

| Ques 3) | Item                   | Slow sand filter                              | Rapid sand filter                               |
|---------|------------------------|---|---|
|         | Rate of filtration     | 100 to 200 liters per hour per m <sup>2</sup> | 3000 to 6000 liters per hour per m <sup>2</sup> |
|         | Loss of head           | 15cm initial to 100 cm final                  | 30 cm initial 3m final                          |
|         | Size of bed            | Requires large area                           | Requires small                                  |
|         | Coagulation            | Not required                                  | essential                                       |
|         | filter media Sand      | effective size 0.2 to 0.33 mm Cu: 2 to 3      | effective size 0.2 to 0.6 mm Cu: 1.2 to 1.3     |
|         | Base material cleaning | Scrapping of top layer to 15mm to 40mm        | Agitation and back washing wither wash          |
|         | Period of cleaning     | 1 to 2 months                                 | 2 to 3 days                                     |
|         | economy                | High initial cost                             | Cheap and economical                            |