

[REF]

## Whitefield International College

Nayabazaar, Town Planning, Kathmandu

### BCA Entrance Mock Test - II

Time: 2 hrs.

Full Marks: 100

(Attempt all questions)

**Grammar (40X1=40)**

1. The woman is dressed ..... a blue sari.  
a) in                      b)with                      c)by                      d)at
2. They enjoyed ..... Christmas.  
a) in                      b)during                      c)on                      d)at
3. .... silver is precious metal.  
a) a                      b)an                      c)the                      d)none
4. What is the passive of "I did it."  
a)It is done.                      b) It is being done.  
c) It was done.                      d) It has been done.
5. Come and sit ..... me.  
a) by                      b)over                      c)at                      d)on
6. She is ..... with good health.  
a) belesed                      b)blessed                      c)blesseed                      d)blesed
7. The plural form of "ape" is  
a)apes                      b)apo                      c)apeses                      d)none
8. If overt is to secret in the same way as cautious is to .....  
a) pompous                      b)rash                      c)clever                      d)coy
9. What .....if you were bitten by a poisonous snake?  
a)were you do                      b)would you have done                      c)would you do                      d)would you had done
10. She thanked me for what I .....  
a)did                      b)do                      c)have done                      d)had done
11. I am happy.....?  
a)am I                      b)aren't I                      c)can I                      d)do I
12. Never yield ..... temptation.  
a) for                      b)in                      c)to                      d)over
13. I prefer coffee ..... tea  
a) with                      b)over                      c)by                      d)to
14. Synonyms of "asset" is  
a) aid                      b) credit                      c) gem                      d) favor
15. The teacher seemed .....  
a) relaxed                      b)happiness                      c)quickly                      d)bore
16. Let's go, .....?  
a)will you                      b)shall you                      c)shall we                      d)will we
17. .... his leg is broken, he ran fast  
a)however                      b)although                      c)despite off                      d)in spite of
18. They said, "Where is the zoo?"  
a)They asked me where the zoo was.                      b) they wanted to know where the zoo was.  
c)They asked where the zoo is.                      d)they inquired where the zoo is.
19. "Domestic" is same as.....  
a)locale                      b)local                      c)country                      d)foreign
20. We saw them ..... out.  
a) go                      b)to go                      c)going                      d)went
21. Today I feel .....  
a) lazy                      b)laziness                      c)lazily                      d)none
22. The past participle of fly is .....  
a) flee                      b)fly                      c)flow                      d)flown
23. One should do ..... duty very well.  
a) ones                      b)one                      c)one's                      d)their
24. "To throw out of currency" means .....  
a) extinguish                      b)forget                      c)destroy                      d)put out of use
25. "The alpha and omega" means  
a)two opposite things                      b)beginning and the end  
c)just a two symbol                      d)none of theabove
26. When they ..... I ..... a letter.  
a)entered, was writing                      b)was entering, wrote  
c)had entered, wrote                      d)enter, is writing
27. SHIELD: SOLDIER  
a) stethoscope: doctor                      b) book: author                      c) advocate: court                      d) helmet: rider
28. The tag question of " I am an engineer" is  
a)Aren't I?                      b)am not I?                      c)Don't I?                      d) Am not I?
29. Wight is to nocturnal in the same way as spring is to  
a) winter                      b)summer                      c)autumn                      d)vernal
30. Out of the moon means  
a)lightening                      b)suddenly                      c)euphoria                      d)out of thegloom
31. She undergoes a strange experience of seeing something not present in front of her. In other handsshe is suffering from.....  
a) hallucination                      b)bronchitis                      c) tonsillitis                      d)psychosis
32. He is happy and ..... am I.  
a)too                      b)so                      c)neither                      d)either
33. I never watch TV and ..... do they.  
a)either                      b)so                      c)neither                      d)too

34. The antonym of "Genuine" is .....  
 a) true                      b) facsimile                      c) pure                      d) original
35. The synonym of purgatory is .....  
 a) polluted city                      b) hell                      c) heaven                      d) sky
36. Because of the heavy rain, they decided to call ..... the cricket match.  
 a) out                      b) up                      c) off                      d) down
37. The doctor felt her pulse.....  
 a) run                      b) ran                      c) to run                      d) running
38. There are a few students in the class,.....?  
 a) are there                      b) aren't there                      c) are they                      d) few they
39. This is the man.....  
 a) which I know                      b) who I know                      c) that I know                      d) whom I know
40. The committees ..... to reform on policies.  
 a) needs                      b) is needing                      c) need                      d) has needed

**Mathematics (50X1=50)**

41. If  $\log_a ab = x$ ,  $\log_b bc = y$  and  $\log_c ac = z$ , then  $\frac{1}{x+1} + \frac{1}{y+1} + \frac{1}{z+1}$  is  
 a) 0                      b) 1                      c) 2                      d) 2
42. A number of two digit is six times the sum of its digits. If 9 is subtracted from the number the digits are reversed. The number is  
 a) 44                      b) 54                      c) 64                      d) 74
43. If  $\lim_{x \rightarrow 2} \frac{x^n - 2^n}{x - 2} = 80$  and n is any positive integer, then n is  
 a) 5                      b) 4                      c) 3                      d) none of these
44. The roots of the equation  $x^2 - 8x + 16 = 0$  are  
 a) Real and unequal                      b) real and equal  
 c) Imaginary and unequal                      d) none of these
45. The value of x and y satisfying the equation  $\frac{3}{x+y} + \frac{2}{x-y} = 3$ ,  $\frac{2}{x+y} + \frac{3}{x-y} = 3\frac{2}{3}$  are given by  
 a) 1, 2                      b) -1, -2                      c) 1, 1/2                      d) 2, 1
46. The null set is represented by  
 a)  $\{\emptyset\}$                       b)  $\{0\}$                       c)  $\emptyset$                       d) none of these
47. If  $(x+2)$  is a factor of  $x^3 - 3x^2 - 4x + 12 = 0$   
 a) Yes                      b) No                      c) both                      d) none of these
48. The point of intersection between the straight lines  $3x - y = 12$  and  $3x + 2y = 6$  lie in  
 a) 1<sup>st</sup> quadrant                      b) 2<sup>nd</sup> quadrant                      c) 3<sup>rd</sup> quadrant                      d) 4<sup>th</sup> quadrant
49. The lines (3, 1), (5, -5) and (-1, 13) are  
 a) Concurrent                      b) collinear                      c) parallel                      d) perpendicular
50.  $2^{4n} - 1$  is divisible by  
 a) 15                      b) 4                      c) 6                      d) 64
51. Sum to infinity of the series  $0.4 + 0.8 + 0.16 + \dots$  is  
 a) 5                      b) 10                      c) 8                      d) none of these
52. The sum of the cubes of the first "n" natural numbers is  
 a)  $\frac{n(n+1)}{2}$                       b)  $\frac{n(n+1)(2n+1)}{6}$                       c)  $\left[\frac{n(n+1)}{2}\right]^2$                       d) none

53. If 120 apples cost \$20, I can buy..... Apples for 50 cents  
 a) 1                      b) 2                      c) 3                      d) 4
54. The average of  $2^{10}$  and  $2^9$  is  
 a)  $2^9 + 2^8$                       b)  $\frac{2^{10} + 2^8}{2}$                       c)  $4^{80}$                       d) none
55. If 7<sup>th</sup> of a month falls two days after Monday on what day will 18<sup>th</sup> of the month fall?  
 a) Monday                      b) Friday                      c) Thursday                      d) Sunday
56. The value of  $(\log_b a \times \log_a b \times \log_a c)^3$  is equal to  
 a) 3                      b) 0                      c) 1                      d) 4
57. The geometric mean of  $a^{2n} \times b^{2n}$  is  
 a)  $\frac{a^{2n} b^{2n}}{2}$                       b)  $a^n b^n$                       c)  $\frac{a^{2n} + b^{2n}}{2}$                       d)  $(ab)^{2n}$
58. If x and y are rational number such that  $\sqrt{xy}$  is irrational number, then  $\sqrt{x} + \sqrt{y}$  is  
 a) rational                      b) irrational                      c) both                      d) none of these
59. Each prime number has  
 a) no factor                      b) only on factor  
 c) only two factors                      d) more than two factor
60. The area of square whose diagonal is 10 is  
 a) 20                      b) 30                      c) 40                      d) 50
61.  $\lim_{x \rightarrow 0} e^{1/x}$   
 a) 0                      b) 1                      c)  $\infty$                       d) none
62. If  $\frac{a}{4} = \frac{b}{5} = \frac{c}{9}$  then  $\frac{a+b+c}{c}$  is  
 a) 4                      b) 2                      c) 7                      d) none of these
63. The value of x when  $x\sqrt{x} = (x\sqrt{x})^x$  is  
 a) 1                      b) 2                      c) 3                      d) 4
64. If  $\frac{a}{b} = \frac{c}{d}$ , then  $\frac{a}{c} = \frac{b}{d}$  is called  
 a) invertendo                      b) alternendo  
 c) componendo                      d) componendo & dividendo
65. The lines  $y + 2 = 5x$  and  $5y + x = -15$  are  
 a) parallel                      b) perpendicular                      c) both                      d) none
66. The sum of prime number greater than 70 and less than 80 is  
 a) 220                      b) 224                      c) 223                      d) 228
67. The diameter of the circle connects the point (2, -3) and (6, 4) on the circle. The co-ordinates of the centre of circles is  
 a) (2, 1/3)                      b)  $(\frac{1}{2}, 3)$                       c) (4, 1/2)                      d) (4, 4)
68. If  $A = \{a, b, c\}$  then which of the following is true?  
 a)  $\{a\} \in A$                       b)  $\{a\} \subset A$                       c)  $a \subseteq A$                       d)  $\{b, d\} \subseteq A$
69. Which of the following is not an "identity law" in set operation?  
 a)  $A \cup \emptyset = A$                       b)  $A \cap \emptyset = \emptyset$                       c)  $A \cup U = U$                       d)  $A \cup A = A$
70. The number of possible non-empty subsets of  $A = \{a, b, c, d\}$  is  
 a) 32                      b) 4                      c) 8                      d) 15
71. If  $f(x) = x^2$  domain =  $[-1, 2]$ , then range is  
 a)  $[-1, 2]$                       b) (1, 4)                      c) [1, 4]                      d) [1, 4)
72. The domain of  $f(x) = \frac{1}{x}$  in the real line is  
 a)  $(-\infty, \infty)$                       b)  $(-\infty, 0] \cup (0, \infty)$                       c)  $[0, \infty)$                       d)  $(-\infty, 0) \cup (0, \infty)$

