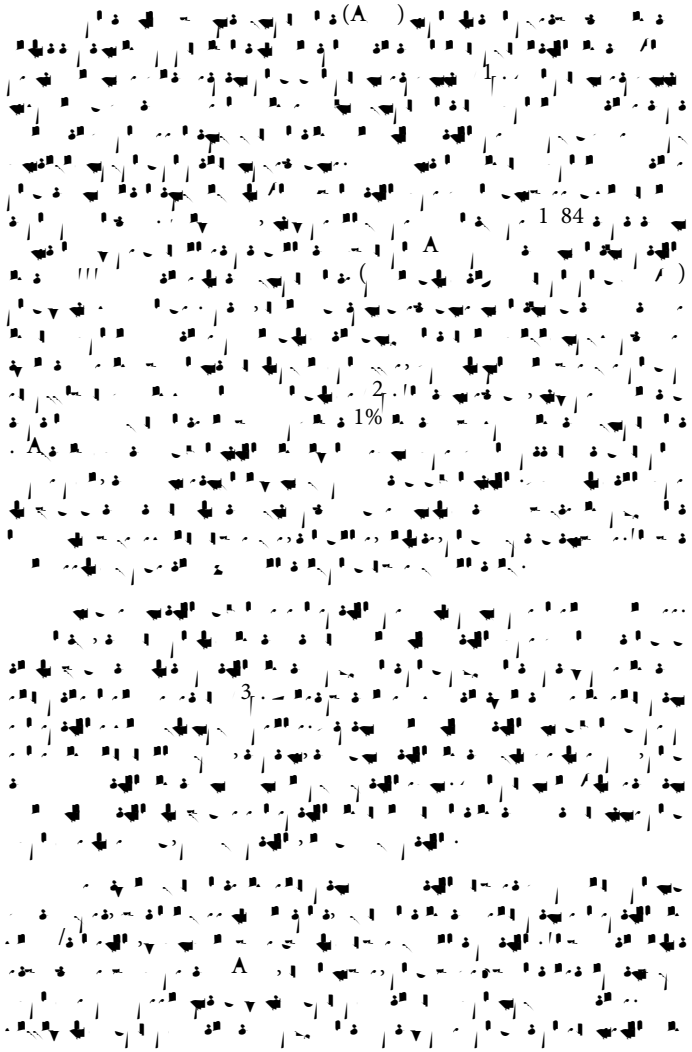Research Article