Unit 1 - How to access the portal

Assignment 0
The due date for submitting this assignment has passed. Due on 2018-02-04, 23:59 IST.

Submitted assignment

1) The set \((A \cup B')\cap (B \cap C)\) is equal to

- \(A' \cup B \cup C\)
- \(A' \cup B\)
- \(A' \cup C'\)
- \(A' \cap B\)

No, the answer is incorrect.
Score: 0

Accepted Answers:
- \(A' \cup B\)

2) Let \(S\) = set of points inside the square, \(T\) = the set of points inside the triangle and \(C\) = 1 point the set of points inside the circle. If the triangle and circle intersect each other and are contained in a square, then

- \(S \cap T \cap C = \phi\)
- \(S \cup T \cup C = C\)
- \(S \cup T \cup C = S\)
- \(S \cup T = S \cap C\)
No, the answer is incorrect.
Score: 0
Accepted Answers:

4) Number of subsets of a set of order three is

- 2
- 4
- 6
- 8

No, the answer is incorrect.
Score: 0
Accepted Answers:

5) If A and B are sets and \( A \cup B = A \cap B \), then

- \( A = B \)
- \( A = \emptyset \)
- \( B = \emptyset \)
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:

6) Which of the following sets is a null set?

- I. \( X = \{ x | x = 9, 2x = 4 \} \)
- II. \( Y = \{ x | x = 2, x \neq 0 \} \)
- III. \( Z = \{ x | x - 8 = 4 \} \)

I and II only
I, II and III
I and III only
II and III only

No, the answer is incorrect.
Score: 0
Accepted Answers:

7) In a beauty contest, half the number of experts voted for Mr. A and two thirds voted for Mr. B. 10 voted for both and 6 did not vote for either. How many experts were there in all?

18
8) If \( A = \{0, 2\} \) and \( B = \{1, 3\} \), then Cartesian product?

- \( A \times B = B \times A \)
- is not possible
- \( A \times B \neq B \times A \)
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
24

9) What is the cardinality of the set of odd positive integers less than 10?

- 10
- 5
- 3
- 20

No, the answer is incorrect.
Score: 0
Accepted Answers:
5

10) Which set is not empty?

- \( \{x : x \text{ is an even prime greater than } 3\} \)
- \( \{x : x \text{ is a multiple of } 2 \text{ and is odd}\} \)
- \( \{x : x \text{ is an even number and } x + 3 \text{ is even}\} \)
- \( \{x : x \text{ is a prime number less than } 5 \text{ and is odd}\} \)

No, the answer is incorrect.
Score: 0
Accepted Answers:
\( \{x : x \text{ is a prime number less than } 5 \text{ and is odd}\} \)

11) If \( A \) and \( B \) are matrices, then which from the following is true?

- \( A + B \neq B + A \)
12) What is $a$, if $B = \begin{bmatrix} 1 & 4 \\ 2 & a \end{bmatrix}$ is a singular matrix?

- 5
- 6
- 7
- 8

No, the answer is incorrect.
Score: 0
Accepted Answers: 
$AB \neq BA$

13) If $A = \begin{bmatrix} 2i & i \\ i & -i \end{bmatrix}$ then $|A| =$?

- 2
- 3
- 4
- 5

No, the answer is incorrect.
Score: 0
Accepted Answers: 8

14) For a matrix $A$, if a matrix $B$ is obtained by changing its rows into columns and column into rows, then relation between $A$ and $B$ is:

- $A^T = B$
- $A^2 = B$
- depends on the matrix
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers: $A^T = B$

15) Degree of the polynomial $4x^4 + 0x^3 + 0x^5 + 5x + 7$ is

- 4
- 5
- 3
16. $\sqrt{x}$ is a polynomial of degree
- 2
- 0
- 1
- $\frac{1}{2}$

No, the answer is incorrect.
Score: 0
Accepted Answers: 4

17. If $a < 0$, then function $f(x) = ax^2 + bx + c$ has a maximum value at
- $x = \frac{a}{2b}$
- $x = -\frac{a}{2b}$
- $x = -\frac{b}{2a}$
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers: 0

18. The local minimum for the function $2x^2 - 4x - 3$ is obtained when $x$ is equal to:
- 1
- 2
- 3
- 4

No, the answer is incorrect.
Score: 0
Accepted Answers: 1

19. What is the output for the following code?

```c
#include<stdio.h>
main()
{
int x = 3;
x += 2;  // x is now 5
x += 2;  // x is now 7
printf
```

- 2
- 5
- 7

Score: 0
What is the output for the following code?

```c
#include<stdio.h>
int main()
{
    int a = 100, b = 200, c = 300;
    if(!a >= 500)
    {
        b = 300;
        c = 400;
        printf("%d,%d,%d",a, b, c);
        return 0;
    }
    return 0;
}
```

- Compile error
- No, the answer is incorrect.
- Score: 0
- Accepted Answers: 2

Options:
- 100, 300, 300
- 100, 200, 400
- 100, 200, 300
- 100, 300, 400

No, the answer is incorrect.
- Score: 0
- Accepted Answers: 100, 200, 400

You were allowed to submit this assignment only once.