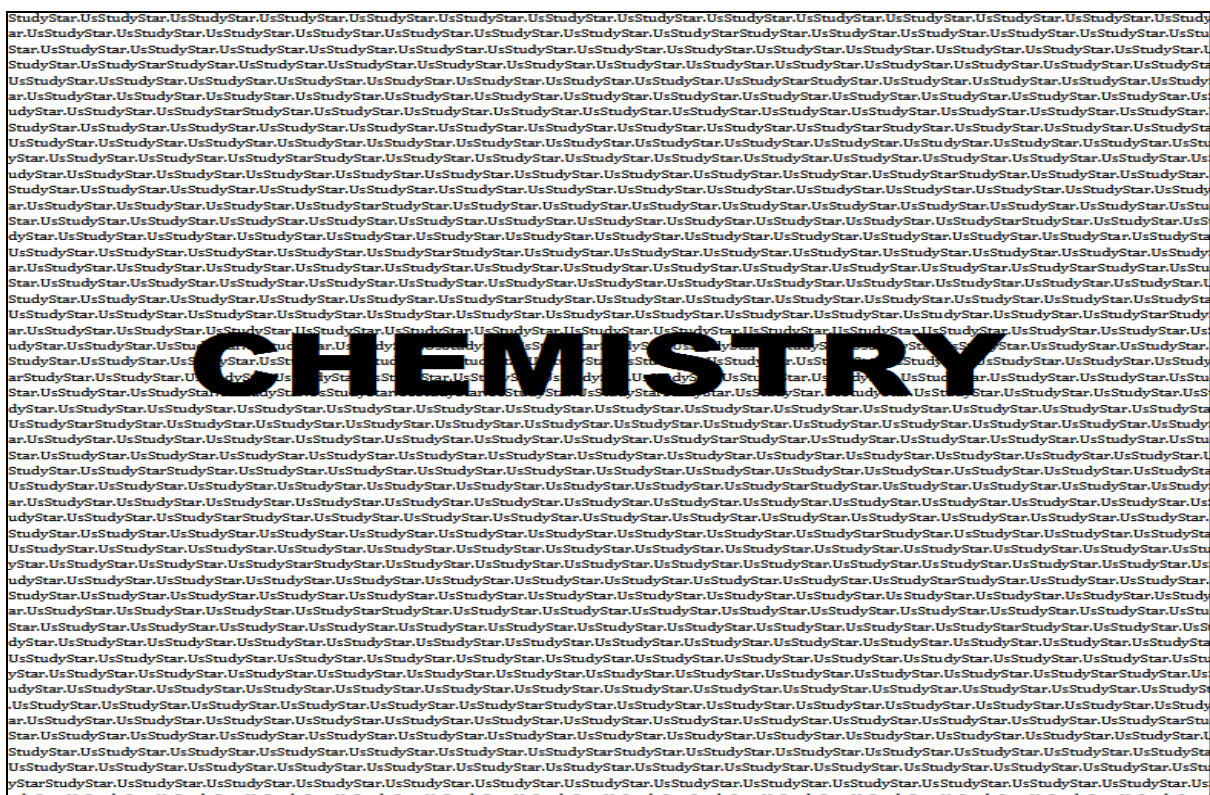




SEPARATION TECHNIQUES

Total Marks: 25

Duration: 0 hours, 20 minutes

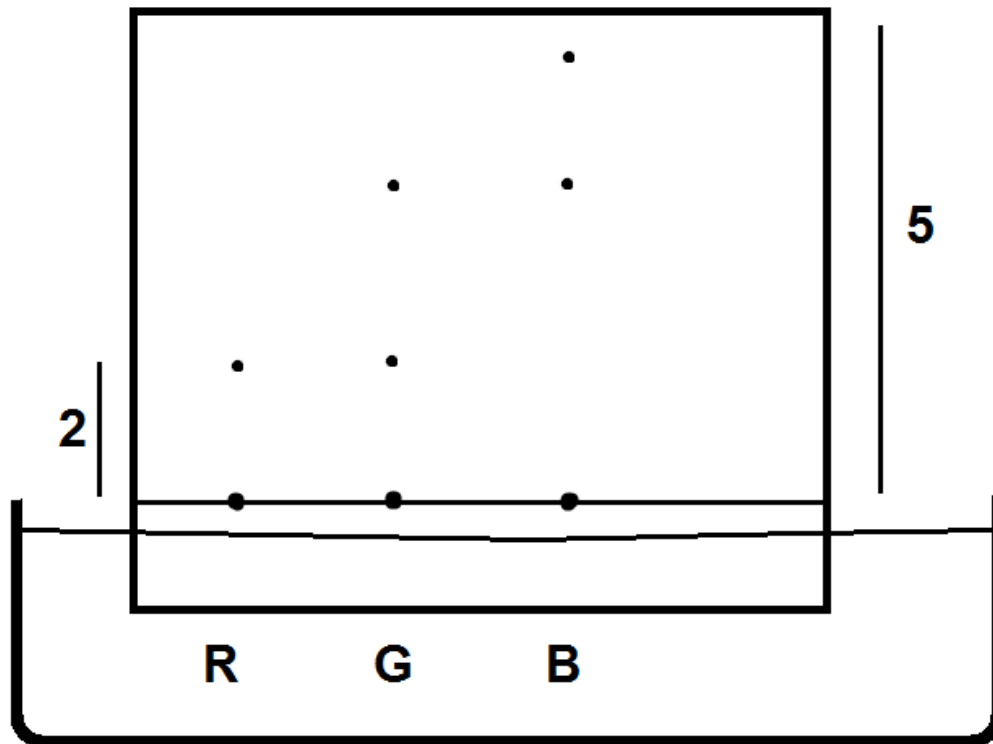
Instructions to test takers

1. Answer all the questions in this paper
2. All the answers for the questions in this paper will be found on **Study Star** (www.studystar.me)
3. Using the answers on the website, mark yourself truthfully and carefully.

Turn this page, time yourself and begin the test

Section A [10 marks]

1. A homogenous mixture
 - a. Does not mix uniformly
 - b. Mixes uniformly
 - c. A mixture of sand and water
2. Which separation technique produces residue?
 - a. Distillation
 - b. Decantation
 - c. Filtration
3. Decantation is
 - a. The settling down of solids in a suspension
 - b. The pouring of a liquid from one jar to another
 - c. The settling and pouring of a liquid from one jar into another
4. Which of the following is used to separate two immiscible liquids?
 - a. Separating funnel
 - b. Fractional distillation
 - c. Decantation
5. Which of the following separation techniques involves the use of a filter paper?
 - a. Sublimation
 - b. Chromatography
 - c. Centrifugation
6. Which of the following is used to separate water from salt?
 - a. Filtration
 - b. Simple distillation
 - c. Fractional distillation
7. Study the diagram below.



From the diagram above, Blue can be made from

- a. Red
 - b. Green
 - c. None
8. Calculate the retention factor of red in question 7 above.
- a. 2.5
 - b. 0.4
 - c. 3
9. The liquid that is collected after distillation is called
- a. Filtrate
 - b. Distillate
 - c. End-product
10. Which of the following can be used to separate two miscible liquids?
- a. Simple distillation
 - b. Separating funnel
 - c. Fractional distillation

Section B [5 marks]

11. The method used to separate iron from other materials is called
12. Two liquids that do not mix with each other are called
13. A solution that contains small particles of solids which do not dissolve in the liquid is called
14. The method that involves spinning of a solid-liquid suspension is called
15. Name the separation technique that can be used to separate water from oil

Section C [10 marks]

16. A sample is placed in the center of the pencil line and then placed in a liquid. The solvent front travels 2.8cm from the pencil line and the ink was completely separated at 1.5cm. Calculate the retention factor.

[2]

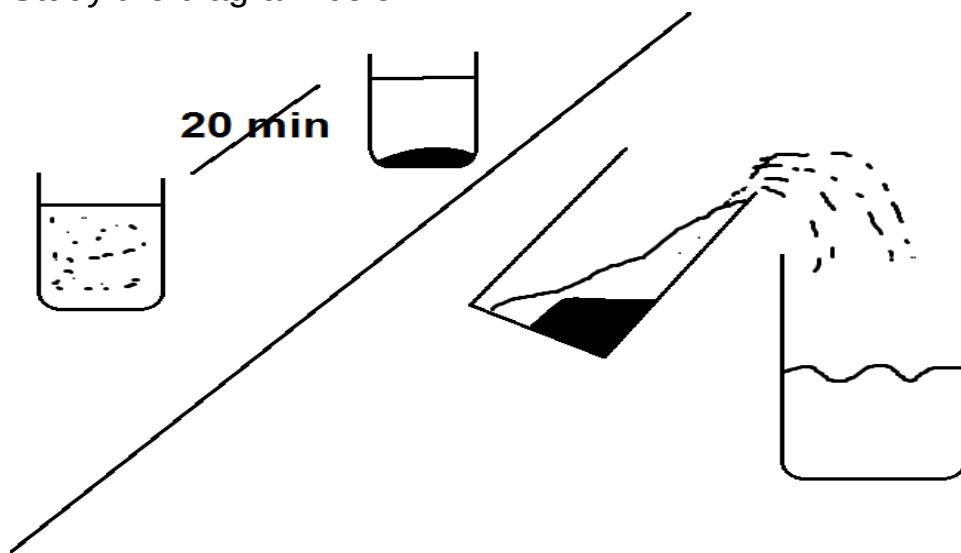
17. Explain the term filtration.

[2]

18. Define simple distillation.

[1]

19. Study the diagram below.



Name the two (2) processes shown above.

[2]

20. Name the processes involved in separating water containing sand, salt and iron filings.

[3]



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