Voltammetric methods for the determination amphenicol antibiotic chloramphenicol (CAP) and quinolone antibiotic Ofloxacin (OFL) were developed. Techniques differential pulse voltammetry (DPV) and DC voltammetry (DCV) for determination of both substances at boron doped diamond film electrode (BDDFE) were used. The effect of pH of Britton-Robinson buffer was tested and the stability of the signal with repeated measurements was monitored. Optimal pH 6 was used for determining of CAP by both, DPV and DCV techniques. Media of pH 4 for determining of OFL by DPV and DCV was optimal. Under these conditions linear dependences in the calibration concentration region 1.10^{-6} - 1.10^{-4} $mol.l^{-1}$ were obtained. The limit of determination for the method for CAP by DPV at 3.10^{-6} $mol.l^{-1}$, by DCV at 3.10^{-6} $mol.l^{-1}$ and for OFL by DPV at 1.10^{-6} $mol.l^{-1}$ and by DCV at 4.10^{-7} $mol.l^{-1}$ was found. The developed methods were used for the determination of CAP in the drug samples Spersadex comp. and OFL determination in drug samples Zanocin 200. Method for solid phase extraction of OFL from samples of urine with voltammetric detection was developed with limit of determination at 7.10^{-6} $mol.l^{-1}$.