Bachelor in Computer Applications(BCA)
Entrance Exam

Full Marks:100

Time:2hr

Group A[English]

**Circle the correct answer from among the given options.
(Multiple Choice Questions)**

1. To beg the question.
   a) to refer to
   b) to take for granted
   c) to raise objections
   c) to be discussed

2. Cricket is a…………game, but the destiny of the side is often shaped by a couple of individuals.
   a) good
   b) team
   c) popular
   d) new

3. The ………….has to be precisely stated.
   a) content
   b) criticism
   c) case
   d) theme

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4. Man worked with his small tools until the advent of modern machinery………….by steam and electricity.
   a) worked
   b) controlled
   c) driven
   d) moved

5. The rest is history.
   a) history takes rest
   b) known to everyone
   c) to avoid historical facts
   d) history repeats.

6. Warm as toast.
   a) very hot
   b) very fresh
   c) lukewarm
   d) Cold

7. The economy is finally ……………
   a) looking in
   b) looking on
   c) looking at
   d) looking up

8. The synonym of "Alien" is:
   a) Citizen
   b) Native
   c) Accustomed
   d) Stranger

9. Which one is appropriate synonym of "Foster".
   a) Rear
   b) Encourage
   c) Nourish
   d) Promote

10. Give an exact synonym of "Witty".
    a) Ingenious
    b) Speedy
    c) Foolish
    d) Awkward

11. The antonym of "Abolish" is:
    a) remove
    b) reside
    c) confront
    d) establish

12. Give the antonym "Salient".
    a) emphatic
    b) striking
    c) important
    d) incline

13. Demonstrating good judgement is called:
    a) insinuate
    b) judicious
    c) masterpiece
    d) towering

14. The study of society is called:
    a) Meteorology
    b) archeology
    c) Sociology
    d) geology

15. Badminton is played on a court as wrestling in a
    a) court
    b) track
    c) ground
    d) Arena

16. It was the help he got from his friends which..........him through the tragedy. www.bcanotesnepal.com
    a) boosted
    b) parked
    c) supported
    d) helped

17. I never miss a cricket match. I......fond of cricket since childhood.
    a) am   b) will be   c) have been   d) has been

18. What is the opposite of "Mute"?

   a) diversify   b) quicken

   c) harmonize   d) amplify

19. The scientists made a...........discovery for which he was honored.

   a) sensual   b) sensational

   c) sensuous   d) sentimental

20. That charming girl was the...........of all eyes.

   a) aim   b) target   c) ambition   d) cynosure

21. A son who is unable to look his father on the face is:

   a) guilty   b) arrogant

   c) timid   d) ashamed

22. He resembles ....his mother. www.bcanotesnepal.com

   a) at   b) in   c) with   d) none of these

23. The thunder was accompanied.........heavy rains.

   a) by   b) with   c) through   d) up

24. We passed...........a lot of beautiful towns on the way to the resort.

   a) along   b) across   c) through   d) all

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25. The child was hiding ....the door.

   a) behind   b) below

   c) among   d) none

26. My parents got married...........the 1970s.

   a) at   b) in   c) from   d) on

27. Many of us eat...........fork and spoon.

   a) of   b) on

   c) to   d) with

28. How many people are ....your team?

   a) of   b) on

   c) to   d) with

29. I brought him ....with great difficulty.
   a) up   b) about
   c) round   d) in

30. Give an example pertinent...................the case.
   a) on   b) to
   c) for   d) with

31. You will have to catch the morning flight,so you.........better
   get ready.
   a) would   b) should
   c) had   d) may

32. Leaps and bounds.
   a) in brief   b) delay
   c) rapidly   d) financial crisis

33. Take up the cudgels.
   a) to disturb   b) to support
   c) to follow   d) to appreciate

34. Spick and span.
   a) in order   b) disorder
   c) all qualities   d) no quality

35. Take to heels.
   a) to wait   b) to run away
   c) to dance   d) to follow

36. Under the cloud.
   a) to be a secret   b) amazing
   c) to be under suspicion.   d) feel good factor

37. Passage
38. Passage
39. Passage
40. Passage

Group-B[Mathematics]

41. The slope of the straight line that passes through the point (-1,0) and (3,8) is:

    a)2   b)4   c)6   d)8

42. The probability of sample space is:

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

43. The number of subsets of set of order 5 is:

    a)16   b)32   c)8   d)24

44. The value of $\frac{\sqrt{3}}{\sqrt{9}}$ is:

    a) rational number   b) irrational number
    c) imaginary number   d) none of these

45. If the function $f(x)=x^2-5$, then $f(\sqrt{5})$ is equal to

    a)0   b) 5
    c)10   d) none of these

46. The sum of 1st n natural no. of A.P is 55, the value of n is:

    a)10   b)12   c)14   d)16

47. The value of tan 60^0 is: www.bcanotesnepal.com

    a)½   b)$\frac{\sqrt{3}}{2}$ c)$\sqrt{3}$ d)1

48. If A and B are arbitrary square matrices of same order, then:

    a) $(AB)'=AB'$ b) $(AB)'=A'B'$

    c) $A'B'=B'A'$ d) $(A+B)'=A'-B'$

49. A room is 12m long and 10m wide. If the area of 4 walls is 176m^2,the height of the room is:

    a)5m^2 b)4m
    c)3m^2 d)6m

50. The value of $2^{12}+2^{12}+2^{12}+2^{12}$ is:

    a)2^{14} b)4^{16} c)2^{16} d)2^{48}

51. If A and B are the nonsingular matrices, then,

    a) $(AB)^{-1}=A^{-1}B^{-1}$ b) AB=BA

c)$(AB)^1=A^1B^1$ d)$(AB)^{-1}=B^{-1}A^{-1}$

52. What is 30% of the 20% of 10% of x?

a)0.006x%
b)0.6x%

c)0.06%
d) none of these

53. The difference between ⅗ of 80 and 30% of 80 is:

a)15   b)10   c)24   d)20

54. In a company with 180 employees,108 of the employees are female. What percent of the employees are male?

a)5%   b)25%   c)35%   d)40%

55. The population doubling time if the population growth rate is 2% p.a is:

a) 35 yrs   b)70yrs   c)50yrs   d)30yrs

56. By selling 33m of cloth one gains the selling price of 11m.The gain percent is:

a)20%   b) 40%   c) 50%   d) 22%

57. Hari sold a radio for Rs.750 with Rs.25 loss. His loss percentage is:

a) 3.33%

b) 3.225%

c) 3.45%

d) 3.49%

58. Area of a rectangle is 150 sq.m. it's one side is 15m, the height of the rectangle is:

a) 8m

b)10m

c) 12m

d)16m

59. The formula to calculate the area of kite is:

a)½ d_1*d_2

b)$\dfrac{\sqrt{3}}{4a}$

c)$\sqrt{s(s-a)(s-b)(s-c)}$ d) None of these

60. A dealer altered his trade discount from 15% to 10%, what percentage was the selling price altered?

a)5.56%   b)5.88%

c)6.88%   d)5.63%

61. An article was sold for Rs.415 at a loss of 17%, what would have been the sale price?

a) Rs.475   b) Rs.490   c) Rs.500   d) Rs.525

62. The value of $\sin 135^0$ is:

a)½

b)$\frac{\sqrt{3}}{2}$

c)$\frac{1}{\sqrt{2}}$

d)$\frac{1}{\sqrt{3}}$

63. The time in ………. years that the sum of money double itself at 10% per annum of interest is:

a) 20yrs   b) 10.5yrs
c) 12yrs   d) 10yrs

64. Today is the birthday of Rahul and he is 3 times as old as Nirmala. In 13 years, Rahul will be one year less than twice as old as Nirmala will be then. The age of Rahul today is:

a)30yrs   b)36yrs
c)49yrs   d)30yrs

65. A number consists of two digits. The sum of its digits is 16. If 18 is subtracted from the number, the digits are interchanged. The number is:

a)73   b)72   c)97   d)24

66. The breadth of a room 4m high is one third of its length. If the cost of painting its wall at the rate of Rs.5 per m² is Rs.640,the cost of carpeting at the rate of Rs.250 per m² is:

a)11000   b)12000
c)13000   d)14000

67. If 7a-b=23 and 7b-a=31, the value of a+b is:

a)6   b)7   c)8   d)9

68. The value of |(-2-3)-(-2-3)| is:

a)5   b)4   c)3   d)2

69. If $f(x)=x^{1/4}+x^{1/2}$, the value of $f(16)$ is:

a)6   b)8   c)32   d)64

70. Which is not true?

i.$(A^T)^T=A$ ii.$(A+B)^T=A^TB^T$

iii.$(AB)^T=A^TB^T$ iv.$(KA)^T=KA^T$, where k is a scalar

a) i   b) ii   c) lii   d) iv

71. The system of equations $2x+6y=6$ and $6x+9y=18$ have:

a) unique solution   b) no solution

c) infinitely many solutions   c) none of these

72. The ratio compounded of 4:9,the duplicate ratio of 3:4 is:

a)1:4   b)1:3   c)3:1   d)5:6

73. If x:y=6:5,the value of (5x/3y):(5x-3y) is equal to:

a)2:1   b)3:1   c)5:3   d)5:2

74. If $5x+13=31$,the value of $\sqrt{5x+31}$ is:

a)5   b)6   c)7   d)8

75. The width of a rectangle is 2cm less than its length and its length and perimeter is 12cm.The area of rectangle is:

a)12cm²   b)24cm²   c)18cm²

d)8cm²

76. If x-7=1,the value of x+19 is:

a)19   b)27   c)38   d)42

77. The equation of the line that passes through (4,-4) and (4,4) is:

a) x=4   b) y=4   c) y=4x   d) y=4x+4

78. If $-7\leq x\leq7$ and $0\leq y\leq12$,the greatest possible value of y-x is:

a) 5   b) 4   c) 3   d) 2

79. If a,b,c are in GP, then

a) b²=ac

b) b(a²+c²)=a(a²+b²)

c) b=(a+b)/2

d) none of these

80. If 13,p,q,r and 29 are in AP,the value of p,q and r are:

a) 17,21,25

b)17,22,23

c) 11,19,21

d) none of these

81. What price should a shopkeeper mark on an article,coming him Rs.153 to gain 20%,after allowing a discount of 15%?

a) Rs.224

b) Rs.216

c) Rs.154

d) Rs.162

82. A sold an article with Rs.250 profit which is 15% in equivalent. The cost price of the article is:

a) Rs.1688.8

b) Rs.1666.67

c) Rs.1676.70

d) Rs.1677.70

83. Ramita sold a skirt for Rs.500 where she had a loss of ⅙ of the cost price. The cost price of the skirt is:

a) 605   b)556   c)506   d)600

84. A dealer marks his goods 60% above the cost price. What percent of discount must be allowed, if he makes a profit of 20% only?

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a) 20%

b) 25%

c) 12%

d) 30%

85. If 20% discount was given on math books costing Rs.250, the selling price S.P is:

a) Rs.150

b) Rs.100

c) Rs.250

d) Rs.200

86. If $A= \begin{matrix} 1 & 0 \\ 0 & 1 \end{matrix}$, the value of A^5 is

a) $\begin{matrix} 1 & 0 \\ 0 & 1 \end{matrix}$ b) $\begin{matrix} -1 & 0 \\ 0 & 1 \end{matrix}$ c) $\begin{matrix} 1 & 0 \\ 0 & -1 \end{matrix}$ d) $\begin{matrix} 2 & -3 \\ 4 & -4 \end{matrix}$

87. The number of solutions 2x+y=4, x-2y=3,3x+5y=6 is:

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

88. Shyam lost 15% by selling his old book for Rs.170. For how much he must have sold it to gain 15%?
   a) Rs184
   b) Rs.194
   c) Rs.230
   d) Rs.224

89. If a plot is for Rs.18,700, the owner losses 15%. Find the price at which it must be sold to gain 25%?
   a) Rs.27000
   b) Rs.27500
   c) Rs.29000
   d) Rs.38000

90. The selling price of four articles equals to cost price of 5 articles. The gain is:
   a) 20%
   b) 25%
   c) 28%
   d) 80%

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Group-C[General Knowledge]

91. The famous Manakamana Temple is situated in:
   a) Gorkha
   b) Chitwan
   c) Tanahun
   d) Dhading

92. The Effiel tower is situated in:
   a) London
   b) Tokyo
   c) Paris
   d) Madrid

93. Which of the following is not programming language?
   a) C#
   b) JAVA
   c) Python
   d) Arduino

94. The largest network category based on coverage area is:
   a) LAN
   b) MAN
   c) WAN
   d) none of these

95. How many permanent members are there in security council of UN?
   a)2   b)10   c)4   d)5

96. Rafael Nadal is associated with:

a) Cricket

b) Lawn Tennis

c) Hockey

d) Wrestling

97. The first President of Nepal is:

a) Bidhya Devi Bhandari

b) Pushpa kamal Dahal

c) Sher Bahadur Deuba

d) Dr. Ram Baran Yadav

98. The letter 's' in HTTPs understands for:

a) Scared

b) Secured

c) Shape

d) Shine

99. Who is the captain of Nepal's National Cricket team?

a) Anil Gurung

b) Gyanendra Malla

c) Rohit Poudel

d) Parash Khadka

100, Which city is known as 'City of Temples'?

a) Phuket

b) New York

c) Kathmandu

d) Rome

Answer Key:

1. b	2. b	3. d	4. c	5. b	6. b	7. d	8. d	9. a	10. a
11. d	12. d	13. b	14. c	15. d	16. d	17. c	18. d	19. b	20. c
21. d	22. d	23. b	24. c	25. a	26. b	27. d	28. b	29. a	30. b
31. b	32. c	33. b	34. a	35. b	36. c	37	38	39	40
41. a	42. b	43. b	44. a	45. a	46. a	47. c	48. b	49. b	50. a
51. d	52. c	53. b	54. d	55. c	56. c	57. a	58. b	59. a	60. a
61. c	62. c	63. d	64. d	65. c	66. b	67. d	68. c	69. a	70. c
71. a	72. d	73. b	74. c	75. c	76. b	77. a	78. a	79. a	80. a
81. b	82. c	83. b	84. a	85. d	86. a	87. b	88. c	89. b	90. b
91. a	92. c	93. d	94. c	95. d	96. b	97. d	98. b	99. d	100. c