

## **SYNTHESIS AND BIO– CHEMICAL STUDY OF ANTIBIOTICS**

### **DERIVATIVES (CEPHALEXIN AND CIPROFLOXACIN)**

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#### **ABSTRACT**

In this work, derivatives of ciprofloxacin and cephalixin were synthesized via condensation reaction of free amine group or carboxyl group in there structure with diamine compounds to yield cyclic derivatives of the two antibiotics [1-9] like (azitidine, lactam, imidazole and formazane compound). The structure of derivatives [1-9] were confirmed by spectral analysis (FT.IR, H.NMR, C.H.N), melting point and screened for antibacterial activity on two types of bacteria (positive and negative)-gram.

**KEYWORDS:** Cephalixin, Ciprofloxacin, Antibiotic, Condensation, Lactame