

QUESTIONS

1. Claims about DIP processing. Right or wrong?
 1. Expression **Recycling rate** corresponds percentage of recovered paper utilisation compared to total paper consumption R / W
 2. Germany's **Collection** and **Utilisation rate** are among highest in Europe. R / W
 3. USA is major importer of recycled fiber in global recycled fiber markets. R / W
 4. Mechanical fibers' properties change significantly in recycling (compared to chemical fibers). R / W
 5. Raw material properties have major impact on final pulp quality. R / W
 6. Washing stage is the heart of the newsprint deinking process. R / W
 7. Typically, coarse screening is equipped with #0.12-0.18 slot basket. R / W
 8. Main task for fine screening is to remove dirt specks. R / W
 9. A cleaner is a device that separates and removes undesirable components from pulp by using rotational fluid motion. The cleaner exploits differences in density, size and shape between fibers and contaminants as a separation mechanism. R / W
 10. Disc filter increases pulp consistency from ~1% to 30%. R / W
 11. Washing removes efficiently ash and small sized ink. R / W
 12. ERIC measurement corresponds relatively well with brightness analysis. R / W
 13. There is one global standard for stickies analysis. R/W
 14. Water management in RCF paper mill is based on counter current flow principle. R / W
 15. Deinking process is designed so that COD level increases from 1st loop to 2nd loop and finally to PM loop. R / W

Max. points: 15
2. Design a 1-loop recovered paper processing concept for tissue production. Show only the main units of production level in form of block diagram! Indicate the consistency level in each unit!
Max. points: 6
3. Flotation in deinking process (tasks, location, process conditions and parameters).
Max. points: 5
4. Bleaching in recycled fiber process (type, chemicals and location in process)
Max. points: 4