

**APPEARANCE OF MOBILE PHONE(S) / SMART DEVICE(S) SUBJECT TO CONSIDERED
AS AN ACT OF CHEATING**

College Name: _____

Student Name: _____ Seat No: _____

Copy No: _____

**KARACHI UNIVERSITY BUSINESS SCHOOL
UNIVERSITY OF KARACHI
FINAL EXAMINATION JUNE 2015; AFFILIATED COLLEGES
BASIC MATHEMATICS-I; BA (H)-321
BS - I**

Date: June 1, 2015

**Max Time: 1.5 Hrs
Max Marks: 40**

INSTRUCTIONS:

- 1. Attempt all questions. Do not write anything on the question paper.**
- 2. Mobile phones or any other communicating device will not be allowed in the examination room. Students will have to remove the batteries of these devices before entering the examination hall.**

Q.1. Solve $6x^2 - 5x - 4 \geq 0$

Q.2. Solve the system graphically

$$\begin{aligned}x + y &= -1 \\3x + 5y &= 1 \\x - y &= -5\end{aligned}$$

Q.3. A university football team has to play a match with other team, the other team has agreed to play the game for guaranteed fee of Rs. 500,000 plus 20% of gate receipts, assume that the ticket price is Rs. 50.

- (i) How many tickets must be sold in order to get Zero profit.
- (ii) If 40,000 tickets must be sold, what ticket price would allow the university to earn the profit Rs. 750,000/=.

Q.4. Solve $x^2 \ln x^2 - 5x \ln x = 12 \ln x$

Q.5. An investment of Rs. 500,000/= is made which earn profit at the rate of 8% per year, determine the total amount after 8 years If profit is calculated on the basis of.

- (i) Compound calculated two times in a year
- (ii) Compounded continuously
- (iii) When amount becomes 4 times

END OF EXAM PAPER