Index

Chapter-1: Review of Literature

1.1 General introduction
   1.1.1 Sulfonamides
      1.1.1.1 Structure and nomenclature of sulfonamides
      1.1.1.2 Classification of sulfonamides
      1.1.1.3 Biological aspects of sulfonamides
      1.1.1.4 Synthetic aspects of sulfonamides
   1.1.2 Thiazoles
      1.1.2.1 Biological aspects of thiazoles
      1.1.2.2 Synthetic aspects of thiazoles
   1.1.3 Chalcones
      1.1.3.1 Biological aspects of chalcones
      1.1.3.2 Synthetic aspects of chalcones
   1.1.4 Carbazoles and azacarbazoles
      1.1.4.1 Biological aspects of carbazoles and azacarbazoles
      1.1.4.2 Synthetic aspects of carbazoles
      1.1.4.3 Synthetic aspects of azacarbazoles

1.2 Brief outline of present work
1.3 References

Chapter-2: Synthesis of thiazolylurea substituted chalcones of oxocarbazoles and oxoazacarbazoles

2.1 General introduction
   2.1.1 Importance of chalcones in the organic synthesis
   2.1.2 Applications of chalcones in the organic synthesis

2.2 Present work
2.3 Result and discussion
2.4 Interpretation of spectral data
2.5 Mechanism of formation of compounds
2.6 Experimental section
2.7 References
Chapter 3: Synthesis of thiazolylurea substituted isoxazole and pyrazole condensed carbazoles and azacarbazoles

3.1 General introduction
  3.1.1 Pyrazoles
    3.1.1.1 Importance of pyrazoles
    3.1.1.2 Biological aspects of pyrazoles
    3.1.1.3 Synthetic aspects of pyrazoles
  3.1.2 Isoxazoles
    3.1.2.1 Importance of isoxazoles
    3.1.2.2 Biological aspects of isoxazoles
    3.1.2.3 Synthetic aspects of isoxazoles

3.2 Present work
3.3 Result and discussion
3.4 Interpretation of spectral data
3.5 Mechanism of formation of compounds
3.6 Experimental section
3.7 References

Chapter 4: Synthesis of thiazolylurea substituted pyrimidine condensed carbazoles and azacarbazoles

4.1 General introduction
  4.1.1 Importance of pyrimidines
  4.1.2 Biological aspects of pyrimidines
  4.1.3 Synthetic aspects of pyrimidines

4.2 Present work
4.3 Results and discussion
4.4 Interpretation of spectral data
4.5 Mechanism of formation of compounds
4.6 Experimental section
4.7 References
Chapter-5: Synthesis of thiazolylurea substituted 1,5-benzodiazepine, 1,5-benzoxazepine and 1,5-benzothiazepine condensed carbazoles and azacarbazoles

5.1 General introduction
5.1.1 1, 5-Benzodiazepines
   5.1.1.1 Biological aspects of 1,5-benzodiazepines
   5.1.1.2 Synthetic aspects of 1,5-benzodiazepines
5.1.2 1, 5-Benzoxazepines
   5.1.2.1 Biological aspects of 1,5-benzoxazepines
   5.1.2.2 Synthetic aspects of 1,5-benzoxazepines
5.1.3 1,5-benzothiazepines
   5.1.3.1 Biological aspects of 1,5-benzothiazepines
   5.1.3.2 Synthetic aspects of 1,5-benzothiazepines

5.2 Present work

5.3 Results and discussion

5.4 Interpretation of spectral data

5.5 Mechanism of formation of compounds

5.6 Experimental section

5.7 References

Chapter-6: Evaluation of anti-microbial activity of the synthesized compounds

6.1 General Introduction

6.2 Antibacterial Activity
   6.2.1 Bacterial Strains
   6.2.2 Antibacterial Studies
   6.2.3 Different Controls

6.3 Methodology

6.4 Antifungal Activity
   6.4.1 Fungal Strains
   6.4.2 Antifungal Studies
   6.4.3 Different Controls

6.5 Results and Discussion

6.6 References

Summary