



Gandaki University

गण्डकी विश्वविद्यालय

Pokhara, Nepal

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Entrance Examination 2078 (2022)

Bachelor of Information Technology (BIT)

Symbol No.:

Time: 75 minutes

In words:.....

Total Questions: 100

Encircle 'o' the correct answer from the multiple choices.

1. If $n(A) = 80$ and $n(B) = 65$, what is the least value of $n(A \cup B)$?

(A) 145 (B) 80 (C) 65 (D) 15

2. If $x + y = 10$ and $x - y = 11$, then the value of $x^2 - y^2$ will be:

(A) 21 (B) 20 (C) 22 (D) 110

3. Which of the following is a prime number?

(A) 9 (B) 8 (C) 4 (D) 2

4. Today is Monday. After 61 days it will be:

(A) Thursday (B) Sunday (C) Monday (D) Saturday

5. There are 30 girls and 20 boys in a class. The percentage of girls in the class is

(A) 60 (B) 90 (C) 75 (D) 30

6. A cap is bought for Rs. 200 and sold it for Rs. 240, what is the profit percentage(%)?

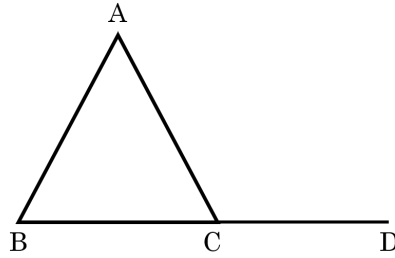
(A) 40 (B) 25 (C) 20 (D) 10

7. What is the area of a circle whose radius is the diagonal of a square of area of 4 cm^2 ?

(A) 2π (B) $2\sqrt{2}\pi$ (C) 4π (D) 8π

8. The Square root of $8\frac{2}{3}$ is
(A) 3 (B) 2 (C) 4 (D) 8
9. Which one of the following options is odd in the list?
(A) 27 (B) 30 (C) 31 (D) 35
10. If A and B are the subsets of U and $n(U) = 43$, $n(A) = 25$, $n(B) = 18$ and $n(A \cap B) = 7$, then the value of $n((A \cup B))$ is:
(A) 7 (B) 36 (C) 43 (D) 30
11. If $a + b = 5$ and $ab = 6$, then the value of $a^2 - b^2$ is:
(A) 6 (B) 5 (C) 10 (D) 12
12. 20 men can do one work in 30 days. In how many days 80 men can finish the same work?
(A) 18 (B) 15 (C) 7.5 (D) None of these
13. If x and y are both odd numbers, then which one of the following is an even number?
(A) $x + y$ (B) x (C) $xy + 2$ (D) $2x + y$
14. If income of Ramesh is increased by 10% and later decreased by 10%, what is the changed percent (%)?
(A) 10 (B) 1 (C) 0 (D) none of these
15. What is the degree of the expression $x^4 + x^3y^3 + x^2y^2 + 7xy$?
(A) 4 (B) 3 (C) 7 (D) 6
16. If mean and median of a distribution are 10 and 11, what is its mode?
(A) 12 (B) 10 (C) 11 (D) 13
17. Solve the quadratic equation $x^2 - 2x = 0$.
(A) 0, 1 (B) 1, 2 (C) 0, 2 (D) -2, 0
18. A card is drawn at random from a well shuffled deck of 52 cards. What is the probability of getting a queen?
(A) $\frac{1}{52}$ (B) $\frac{1}{13}$ (C) $\frac{1}{4}$ (D) $\frac{1}{26}$

19. In the adjacent figure, if $\angle BAC = 50^\circ$, $\angle ABC = 60^\circ$, then the value of $\angle ACD$ is:



- (A) 120° (B) 115° (C) 130° (D) 110°

20. What is the value of $(\sin 30^\circ + \cos 60^\circ) - (\sin 60^\circ + \cos 30^\circ)$?

- (A) $1 - \sqrt{3}$ (B) $1 + \sqrt{2}$ (C) $1 + \sqrt{3}$ (D) $1 - 2\sqrt{3}$

21. A set with three elements has a number of subsets equal to:

- (A) 2^1 (B) 2^2 (C) 2^3 (D) 2^4

22. A shopkeeper marks his goods 30% above his cost price but allow a discount of 10% at the time of Sale. His gain is:

- (A) 20% (B) 17% (C) 18% (D) 21%

23. If $A \subseteq B$, then which one of following is true?

- (A) $B \subseteq A$ (B) $A \cup B = A$ (C) $A \cup B = B$ (D) $A \cap B = B$

24. A tangent intersects the circle at:

- (A) one point (B) two distinct point
(C) at the circle (D) none of these

25. The Volume of a sphere of radius r is equal to:

- (A) $\frac{2}{3}\pi r^3$ (B) $\pi r^2 h$ (C) $\frac{4}{3}\pi r^3$ (D) $\frac{1}{3}\pi r^2 h$

26. The examination was postponed the pandemic of COVID-19.

- (A) despite (B) because (C) because of (D) in spite of

27. The suffix in the word 'comfortable' is:

- (A) -for (B) -table (C) -ibl (D) -able

28. What is the word class of the word underlined in the sentence: 'Please come here'?

- (A) noun (B) verb (C) adverb (D) adjective

29. The book I bought yesterday is interesting. I am interested _____ reading it.

- (A) on (B) at (C) in (D) for

30. One of the students _____ absent yesterday.

- (A) was (B) is (C) were (D) are

31. My grandfather is _____ (funny) my father.

- (A) more funny than (B) funniest than (C) funnier than (D) the funnier than

32. We have already finished our work. Its negative form is:

- (A) We have already not finished our work.
(B) We have not already finished our work.
(C) We do not have already finished our work.
(D) We have not finished our work yet.

33. My little sister likes _____ cartoons.

- (A) watch (B) to watch (C) watches (D) watching

34. If you boil water, it _____.

- (A) will evaporate (B) evaporates (C) would evaporate (D) evaporated

35. Had Sam invited me, I _____ his party.

- (A) attend (B) will attend
(C) would have attended (D) would attend

36. 'I am extremely sorry.' He says that _____ .

- (A) he is extremely sorry (B) I am extremely sorry
(C) he was extremely sorry. (D) he has been extremely sorry

37. Ryan _____ his key. He is still searching it.

- (A) loses (B) has lost (C) lost (D) had lost

38. They adopted an orphan as _____ heir.

- (A) a (B) an (C) the (D) no article

39. My mother ----- me to work for her.
(A) gets (B) has (C) makes (D) help
40. Which of the following words is the synonym of 'military' ?
(A) navy (B) civil (C) servant (D) coup
41. I am looking forward to ----- your response as soon as possible.
(A) hear (B) being heard (C) is hearing (D) hearing
42. This book is ----- .
(A) my (B) mine (C) our (D) me
43. Nobody speaks English, ----- ?
(A) don't they (B) doesn't they (C) do they (D) did they
44. He is an introvert. He has got very ----- friends.
(A) few (B) little (C) many (D) much
45. Nelson Mandela joined the ANC in the 1930s ----- he was a student.
(A) where (B) what (C) who (D) when
46. She ----- be at work because she always works at this time.
(A) may (B) might (C) can (D) must
47. 'I hate people criticizing me.' Its passive is:
(A) I hate people being criticized for me. (B) I hate being criticized me.
(C) I hate being criticized. (D) I hate having been criticized by people.
48. ----- handwriting is handwriting that cannot be read.
(A) Illegible (B) Legible (C) Eligible (D) Illegal
49. Which of the following words is the synonym of 'courteous' ?
(A) tyranny (B) brave (C) polite (D) candid
50. Which of the following words is the antonym of 'slump' ?
(A) rise (B) plunge (C) tumble (D) plummet

51. $NaHCO_3$ is a
- (A) basic compound (B) acidic compound
(C) amphoteric compound (D) neutral compound
52. Atomic number of calcium is
- (A) 21 (B) 20 (C) 31 (D) 30
53. 100% pure ethanol is called
- (A) Rectified spirit (B) Denatured alcohol
(C) Absolute alcohol (D) Power alcohol
54. 37 degrees Celsius is equal to
- (A) 98.6 degrees Fahrenheit (B) 58.6 degrees Fahrenheit
(C) 37.6 degrees Fahrenheit (D) d) 100 degrees Fahrenheit
55. Which one of the mixtures is homogeneous?
- (A) Starch and sugar
(B) Ethanol and water
(C) Charcoal and sand
(D) Calcium carbonate and calcium bicarbonate
56. Which one does not contain carbonyl group?
- (A) Aldehyde (B) Carboxyl acid (C) Ketone (D) Methanol
57. Electromagnetic radiation with maximum wavelength is:
- (A) Ultraviolet (B) Radio waves (C) X-ray (D) Infrared
58. X-ray cannot pass through:
- (A) Wood (B) Flesh (C) Glass (D) Bone
59. Which of the following color of white light deviated most when passes through a prism?
- (A) Red light (B) Violet light (C) Yellow light (D) Both (A) and (B)
60. The instrument used for measuring electric current is:
- (A) Ammeter (B) voltmeter (C) Potentiometer (D) Wattmeter
61. Sound energy is converted into electrical energy in:
- (A) Loudspeaker (B) Microphone (C) Sonometer (D) Radio

62. The color of light is determined by its:
- (A) Wavelength (B) Frequency (C) Speed (D) Amplitude
63. Lichen is a composite combination of two organisms:
- (A) Algae and fungi (B) Algae and bryophyta
(C) Fungi and fern (D) Fungi and bryophyta
64. Sand and camphor can be separated by:
- (A) Steam distillation (B) Fractional distillation
(C) Chromatography (D) Sublimation
65. Which of the following is not unit of time?
- (A) Leap year (B) Solar day (C) Light year (D) Debye
66. With the rise in temperature, surface tension:
- (A) Increases (B) Decreases
(C) Remain the same (D) Becomes zero
67. The sky looks blue due to:
- (A) Dispersion effect (B) Reflection (C) Transmission (D) Scattering
68. Heat travels through vacuum by:
- (A) Convection (B) Radiation (C) Conduction (D) All of the above
69. Photosynthesis occurs in:
- (A) Nucleus (B) Mitochondria (C) Chloroplast (D) Peroxisome
70. Which of the following is not found in animal cell?
- (A) Mitochondria (B) Golgi body (C) Nucleus (D) Chloroplast
71. Which of the following blood vessels contains impure blood?
- (A) Renal artery (B) Femoral artery
(C) Pulmonary artery (D) Hepatic artery
72. Which of the following solution is more acidic?
- (A) pH=2 (B) pH=14 (C) pH=7 (D) pH= 5

73. Methane contributes towards global warming so it is called a gas
(A) Poisonous (B) Infectious (C) Greenhouse (D) Carcinogenic
74. Milk is an example of a:
(A) solution (B) mixture (C) suspension (D) emulsion
75. The weight of any body is:
(A) more on equator (B) maximum at poles
(C) same at every place on earth's surface (D) more on mountain than in plains
76. Name the Scientist who stated that 'matter can be converted into energy'.
(A) Boyle (B) Einstein (C) Galileo (D) Avogadro
77. Which of the following device is fully duplex?
(A) Walky-talky (B) Radio (C) Mobile phone (D) Loud speaker
78. Which one among the following statement is true?
(A) All proteins are enzymes. (B) All enzymes are proteins.
(C) None of the enzymes is protein. (D) None of the proteins is enzyme.
79. Which of the following is not a viral disease?
(A) Malaria (B) Influenza (C) Common cold (D) Covid-19
80. Full form of HIV is:
(A) Human immune deficiency virus (B) Human inverted virus
(C) Human immune depressive virus (D) Human infectious virus
81. Dolphins are classified under:
(A) Mammals (B) Reptiles (C) Amphibians (D) Pisces
82. Altitude sickness is due to:
(A) high concentration of oxygen (B) low concentration of oxygen
(C) low concentration of carbon dioxide (D) low concentration of nitrogen
83. Scientific name of Amala is
(A) *terminalia chebula* (B) *terminalia bellirica*
(C) *emblica officinalis* (D) *emblica chebula*

84. The study of fossils is called:
- (A) taxonomy (B) physiology (C) anatomy (D) paleontology
85. Which one of the following is not fat-soluble vitamin?
- (A) Vitamin C (B) Vitamin A (C) Vitamin D (D) Vitamin E
86. Which of the following is a common input devices?
- (A) keyboard (B) monitor (C) printer (D) all
87. CPU is an example of:
- (A) hardware (B) software (C) program (D) output unit
88. Computer system is composed of:
- (A) input device (B) output device (C) processor (D) all
89. Which of the following is a primary memory?
- (A) Hard disk (B) Pen drive (C) RAM (D) All
90. MS word and MS Excel are :
- (A) operating systems (B) application software
(C) system software (D) high level language
91. Junk Email is also called as:
- (A) spam (B) spoof (C) spool (D) sniffer script
92. Name of the screen that recognizes touch input is:
- (A) recog screen (B) point screen (C) touch screen (D) android screen
93. Bluetooth is a communication technology.
- (A) wired (B) wireless (C) both (D) none
94. Eight Bits make up a:
- (A) byte (B) megabyte (C) kilobyte (D) none of them
95. The printed output from a computer is called:
- (A) copy (B) soft copy (C) hard copy (D) paper

96. What do you call a computer on a network that requests files from another computer?

- (A) A client (B) A host (C) Router (D) Web Server

97. Google (www.google.com) is a:

- (A) search engine (B) number in math
(C) directory of images (D) chat service on the web

98. "WWW" stands for:

- (A) World Wide Web (B) World Wide Wares
(C) World Wide Wait (D) World Wide Win

99. ISP stands for:

- (A) Internet Survey Period (B) Integrated Service Provider
(C) Internet Security Protocol (D) Internet Service Provider

100. Which of the following is social media service?

- (A) Facebook (B) Instagram (C) Twitter (D) All

All the best !!!