

Set II



**Tribhuvan University**  
**Faculty of Humanities & Social Sciences**  
**OFFICE OF THE DEAN**  
**2018**

**Bachelor in Computer Applications (BCA)**  
**Entrance Exam**

**Full Marks: 100**

**Time: 2 hrs.**

**Group A [English]**

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

2. When did you ..... on the last stage of your journey?  
a) set to                      b) set out                      c) set up                      d) set off
2. Jenny always ..... when you least expected her.  
a) showed up                      b) shut up                      c) showed off                      d) shut down
3. It is a 14 hour flight, so it will give me a change ..... my reading.  
a) catch up on                      b) catch on                      c) catch up with                      d) catch out
4. Mrs. MacDonald is having the old cottage .....  
a) do for something      b) do without                      c) do over                      d) do with
5. The new commercial ..... very well.  
a) gets away                      b) gets across                      c) gets about                      d) gets along
6. I'm still trying to ..... common cold.  
a) shake off                      b) shake up                      c) shack up                      d) show off
7. Take up a brisk walk to ..... a good appetite.  
a) work out                      b) work up                      c) wrap up                      d) write off
8. The synonym of "ameliorate" is:  
a) finish                      b) appreciate                      c) improve                      d) affluent
9. Which one is appropriate synonym of "squalor".  
a) miser                      b) indolent                      c) hinder                      d) shabby
10. Give an exact synonym of "hallowed".  
a) mellowed                      b) sacred                      c) decayed                      d) mixed

11. The antonym of "cynical" is:  
a) rustic                      b) friendly                      c) hostile                      d) simple
12. Give the antonym of "corpulent".  
a) bulky                      b) skinny                      c) obese                      d) fat
13. Killing of one's sister is called .....  
a) regicide                      b) genocide                      c) sororicide                      d) suicide
14. Killing of snake is called:  
a) apicide                      b) avicide                      c) herpeticide                      d) filicide
15. Badminton is played on a court whereas boxing in a .....  
a) court                      b) track                      c) ring                      d) arena
16. A nun lives in a ..... whereas a hermit in a .....  
a) prison, sty                      b) convent, hermitage                      c) asylum, stable                      d) cottage, inn
17. The bell ..... but bracelets jingles.  
a) tolls                      b) jingles                      c) whistle                      d) rattles
18. What is the opposite of "pompous"?  
a) humble                      b) rough                      c) cheap                      d) unique
19. One who abandons his religious faith is a/an .....  
a) apostate                      b) atheist                      c) secular                      d) credulous
20. Repetition or writing word for word is putting it .....  
a) pedantic                      b) extempore                      c) epilogue                      d) verbatim
21. Johnson died ..... cancer.  
a) by                      b) in                      c) of                      d) from
22. I hope you will agree ..... me on this issue.  
a) to                      b) on                      c) with                      d) for
23. I am angry ..... your rude manner but not angry ..... you for not helping me.  
a) at, with                      b) with, with                      c) to, with                      d) to, to
24. I know you are looking ..... a job.  
a) for                      b) at                      c) with                      d) by
25. This magazine is not useful ..... me as I have no taste in music debates.  
a) to                      b) with                      c) for                      d) by
26. She was fined ..... parking her car in a no parking area.  
a) for                      b) on                      c) in                      d) at
27. I'm interested in cricket but I'm not very good ..... it.  
a) in                      b) with                      c) at                      d) about
28. What is the meaning of the phrase "ad interim"?  
a) at pleasure                      b) at will                      c) to the extreme                      d) for the time being
29. A government controlled by the rich is:  
a) oligarchy                      b) aristocracy                      c) plutocracy                      d) democracy
30. We must be early ..... we won't get a seat.  
a) otherwise                      b) yet                      c) however                      d) but

31. Work like a Trojan.  
 a) treats                      b) works                      c) watches                      d) sleeps
32. Fit like glove.....  
 a) fits very well              b) loosely fits              c) matches                      d) dresses
33. Time will tell.  
 a) no time left  
 b) old fashioned ideas  
 c) whether decisions or actions in the present were right or not  
 d) future will show
34. A night in the town is full of .....  
 a) tasks    b) green lights  
 c) fun and entertainment                      d) creativity
35. Dressed up to the nines means.  
 a) very happy spirit    b) dressed in one's best clothes  
 c) a routine dress    d) a small chance to bring good luck

**Read the following passage carefully and answer the questions given below it.**

Sultan Nasiruddin was a wise and just ruler. Everybody sang his praises. He was kind to the poor. He used to distribute money to the poor and the needy. His treasury was full of wealth. In spite of having so much wealth, he did not spend anything on himself. He earned his living by copying the holy book of the Muslims. Though a king, he felt that he must earn his own livelihood. He led a simple life. His wife was forced to do all the household chores. She had to cook food, sweep the floor, make clothes and do many other household duties. At night, she complained of severe pain in her body. She muttered to herself. " My life is so miserable. I am tired of working from morning to evening."

One day while cooking food, she burnt her fingers. She started weeping. On seeing her weeping, Sultan Nasiruddin asked her, " Begum, what is the matter?" The queen started grumbling. " See, I have burnt my fingers. In spite of my being a queen, I have to work like other poor women. Why don't you employ some maid servant?" Sultan Nasiruddin replied, " No, Begum, I earn my livelihood by copying the Koran. My income does not permit me to spend lavishly." The queen was annoyed. She said, " Sultan, for whom is this treasury full? As a king, you must spend on yourself and your family." Sultan Nasiruddin disagreed. He replied, " Begum, you are mistaken. I cannot touch the treasure. It is people's wealth. I am answerable to God. I must earn my livelihood." The Begum was quiet. She was convinced by the Sultan's argument and accepted it willingly.

36. The queen got annoyed because .....
- a) she had burnt her fingers.  
 b) she was not happy with the Sultan's statement about his own income  
 c) the Sultan was busy copying the holy book.  
 d) of the Sultan's undue concern for her.

37. Why did Sultan Nasiruddin not use the money in the treasury for himself?
- He was afraid that his subjects would accuse him of theft.
  - He had already distributed the money to the poor.
  - He wanted to annoy his Begum.
  - He was convinced that the money belonged to the people.
38. The demand of the queen was that the .....
- Sultan should earn his own livelihood.
  - money in the treasury should not be distributed to the poor.
  - Sultan should employ a maid-servant.
  - Sultan should help her in her household duties.
39. Why was Sultan Nasiruddin popular among his people?
- He was devoted to the holy Koran.
  - He was fair to all and was full of wisdom.
  - He kept the treasury full of wealth.
  - He made his wife work like an ordinary woman.
40. What forced the queen to do all the household chores?
- The simple life style of the Sultan.
  - The lack of money in the treasury.
  - The poor working of the maid servant.
  - The Sultan's greed for money.

**Group B [Mathematics]**

41. If the slope of line joining (1,2) and (k, -5) is equally inclined with both the axes, then the value of k is
- 6
  - 6
  - 3
  - 2
42. What is the value of  $\cot 90^\circ$ ?
- 3
  - $\frac{1}{2}$
  - 0
  - 1
43. What is the probability of drawing a queen when one card is drawn randomly from a well shuffled pack of 52 cards? Find the probability of drawing a red queen?
- $\frac{1}{26}$
  - $\frac{5}{6}$
  - $\frac{3}{4}$
  - $\frac{15}{36}$
44. If A, B, C are the subsets of a universal set U. Then  $A - (B \cup C)$  is equal to,
- $(A - B) \cup (A - C)$
  - $(A - B) \cap (A - C)$
  - $(A \cap B) - (A \cap C)$
  - $(A \cup B) - (A \cup C)$
45. Of a group of 120 students, 90 takes mathematics and 72 takes statistics. If 10 students neither of two, the number of student taking both subjects are:
- 50
  - 45
  - 52
  - 58
46.  $-5 < x < 7$  can be written in the absolute value sign as:

47. a)  $|x-1| < 7$                       b)  $|x-1| < 6$                       c)  $|x-1| < 2$                       d)  $|x-1| < -1$
47. If the relation  $R = \{(1, 2), (2, 3), (3, 4), (4, 5)\}$  then its range is,
48. a)  $\{2, 3, 4, 5\}$                       b)  $\{1, 2, 3, 4\}$                       c)  $\{1, 2, 3, 5\}$                       d)  $\{1, 3, 4, 5\}$
48. The value of  $\tan 180^\circ$  is equal to,
- a) 1                      b) -1                      c) 0                      d)  $\infty$
49.  $1^2 + 2^2 + 3^2 + \dots + n^2$  is equal to,
- a)  $\frac{n(n+1)}{2}$                       b)  $\frac{n(n+1)(2n+1)}{6}$                       c)  $\left\{\frac{(n+1)}{2}\right\}^2$                       d) None of the above
50. If a matrix  $A = \begin{pmatrix} 0 & 5 & -6 \\ -5 & 0 & 2 \\ 6 & -2 & 0 \end{pmatrix}$ , then matrix A is known as
- a) Symmetric Matrix                      b) Skew-Symmetric Matrix  
c) Diagonal Matrix                      d) Triangular Matrix
51. The radius of the circle  $x^2 + y^2 = 9$  is equal to,
- a) 4                      b) 3                      c) 5                      d) 9
52. The value of  $2\sqrt{128} + \sqrt{162}$  is,
- a)  $25\sqrt{2}$                       b)  $4\sqrt{3}$                       c) 0                      d) 60
53. If  $A = \begin{bmatrix} 1 & 2 \\ 3 & 1 \end{bmatrix}$ , then the value of  $A^2 - 2A - 5I$  is equal to,
- a) 1                      b) -1                      c) 2                      d) 0
54. What is the half of quarter of 400?
- a) 200                      b) 100                      c) 50                      d) 90
55. Half percent, written as a decimal is,
- a) 0.2                      b) 0.02                      c) 0.005                      d) 0.05
56. The true discount on Rs. 2,562 due 4 months hence is Rs. 122. The rate percent is:
- a) 12%                      b) 13%                      c) 14%                      d) 15%
57. The percentage increase in the area of a rectangle, if each of its sides is increased by 20% is:
- a) 40%                      b) 42%                      c) 44%                      d) 46%
58. AB and CD bisect each other at O. If AD = 6 cm, BC is:
- a) 5.9 cm                      b) 6 cm                      c) 4.8 cm                      d) 7 cm
59. The compound interest on Rs. 30,000 at 7% per annum is Rs. 4347. The period (in years) is:
- a) 2                      b) 3                      c) 4                      d) 8
60. If a man were to sell his chair Rs. 720, he would lose 25% to gain 25%. He would sell it for:
- a) Rs. 1,200                      b) Rs. 1,000                      c) Rs. 960                      d) Rs. 900
61. Find the percentage gain or loss when the dot pens bought for Rs. 96 per dozen were sold at the rate of 10 for Rs. 90?
- a) 13%                      b) 20%                      c) 4%                      d) 12.5%
62. What is the value of  $\cos^2 30^\circ - \sin^2 30^\circ$ ?

- a)  $\frac{1}{2}$                       b)  $\frac{\sqrt{3}}{2}$                       c)  $\frac{1}{\sqrt{3}}$                       d)  $\frac{-1}{2}$
63. How many stones each of area 0.16 cm square are required for paving a courtyard 5.5 m long and 4.8 m wide?  
a) 60                      b) 100                      c) 50                      d) 165
64. Which one is the formula for area of equilateral triangle?  
a)  $\frac{\sqrt{3}}{4a^2}$                       b)  $\frac{1}{2} \times b \times h$                       c)  $\sqrt{(s-a)(s-b)(s-c)}$                       d) None of these.
65. The commission of Rs. 5,600 at the rate of 3.5% is:  
a) Rs. 196                      b) Rs. 440                      c) Rs. 360                      d) Rs. 1,000
66. The discount percent of marked price is Rs. 5,800 and discount amount is Rs. 696 then the discount percent is,  
a) 12%                      b) 20%                      c) 5%                      d) 38%
67. What is the tax rate if original price is Rs. 2,000 and selling price is Rs. 2,400?  
a) 20%                      b) 17.39%                      c) 35%                      d) 10%
68. The sum of the ages of father and his son is 52 years. Eight years ago the father was eight times as old as his son, the present age of son is,  
a) 10 years                      b) 20 years                      c) 12 years                      d) 15 years
69. If 4 is subtracted from a square of a number, its result is 21. The number is,  
a) 5                      b) 4                      c) 6                      d) 3
70. The radius of the circle  $x^2 + y^2 - 12x - 4y = 9$  is equal to,  
a) 18                      b) 7                      c) 10                      d) 2
71. The system of linear equation will be consistent and independent if they have,  
a) exactly one solution                      b) more than one solution  
c) no solution                      d) none of these
72. Let a and b are two numbers on the real line. If  $(a, b] = \{x: a < x \leq b\}$  is known as,  
a) left open interval                      b) right open interval  
c) closed interval                      d) open interval
73. Let  $f: \mathbb{R} \rightarrow \mathbb{R}$  and  $g: \mathbb{R} \rightarrow \mathbb{R}$  be defined by  $f(x) = 2x^2 - 3$ ,  $g(x) = 3x + 2$ . Then the composite functions  $g \circ f(x)$  is,  
a)  $9x + 8$                       b)  $2x + 2$                       c)  $2x + 1$                       d)  $6x^2 - 7$
74. A square matrix A is said to be singular if its determinant is equal to,  
a) 1                      b) 0                      c) -1                      d) none of these
75. The system of equations  $4x - 3y = -6$ ,  $-4x + 2y = 16$  is,  
a) consistent and dependent                      b) inconsistent and independent  
c) inconsistent and dependent                      d) consistent and independent
76. Ratio of 2 km to 600 m should be,  
a) 2:7                      b) 2:8                      c) 2:3                      d) 10:3
77. In  $a : b = c : d$ , then b and c are called,

- a) antecedent                      b) extreme                      c) consequent                      d) mean
78. If  $b^2 - 4ac < 0$  then the roots of  $ax^2 + bx + c = 0$  are:  
a) equal                      b) rational                      c) irrational                      d) imaginary
79. A polygon having 10 sides is called,  
a) decagon                      b) heptagon                      c) quadrilateral                      d) hexagon
80. Linear equation is also known as,  
a) simultaneous equation                      b) second degree equation  
c) first degree equation                      d) zero degree equation
81. Two straight lines in same plane which never meet are called,  
a) angles                      b) transversal lines                      c) vertex                      d) parallel line
82. If  $x^4 - 3x + 5$  is divided by  $2x - 1$ , then remainder is,  
a)  $\frac{35}{16}$                       b)  $-\frac{35}{16}$                       c) -9                      d) 3
83. If A, G, H are arithmetic, geometric and harmonic means between a and b,  
a) in G.P                      b) in A.P                      c) real numbers                      d) in H.P
84. In selling an article for Rs. 76, a shopkeeper gain 52%. The gain by selling that for Rs. 74 is  
a) 45%                      b) 48%                      c) 49%                      d) 50%
85. Ram bought oranges at 6 for Rs. 10 and sold them at 4 for Rs. 6, find his loss percent  
a) 12%                      b) 8%                      c) 6%                      d) 10%
86. Which of the following is incorrect?  
a)  $A.M = ab$                       b)  $G.M = \frac{2ab}{a+b}$                       c)  $H.M = \frac{a+b}{2}$                       d) none of these
87. By giving a discount of 10% on the marked price of Rs. 1,100 of a mobile phone a dealer gains 10%, then the cost price is  
a) Rs. 950                      b) Rs. 900                      c) Rs. 1,000                      d) Rs. 1,050
88. Rama purchased a table in Rs. 1,260 and due to some damage on its top, she had to sell it for Rs. 1,197,  
a) 20%                      b) 15%                      c) 10%                      d) 5%
89. A shopkeeper purchases 11 pens for Rs. 10 and sells them at of 10 for Rs. 11, then the profit is,  
a) 18%                      b) 19%                      c) 20%                      d) 21%
90. If  $A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix}$ , then A is  
a) unit matrix                      b) singular matrix                      c) symmetric                      d) all of them are true

### Group C [General Knowledge]

91. The famous Muktinath Temple is situated in,  
a) Tanahun                      b) Makwanpur                      c) Mustang                      d) Gorkha

92. The longest river in the world is,  
a) Nile                      b) Ganga                      c) Amazon                      d) Indus
93. In computer abbreviation of 'OS' usually means?  
a) Order Significance                      b) Open Software  
c) Operating System                      d) Optical Sensor
94. What day was yesterday, if Monday is in two days?  
a) WEDnesday                      b) Thursday                      c) Friday                      d) Saturday
95. Which district lie in state number 3?  
a) Helambu                      b) Birgunj                      c) Tanahun                      d) Lumbini
96. How many bits equal to one byte?  
a) 4                      b) 16                      c) 8                      d) 32
97. Who won the FIFA World Cup 2018?  
a) Croatia                      b) Russia                      c) Argentina                      d) France
98. What is the term to ask the computer to put information in order numerically or alphabetically?  
a) Crop                      b) Report                      c) sort                      d) Record
99. How many districts are there in Nepal?  
a) 75                      b) 73                      c) 77                      d) 76
100. Which one of the following is not a part of the internet?  
a) WWW                      b) E-mail                      c) CDROM                      d) HTTP

**Best of Luck**