Tribhuvan University
Faculty of Humanities and Social Sciences
Bachelor of Computer Application Program
Entrance Examination 2017

Full Mars: 100
Time: 2.00 Hours
Attempt all the questions.
Circle the correct option [Multiple Choice Questions]

Subject : English (40 Questions)

1. She is very good ----- swimming.
   a) at  b) on  c) of  d) for
2. Ravi will have arrived home ----- 8 pm tomorrow.
   a) in  b) at  c) by  d) on
3. Rita is ----- honest and diligent student.
   a) a  b) an  c) this  d) no article
4. The passive version of “Who did it?” is:
   a) Who was it done?  b) Who was it done by?  c) Who was done it?
   d) Who had it done by ?
5. We had to stop ---- the entrance for the security check.
   a) in  b) on  c) at  d) for
6. Using a ------ cleaner is the best way for avoiding the dust pollution.
   a) vaccum  b) vacume  c) vacuum  d) vacuume
7. The plural form of “ox” is:
   a) oxen  b) oxes  c) oxez  d) none
8. The feminine form of deer is:
   a) deeress  b) doe  c) stag  d) none
9. If I had known about your arrival, I -------- to receive you at the airport.
   a) would come  b) would came  c) would have come  d) had come
10. At midnight, all the goats were --------.
    a) bleating  c) howling  c) roaring  d) mowing
11. The question tag of “They have already arrived,” is
    a) Have they?  b) Haven’t they?  c) Weren’t they?  d) Did they?
12. Please ------ the cigarette. It irritates me.
    a) put down  b) put out  c) put away  d) put in
13. As Gretel’s father could not do anything, he gave------.
    a) away  b) out  c) in  d) into
14. I have eaten nothing for hours. I am ----- hungry.
    a) quiet  b) quit  c) quite  d) quit
15. The synonym of recurring is:
    a) occurring repeatedly  b) happening rarely
    c) occurring once a week  d) occurring seldom
16. The antonym of “on” is:
   a) of  b) un  c) off  d) out
17. ------ he was very popular among common people, he could not win the election.
   a) Because  b) So  c) Although  d) Therefore
18. The indirect speech of “Are you sure? She said to me”, is:
   a) She asked me if I was sure.  b) She wanted to know was I sure.
   c) She inquired if I am sure.  d) She asked him if I was sure.
19. In the night bus yesterday, I had my purse ______.
   a) steal b) stole  c) stolen  d) to steal
20. I am looking forward to ------ you very soon again.
   a) see b) seen  c) seeing  d) be seen.
21. I bought this pen from the ------ store.
   a) stationery  b) stationary  c) stationnary  d) stantianory
22. This bed is not _____ for two people to sleep in.
   a) as wide as  b) wide enough  c) wider enough  d) quite wider
23. The fault in the engine is ______ this time than it was the last time.
   a) more serious  b) seriouser  c) very serious  d) serious than
24. You will find the photograph of mine ----- page 13.
   a) at  b) on  c) of  d) with
25. Reeta can dance ----- of all in this class.
   a) the best  b) better  c) best  d) more better
26. Hurry up and use the fire ------------, the house is on fire.
   a) extincter  b) extinguisher  c) extinguishing  d) extinguish
27. The tag question of “I am an engineer,” is:
   a) Aren’t I?  b) Am not I?  c) Don’t I?  d) Ain’t I ?
28. I am in a state of dilemma. That means I am -------.
   a) dazzled  b) tired  c) puzzled  d) not sure
29. She undergoes a strange experience of seeing something not present in front of her. In other
   words, she is suffering from ----------.
   a) hallucination  b) bronchitis  c) tonsillitis  d) psychosis
30. She can play tennis, but she is ------- at it than her friend.
   a) badly  b) worse  c) more badly  d) worsley
31. Sulav sold his plot of land in the village so that he ------- buy a new house in the city.
   a) could  b) can  c) need  d) would
32. If you teased the dog, it ------ bite you.
   a) will  b) would  c) did  d) can
33. She is so ___ that she easily catches cold.
   a) Sincere  b) sensitive  c) sensible  d) sober
34. The synonym of purgatory is:
   a) polluted city  b) hell  c) heaven  d) sky
35. The synonym of creek is:
   a) pond  b) late  c) rivulet  d) tributary
36. No sooner had I left the room, the bomb ----- exploded.
37. Sarita plays chess ------ than her sister.
   a) more better   b) better   c) well   d) best

38. I am looking forward to ------ you soon.
   a) seeing   b) see   c) be seen   d) seen

39. Because of the heavy rain, they decided to call ------ the cricket match.
   a) out   b) up   c) off   d) down

40. Cholera broke ------ in Jajarkot ten years ago.
   a) out   b) down   c) up   d) into

**Mathematics (50 Questions)**

41. Which one of the following number has a remainder of 4 when it is divided by 6?
   a) 8   b) 12   c) 22   d) 29

42. The sum of the product and quotient of 4 and 4 is ____.
   a) 16   b) 15   c) 8   d) 17

43. The average of all even numbers between -4 and 5 is____.
   a) 1   b) 0.5   c) -1   d) none of these

44. The sum of first five prime numbers is:
   a) 11   b) 18   c) 26   d) 28

45. The value of $\sum_{n=1}^{10}(-1)^n$ is:
   a) 1   b) -1   c) 10   d) 0

46. The product of two consecutive even number is 224. Then the numbers are:
   a) 16, 18   b) 12, 14   c) 14, 16   d) 18, 20

47. If 5 is added to the square of a number, then the result is 14. What is the value of that number?
   a) 3   b) 5   c) 7   d) 9

48. If three spoons equals to one glass, two glasses equals to one plate, then how many spoons equals to one plate?
   a) 3   b) 6   c) 9   d) 2

49. If a matrix is of order 5 x 7, then each column will contain ____ elements.
   a) 5   b) 12   c) 35   d) 7

50. If the equations are $3x + 4y = 7$ and $4x – y = 3$, after solving these equations the value of x and y will be:
   a) 1, 1   b) 1, 2   c) 2, 1   d) 2, 2

51. What is the value of x in series 1, 9, 25, x, 81, 121?
   a) 100   b) 36   c) 49   d) 64

52. If $a + b = c$, then what is the average value of a, b, and c?
   a) $(a+b)/3$   b) $c/3$   c) $2c/3$   d) $c/3$

53. If x is an integer and $y = -2x – 8$, what is the least value of x for which y is less than 9?
   a) -8   b) -9   c) -10   d) -11
54. The slope of line which equation is \(2x - 4y = 9\) is:
   a) 2  
   b) \(\frac{1}{2}\)  
   c) -\(\frac{1}{2}\)  
   d) 3

55. What is the slope of horizontal line?
   a) >1  
   b) < 0  
   c) 0  
   d) 1

56. The difference between \(\frac{3}{5}\) of 80 and 30% of 80 is:
   a) 20  
   b) 14  
   c) 15  
   d) 24

57. Gautam spent Rs. 40/-, which is 5% of his daily wage, then his total daily wage is:
   a) Rs.400/-  
   b) Rs.600/-  
   c) Rs.800/-  
   d) Rs. 1000/-

58. If 1254376 represents the CENTURY, then what represents 735?
   a) NUT  
   b) RUT  
   c) RUN  
   d) YET

59. Find the missing value in \[
\begin{bmatrix}
2 & 7 & 6 \\
9 & 5 & 1 \\
4 & 3 & ? \\
\end{bmatrix}
\]
   a) 5  
   b) 8  
   c) 7  
   d) 9

60. There are 48 students in a computer class. If number of boys are twice than girls, then how many girls are there?
   a) 16  
   b) 18  
   c) 32  
   d) 28

61. Find the number \(x\), which is equal to (80% of \(x\)) plus 5.
   a) 20  
   b) 30  
   c) 40  
   d) 25

62. If the ratio of two numbers is 2:3 and sum of these numbers is 30, then which are these numbers?
   a) 14, 16  
   b) 10, 20  
   c) 12, 18  
   d) 18, 12

63. If the age of five girls are 15, 16, 17, 18, 19 respectively then what is the average age of girls?
   a) 15  
   b) 17  
   c) 18  
   d) 19

64. How many triangles in this figure?
   a) 6  
   b) 7  
   c) 8  
   d) 9

65. What is the value of \(\cos 60^\circ\)?
   a) 1  
   b) \(\frac{1}{2}\)  
   c) 0  
   d) \(\frac{\sqrt{3}}{2}\)

66. Find the value of \(x\) in series 1, 1, 2, 3, 5, 8, 13, x.
   a) 21  
   b) 22  
   c) 19  
   d) 23

67. If \(n\) is an integer, which of the following must be even?
   a) \(n + 1\)  
   b) \(n + 2\)  
   c) \(2n + 1\)  
   d) \(2n\)
68. The largest prime factor of 255 is:
   a) 45  
b) 25  
c) 17  
d) 5

69. The sum of first n natural number is:
   a) $\frac{n(n+1)}{2}$  
b) $\frac{n(n+1)(2n+1)}{2}$  
c) $\frac{(n+1)^2}{2}$  
d) none of these

70. The root of the equation $3x^2 - 8x + 16 = 0$ are
   a) real & equal  
b) real & unequal  
c) imaginary & unequal  
d) none of these

71. If $x + y = 12$ and $x - y = 6$ then, the value of $x^2 - y^2$ is:
   a) 18  
b) 36  
c) 60  
d) 72

72. If $x - 5 = 2$, then the value of $x + 12$ is:
   a) 15  
b) 17  
c) 19  
d) 18

73. The value when simplified $\frac{6^4 - 6^3}{5}$ is:
   a) 1/5  
b) 6^3  
c) 6/5  
d) 6^4

74. If $4/a + 4/a + 4/a + 4/a = 16$ then, 4a is:
   a) 4  
b) 8  
c) 12  
d) 16

75. The slope of line $\frac{x}{a} + \frac{y}{b} = 1$ is:
   a) $-\left(\frac{a}{b}\right)$  
b) $-\left(\frac{b}{a}\right)$  
c) ab  
d) $-\left(\frac{1}{ab}\right)$

76. If $x = 4y$, what percent of 2x is 2y?
   a) 20%  
b) 40%  
c) 30%  
d) 25%

77. If the cost of 9 kg sugar is Rs. 270/-, how much sugar can be purchased for Rs. 390/-?
   a) 11  
b) 12  
c) 13  
d) 14

78. If 3 bananas cost 50 cents, how many bananas can be bought for 20 dollars?
   a) 120  
b) 115  
c) 110  
d) 130

79. If $5:7 = 15:x$, then the value of $x$ is:
   a) 35  
b) 21  
c) 27  
d) 18

80. By selling 150 apples, the seller gains the selling price of 30 apples, then gain percentage is:
   a) 25%  
b) 30%  
c) 12%  
d) 20%

81. A vendor purchases lemons at Rs. 5/- per lemon, at what price vendor will sell lemon to gain 20% profit?
   a) Rs. 4/-  
b) Rs. 5/-  
c) Rs. 6/-  
d) Rs. 7/-

82. What is the population doubling time if population growth rate is 2% per annum?
   a) 50yrs  
b) 30yrs  
c) 40yrs  
d) none of these

83. The cardinal number of a vowel set $V = \{a, e, i, o, u\}$ is:
   a) 4  
b) 5  
c) 6  
d) 7

84. If $\log_a 81 = 4$, then the value of ‘a’ is:
   a) 4  
b) 3  
c) 5  
d) none of these

85. The value of $\frac{\sqrt{18}}{\sqrt{72}}$ is:
   a) a rational number  
b) an irrational number  
c) an imaginary number  
d) none of these
86. If 5/7 of a number is 1025, then 3/7 of number is:
   a) 735     b) 430     c) 615     d) 560

87. The number of seconds in $1\frac{1}{3}$ hours is:
   a) 4800     b) 4700     c) 4900     d) 5000

88. The 4m wide carpet is used for carpeting a room of 8m long and 3m wide, then what is the length of carpet?
   a) 5m     b) 6m     c) 2m     d) 3m

89. Hari ranks seventh from the top and twenty sixth from the bottom in a class. Then the total number of students in a class are:
   a) 36     b) 35     c) 31     d) 32

90. If three girls write 3 pages in 3 minutes, in how many minutes can one girl write one page?
   a) 4 min     c) 5 min     c) 3 min     d) 6 min

91. Nepal was hit by the 7.8 magnitude Earthquake on:
   a) 2072 Baisak 10     b) 2072 Baisak 11     c) 2072 Baisak 12     d) 2072 Baisak 13

92. The new constitution of Nepal, "Nepal Ko Sambidhan" was released on:
   a) 2072 Asoj 4     b) 2072 Asoj 3     c) 2072 Asoj 2     d) 2072 Asoj 1

93. Who is the writer of Novel *Ek Chihan*?
   a) Hridaychandra singh Pradhan     b) Krishnachandra singh Pradhan
   c) Bijaybahadur Malla     d) Parijat

94. Kusti is played on:
   a) Ground     b) Court     c) Ring     d) Akhada

95. Who is considered as the father of computer?
   a) Charles Babbage     b) Bill Gates     c) Mark Jukerberg     d) Chris Hughes

96. Which one of the following is the database program?
   a) MySQL     b) MS-Excel     c) MS-Word     d) MS-Outlook

97. What is the full form of LCD?
   a) Light and Clear Display     b) Liquid Cristal Display
   c) Light Cristal Display     d) Liquid Clear Display

98. Which is the first bank in Nepal?
   a) Nepal Bank Limited     b) Rastriya Banijya Bank     c) Nepal Investment Bank
   d) Nepal Rastra Bank

99. Which of the following field is not awarded by Noble Prize?
   a) Computer Science     b) Physics     c) Economics     d) Literature

100. How many provinces (Pradesh) are in Nepal according to the new constitution?
    a) 5     b) 7     c) 8     d) 9