Work plan and methodology

- Literature survey
- Collection and authentication of *Hibiscus sabdariffa* plant.
- Drying and size reduction of *Hibiscus sabdariffa* roots, stems and leaves.
- Physicochemical evaluation of leaves, stems and roots.
- Preparation of extracts of dried coarsely powdered stem, root and leaves.
- Preliminary phytochemical screening of all extracts
- Qualitative Analysis by TLC.
- Quantitative estimation of active constituents.
- Evaluation of Antihyperlipidemic activity for *Hibiscus sabdariffa* on different extracts.
- Evaluation of Antioxidant activity for *Hibiscus sabdariffa* extracts.
- Evaluation of Antimicrobial activity for *Hibiscus sabdariffa* extracts.
- Interpretation of results by statistical analysis

Methodology

- Physicochemical evaluation determine by
  - Moisture content.
  - Total ash.
  - Foreign organic matter.
  - Water soluble extractive value.
  - Alcohol soluble extractive value.

- Preparation of extracts of dried coarsely powdered stem, root and leaves by maceration method.

- Preliminary phytochemical screening of all extracts by colorimetry.

- Qualitative Analysis by TLC.
➢ Quantitative estimation of active constituents by Spectrophotometer.

➢ Evaluation of Antihyperlipidemic activity shall be determined by Triton induced model using wister albino rats.

➢ Evaluation of Antioxidant activity shall be determined by DPPH and Nitric oxide radical inhibition method.

➢ Evaluation of Antimicrobial activity shall be determined by Cup and plate method and two fold dilution method.