

LEAVING CERTIFICATE EXAMINATION, 1999

**ENGINEERING - PRACTICAL  
HIGHER AND ORDINARY LEVELS**

150 marks

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**WEDNESDAY 5 MAY - MORNING: 10.00 to 1.00**  
**AFTERNOON: 2.00 to 5.00**

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**INSTRUCTIONS**

- (a) The Examination Number must be clearly stamped on the test-piece in the position indicated on the drawing. If the test-piece is not assembled, the Examination Number must be indicated on each separate part of the test-piece.
- (b) Candidates are not permitted to communicate with or assist one another.
- (c) Completed test-piece must be very lightly coated with clean lubricating oil.

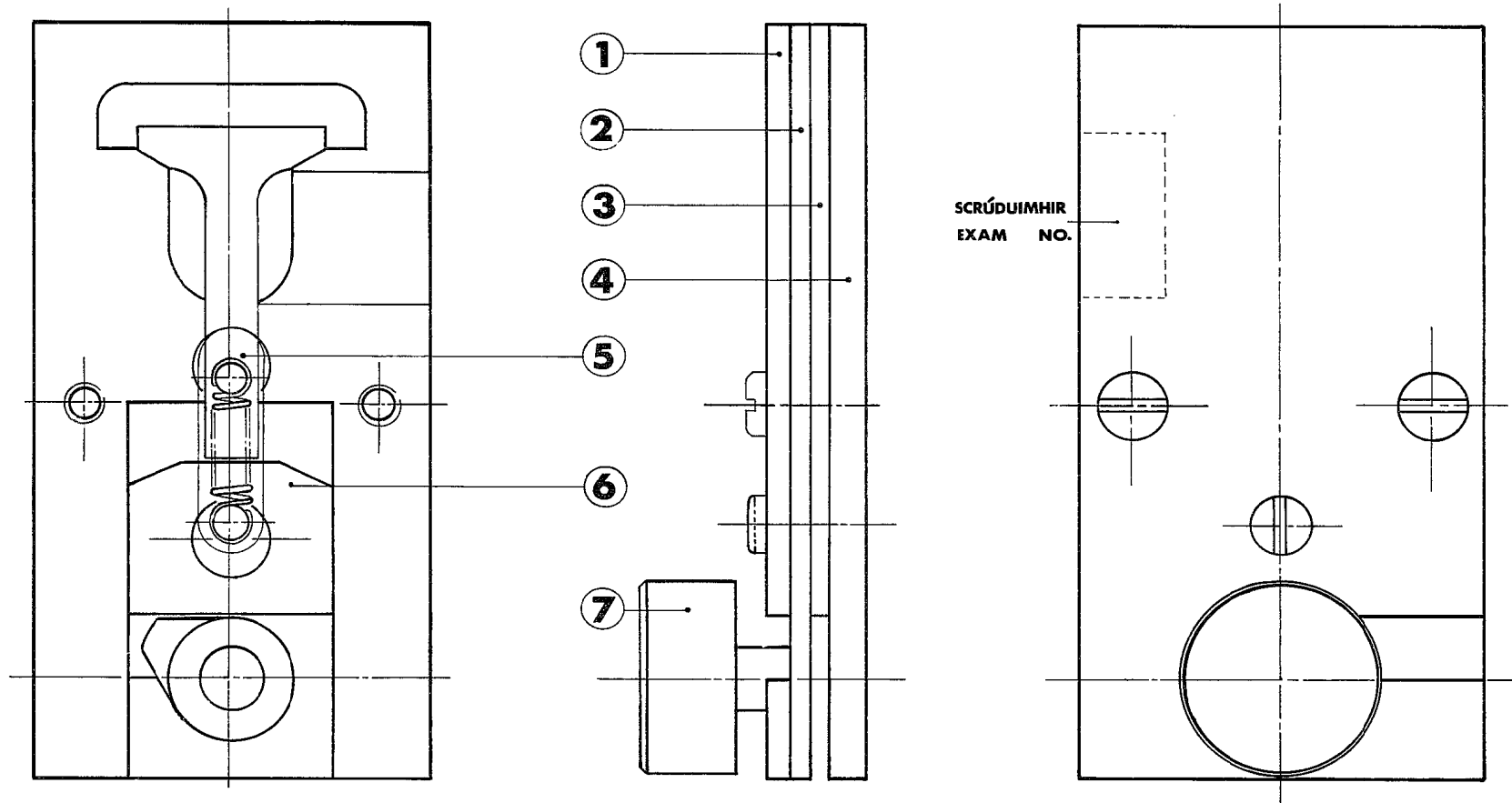
From the materials supplied, make the VALVE MECHANISM shown on the drawing to the shape and dimensions specified. Accuracy, finish and operation are important. Dimensions are in millimetres.

PART	MATERIAL	PROCESS
1	Aluminium	Mark out, drill, shape and cut screw threads.
2	Bright Mild Steel	Mark out, drill and shape.
3	Polycarbonate or Vivak	Mark out, drill and shape.
4	Polycarbonate	Mark out, drill, shape and cut screw threads.
5	Brass	Mark out, drill, shape and cut screw threads.
6	Bright Mild Steel	Mark out , drill and shape.

NOTE: (i) Part 2 has been partially shaped prior to examination day.  
(ii) Part 7 has been made prior to examination day.

ASSEMBLY: Screw M5 X 12 mm stud into part 5 and solder as indicated.  
Assemble the parts using the spring and screws supplied.

AN ROINN OIDEACHAIS AGUS EOLAÍOCHTA  
SCRÚDÚ ARDTEISTIMÉIREACHTA  
INNEALTÓIREACTH—PRAITICIÚIL



ASSEMBLY DETAILS  
SONRAÍ CÓIMEÁLA

OVER  
THALL →

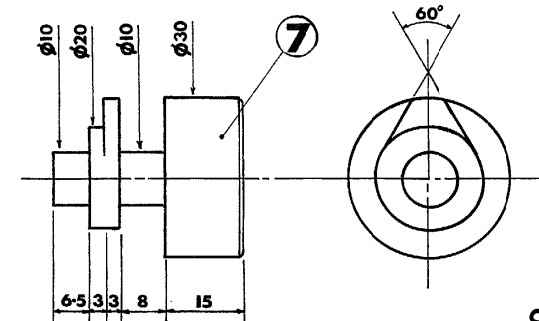
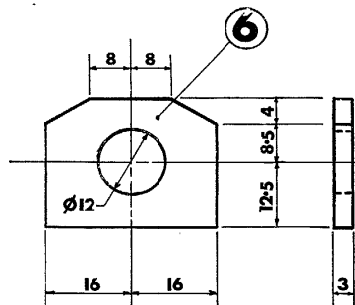
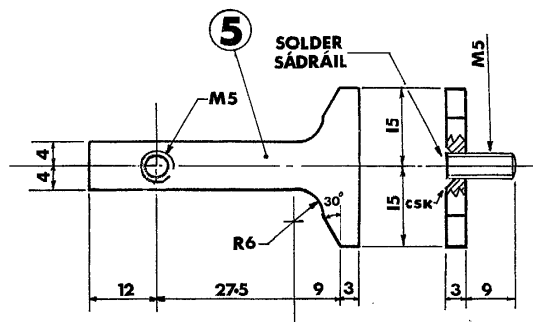
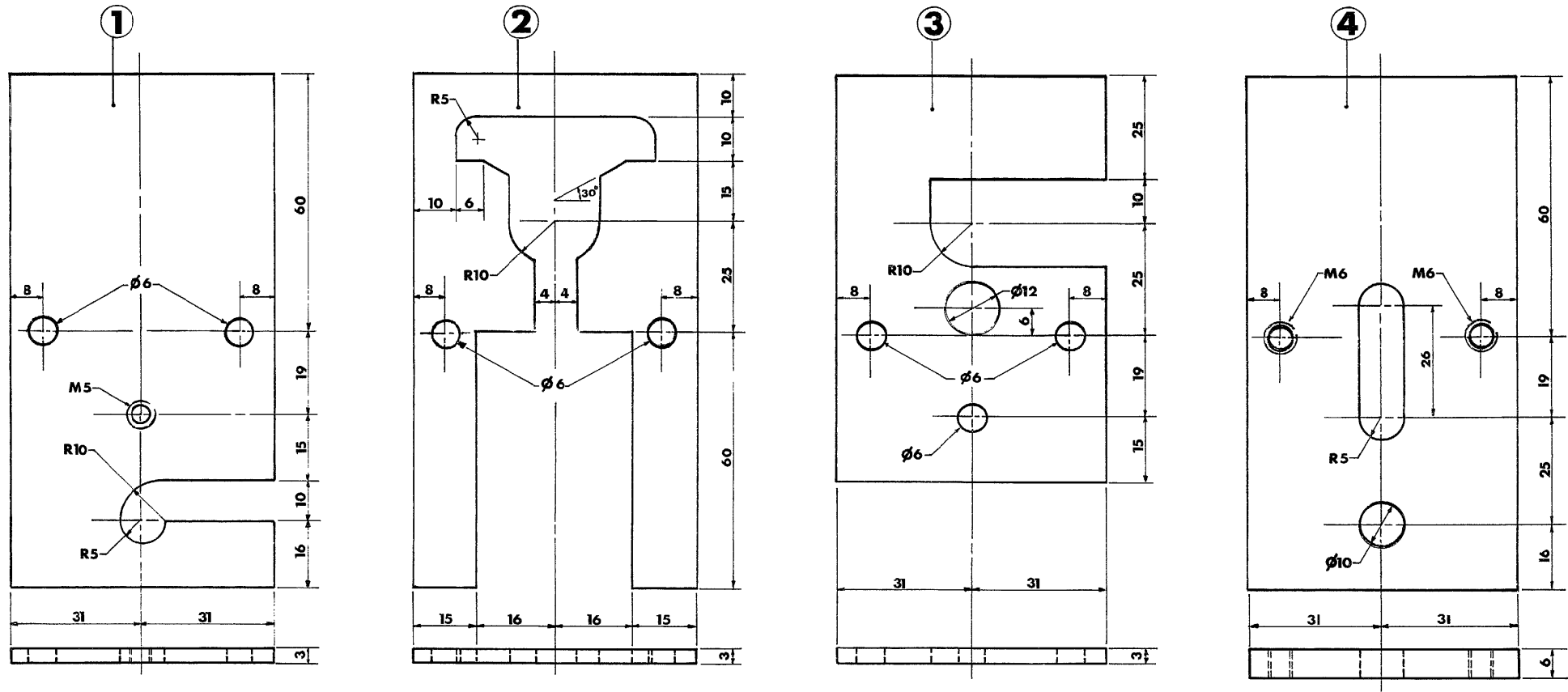
# AN ROINN OIDEACHAIS AGUS EOLAÍOCHTA

1999

## SCRÚDÚ ARDTEISTIMÉIREACHTA

M.74A.(L<sub>2</sub>)

### INNEALTÓIREACT-PRAITICIÚIL



OVER THALL