**Assignment – 2**

Convert the Following Sentences into Predicate logic:

(A) B(X) is ‘X is a ball’

R(X) is ‘X is round’

S(X) is ‘X is a soccer ball’

1. All soccer balls are Round.
2. Some balls are not Round.
3. Some balls are round but soccer balls are not round.
4. Every round ball is a soccer ball.
5. Only soccer balls are round balls.

(B)

1. Prince is a mega star.
2. Mega stars are Rich.
3. Rich people have Fast cars.
4. Fast cars consume lot of petrol.

Prove that: Prince’s car consumes a lot of petrol.

(C)

1. The member of the St. Bridge club are Joe, Sally, Bill and Ellen.
2. Joe is married to sally.
3. Bill is Ellen’s brother.
4. The spouse of every Married person in the club is also in the club.
5. The last meeting of the club was at Joe’s house.

Give answer: Is Ellen married or not?