**Sample Paper UGAT Subject (Mathematics)**

**Section I, Subject**

**1).** The inequality can be written in term of interval as

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | 1. None |

**2).** The slope of a line which is parallel to is

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

**3).** If the function satisfies all conditions of Rolle’s theorem in interval , then c=

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

**4.)**The area bounded by the parabola and the line is

(a) 32 (b) (c) (d)

**5).** If  is a group such that  , then  is a/an

* + 1. Commutative semi group
    2. Abelian group
    3. Non-abelian group
    4. None of these

**6).** If  is a group such that , then  is

a) Semi group

b) Abelian group

c) Non-abelian group

d) None of these

**7).** The set  is an abelian group under

a) subtraction

b) division

c) multiplication

d) addition

**8).** If and , then

(a). 

(b). 

(c). 

(d). 

**9).** If the determinant of a matrix A is zero, then one of its eigenvalue of A is:

a) 1

b)0

c) -1

d) Positive

**10).** Polar form of a complex number is

a)

b)

c)

d)