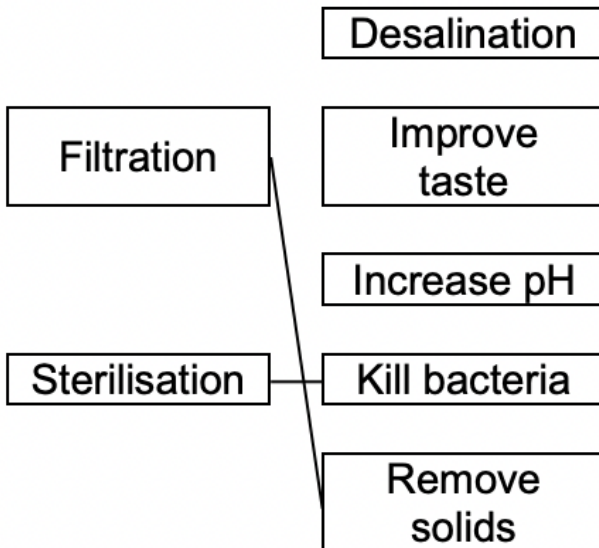


(Potable water and water treatment (practical methods))

Q1.(2019)



Q2.(2019)

chlorine

ozone

Q3.(2019)

distillation

Q4.a)(2021)

(no condenser)
(more) steam escapes
or
less steam condenses

(because) cooling / condensing
is less efficient
or
(because) a (liebig) condenser
is not used

Q4.b)(2021)

(distilled) water is pure

Q4.c)(2021)

using chlorine

using ozone

Q4.d)(2021)

pH 7

Q5.a)(2022)

100

7

Q5.b)(2022)

pH probe / meter

or

universal indicator
(paper / solution)

Q6.(2024)

Potable water production

- pass water through filter beds
- to remove solids
- use chlorine / ozone / UV light
- to sterilise water
- to destroy microbes

Waste water treatment

- screening
- using a metal grid
- to remove solids
- to remove grit
- sedimentation
- to produce sewage sludge and effluent
- anaerobic digestion of sewage sludge
- aerobic biological treatment of effluent

Q7.(2020)

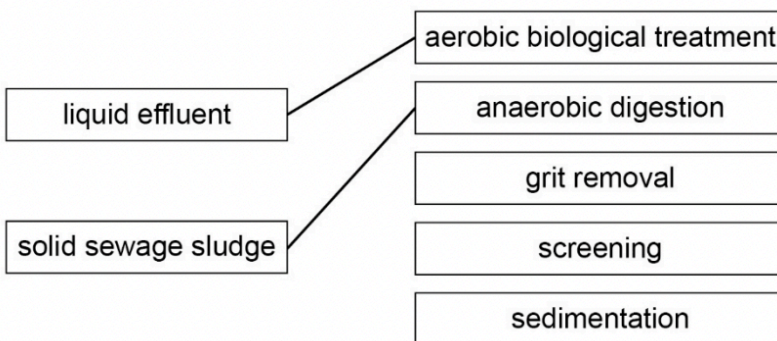
- choose an appropriate source of fresh water
- such as rivers, streams, lakes, boreholes
- pass through filter beds
- (which) removes undissolved solids
- sterilise
- using chlorine / ozone / UV light
- (which) destroys harmful microbes

Q8.(2020)

any **one** from:

- **distillation**
- **reverse osmosis**

Q9.(2020)



Q10.a)(2020)

$$\frac{260}{1413} \times 100$$

$$= 18.40056617 \%$$

$$= 18.4 \%$$

Q10.b)(2020)

any **one** from:

- the population increased
- more waste water produced
- less untreated sewage discharged

Q10.c)(2020)

any **two** from:

- increased demand for food
(due to increasing population)
 - conserves energy / resources
 - landfill space is running out
-
- increased demand for organic fertiliser