

HIGHER SECONDARY
PRACTICAL STUDY MATERIAL
GEOLOGY

PART-II

Dhanya Raj

GHSS Kottayam Malabar, Kannur

Pushpa.P

GHSS Chemnad Kasaragod

MINEROLOGY

- **ROCK FORMING MINERALS**
- **INDUSTRIAL MINERALS**
- **ORE MINERALS**

GYPSUM

Physical properties

FORM	Tabular or Prismatic
COLOUR	Colorless or white
STREAK	white
LUSTER	Vitreous/pearly/silky
CLEAVAGE	Perfect
FRACTURE	Conchoidal
HARDNESS	2
SPECIFIC GRAVITY	2.32



USE: For making plaster of Paris

ASBESTOS

Physical properties

FORM	Fibrous
COLOUR	Shades of White or green
STREAK	White
LUSTER	Silky , greasy or earthy
CLEAVAGE	Perfect
FRACTURE	Hackly
HARDNESS	2.5 usually 4
SPECIFIC GRAVITY	2.2



USE: For making asbestos sheet

MUSCOVITE

Physical properties

FORM	Foliated masses and scaly or massive
COLOUR	Colorless, White or pale yellow
STREAK	Color less
LUSTER	Pearly
CLEAVAGE	Perfect basal
FRACTURE	Uneven
HARDNESS	2.5-3.0
SPECIFIC GRAVITY	2.77-2.88



USE: used as insulator in electrical and Electronic industry, paint and lubricants

GRAPHITE

Physical properties

FORM	Massive ,scaly
COLOUR	Black
STREAK	Steel grey
LUSTER	Mettalic
CLEAVAGE	Perfect
FRACTURE	Even
HARDNESS	1
SPECIFIC GRAVITY	2.2



USE: For making pencil ,lubricants

BARITE

Physical properties

FORM	Tabular or bladed
COLOUR	White or grey
STREAK	White
LUSTER	Vitreous, pearly to dull
CLEAVAGE	Perfect in one direction
FRACTURE	Even
HARDNESS	3-3.5
SPECIFIC GRAVITY	4.5



USE: In drilling, paper, paint, and plastic industry

MAGNESITE

Physical properties

FORM	Massive and compact
COLOUR	White, grey, yellow or brown
STREAK	white
LUSTER	Vitreous , sub-Vitreous, or pearly
CLEAVAGE	Perfect
FRACTURE	Conchoidal
HARDNESS	3.5-5
SPECIFIC GRAVITY	3.0-3.2



USE: In refractory industry