

# Tribhuvan University

## Faculty of Education

Entrance Test- 2080

Subject: BICTE

Time: 1.40 hrs

Level: Bachelor Degree

Full Marks: 100

Mark  the letter corresponding to the right answer of each question

- What is the primary function of a computer's BIOS?
  - Load the operating system
  - Create graphics display
  - Edit documents
  - Control music
- What type of storage does a computer use to store data for a long time?
  - RAM
  - Cache
  - Hard Disk
  - CPU
- Which type of monitor technology has the fastest frame rates and response times for gaming?
  - CRT
  - OLED
  - LCD
  - LED
- Which computer port is commonly used for connecting external hard drives and printers?
  - USB
  - HDMI
  - VGA
  - Ethernet
- Which component in a webcam captures video and sends it to your computer?
  - Microphone
  - Sensor
  - Lens
  - Speaker
- What kind of printer does an organisation use to print numerous pages in a short period of time?
  - Laser Printer
  - Inkjet Printer
  - Dot Matrix Printer
  - Thermal Printer
- Which mobile operating system is developed by Google?
  - Android
  - iOS
  - Windows Mobile
  - BlackBerry OS
- What is the purpose of a SIM card in a mobile device?
  - Take photos
  - Store contacts
  - Connect to Facebook
  - Make phone calls
- How many bits are in a single byte in the binary system?
  - 2
  - 4
  - 8
  - 16
- What is the binary representation of the decimal number "8"?
  - 1000
  - 1001
  - 1100
  - 1110
- Which logic gate produces an output of "1" if exactly one input is "1"?
  - OR gate
  - AND gate
  - XOR gate
  - NOT gate
- Which feature in MS Word is used to correct spelling errors as you type?
  - AutoCorrect
  - Spelling and Grammar
  - Accessibility Check
  - Thesaurus
- Which option is used to adjust the space between lines of text in Microsoft Word?
  - Text Alignment
  - Line Spacing
  - Font Size
  - Text Case
- Which keyboard shortcut is used to undo the last action in MS Word?
  - Ctrl + X
  - Ctrl + U
  - Ctrl + Z
  - Ctrl + S
- Which term is commonly used to refer to a single data point in Excel, where a column and row intersect?
  - Cell
  - Box
  - Frame
  - Block
- Which Excel function calculates the average of a range of numbers?
  - SUM
  - AVG
  - MAX
  - MIN
- Which Excel function is used to add up a range of numbers?
  - SUM
  - AVG
  - MAX
  - MIN
- Which Excel function can be used to sort data in ascending or descending order?
  - Filter
  - Sort
  - PivotTable
  - Order
- What is the keyboard shortcut to save a PowerPoint presentation?
  - Ctrl + P
  - Ctrl + S
  - Ctrl + N
  - Ctrl + O
- Which shortcut key is used to start a slide show from the current slide in PowerPoint?
  - F5
  - F12
  - Ctrl + F5
  - Shift + F5
- What is the primary purpose of a hashtag (#) on social media platforms?
  - Tagging people
  - Adding emphasis to text
  - Categorizing content
  - Encrypting messages
- Which protocol is used to transmit data over the Internet securely?
  - HTTP
  - SMTP
  - FTP
  - HTTPS
- What is the purpose of a web browser?
  - Sending emails
  - Playing video games
  - Navigating and displaying webpages
  - Editing documents
- Which folder in an email client is used to store emails that you have sent?
  - Inbox
  - Outbox
  - Sent Items
  - Drafts
- In email, what does "CC" stand for when sending a copy to others?
  - Copy Confirmation
  - Copy Control
  - Carbon Copy
  - Control Copy
- In a typical IPv4 address like "192.168.1.1," what does "192" represent?
  - Network address
  - Host address
  - Subnet mask
  - Port number

27. Which networking cable is often used for long-distance connections and is immune to electromagnetic interference?
- a. Coaxial cable                      b. Cat5e cable  
c. Fiber optic cable                  d. Cat6 cable
28. Which networking device is commonly used to connect a small office network to the internet provided by an ISP?
- a. Router                                  b. Switch  
c. Modem                                 d. Hub
29. Which network topology connects all devices to a central switch?
- a. Star      b. Bus      c. Ring      d. Mesh
30. What is the function of a firewall in a network?
- a. Filtering and blocking unwanted network traffic  
b. Increasing network speed  
c. Amplifying Wi-Fi signals  
d. Encrypting data packets
31. What is "Two-Factor Authentication" (2FA) used for?
- a. Sharing social media updates  
b. Improved online security with dual verification methods.  
c. Blocking internet access  
d. Creating strong passwords
32. What is the name for malicious software that encrypts your files and asks for payment to decrypt them?
- a. Computer Virus                      b. Worm  
c. Ransomware                         d. Spyware
33. What does cybercrime involve when it comes to misleading someone into supplying private information, generally via fake emails?
- a. Hacking                                 b. Phishing  
c. Cyberstalking                         d. Cyberterrorism
34. Which type of cybersecurity threat involves attempting to guess or crack passwords?
- a. Ransomware                         b. Malware  
c. Brute force attack                      d. Phishing
35. Which technology uses AI algorithms to analyze and understand human language?
- a. Machine Learning  
b. Virtual Reality  
c. Natural Language Processing  
d. Augmented Reality
36. Which technology is a subfield of AI that focuses on teaching computers to learn from data?
- a. Machine Learning                      b. Virtual Reality  
c. Cloud Computing                         d. Internet of Things
37. Which organization developed ChatGPT?
- a. Amazon                                 b. Google  
c. Facebook                                 d. OpenAI
38. What is the name of the learning tool that offers a vast collection of online books, textbooks, and academic resources?
- a. Coursera                                 b. edX  
c. Project Gutenberg                         d. LinkedIn Learning
39. Which of the following is an example of a popular video conferencing tool commonly used for online education?
- a. Microsoft Word                         b. Zoom  
c. Adobe Photoshop                         d. Spotify
40. What is the new logo of Twitter after replacing the iconic bird logo?
- a. Alphabet 'X'                                 b. Rocket  
c. Tesla Car                                     d. Chat symbol
41. If  $a < b$ ,  $c < 0$ , then which of the following is true?
- a.  $ac < bc$                                      b.  $ac \leq bc$   
c.  $ac > bc$                                      d.  $ac \geq bc$
42. If  $U = \{1, 2, 3, \dots, 15\}$ ,  $A = \{x : x \geq 8\}$  and  $B = \{x : x \leq 12\}$ , then what is the value of  $A - B$ ?
- a.  $\{13, 14, 15\}$   
b.  $\{1, 2, 3, 4, 5, 6, 7\}$   
c.  $\{8, 9, 10, 11, 12\}$   
d.  $\{8, 9, 10, 11, 12, 13, 14, 15\}$
43. Which of the following is the value of  $x$  if  $3^{3x+1} = 9^{2x}$
- a. 3                      b. 1                      c. -1                      d. 2
44. If  $ax - bx = a^2 - b^2$  and  $a \neq b$  then which of the following is the value of  $x$ ?
- a.  $a - b$                                          b.  $a^2 + b^2$   
c.  $a^2 - b^2$                                          d.  $a + b$
45. What is the value of  $x$  for:  $\sqrt{x} + 1 = 3$ ?
- a. 2     b. 4  
c. 1     d. does not exist
46. Which of the following is a false statement?
- a. If  $2+3=5$  then 6 is an odd number.  
b. If  $2+3>5$  then 6 is an odd number.  
c. If  $2+3=5$  then 6 is an even number.  
d. If  $2+3<5$  then 6 is an even number.
47. What is the slope of the given straight line:  $2y - 3x = 5$ ?
- a.  $-\frac{3}{2}$      b. 5  
c.  $\frac{3}{2}$      d.  $-\frac{2}{3}$
48. The quadratic equation  $ax^2 + bx + c = 0$  has equal roots if
- a.  $b^2 = 4ac$                                          b.  $b^2 > 4ac$   
c.  $b^2 < 4ac$                                          d.  $b^2 \neq 4ac$
49. The quadratic equation has
- a. at least two roots                                 b. exactly two roots  
c. more than two roots                                 d. less than two roots
50. Which of the following is the HCF of  $a^2b^2c^5, b^2c^2, ab^3c^5$ ?
- a.  $b^2c^2$      b.  $a^2b^3c^5$   
c.  $abc$      d.  $a^2b^2c^2$
51. Which of the following is the total surface area of a cube having one side  $x$ ?
- a.  $x^3$      b.  $x^2$   
c.  $4x^2$      d.  $6x^2$
52. Which of the following is the area of an equilateral triangle with one side  $4$  cm?
- a.  $\frac{\sqrt{3}}{4} \text{ cm}^2$      b.  $4\sqrt{3} \text{ cm}^2$   
c.  $16 \text{ cm}^2$      d.  $8 \text{ cm}^2$

53. Which of the following is the volume of the cylinder?  
 a.  $\frac{4}{3}\pi r^3$                       b.  $\frac{1}{3}\pi r^2 h$   
 c.  $\pi r^2$                               d.  $\pi r^2 h$
54. According to the symmetric matrix, which of the following statement is true?  
 a. The diagonal elements of a symmetric matrix are zero.  
 b. The diagonal elements of a symmetric matrix are one.  
 c. The value of matrix A and  $A^T$  is equal  
 d. The value of matrix A and  $-A^T$  is equal.
55. Which of the following is the solution of the inequality:  
 $-7 \leq 2x + 5 < 7$   
 a.  $-6 \leq x < 1$                       b.  $-6 \geq x > 1$   
 c.  $-7 \leq x < 7$                       d.  $-5 \leq x < 5$
56. What is the sum of two roots of the quadratic equation  
 $x^2 + bx + c = 0$ ?  
 a.  $\frac{b}{a}$                       b.  $\frac{c}{a}$                       c.  $-\frac{b}{a}$                       d.  $-\frac{c}{a}$
57. What is the CP of the goods which are sold for Rs. 1100 gaining 10% profit?  
 a. 1210                                      b. 1100  
 c. 1050                                      d. 1000
58. The price of an article is Rs. 5400. If 13% VAT is charged on it. Then which of the following is the VAT amount?  
 a. 700                                      b. 707  
 c. 705                                      d. Rs. 702
59. What will be the simple interest of Rs. 5000 for 5 years at 10% annual interest rate?  
 a. Rs. 2400                              b. Rs. 2500  
 c. Rs. 2200                              d. Rs. 2700
60. In how many years the sum of money will be doubled at 10% annual interest rate?  
 a. 5 years                                      b. 15 years  
 c. 10 years                                      d. 20 years
61. The sum of the deviation of all the items from the arithmetic mean is  
 a. Zero                                      b. Greater than zero  
 c. Less than zero                              d. Equal to 1.
62. Which of the following is not the measure of central tendency?  
 a. Arithmetic Mean                      b. Mode  
 c. Median                                      d. Standard deviation
63. If a coin is tossed twice then what will be the probability of getting two heads?  
 a.  $\frac{1}{4}$                                       b.  $\frac{1}{2}$   
 c. 1    d. 0
64. What is the probability of getting a red card from 52 deck of cards?  
 a.  $\frac{1}{13}$                                       b.  $\frac{1}{52}$   
 c.  $\frac{1}{4}$     d.  $\frac{1}{2}$
65. If the sum of two numbers is 7 and their product is 12, what are the numbers?  
 a. 5 and 2                                      b. 6 and 2  
 c. 4 and 3                                      d. 6 and 1
66. "She ran to her father, but he feebly waved his arm, pointing to her mother's door". The synonym of the underlined word is \_\_\_\_.  
 a. strongly                                      b. robustly  
 c. weakly                                      d. firmly
67. \_\_\_\_\_ of the opportunity, he didn't go to the interview.  
 a. Despite                                      b. Even though  
 c. In spite                                      d. However
68. Satish was late. \_\_\_\_\_, the others were all on time.  
 a. although                                      b. despite  
 c. even though                                      d. however
69. "That student had an extraordinary enthusiasm for science".  
 a. emotion                                      b. passion  
 c. logic    d. power
70. Which of the following is a plural noun?  
 a. cactus                                      b. goose  
 c. fungus                                      d. bacteria
71. I \_\_\_\_\_ my keys. Can you help me look for them?  
 a. lose    b. lost  
 c. have lost                                      d. had lost
72. She's \_\_\_\_\_ to China on holiday three times.  
 a. gone    b. been  
 c. go    d. going
73. "Her boss humiliated her in front of all her colleagues". Which is the synonym of the underlined word?  
 a. tortured                                      b. punished  
 c. confused                                      d. shamed
74. She is so different from you. You \_\_\_\_\_ be her sister.  
 a. may    b. must  
 c. can't    d. can
75. "Confront" means \_\_\_\_\_.  
 a. to face a difficult situation  
 b. to ease the situation  
 c. to change the situation that comes in front of you  
 d. to have a contract to build the front side
76. Perhaps this issue will not get much media \_\_\_\_\_.  
 a. security                                      b. examination  
 c. coverage                                      d. news
77. I always heard that marriage could \_\_\_\_\_ up a good friendship.  
 a. break    b. brake  
 c. braking                                      d. breaking
78. Nothing can stop us now, \_\_\_\_\_?  
 a. don't it                                      b. does it  
 c. can it    d. doesn't it
79. 'Sorry I'm late. I got delayed at work.' 'You \_\_\_\_\_ called. I was really worried about you.'  
 a. must have                                      b. could have  
 c. would have                                      d. had
80. He is an introvert. He has got very \_\_\_\_\_ friends.  
 a. much    b. many  
 c. few    d. little

81. Someone is learning something from a friend while working in the field. What kind of education is this?  
 a. Formal                      b. Non- formal  
 c. Informal                    d. Incidental
82. Bounded education system is a characteristic of...  
 a. informal education      b. non-formal education  
 c. incidental education    d. formal education
83. Which of the following is the associative process of social interaction?  
 a. Conflict                      b. Co-operation  
 c. Competition                d. Contradiction
84. Which of the following is the characteristics of permissive mode of socialization?  
 a. Communication as command  
 b. Non- verbal communication  
 c. Verbal communication  
 d. Parent centered
85. Which of the following is the characteristics of society?  
 a. Conscious organization  
 b. Living in a certain territory  
 c. Population aggregate  
 d. Co-operation and Conflict
86. Which of the following is a dimension of equality in education?  
 a. Teacher recruitment      b. Parents involvement  
 c. Inclusive assessment      d. Home work
87. Inclusive education aims to  
 a. Exclude students with disabilities from mainstream classrooms  
 b. Provide equal opportunities to all students, regardless of their abilities or disabilities  
 c. Create separate schools for students with disabilities  
 d. Promote competition among students
88. What is the term for policies or practices that give preferential treatment to underrepresented or disadvantaged groups in education?  
 a. Discrimination  
 b. Segregation  
 c. Affirmative action  
 d. Standardization
89. Educational equity refers to  
 a. treating all students the same way  
 b. providing the same resources to all schools and students  
 c. ensuring that all students have access to the same opportunities and resources needed to succeed  
 d. promoting competition among students
90. Which international document recognizes the right to education without discrimination and promotes equality in education?  
 a. Universal Declaration of Human Rights  
 b. Kyoto Protocol  
 c. United Nations Security Council Resolution 1325  
 d. Paris Agreement
91. According to behaviorist learning theory, learning is primarily influenced by:  
 a. Internal cognitive processes  
 b. Rewards and punishments  
 c. Social interactions  
 d. Cultural factors
92. Which of the following is an example of formative assessment?  
 a. A final exam at the end of the semester  
 b. A weekly test  
 c. A standardized test for college admissions  
 d. Entrance exam of language
93. Socratic method is known as:  
 a. Co-operative method  
 b. Student centered method  
 c. Problem solve method  
 d. Questioning method
94. Which of the following education plan introduced private, public partnership (3ps) concept in school level?  
 a. SSRP                              b. BPEP  
 c. EFA                                d. Seti project
95. Which of the following is micro plan?  
 a. EFA                              b. SSDP                              c. SIP                              d. SESP
96. How many years of education is the minimum compulsory education in Nepal?  
 a. 8 years                              b. 10 years  
 c. 12 years                             d. 14 years
97. When was the Basic Education established?  
 a. 2002 B.S.                              b. 2003 B.S.  
 c. 2004 B.S.                             d. 2005 B.S.
98. Which of the following Education commission recommended for establishing of Multi University concept in Nepal?  
 a. NNEPC, 2011B.S.                      b. ARNEC, 2018 B.S  
 c. NESP, 2028 B.S                        d. NEC, 2049 B.S.
99. What was the purpose of Shresta Pathshala opened during the Rana period?  
 a. To educate sons and daughters  
 b. To give technical education  
 c. To produce civil servants  
 d. To make priests
100. Salamanca Conference was related to  
 a. Education for All                      b. Inclusive Education  
 c. Child Rights                            d. Human Rights



