

Sample questions for MSc (IT) Entrance Test

1. The relation $R = \{(x, y) \mid x^2 + y^2 = 1\}$ is a function when
 - (a) $-1 \leq x \leq 1, -1 \leq y \leq 1\}$
 - (b) $-1 \leq x \leq 1, -1/2 \leq y \leq 1\}$
 - (c) $-1 \leq x \leq 0, -1 \leq y \leq 1\}$
 - (d) $0 \leq x \leq 1, 0 \leq y \leq 1\}$

2. The relation between $2^{A \cup B}$ and $2^A \cup 2^B$ is
 - (a) $2^{A \cup B} \subseteq 2^A \cup 2^B$
 - (b) $2^A \cup 2^B \subseteq 2^{A \cup B}$
 - (c) $2^{A \cup B} = 2^A \cup 2^B$
 - (d) none

3. The cost of a diamond varies directly as the square of its weight. Once, this diamond broke into four pieces with weights in the ratio 1:2:3:4. When the pieces were sold, the merchant got Rs. 70,000 less. Find the original price of the diamond.
 - a. Rs. 1.4 lakh
 - b. Rs. 2.0 lakh
 - c. Rs. 1.0 lakh
 - d. Rs. 2.1 lakh

4. If n is any odd number greater than 1, then $n(n^2 - 1)$ is
 - a. divisible by 48 always
 - b. divisible by 24 always
 - c. divisible by 60 always
 - d. None of these

5. The average weight of three men A, B, and C is 84 kg. Another man D joins the group and the average now becomes 80 kg. If another man E, whose weight is 3 kg more than D, replaces A then average weight of B, C, D, and E becomes 78 kg. The weight of A is –
 - a. 70 kg
 - b. 72 kg
 - c. 79 kg
 - d. 78 kg

6. FOOD is to HUNGER as SLEEP is to _____ ?
 - a. Rest
 - b. Night
 - c. Dream
 - d. Weariness

7. Which of the following is an example of nonvolatile memory?

- a. ROM
- b. RAM
- c. LSI
- d. VLSI

8. Which programming language was used for writing the popular operating system UNIX?

- a. C++
- b. SNOBOL
- c. PASCAL
- d. C

9. How long does this loop run: **for(int x=0; x=3; x++)**

- a. Never
- b. Three Times
- c. Four Times
- d. Forever

10. Considering following program code, which one of option is correct -

```
main()  
{  
    char *p = "hello world";  
    p[0] = 'H';  
    printf("%s", p);  
}
```

- a. Has Runtime error.
- b. Would output "Hello world"
- c. Has Compile error
- d. Would Output "hello world"

11. I am _____ to the dentist after my class this afternoon

- a. gone
- b. goes
- c. going
- d. go

12. The _____ in his office is expensive and luxurious

- a. furniture
- b. furnitures
- c. furnitures
- d. furniturs