

Subject - Botany

Class - B.Sc. (Subs.) Part-I Group-B

Topic - "Botanical names, families and the part used of the following : Sugarcane, Potato, Tomato, Brinjal, Neem, Cinchona and Cotton."

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Sugarcane

Botanical name : - Saccharum officinarum

Family : - Poaceae

Parts used : - Stem

- Cane sugar (sucrose) is a sweet, crystalline substance and is an important source of energy in the human diet.
- It is used in the manufacture of soft drinks, chocolates, ice creams and confectionery industry.
- Molasses, bagasse and press mud (or filter cake, filter mud) are byproducts of sugar industry.
- Bagasse is cane residue left after the extraction of juice and it is mostly used as fuel and in the manufacture of paper and wall board.
- Molasses is used as food stuff, for candy making

- and also for cooking
- It is also widely used in the manufacture of rum, vinegar, glycerol, lactic acid, industrial alcohol etc.

Potato

Botanical name : - Solanum tuberosum

Common name : - Adu

Family : - Solanaceae

Parts used : - Stem

On an average potato tubers contain

Moisture — 75%.

Carbohydrates — 22%.

Proteins — 1.5%.

Fats — 0.1%.

Minerals — 0.6%.

Fibres — 0.4%.

Also contains vitamins especially vitamin A and C.

- Potato is one of the principal cash crops and contributes to the national economy in many ways.
- It is widely consumed as food and used in the variety of ways.
- Potato is also used as raw materials for manufacture of starch, ethyl alcohol and some other industrial products.
- Potato is among richest source in potassium and poorest in sodium.
- Potatoes are good for patients suffering from hyperacidity. Boiled potatoes make an excellent diet.

"You must be the change you want to see in the world." — Mahatma Gandhi

for those suffering from high blood pressure.

Tomato

Botanical name: - Lycopersicon esculentum

Common name: - Tomato (tamatar)

Family: - Solanaceae

Parts used: - Fruit (Berries)

Tomatoes consist of

Moisture - 93%

Carbohydrates - 3.6%

Proteins - 1.9%

Fats - 0.1%

Minerals - 0.6%

Fibers - 0.7%

- Tomatoes are especially rich in soluble sugars, several organic acids (citric and malic acids), mineral salts and relatively large quantities of vitamin A, B₂ and C.
- Tomatoes are extensively used for soup, salad, pickles, ketchup, purée, sauces and in many other ways.
- Tomatoes stimulates torpid liver and kidneys and helps to wash away the poisons.
- It is useful in atonic dyspepsia, bronchitis, asthma and in eczema.
- It promotes the flow of bile.

"Cultivation of mind should be the ultimate aim of human existence." - B.R. Ambedkar

Brinjal (Egg plant)

Botanical name : - Solanum melongena

Common name : - Bajhgan

Family : - Solanaceae

Parts used : - Fruits (Berries)

Brinjal consists of

Moisture - 93%

Carbohydrates - 4%

Proteins - 1.4%

Fat - 0.3%

Minerals - 0.3%

Fibers - 1.3%

→ Brinjal is especially rich in potassium, sulphur, phosphorus, vitamin A and C.

→ Brinjal is consumed as vegetables.

→ The roots are antispasmodic and general stimulant.

→ Leaves are used in bronchitis, asthma, etc.

Neem

Botanical name : - Azadirachta indica

Common name : - Neem or Margosa

Family : - Meliaceae

Parts used : - Leaves

→ Leaves contain 'azadirachtin' acts as an insecticide.

Cinchona

Botanical name: - Cinchona spp (C. officinalis, C. ledgeriana, C. succirubra)

Common name: - Quinine

Family: - Rubiaceae

Parts used: - Bark

→ ~~Cinchona~~ is the

→ Bark of several species of Cinchona is the source of the drug Quinine, used in the treatment of malarial fever.

Cotton

Botanical name: - Gossypium spp.

Common ~~name~~ name: - Kapas, Rui

Family: - Malvaceae

Parts used: - Epidermal hairs from the seed coat.

→ The cotton fibre is extensively used in the manufacturing of cloth, tyre fabrics, various form of threads, cordages, twine, etc.

→ Cotton seeds are rich in proteins and vitamins of B-complex and are used as the cattle feed.

