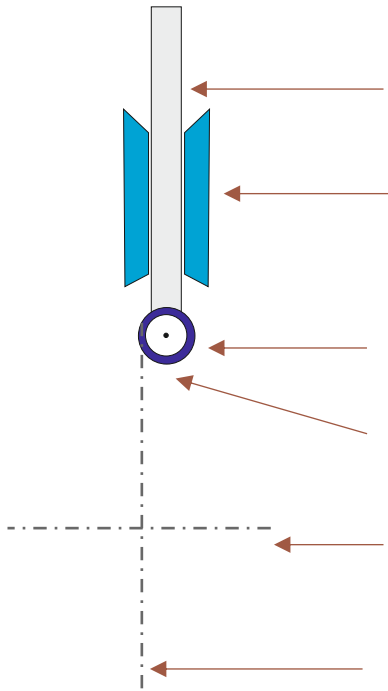


EXAMINATION QUESTIONS - SNAIL / DROP CAMS

HELPFUL LINK: <https://technologystudent.com/cams/snail1.htm>

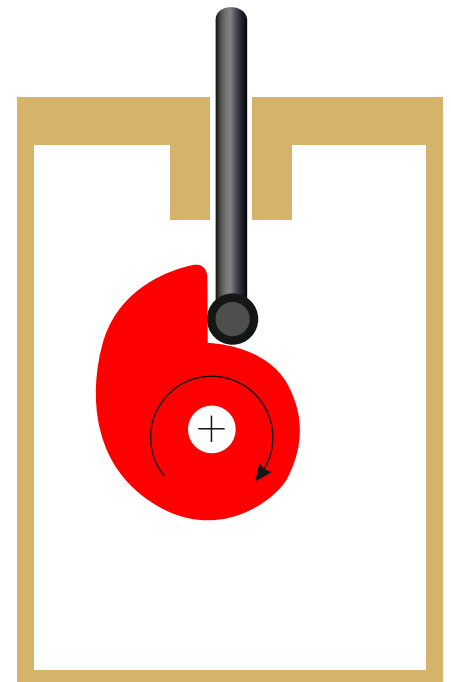


1. Complete the diagram shown opposite, by adding a snail / drop cam profile. **3 marks**

2. Add labels to all the arrows. These should name the parts correctly. **6 marks**

3. Describe the motion of the follower, when a snail / drop cam profile is used. **3 marks**

4. What will happen if this snail cam rotates in a clockwise direction (as shown in the diagram) . **3 marks**



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5. The incomplete mechanical toy seen below, has a snail/drop cam. The follower is connected to the arm of a model person by a wire link. As the cam rotates, the follower rises and the wire link lifts the models arm. This gives the appearance of the model person lifting a fork full of food towards his/her mouth. As the cam continues to rotate the follower suddenly falls and also the model's arm and fork.

Draw the model of the person. Include detail that clearly shows how the arm moves in relation to the snail / drop cam - including pivots, linkages etc..... Add notes that explains the working of the model, cam, follower, slide and any important details. **5 marks**

