

NIMCET Mock Test

Mathematics

1. What is the value of x in the equation $3x - 5 = 103x - 5 = 103x - 5 = 10$?
 - Answer: $x = 5$
2. Solve for y : $4y + 7 = 35$
 - Answer: $y = 7$
3. What is the area of a circle with a radius of 7 cm?
 - Answer: 154 cm^2
4. If $f(x) = x^2 + 3x + 2$, what are the roots of the equation $f(x) = 0$?
 - Answer: $x = -1, -2$
5. What is the value of $\log_{10} 10000$?
 - Answer: 333
6. Evaluate the limit: $\lim_{x \rightarrow 0} \frac{\sin x}{x}$
 - Answer: 111
7. What is the sum of the first 10 natural numbers?
 - Answer: 55
8. Find the value of $\tan 45^\circ$
 - Answer: 111
9. If the angles of a triangle are in the ratio 2:3:4, what is the measure of the largest angle?
 - Answer: 120°
10. What is the derivative of $f(x) = 2x^3 - 3x^2 + 4$?
 - Answer: $f'(x) = 6x^2 - 6x$
11. If the first two statements are true, is the final statement true?
 - All cats are mammals.
 - Some mammals are not dogs.
 - Therefore, some cats are not dogs.
 - Answer: True
12. In a certain code language, if 'CAT' is coded as '3120', what is the code for 'DOG'?
 - Answer: '4157'
13. If A is taller than B and B is taller than C, who is the shortest?
 - Answer: C
14. Complete the series: 2, 6, 12, 20, ?
 - Answer: 30
15. If today is Monday, what day will it be 100 days from today?
 - Answer: Friday
16. Which of the following words is different from the others?
 - a) Dog
 - b) Cat
 - c) Fish
 - d) Elephant
 - Answer: c) Fish
17. If 5 cats can catch 5 mice in 5 minutes, how many cats are needed to catch 100 mice in 50 minutes?
 - Answer: 10 cats
18. In a class of 30 students, 18 like Mathematics, 12 like Science, and 6 like both. How many students like neither subject?
 - Answer: 6 students
19. Which number is the odd one out? 7, 14, 21, 28, 35, 42, 49
 - Answer: 49
20. If a train leaves a station and travels at 60 km/h, how far will it go in 2.5 hours?
 - Answer: 150 km

Computer Awareness

21. **What does CPU stand for?**
- **Answer:** Central Processing Unit
22. **Which of the following is an input device?**
- a) Monitor
 - b) Keyboard
 - c) Printer
 - d) Speaker
 - **Answer:** b) Keyboard
23. **What is the primary purpose of an operating system?**
- **Answer:** To manage computer hardware and software resources.
24. **Which programming language is primarily used for web development?**
- **Answer:** JavaScript
25. **What does RAM stand for?**
- **Answer:** Random Access Memory
26. **Which of the following is not a database management system?**
- a) Oracle
 - b) SQL Server
 - c) Python
 - d) MySQL
 - **Answer:** c) Python
27. **What is phishing?**
- **Answer:** A technique used to gain sensitive information by pretending to be a trustworthy entity.
28. **What is the purpose of a firewall?**
- **Answer:** To protect a network by controlling incoming and outgoing traffic.
29. **Which of the following is a type of malware?**
- a) Virus
 - b) Firewall
 - c) Router
 - d) Modem
 - **Answer:** a) Virus
30. **What does URL stand for?**

- **Answer:** Uniform Resource Locator

English

31. **Choose the correct antonym for "expand":**
- a) Contract
 - b) Enlarge
 - c) Increase
 - d) Widen
 - **Answer:** a) Contract
32. **Identify the error in the sentence: "Everyone are invited to the party."**
- **Answer:** "are" should be "is."
33. **What is the plural of "cactus"?**
- **Answer:** Cacti
34. **Choose the correct word: "The committee have made their decision."**
- **Answer:** "has" (The committee has made their decision.)
35. **Which of the following is a compound sentence?**
- a) I like ice cream.
 - b) I like ice cream, and I like cake.
 - c) Ice cream is delicious.
 - d) I enjoy desserts.
 - **Answer:** b) I like ice cream, and I like cake.
36. **Fill in the blank: "He is as brave ___ a lion."**
- **Answer:** as
37. **Which word is spelled incorrectly?**
- a) Receive
 - b) Occurrence
 - c) Definatly
 - d) Separate
 - **Answer:** c) Definatly (should be definitely)
38. **Choose the correct word: "There were ___ people at the event."**
- **Answer:** many
39. **What is the meaning of the idiom "break the ice"?**

- **Answer:** To initiate conversation in a social setting.
40. Which of the following sentences is correct?
- a) She don't know the answer.
 - b) She doesn't know the answer.
 - c) She not know the answer.
 - d) She didn't knows the answer.
 - **Answer:** b) She doesn't know the answer.

General Knowledge

41. Who is known as the Father of the Nation in India?
- **Answer:** Mahatma Gandhi
42. Which planet is known as the Red Planet?
- **Answer:** Mars
43. What is the capital of Japan?
- **Answer:** Tokyo
44. Who wrote the play "Romeo and Juliet"?
- **Answer:** William Shakespeare
45. What is the largest mammal in the world?
- **Answer:** Blue Whale
46. Which gas do plants absorb from the atmosphere?
- **Answer:** Carbon Dioxide
47. In which year did India gain independence?
- **Answer:** 1947
48. Which is the largest continent by area?
- **Answer:** Asia
49. What is the currency of the United Kingdom?
- **Answer:** Pound Sterling
50. Who painted the Mona Lisa?
- **Answer:** Leonardo da Vinci

Additional Mathematics

51. What is the value of $12 + 14\frac{1}{2} + \frac{1}{4}21 + 41$?
- **Answer:** $34\frac{3}{4}43$
52. Solve for xxx in the equation $x^2 - 9 = 0$
- **Answer:** $x=3, -3$
53. What is the greatest common divisor (GCD) of 24 and 36?
- **Answer:** 12
54. What is the square root of 144?
- **Answer:** 12
55. If a triangle has sides of lengths 3 cm, 4 cm, and 5 cm, is it a right triangle?
- **Answer:** Yes
56. What is the value of $5!5!5!$?
- **Answer:** 120
57. How many degrees are in a full circle?
- **Answer:** 360 degrees
58. What is the sum of the interior angles of a pentagon?
- **Answer:** 540 degrees
59. If a car travels at 80 km/h for 2.5 hours, how far does it travel?
- **Answer:** 200 km
60. What is the mode of the following set of numbers: 3, 5, 3, 8, 9?
- **Answer:** 3

Additional Logical Reasoning

61. If all birds can fly and penguins are birds, can penguins fly?
- **Answer:** No
62. Which number comes next in the series: 5, 10, 20, 40, ?
- **Answer:** 80
63. If a clock shows 3:15, what is the angle between the hour and the minute hand?
- **Answer:** 52.5 degrees

64. **How many letters are there in the English alphabet?**
 ○ **Answer:** 26
65. **In a certain code, 'FISH' is written as 'GJTI'. How would 'BIRD' be written in that code?**
 ○ **Answer:** CJSE
66. **What is the next number in the sequence: 2, 4, 8, 16, ?**
 ○ **Answer:** 32
67. **If A is older than B, and B is older than C, who is the youngest?**
 ○ **Answer:** C
68. **If some apples are fruits and all fruits are healthy, are some apples healthy?**
 ○ **Answer:** Yes
69. **If today is Tuesday, what day will it be 50 days from today?**
 ○ **Answer:** Thursday
70. **How many edges does a cube have?**
 ○ **Answer:** 12

Additional Computer Awareness

71. **Which of the following is an example of a hardware device?**
 ○ a) Software
 ○ b) Monitor
 ○ c) Program
 ○ d) Database
 ○ **Answer:** b) Monitor
72. **What is an IP address?**
 ○ **Answer:** A unique identifier for a device on a network.
73. **Which of the following is an example of open-source software?**
 ○ a) Windows
 ○ b) Linux
 ○ c) Microsoft Office
 ○ d) Adobe Photoshop
 ○ **Answer:** b) Linux
74. **What does HTTP stand for?**
 ○ **Answer:** HyperText Transfer Protocol
75. **Which component of a computer is responsible for processing data?**

- **Answer:** CPU
76. **What is the function of an algorithm?**
 ○ **Answer:** To provide a step-by-step procedure for solving a problem.
77. **Which of the following storage devices has the highest speed?**
 ○ a) Hard Disk Drive
 ○ b) Solid State Drive
 ○ c) USB Flash Drive
 ○ d) CD-ROM
 ○ **Answer:** b) Solid State Drive
78. **What is a computer virus?**
 ○ **Answer:** A malicious program that can replicate itself and spread to other computers.
79. **Which of the following is a programming language?**
 ○ a) HTML
 ○ b) CSS
 ○ c) Java
 ○ d) Both a and b
 ○ **Answer:** c) Java
80. **What does GUI stand for?**
 ○ **Answer:** Graphical User Interface

Additional English

81. **Identify the incorrect sentence:**
 ○ a) She has a lot of homework.
 ○ b) He go to the store yesterday.
 ○ c) They are playing outside.
 ○ d) I will call you later.
 ○ **Answer:** b) He go to the store yesterday. (should be "went")
82. **Choose the correct synonym for "happy":**
 ○ a) Sad
 ○ b) Joyful
 ○ c) Angry
 ○ d) Tired
 ○ **Answer:** b) Joyful
83. **What is the past tense of "run"?**

- **Answer:** Ran
- 84. **Fill in the blank: "She is the _____ of the team."**
 - **Answer:** leader
- 85. **Which word means "to come to a conclusion"?**
 - **Answer:** Infer
- 86. **Choose the correct preposition: "He is good ____ math."**
 - **Answer:** at
- 87. **Identify the adverb in the sentence: "She sings beautifully."**
 - **Answer:** beautifully
- 88. **What is the meaning of the phrase "hit the books"?**
 - **Answer:** To study hard.
- 89. **Which of the following sentences is passive voice?**
 - a) The cat chased the mouse.
 - b) The mouse was chased by the cat.
 - **Answer:** b) The mouse was chased by the cat.
- 90. **Choose the correct word: "Everyone should do their ____ to help."**
 - **Answer:** part
- 97. **Which instrument measures atmospheric pressure?**
 - **Answer:** Barometer
- 98. **Who discovered penicillin?**
 - **Answer:** Alexander Fleming
- 99. **Which is the smallest country in the world?**
 - **Answer:** Vatican City
- 100. **What is the main language spoken in Brazil? - Answer:**
Portuguese

Additional General Knowledge

- 91. **What is the capital of Australia?**
 - **Answer:** Canberra
- 92. **Which element has the chemical symbol 'O'?**
 - **Answer:** Oxygen
- 93. **What is the tallest mountain in the world?**
 - **Answer:** Mount Everest
- 94. **Who is the author of "Pride and Prejudice"?**
 - **Answer:** Jane Austen
- 95. **What is the largest ocean on Earth?**
 - **Answer:** Pacific Ocean
- 96. **In which year did World War II end?**
 - **Answer:** 1945