EXAMINATIONS COUNCIL OF ZAMBIA
Examination for School Certificate Ordinary Level

Geometrical and Mechanical Drawing 7040/2
PAPER 2

Tuesday 3 NOVEMBER 2015

Additional materials:
- Drawing paper (1 sheet)
- Standard drawing equipment

Time: 2 hours 40 minutes Marks: 100

Instructions to candidates

Print your name, centre number and candidate number in the Title Block at the bottom right-hand side of your drawing paper.

There are two (2) questions in this paper. Answer both questions.

Use both sides of the drawing paper for your answers.

Information for candidates

The number of marks is given in brackets [ ] at the end of each question or part question.
The insert contains Figure 2 for Section 2.
You have an additional 10 minutes to read carefully the text of Section 2 before answering the questions.

Arcs of circles less than 5mm radius may be drawn freehand.
All dimensions are in millimetres unless otherwise stated.

Cell phones are not allowed in the examination room.

www.zedpastpapers.com

©ECZ2015/H1 This question paper consists of 3 printed pages and an insert.
Answer the question from Section 1 on one side of the drawing paper and that from Section 2 on the other side. All dimensions are in millimetres.

SECTION 1 (16 MARKS)

Candidates are advised to spend not more than 20 minutes on this section of the paper:

1. Orthographic views of a BRACKET are shown in First Angle Projection in Figure 1. Sketch freehand and in good proportion, a pictorial view of the bracket with 'C' in the foreground of the view. The use of instruments, including any form of straight edge, when constructing the view or when lining up will be heavily penalised. Faint construction lines and points used when construction the view should not be erased.

Figure 1
SECTION 2  (84 MARKS)

2  Figure 2 on the insert shows details of a SLIDE on the lathe machine in Third Angle Projection.

The components are assembled as follows:

The machined spindle © is inserted into the 30mm square hole of the slide © from under in the dovetail slot until it flushes. The tool holder © is then placed on top of the slide with the four M8 holes on top until the two components are in contact. The washer © is then placed on to the M10 part of the spindle.

The Handle © is screwed onto the M6 hole of the cap © after which the cap is tightened on the M10 portion of the spindle until tight.

Finally, the four M8 Hexagonal bolts © are screwed into the four M8 threaded holes of the tool holder.

With the components assembled as above, showing only one bolt on the far left and the handle in the horizontal position to the right, draw full size in either First Angle or Third Angle Projection,

(a) A Sectional Front Elevation, the plane of the section and the direction of the required view being indicated by X – X in the plan view of the main body.

(b) A plan as viewed arrow P.

Hidden detail is not required in any view. Suitable dimensions should be estimated where not provided.

In the lower right-hand corner of the drawing paper and on the same side as you have drawn the above views, , draw a title block. Print in this block your name, examination number, the title, the scale and indicate the projection you have used by using the appropriate British Standard symbol.
FIGURE 2

SLIDE
1 REQUIRED

BOLT
4 REQUIRED
2. TOOL HOLDER 1 REQUIRED

3. SPINDLE 1 REQUIRED

4. CAP 1 REQUIRED

5. HANDLE 1 REQUIRED

7. WASHER 1 REQUIRED

www.zedpastpapers.com
DOWNLOAD ECZ
PAST PAPERS
FROM YOUR
PHONE OR PC
www.zedpastpapers.com