

Old Question For BCA Entrance Preparation

Tribhuvan University
Faculty of Humanities and Social Sciences
Bachelor of Arts in Computer Application
Program (BCA)

Entrance Examination 2022

Full Marks: 100

Time: 2 hrs.

Attempt all questions:

Group A Grammar (40 × 1 = 40)

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

1. Managers have authoritytheir employees.
a. over b. with c. on d. in
2. She was born.....the 14th of July, 1994
a. in b. by c. at d. on
3. At the end of the street, turn....your left.
a. on b. at c. to d. with
4. The man has been working herelast Monday.
a. for b. from c. to d. since
5. She is expected to arrive a month's time.
a. at b. by c. in d. on
6. He crossedPacific ocean by plane.
a. a b. an c. the d. none
7. She isdoctor by profession.
a. a b. an c. the d. none
8. Please calldoctor as soon as possible, he is getting worse.
a. a b. an c. the d. none
9. Milan is innorth of Italy.
a. a b. an c. the d. none
10. She isSmallest of the three sisters.
a. a b. an c. the d. none
11. She helped her brother.....the problem.
a. solve b. solving
c. solves d. solved
12. I will make her....the telephone.
a. answered b. answer
c. answering d. answers
13. She is having me ...the job for her.
a. done b. doing
c. do d. to doing
14. He got his car....
a. fixing b. fixed
c. to fix d. fix
15. My mother got me ...my work.
a. to complete b. completed
c. complete d. completing
16. Columbus discovered America.....?
a. did he b. didn't he
c. hadn't he d. none
17. Stop that noise,?
a. will you b. won't you
c. can't you d. don't you
18. Let's march ahead,.....?
a. will you b. won't you
c. can't you d. don't you?
19. You and I are friends,.....?
a. aren't we b. aren't I
c. aren't you d. all possible
20. Everyone is happy,.....?
a. Isn't they b. aren't they
c. isn't everyone d. aren't everyone
21. I wish that heto the party.
a. may come b. will come
c. can come d. would come
22. The tourist finally got used to.....Nepali food after staying in Nepal for five months.
a. eat b. to eating
c. eaten d. eating
23. The cat hadtail hurt.
a. it b. it's c. their d. its
24. She washes the clothes...
a. themselves b. herself
c. himself d. ourselves
25. The plural of "goose" is
a. geoses b. goosees
c. geese d. gooses
26. The opposite of "detest" is ...
a. love b. hate
c. prove d. none
27. The word "understand" receives stress on itssyllable.
a. 1st b. 2nd c. 3rd d. 4th
28. A speech made at the end of the day.
a. Prologue b. epilogue
c. dialogue d. monologue
29. He said "what a beautiful scene!"
a. He said that what a beautiful scene it was
b. He exclaimed what a beautiful scene it was
c. He exclaimed what a beautiful scene it were.
d. He exclaimed that it was a beautiful dress.
30. What is the indirect of "congratulations"?
a. He congratulated me.
b. He told me congratulations.
c. He said congratulations.
d. He wished me congratulations.
31. 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

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32. She postponedto Pokhara.
a. going b. gone
c. to go d. going
33. You will succeed if you.....hard.
a. works b. work
c. will work d. had worked
34. I would rather...drink coffee than tea.
a. don't b. not
c. didn't d. hadn't
35. She acts as through he... acting classes.
a. takes b. took
c. had taken d. is taking

Read the given passage and then choose the best answer to each questions that follows.

Very closely associated with the beauty of the mountains are some special emotions that the peaks provoke. The companionship provided by climbing together is almost universally value. Lonely through the mountain peaks are, the teams of mountaineers who climb them find an developing between them. The friendship established in the mountains is lasting and irreplaceable walked the feather edge of danger with someone. When you have held his life at the end of a room he has later held yours, you have an almost impregnable foundation for friendship, for the deeper from sharing failure as well as success, danger as well as safety.

Questions:

36. The friendship established during mountain climbing is
 - a. lasting and irreparable
 - b. like the friendship in modern societies
 - c. born out of solitude
 - d. inspired by the beauties of nature
37. Real friendship is born when people share about their
 - a. failures
 - b. success
 - c. dangers
 - d. 1, 2, and 3 together
38. When you have walked the feather edge of danger with someone.
 - a. You will meet him at the party afterward
 - b. You will have really appreciated the beauty later
 - c. You will get tired easily
 - d. You will have an irreplaceable foundation for a friend.
39. The word 'impregnable' implies
 - a. That which cannot be overcome or taken by force.

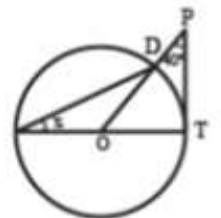
- b. That which exhibits a lot of strength.
c. That which last forever.
d. That which is very impressive.
40. "Walked the feather edge of danger with someone" means
a. Walked on feathers with someone.
b. Walked on someone on the edge of danger.
c. Walked together with feather-like steps
d. Walked where the dividing line between danger and safety.

Group B [Mathematics]

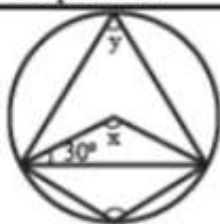
41. If $n(A) = 50$, $n(B) = 30$, $n(U) = 70$ and $n(A \cap B) = 15$ then $n(A \cup B)$ is equal to
a. 45 b. 50 c. 55 d. 60
42. Set of natural number is
a. Finite set b. Infinite set
c. Null set d. Singleton set
43. If $n(A) = 26$, $n(B) = 32$, then maximum value of $n(A \cup B)$ is
a. 26 b. 58 c. 32 d. 6
44. The Marked Price of an article is Rs. 8500. If a discount of 10% is allowed the selling price is
a. 7550 b. 7650
c. 7750 d. 7850
45. If £ 7 = \$ 11 and \$ 2 = Rs. 213, then how many pound (£) can be exchange for Rs. 117150?
a. 750 b. 650
c. 700 d. 850
46. A mobile is sold for Rs. 11000, with a profit of Rs. 1000, then the percentage profit is
a. 9% b. 10% c. 12% d. 14%
47. Area of an equilateral triangle with each side 'a' is
a. $\frac{\sqrt{3}}{2} a^3$ b. $\frac{\sqrt{3}}{2} a^2$
c. $\frac{\sqrt{3}}{4} a$ d. $\frac{\sqrt{3}}{4} a^2$
48. Area of triangle with sides 4cm, 5cm, 7cm is
a. 7.8cm^2 b. 8.8cm^2
c. 9.8cm^2 d. 10.8cm^2
49. Radius of cylinder is 7 cm height is 12 cm then it's volume is
a. 1848cm^3 b. 1748cm^3
c. 1648cm^3 d. 1548cm^3
50. Total surface area of a hemisphere having radius 7 cm is
a. 450cm^2 b. 460cm^2
c. 462cm^2 d. 472cm^2
51. If the volume of a cone is 3696cm^3 and radius of the base is 14cm then height of the cone is
a. 16cm b. 17cm c. 18cm d. 19cm

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52. If $3^{2x} - 9 = 0$ then the value of x is equal to
a. 0 b. 1 c. 3 d. 9
53. The value of $\left(\frac{27}{8}\right)^{\frac{1}{3}} \div \left(\frac{9}{4}\right)^{\frac{1}{2}}$ is
a. 1 b. -1 c. 2 d. -2
54. The two lines $x - y = 4$ and $2x - y = 16$ are
a. parallel b. perpendicular
c. intersecting d. non-intersecting
55. The sum and difference of two positive numbers are 15 and 5 respectively, then the numbers are
a. 14, 1 b. 11, 4
c. 12, 3 d. 10, 5
56. A number is twice the other. If their sum is 30 then the numbers are
a. 10, 20 b. 25, 5
c. 12, 18 d. 17, 13
57. If the sum of squares of two consecutive even numbers is 100, then the numbers are
a. 2, 4 b. 4, 6 c. 6, 8 d. 8, 10
58. If 17 is subtracted from a square of a number the result is 152, then the positive number is
a. 11 b. 14 c. 12 d. 13
59. The sum of first 20 positive numbers is
a. 150 b. 175 c. 200 d. 210
60. The fifth term of the sequence $\frac{1}{2}, \frac{4}{5}, \frac{7}{8}, \dots$ is
a. $\frac{11}{12}$ b. $\frac{12}{13}$ c. $\frac{13}{14}$ d. $\frac{14}{15}$
61. If $f(x) = 2x + 3$ then $f(3)$ is equal to
a. 6 b. 3 c. 8 d. 9
62. Sum of the functions $\sin(\pi) + \cos(\pi)$ is equal to
a. 6 b. 3 c. 8 d. 2
63. One factor of the polynomial $x^3 - 4x^2 + x + 6$ is
a. $(x + 1)$ b. $(x + 2)$
c. $(x + 3)$ d. $(x + 4)$
64. Sum of the infinite series $1 + \frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \dots$ is
a. 2 b. 3 c. 1 d. 4
65. Sum of squares of first 5 natural numbers is
a. 50 b. 52 c. 53 d. 55
66. Top of tree which is at a distance of 45 meter makes an angle of 45° to the observer, then the height of the tree is
a. 45m b. 50m c. 55m d. 60m
67. If two lines are perpendicular with each other then the product of their slope is
a. 1 b. -1 c. 2 d. -2
68. $(2, 1)$ and $(2, 5)$ are two points in a plain then the distance between two points is
a. 1 b. 2 c. 3 d. 4
69. Equation of a straight line which is parallel to y -axis and passes through the point $(3, 0)$ is
a. $X = 3$ b. $x = -3$
c. $y = 3$ d. $y = -3$
70. Single equation represented by two straight lines $x = 2y$ and $2x = y$ is
a. $2x^2 - 3xy + 2y^2 = 0$
b. $x^2 - 3xy + 2y^2 = 0$
c. $2x^2 - xy + 2y^2 = 0$
d. $2x^2 - 3xy + y^2 = 0$
71. Diameter of a circle subtend an angle at the circumference which is always
a. 45 degree b. 60 degree
c. 90 degree d. 180 degree
72. Angle subtended by an arc at the center of a circle and at the circumference are related as
a. Angle at the center is double of the angle of the circumference
b. Angle at circumferences is double of the angle at the center
c. Both the angles are equal
d. There is no relation between them
73. A parallelogram and a triangle standing on the same base and between the same parallel lines are
a. Both are equal in area
b. Area of the parallelogram is double of the area of triangle
c. Area of the triangle is double of the area of parallelogram.
d. Area between them can't be compared
74. Sum of the four angles of a cyclic quadrilateral is
a. 90 b. 180 c. 270 d. 360
75. In the adjoining figure, PT is tangent, center O and angle OPT is 140° , then the value of x is



- a. 40° b. 80° c. 50° d. 25°
76. In the adjoining figure, X is the center of the circle and the given angle is 30° , then the value of y is



- a. 30° b. 40° c. 50° d. 60°
77. $A = \begin{bmatrix} 2 & 3 \\ 1 & 1 \end{bmatrix}$, then inverse of matrix A is
 a. $\begin{bmatrix} -2 & 3 \\ 1 & -1 \end{bmatrix}$ b. $\begin{bmatrix} 2 & -3 \\ -1 & 1 \end{bmatrix}$
 c. $\begin{bmatrix} 2 & 3 \\ 1 & 1 \end{bmatrix}$ d. $\begin{bmatrix} -2 & -3 \\ 1 & 1 \end{bmatrix}$
78. Determinant of singular matrix is
 a. 0 b. 1 c. -1 d. 2
79. What is the value of $\tan 90^\circ$?
 a. 0 b. 1 c. -1 d. ∞
80. Of a group of 120 students, 80 takes mathematics and 62 takes statistics. If 20 students neither if two, the number of students taking both subjects are
 a. 50 b. 42 c. 52 d. 55
81. $-5 < x < 9$ can be written in the absolute value sign as:
 a. $|x - 2| < 5$ b. $|x - 2| < 7$
 c. $|x - 2| < 9$ d. $|x + 2| < 5$
82. If the relation $R = \{(1,2), (2,3), (3,4), (4,5)\}$ then its range is,
 a. $\{2, 3, 4, 5\}$ b. $\{1, 2, 3, 4\}$
 c. $\{1, 2, 3, 5\}$ d. $\{1, 3, 4, 5\}$
83. The radius of the circle $x^2 + y^2 = 25$ is equal to
 a. 4 b. 3 c. 5 d. 9
84. The value of $2\sqrt{128} + \sqrt{162}$ is,
 a. $25\sqrt{2}$ b. $4\sqrt{3}$
 c. 0 d. 60
85. How many stones each of area 22 cm square are required for paving a courtyard 5.5 m long and 4 m wide?
 a. 60000 b. 40000
 c. 20000 d. 10000
86. The commission of Rs. 5,600 at the rate of 5% is
 a. Rs. 280 b. Rs. 360
 c. Rs. 560 d. Rs. 144
87. The discount of marked price is Rs. 5,800 is the amount Rs. 696 then the discount percent is.
 a. 12% b. 20%
 c. 5% d. 38%
88. If $b^2 - 4ac = 0$ then the roots of $ax^2 + bx + c = 0$ are:

- a. equal b. not exist
 c. rational d. imaginary
89. Which of the following is correct?
 a. $A.M = ab$ b. $H.M = \frac{2ab}{a+b}$
 c. $H.M = \frac{a+b}{2}$ d. none of these
90. Limit of function $\lim_{x \rightarrow 0} \frac{\sin(x)}{x}$ is equal to
 a. 0 b. 1 c. -1 d. Not exists
- General Knowledge (10 × 1 = 10)**
91. What is the full form of WWW?
 a. Well Wired Work b. World Web Wide
 c. World Wide Web d. Word Windows Work
92. Which is not a input device?
 a. Mouse b. Light Pen
 c. Printer d. Scanner
93. The day before the day before yesterday is three days after Saturday is,
 a. Friday b. Thursday
 c. Wednesday d. Sunday
94. A and B are brothers, C and D are sisters A's sons is D's brother. How is B related to C?
 a. Father b. Brother
 c. Grandfather d. Uncle
95. What is the area of Nepal?
 a. $147,516 \text{ km}^2$ b. $147,316 \text{ km}^2$
 c. $147,416 \text{ km}^2$ d. $147,616 \text{ km}^2$
96. Who is the author of Palpasa Cafe?
 a. Amar Neupane b. Buddhi Sagar
 c. Narayan Wagle d. Laxmi Prasad Devkota
97. How many total teams are going to participate in FIFA World Cup 2022?
 a. 34 b. 31 c. 35 d. 32
98. What temperature is water the dense?
 a. 3.98° b. 3.76°
 c. 3.70° d. 3.50°
99. The famous Shashwat Dham Temple is situated in,
 a. Tanahun b. Makawanpur
 c. Nawalparasi d. Gorkha
100. Which is the first WiFi-free district of Nepal?
 a. Parsa b. Darchula
 c. Kaski d. Myagdi