PLATE - 1

1. Basalt flow showing sharp contact with biotite hornblende granite near crematorium.

2. Basalt flows seen from a distance around Jalor crematorium area.
PLATE - 2

1. Enclaves of basalt in biotite hornblende granite, (east of Jalor Fort Hill).

2. Olivine gabbro seen associated with biotite hornblende granite, Kalaghata area.
PLATE - 3

1. Enclaves of olivine gabbro in biotite hornblende granite, Kalaghata area.

2. A view of biotite hornblende granite, Jalor Fort.
PLATE - 4

1. Pegmatite and olivine dolerite dyke cutting biotite hornblende granite (Jalor Fort Hill).

2. Quarry of biotite hornblende granite, Kalkajee temple.
PLATE - 5

1. Sheets of alkali granite in the biotite hornblende granite (Kalkajee mines).

2. Rhyolite dyke showing sharp contact with granite (south of Jalar Fort Hill).
1. Olivine dolerite dyke cutting biotite hornblende granites (west of Jalor Fort Hill).

2. Gullies formed in the Jalor Fort Hill because of the differential weathering of granites, and olivine dolerite dykes.
1. Hypidiomorphic texture of the biotite hornblende granite, orthoclase showing carlsbad twinning, plagioclase showing polysynthetic twinning. Crossed Polars 20X.

2. Granophyric and perthitic texture, biotite hornblende granite. Crossed Polars 50X.

3. Orthoclase altered to sericite, biotite hornblende granite. Crossed Polars 30X.

4. Sutured quartz and large flakes of biotite, biotite hornblende granite. Crossed Polars 20X.

5. Biotite showing inclusion of magnetite and zircon with altered margins, biotite hornblende granite. Plane Polar 50X.

6. Prismatic hornblende associated with biotite, and with inclusions of magnetite, biotite hornblende granite. Crossed Polars 30X.
PLATE - 8

1. Fractured fayalite (Fa.) with high order interference colour, biotite hornblende granite. Crossed Polars 50X.

2. Biotite granite showing hypidiomorphic texture, subhedral phenocrysts of perthite, orthoclase, and sutured quartz with interstitial biotite. Crossed Polars 20X.

3. Alkali granite showing hypidiomorphic texture with (prismatic) arfvedsonite, aegirine, kataphorite and minor biotite. Plane Polars 20X.

4. Perthitic texture and Carlsbad twinning, alkali granite. Crossed Polars 50X.

5. Prismatic kataphorite (Kt.) intergrowth of arfvedsonite and kataphorite, with inclusions of quartz in kataphorite, alkali granite. Plane Polars 30X.

6. Intergrowth of aegirine with kataphorite, kataphorite cores rimmed by aegirine, alkali granite. Plane Polars 30X.
PLATE - 3a

Photomicrograph of Kataphorite.
PLATE - 9

1. Ophitic texture, olivine gabbro. Crossed Polars 50X.

2. Poikilitic texture, large plagioclase laths enclose small olivine crystals, olivine gabbro. Crossed Polars 50X.

3. Augite plate enclose plagioclase laths and olivine. Crossed Polars 50X.

4. Olivine intergrowth with augite, olivine gabbro. Crossed Polars 50X.

5. Fractured olivine, with chlorite and biotite, olivine gabbro. Plane Polars 50X.

6. Inclusion of magnetite, ilmenite and biotite in augite ground mass, olivine gabbro. Crossed Polars 50X.
PLATE - 10

1. Quartz, perthite, orthoclase and minor plagioclase phenocrysts with granophyric texture, rhyolite. Crossed Polars 30X.

2. Flow structure, rhyolite. Plane Polars 50X.


4. Embayed high quartz in the quartzo-feldspathic groundmass of rhyolite. Crossed Polars 30X.

5. Biotite with zircon, rhyolite. Plane Polars 50X.

6. Altered orthoclase and green aegirine specks, rhyolite. Plane Polars 50X.
PLATE - 11

1. Subophitic texture, plagioclase laths showing twinning according to albite law and augite, olivine dolerite. Crossed Polars 50X.

2. Olivine enclosed between plagioclase laths, olivine dolerite. Crossed Polars 50X.

3. Augite altered to sericite and chlorite with inclusions of ilmenite and magnetite, olivine dolerite. Crossed Polars 30X.

4. Microcrystalline texture in microgranite with fine grained quartz, alkali feldspar and biotite. Crossed Polars 20X.

5. Glomerophyritic texture, basalts. Crossed Polars 50X.

6. Plagioclase altered to saussurite and augite altered to chlorite and sericite, basalt. Plane Polars 50X.