

QUESTION 1

MECHANICAL ANALYTICAL

Figure A

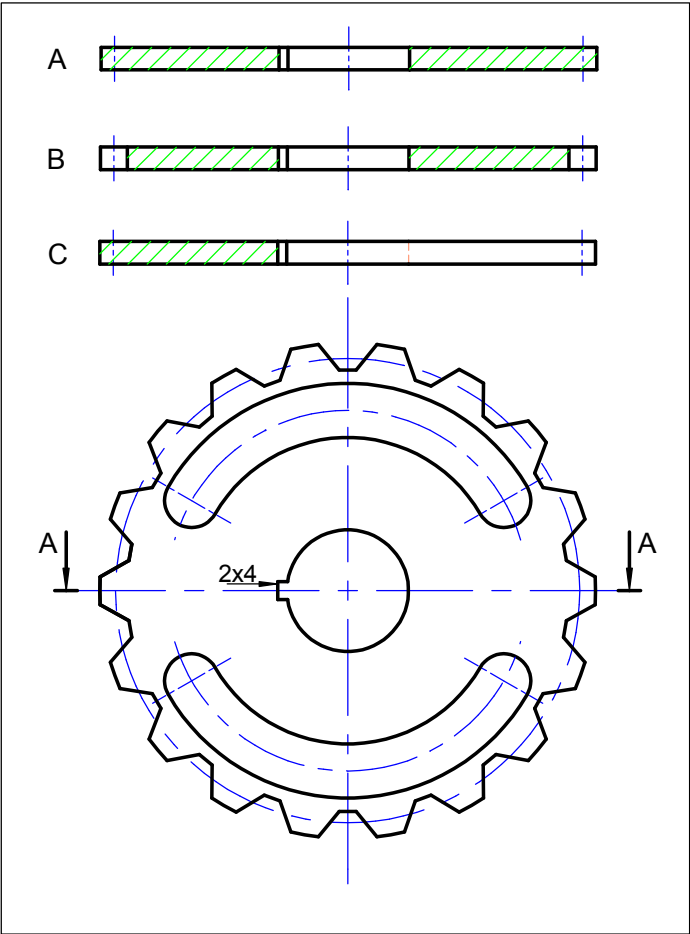


Figure B

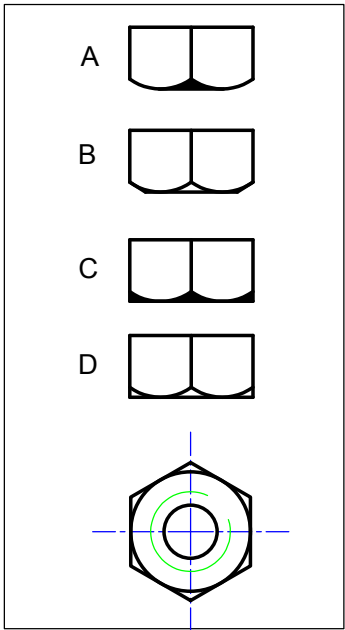


Figure C

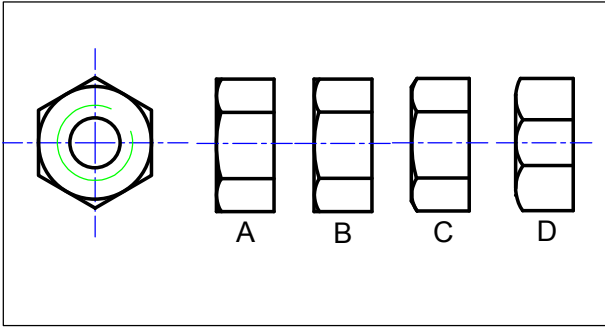


Figure D

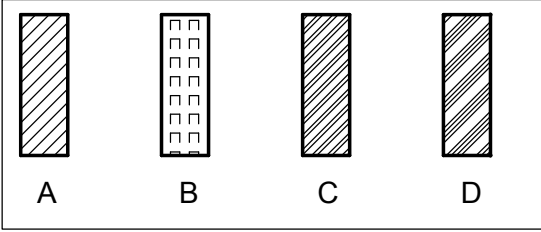


Figure G

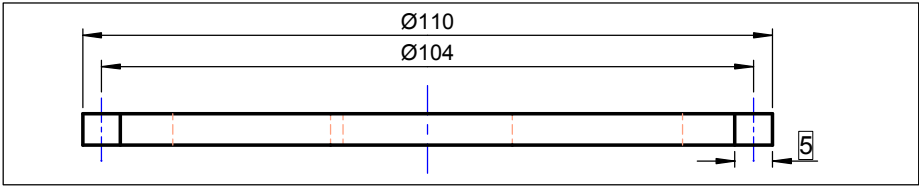


Figure E

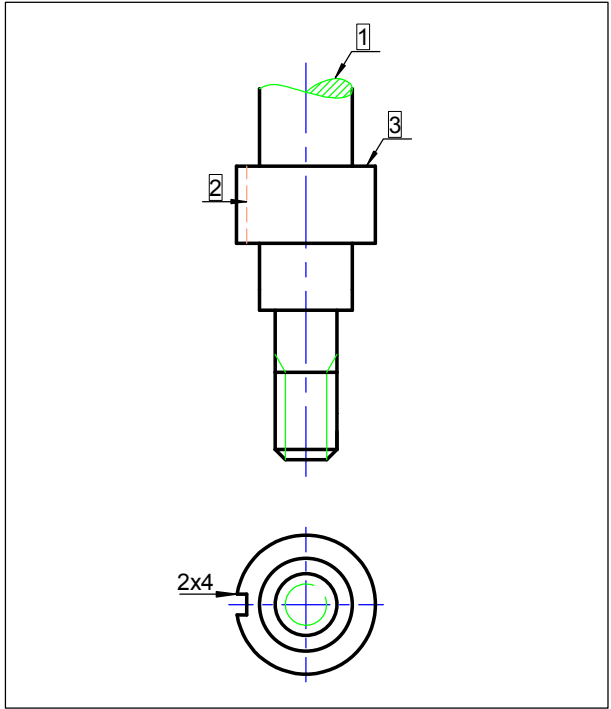


Figure F

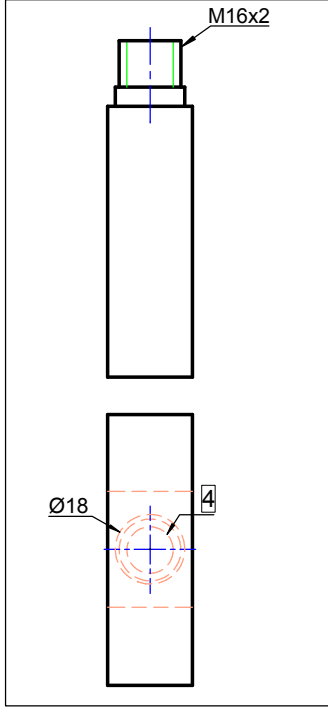


Figure H

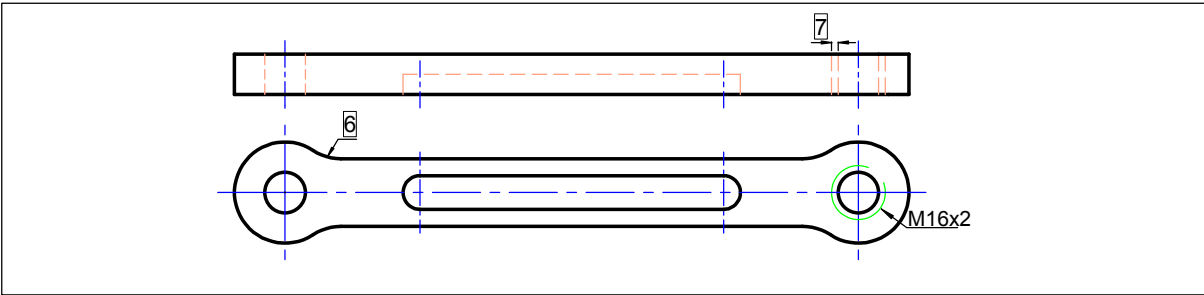


Figure J

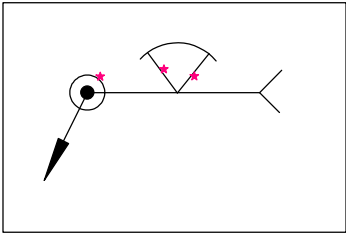


Figure K

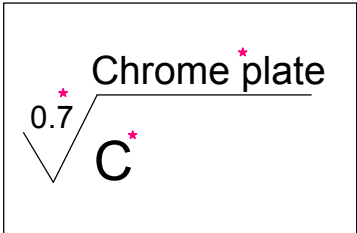
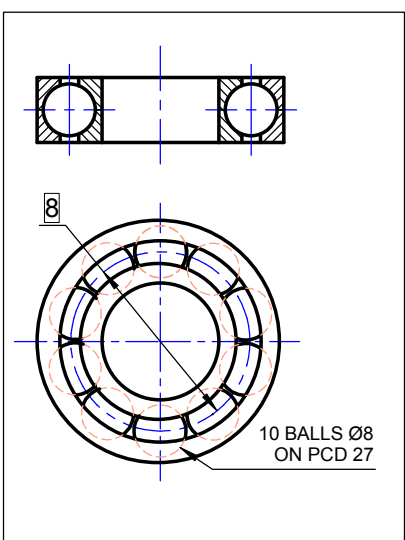


Figure I



- Complete the following questions by writing the correct answer in the space provided.
- 1.1 Which top view in Figure A is correct to convention? **B** _____ (1)
- 1.2 Which top view of the nut in Figure B is correct? **D** _____ (1)
- 1.3 Which side view of the nut in Figure C is correct? **C** _____ (1)
- 1.4 Which hatching, for steel, in Figure D is correct? **A** _____ (1)
- 1.5 The feature 1 on Figure E is an **Interrupted view** _____ (1)
- 1.6 The feature 2 on Figure E is a **Keyway/key seat** _____ (1)
- 1.7 The feature 3 on Figure E is a **Shoulder** _____ (1)
- 1.8 Calculate the diameter 4 of the circle in Figure F. **12** _____ (1)
- 1.9 Calculate the dimension 5 in Figure G. **6** _____ (1)
- 1.10 The feature 6 on Figure H is a **Fillet** _____ (1)
- 1.11 Calculate the dimension 7 on Figure H. **2** _____ (1)
- 1.12 Calculate the dimension 8 on Figure I. **27** _____ (1)
- 1.13 Is the thread in Figure F internal or external? **External** _____ (1)
- 1.14 Is the thread in Figure H internal or external? **Internal** _____ (1)
- 1.15 Figure J shows an incomplete **welding symbol**. Complete the symbol for a **single-V butt weld** that will be welded **all around** and **on the site**. (3)
- 1.16 Figure K shows an incomplete **machine symbol**. Insert the following data correctly on the symbol:
- 1.16.1 Direction of lay is Circular.
- 1.16.2 Roughness value of 0.7.
- 1.16.3 Finishing by Chrome plating. (3)