UNIVERSITY OF THE PUNJAB

Third Semester - 2019 Examination: B.S. 4 Years Program Roll No. in Words.

Roll No. in Fig.

ER: General Mathematics

Course Code: EDE-109 Part-I (Compulsory) MAX. TIME: 39 Min.

MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

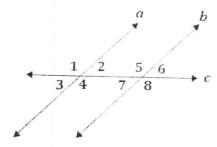
Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Q.1. Encircle the right answer, cutting and overwriting is not allowed.

(1x10=10)

- 1. What is the measure for a one dimensional figure?
 - a. Area
 - b. Length
 - c. Surface Area
 - d. Volume
- 2. Which of these is not an 'equation'?
 - a. 3x = 7
 - b. 4x2 6 = 28
 - c. 4x + 5y + 6z
 - d. 5x = 6y
- 3. $a^2 + b^2 = 25$. If a = 3 then what is the value of b?
 - a. 4
 - b. 5
 - c. 6
 - d. 7
- 4. What is a 'variable'?
 - a. A division sign
 - b. A letter or symbol representing a varying quantity
 - c. A multiplication sign
 - d. An equals sign
- 5. Use the figure below to answer the question.



Lines a and b are parallel. Line c is a transversal. Which statement is true?

- a. $m \angle 1K$ $m \angle 4$, because they are opposite angles
- b. $m \angle l = m \angle 6$, because they are supplementary angles
- c. $m \angle 1K$ $m \angle 8$, because they are adjacent angles



UNIVERSITY OF THE PUNJAB

Third Semester – 2019 Examination: B.S. 4 Years Program

PAPER: General Mathematics Course Code: EDE-109 Part – II Roll No.

MAX. TIME: 2 Hrs. 30 Min.

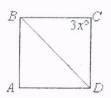
MAX. MARKS: 50

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Q.2. Short answers questions.

(5x4=20)

- 1. Jamal started a business in which he earned Re 1 on the first day Rs 4 on the second day, Rs 7 on the third day, Rs 10 on the fourth day, and so on. What is his earning in day 1001?
- 2. A right triangle has a hypotenuse of length 2x, a leg of length x, and a leg of length y. Write an expression that shows the value of y in terms of x.
- 3. If ABCD is a square, find the value of x.



4. Expand and simplify the following

$$\frac{1}{2}(4x+4)+\frac{1}{3}(6x+12)$$

5. Find the unknown value in the proportion: 2: x = 3: 9.

Q.3. Brief answers questions.

(3x10=30)

- 1. Bilal works 8 hours per day, 5 days per week and his weekly pay is Rs. 1200. His employer increases his weekly wage by Rs. 400. Bilal does not need more money per week than his current weekly wage. He decides to decrease the number of hours he works every week. How many hours per week can he work now and keep the same income?
- 2. At stock exchange the share price a company is valued at Rs. 40 per share. The value increase by 25% and then decreases by 20%. What is the final value of share of that company?
- 3. In the following figure AB and CD are parallel lines and EH is a transversal. The size of angle AFG is 40° and the size of angle FGD is x° . What is the value of x?

