 56/33 (b) 63/65 (c) 16/63 (d) 33/56

37. The number of values of k for which the system of equations (k+1) x+8y=4k an kx+(k+3)y = 3k-1 has infinitely many solutions is

(a) 0 (b) 1 (c) 2 (d) infinite

38. The value of $\cot^{-1}(21) + \cot^{-1}(13) + \cot^{-1}(-8)$ is

(a) 0 (b) π (c) ∞ (d) $\frac{\pi}{2}$

39. A problem in Mathematics is given to three students A, B and C whose chances of solving it are $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}$ respectively. If they all try to solve the problem, what is the probability that the problem will be solved ?

(a) ½ (b) ¼ (c) 1/3 (d) ¾

40. If $\vec{a}+\vec{b}+\vec{c}=0, |\vec{a}|=3|\vec{b}|=5, |\vec{c}|=7,$ then angle between the vector $\vec{a}$ and $\vec{b}$ is

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$ (c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

41. If $f(a+b)=f(a)\times f(b)$ for all *a* and *b* and $f(5)=2, f'(0)=3,$ then $f'(5)$ is

(a) 2 (b) 4 (c) 6 (d) 5

42. If (4,-3) and (-9, 7) are the two vertices of a triangle and (1,4) is its centroid, then the area of triangle is

(a) 138/2 (b)319/2 (c) 183/2 (d) 381/2

43. If the circles $x^2+y^2+2x+2ky+6=0$ and $x^2+y^2+2ky+k=0$ intersect orthogonally, then k is

(a) 2 or $-\frac{3}{2}$ (b) –2 or $-\frac{3}{2}$ (c) 2 or 3/2 (d) –2 or 3/2

44. Focus of the parabola $x^2+y^2-2xy-4(x+y-1)=0$ is

(a) (1,1) (b) (1,2) (c) (2,1) (d) (0,2)

45. Suppose values taken by a random variable X are such that $a\le x_i\le b,$ where x_i denotes the value of X in the *i*th case for i=1,2,3, …. n, then

(a) $(b-a)^2\le Var(X)$ (b) $\frac{a^2}{4}\le Var(X)$

(c) $a^2\le Var(X)\le b^2$ (d) $a\le Var(X)\le b$

46. If ω is the cube root of unity, then the system of equations $x+\omega^2 y+\omega z=0, \omega x+y+\omega^2 z=0$ and $\omega^2 x+\omega y+z=0$ is

(a) consistent and has unique solution (b) consistent and has more than one solution (c) inconsistent (d) none of these

47. if e and e' be the eccentricities of a hyperbola and its conjugate, then $\frac{1}{e^2}+\frac{1}{e'^2}=$

(a) 2 (b) 1 (c) 2 (d) none of these

48. One hundred identical coins each with probability P of showing up heads are tossed if 0<P<1 and the probability of heads showing on 50 coins is equal to that of heads on 51 coins, then the value of P is

(a) ½ (b) 49/101 (c) 50/110 (d) 51/101

49. The equation $(\cos p-1)x^2+(\cos p)x+\sin p=0$ where x is a variable has real roots. Then the interval of p is

(a) (0, 2π) (b) (-π ,0) (c) $\left(\frac{-\pi}{2},\frac{\pi}{2}\right)$ (d) (0, π)

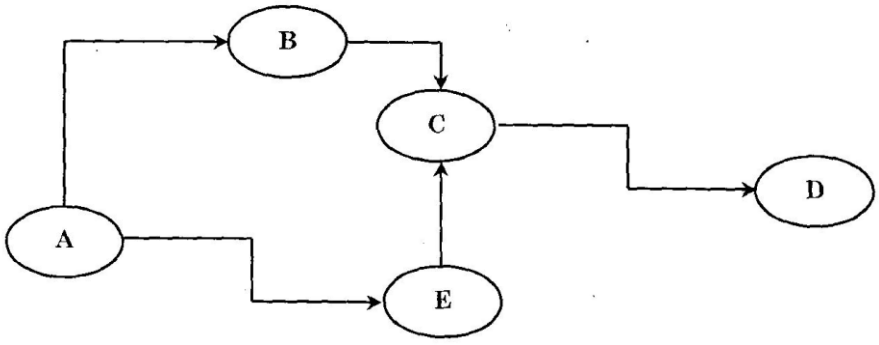
50. If $x=\log_3 5, y=\log_{17} 25,$ then which one of the following is correct ?

(a) x>y (b) x<y (c) x≤ y (d) x=y

Analytical Ability and Logical Reasoning

Directions:

The following sketch shows the pipeline carrying material form one location to another. The capacity of each pipeline is 2000. The demand for the material at B is 800, at C is 800, at D is 1400 and at E is 400. The arrow indicates the direction of material flow through pipeline. The flow through pipelines meets exactly the demand at each location, flow from B to C is 600.



51. The quantity moved from A to E is

(a) 400 (b) 1600 (c) 1400 (d) 2000

52. The free capacity available in the A-B pipeline is

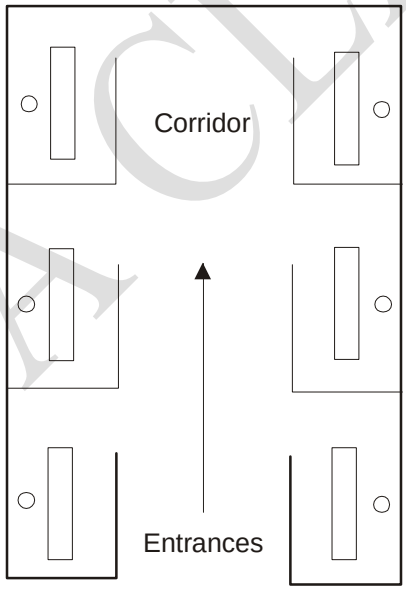
(a) 0 (b) 200 (c) 400 (d) 600

53. What is the free capacity available in the E-C pipelines?

(a) 600 (b) 400 (c) 200 (d) 0

Directions :

The plan given below, shows office for six officers namely A, B, C, D, E and F. Both B and C occupy offices to the right of the corridor (as one enters the office block) and A occupies the office to the left of the corridor. E and F occupy offices on opposite sides of the corridor bu thtie offices do not face each other. The offices of C and D face each other. E does not have a cornet office. F's office is further down the corridor than A's, but on the same side



54. If E sits in his office and faces the corridor, whose office is to his left?

(a) A (b) B (c) C (d) D

55. Whose office faces A's office?

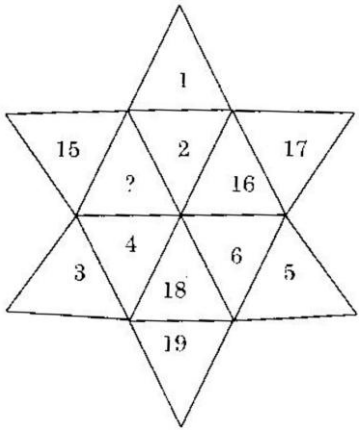
(a) B (b) C (c) D (d) E

56. Who is/are F's neighbour(s)?

(a) A only (b) A and D (c) C only (d) B and C

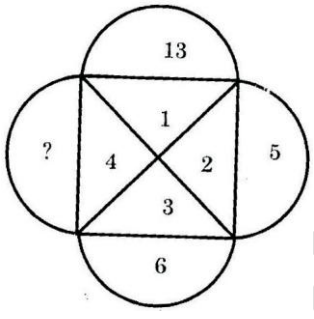
Directions : Find the missing number in each of the following questions ;

57.



(a) 13 (b) 14 (c) 20 (d) 21

58.



(a) 10 (b) 11 (c) 12 (d) 13

59. If ¾ of a number is equal to 2/3 of another number, what is the raito between these two numbers

(a) 3 : 4 (b) 5 : 6 (c) 8 : 9 (d) 9 : 10

60. Q is shorter than P, but taller than R, R is shorter than P but taller than A. If they stand in. ascending order of their height the sequence is

(a) ARQP (b) AQPR (c) QPAR (d) RPQA

61. A man starts wlking towards south. After walking 5 km he again turns left at right angles in what direction is he finally walking in?

(a) North (b) South (c) East (d) West

62. Find the missing number in the following series 4, 6, 3, 5, 2?

(a) 8 (b) 4 (c) 3 (d) 6

63. If UNDERSTAND is code as 1234567823 how will START be coded?

(a) 56781 (b) 83243 (c) 73652 (d) 67857

64. A cylist goes 30 km to North and then turning of East he goes 40 km, Again he turns to his right and goes 20 km. After this he turns to his right and goes 40 km. How far is he from his straight point?

(a) 0 km (b) 10 km (c) 25 km (d) 40 km

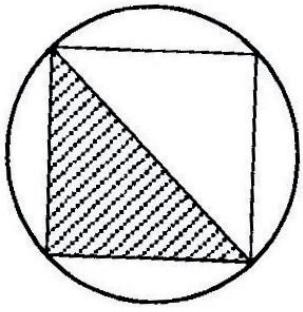
65. A one rupee coin is placed on a plain paper. How many coins of the same size can be placed round it so that each one touches the central and adjacent coins ?

(a) 9 (b) 8 (c) 4 (d) 6

66. A, B, C, D and E distribute some cards among themselves in a manne that A gets one less than B;C gets 5 more than D ;E gets 3 more than B while D gets as many as B. Who gets the least cards?

(a) A (b) C (c) D (d) E

67. If r is the radius of the circle given below, what is the area of the shaded region?



(a) 4 r^2 (b) r^2 (c) $4/3r^2$ (c) 4r

68. An elevator has a capacity of 12 adults or 20 children. How many adults can board the elevator with 15 children?

(a) 4 (b) 5 (c) 3 (d) 6

69. Which two months in a year have the same calendar ?

(a) June-October (b) April-November (c) April-July

(d) October-December

70. Flow many number from 1 to 100 are such each of which is divisible by 8 and whose at least one digit is 8?

(a) Four (b) Zero (c) Eight (d) Six

71. In the following square, number have been filled according to some rule. One space has been left blank, Find the correct number out of those given below for the blank, space

56	**65**	**78**
12		**30**
44	**14**	**48**

(a) 14 (b) 44 (c) 62 (d) 51

72. if + is *, – is +, * is /and/is –, then 6 – 9 + 8 * 3/20 is

(a) – 2 (b) 6 (c) 10 (d) 12

73. In a certain year there were exactly four Fridays and four Mondays in January. On what day of the week did the 20th of January fall that year?

(a) Saturday (b) Sunday (c) Thursday (d) Tuesday

74. The letters P, Q, R, S, T, U and V, not necessarily in that, order represent seven consecutive integers from 22 to 33 and

(1) U is as much less than Q as R is greater than S

(2) V is greater than U (3) Q is the middle term

(4) P is greater than S

Then the sequence of letters from the lowest value to the highest value is

(a) TVPQRSU (b) TRSQUPV (c) TUSQRPV (d) TVPQSRU

75. The minimum number of tiles of size 16 by 24 required to form a square by placing them adjacent to one another is

(a) 6 (b) 8 (c) 11 (d) 16

26. Five persons K, L, M, N and O are sitting around a dining table. K is the mother of M,M is actually the wife of O,N is the brother of K and L is the husband of K, how is N related to L?

(a) Son (b) Cousin (c) Brother (d) Brother-in-law

77. There men A, B, C play cards. If one loses the game he has to give Rs. 3. If he wins the game he will gain Rs. 3 each from the other two losers. If A has won 3 games, B loses Rs. 3 C wins Rs. 12, then the total number of games played is

(a) 12 (b) 21 (c) 20 (d) 6

78. If a man walks at the rate of 4 kmph, he misses a train by only 6 min. However if he

walks at the rate of 5 kmph he reaches the station 6 minutes before the arrival of the train. The distance covered by him to reach the station is

(a) 4 (b) 7 (c) 9 (d) 5

79. The missing number in the given series is

3, 6, 6, 12, 9 , 12

(a) 15 (b) 18 (c) 11 (d) 13

80. A man runs 20 m towards east and turns right, runs 10 m and turns right, runs 9 m and turns left, runs 5 m and turns left, runs 12 m and finally turns left and runs 6 m. Which direction is the man facing?

(a) North (b) South (c) East (d) West

81. In a club there are certain number of males and females. If 15 females are absent then number of males will be half of females. If 45 males are absent then female strength will be 5 times that of males. Number of males actually present is

(a) 45 (b) 80 (c) 105 (d) 175

82. The missing number in the following series is

6, 12, 21, …., 48

(a) 40 (b) 33 (c) 38 (d) 45

Directions : Read the below passage carefully and answer the questions :

Five roommates Randy, Sally, Torry, Uma and Vemon each do one housekeeping task-mopping sweeping, laundry, vacuuming or dusting one day a week, Monday through Friday.

- ❖ Vernon does not vacuum and does not do his task on Tuesday.
- ❖ Sally does the dusting and does not do it on Monday or Friday.
- ❖ The mopping is done on Thursday.
- ❖ Terry does his task, which is not vacuuming, on Wednesday.
- ❖ The laundry is done on Friday and not Uma.
- ❖ Randy does his task on Monday.

83. The Task done by Terry on Wednesday is

(a) Vacuuming (b) Dusting (c) Mopping (d) Sweeping

84. The day on which the vacuuming is done is

(a) Friday (b) Monday (c) Tuesday (d) Wednesday

85. Sally does dusting on

(a) Friday (b) Monday (c) Tuesday (d) Wednesday

86. Find the odd number in the series : 2, 9, 28, 65, 126, 216, 344,….

(a) 28 (b) 65 (c) 126 (d) 216

87. Average age of student of an adult school is 40 years. 120 new students whose average is 32 years joined the school. As a result the average age is decreased by 4 years. The number of students of the school after joining of the new students is

(a) 1200 (b) 120 (c) 360 (d) 240

Directions: P, Q, R, S, T, U, V and W are sitting round the circle and are facing the center. P is second to the right of T, T is the neightbour of R and V. S is not the neighbour of P, V is the neighbour of U, Q is not between S and W, and W is not between U and S.

88. Which two of the following are no neighbours?

(a) RV (b) UV (c) RP (d) QW

89. What is the position of S?

(a) Between U and V (b) Second to the right of P

(c) TO the immediate right of W

(d) Data inadequate

90. The ratio between a two digit number and the sum of the digits of that numbers is 4 : 1 if the digit in the units place is 3 more than the digit in ten's place, then the number is

(a) 24 (b) 63 (c) 36 (d) 42

General English

Directions : Read the Passage and select the most suitable answer to questions from the given choices.

Observe the dilemma of the fungus: It is a plant but it possesses no chlorophyll. While all other plants put the sun's energy to work for them combining the nutrients of ground and air into the body structure, the chlorophylless must look eisewhere for energy supply. It finds it in those other plants which, having received chlorophylless must look eisewhere for energy supply. It finds it in those other plants which, having recived their energy free from the sun, relinquish it at some point intheir cycle either to animals (like us humans) or to the fungi.

In this search for energy the fungus has become the earth's major source of rot and decay. Wherever you see mold forming on a piece of bread, or a pile of leves turning to compost, or a blown-down tree becoming pulp on the gound, you are watching a fungus eating. Without fungus action the earth would be piled high with the dead plant life of past centuries. In fact, certain plants, which contain resins that are toxic to fungi, will last indefinitely; specimens of the redwood, for instance, can still be found resting on the forest floor centruries ater having been blown down.

91. The passage states all the following about fungi EXCEPT;

(a) They are responsible for the decomposition of much plant life
(b) They cannot live completely apart from other plants
(c) They are vastly different from other plants
(d) They are poisonous to resin producing plants

92. The passage is primarly concerned with

(a) Warning people of the dangers of fungi
(b) Rot and decay of plants in nature
(c) Describing the action of fungi
(d) Relating how most plants use solar energy

93. Fill in the blank:

The sugar dissolved in water _____; finally all that remained was an almost _____; resdiue on the bottom of the glass.

(a) Quivkly ……..lumpy
(b) Immediately ……fragrant
(c) Gradually …….. imperceptible
(d) subsequently ……glassy

94. Find the synonym that is most nearly similar in meaning to the word CLANDESTINE

(a) abortive (b) secret (c) tangible (d) doomed

95. Choose the word that is <u>opposite</u> in meaning to the word COMPOSE

(a) disturb (b) reveal (c) strengthen (d) isolate

Directions : In each of the follwing sentences, a part of the sentence is underlined. Beneath each sentence, four different ways of phrasing the underlined part are indicated. Choose the best alternative from among the four.

96. It was <u>us who had left before he arrived</u>

(a) We who had left before time he had arrived
(b) Us who has went before he arrived
(c) Us who has went before he had arrived.
(d) We who has left before he arived

97. Many of these environmentalists proclaim <u>to save nothing less than</u> the planet itself.

(a) to save nothing lesser than

(b) that they are saving nothing less than
(c) that they save nothing less than
(d) to have saved nothing less than

Directions : Select the pair of words which are related in the som way as the capitalized words are related to each then?

98. MOTH : CLOTHING

(a) egg : larva (b) hole : repair
(c) suit : dress (d) stigma : reputation

99. ASCETIC : LUXURY::

(a) philosopher : knowledge
(b) general : victory
(c) misogynist : women
(d) teacher : blackboard

100. There are four statements, of which one is incorrect Choose the incorrect one

(a) A hater of the institution of marriage is misogamist.
(b) The violation of sacred things is sacrilege.
(c) To prevaricate is to make evasive or misleading statements.
(d) A torpid person is generally hyperactive

101. And now for this evening's main headline; Britain _____ another Olympic gold medal.

(a) had won (b) Wins (c) Won (d) Has Won

102. If She _____about his financial situation, she would have helped him out.

(a) Knew (b) had been knowing (c) had known
(d) have known

103. I am sure she can teach computers as well. She's not _____ new to the subject.

(a) All together (b) Altogether (c) Alltogether
(d) Together

104.You are trying to drag me _____ a controversy.

(a) in (b) into (c) from (d) for

105.The people _____ you socialize are called friends.

(a) with whom (b) who (c) with who (d) whom

106. _____ to school yesterday?

(a) did you walk (b) Did you walked
(c) Do you walk (d) Have you walked

107.There was no _____ in the railway compartment for additional passengers.

(a) space (b) place (c) seat (d) room

108. The sentence below has 2 blanks. Fill in the balnks picking the appropriate pair of words from the ones given below that best completes the meaning of the sentence. The most technologically advanced societies have been responsible for the greatest _____; indeed, savagery seems to be in direct proportion to _____

(a) Wars; viciousness (b) Catastrophes; ill-will
(c) Atrocities; development (d) Triumphs; civilization

109. Fill in the balnk with the correct form of tense.

The thief _____ before the police came.

(a) Escaped (b) Had escaped (c) will escape
(d) has been escaped

110. Fill in the balnk with appropriate words given.

Anne had to pay for everything because as usual, Peter _____ his wallet at home.

(a) had left (b) was leaving (c) left(d) leave

Computer Awareness

111. The decimal equivalent of octal number 111 010 is

(a) 81 (b) 72 (c) 71 (d) 61

112. Which of following devices will take highest time in taking the backup of the data from a computer?

(a) Magnetic Disk (b) Pen Drive
(c) CD (d) Magnetic Tape

113. The errors that can be pointed out by complilers are

(a) Syntax errors (b) Semantic errors
(c) Logical errors (d) Internal errors

114. The range of numbers that can be stored in 8 bits, if negative numbers are stored in 2's complement form is

(a) – 128 to + 128 (b) – 128 to + 127
(c) – 127 to + 128 (d) – 127 to + 127

115. Primary storage is _____ as compared to secondary memory?

(a) Slow and expensive (b) fast and inexpensive
(c) fast and expensive (d) slow and inexpensive

116. Which of the following palces the common data elements in order from smallest to largest?

(a) Field, Record, Character, Database
(b) Character, Record Field, Database
(c) Character, field, Record, Database
(d) Bit, Byte, Character, Record, Field, Database

117. A CPU has a 12 bit address for memory addressing. If the memory has a total capacity of 16 KB, what is the word length of the memory?

(a) 2 bytes (b) 4 bytes (c) 8 bytes (d) 16 bytes

118. For a microprocessor using I/O mapped I/O

(a) Memory and I/O addresses are distinct
(b) Not all data transfer instructions are available for I/O
(c) Both (1) and (2) (e) none of these

119. Execution of an operating system is initiated by a program called the

(a) Window manager (b) Scheduler
(c) Bootstrap (d) none of the above

120. If $(12x)_3 = (123)_x$ then the value of x is

(a) 1 (b) 2 (c) Both (a) and (b) (d) none of above