**Question I**

**Draw the structures of the following alkaloids** and **write their uses.**

**(25 Marks)**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Name of Alkaloid** | **Structure** | **Uses** |
| 1 | Quinine |  |  |
| 2 | Chloroquine |  |  |
| 3 | Camptothecin |  |  |
| 4 | Lupinine |  |  |
| 5 | Morphine |  |  |
| 6 | Codeine |  |  |
| 7 | Thebaine |  |  |
| 8 | Papaverine |  |  |
| 9 | Noscapine |  |  |
| 10 | Heroine |  |  |
| 11 | Naltrexone |  |  |
| 12 | Naloxone |  |  |
| 13 | Fentanyl |  |  |
| 14 | Methadone |  |  |
| 15 | Pethidine |  |  |
| 16 | Emetine |  |  |
| 17 | Cephaline |  |  |
| 18 | Berberine |  |  |
| 19 | Galanthamine |  |  |
| 20 | Pcilocin |  |  |
| 21 | Physostigmine |  |  |
| 22 | Harmine |  |  |
| 23 | Pilocarpine |  |  |
| 24 | Caffeine |  |  |
| 25 | Lobelanidine |  |  |

**Question II**

**MATCH** the **Phytoconstituents/Crude drugs/Plants (Column A)** withtheir suitable **Family Name** (**Column B**). The **code** of **your correct answer** must be written on the **first page** of this booklet.  **05 Marks**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Phytoconstituents/Crude drugs/Plants (Column A)** | **Code** | **Family Name**  **(Column B)** |
| 1 | Nicotine | **A** | Berberidaceae |
| 2 | Pellatriene | **B** | Rutaceae |
| 3 | Sparteine | **C** | Fabaceae |
| 4 | Galantamine | **D** | Celastraceae |
| 5 | Cytisine | **E** | Leguminosae |
| **---** | --------------------------------- | **F** | Papaveraceae |
| **---** | --------------------------------- | **G** | Solanaceae |
| **---** | --------------------------------- | **H** | Ephedraceae |
| **---** | --------------------------------- | **I** | Erythroxylaceae |
| **---** | --------------------------------- | **J** | Menispermaceae |
| **---** | --------------------------------- | **K** | Rubiaceae |
| **---** | --------------------------------- | **L** | Amaryllidaceae |
| **---** | --------------------------------- | **M** | Campanulaceae |
| **---** | --------------------------------- | **N** | Orchidaceae |
| **---** | --------------------------------- | **O** | Punicaceae |

**Question III**

Write **your answers** in more detail for each question. **(05 x 02 = 10 Marks)**

|  |  |
| --- | --- |
| **EXPLAIN YOUR ANSWERS IN THE PROVIDED SPACE** | |
| **A** | The **mechanism of action** of **mitomycin C** in treating cancer. |
| **B** | The **mechanism of action** of **sanguinarine** in killing animal cells. |
| **C** | The **mechanism of action** of **xanthine** alkaloids in treating bronchoconstriction. |
| **D** | The **mechanism of action** of **harmaline** in treating mental depression. |
| **E** | Explain about **Allelopathy**. |

---**END-**----