



QUESTION 1: ANALYTICAL (MECHANICAL)

Given:
Working drawings of a ratchet and pawl assembly and questions relating to the drawings.

Instructions:
Answer the questions and write the answers in the provided space.

Notes:
Sketches and diagrams must be completed in pencil.
Text must be printed.

[30]

| QUESTIONS | | | ANSWERS | |
|-----------|---|---|---------|----|
| 1 | On what date was the revision completed? | | | 1 |
| 2 | What is the title of the drawing? | | | 1 |
| 3 | Who approved the drawing? | | | 1 |
| 4 | What is the scale of the drawing? | | | 1 |
| 5 | SKETCH the projection symbol of the drawing below the table, in the provided space. | | | 6 |
| 6 | What material is used for production of the article? | | | 1 |
| 7 | How many parts does this assembly consist of? | | | 1 |
| 8 | What is the tolerance for manufacture? | | | 1 |
| 9 | What will the minimum tolerance be for dimension A? | | | 2 |
| 10 | What is the diameter of B? | | | 1 |
| 11 | What is the across flats (A/F) dimension of the nut? | | | 4 |
| 12 | What drawing convention is represented by C? | | | 1 |
| 13 | What type of line is shown at D? | | | 1 |
| 14 | Name view 2. | | | 1 |
| 15 | What is feature E called? | | | 1 |
| 16 | What type of section is found at F? | | | 1 |
| 17 | What is feature G called? | | | 1 |
| 18 | Why is feature H not hatched? | | | 1 |
| 19 | Read the dimensions of: I | J | | 2 |
| 20 | What are the specifications of the thread at E? | | | 1 |
| TOTAL | | | | 30 |

| | | | |
|-------------------------------|------------|-------------------------|----|
| 2010/09/09 | A. DLAMINI | DIAMETER OF RATCHET | A |
| DATE | REVISED BY | DESCRIPTION OF REVISION | No |
| DRAWING PROGRAM: AutoCAD 2010 | | | |
| DRAWING No: SK-0010 | | | |
| FILE NAME: 4Q2-10 | | | |
| CHECKED BY: PAUL | | | |
| 2010/09/03 | | | |
| APPROVED: WILLEM | | | |
| 2010/09/11 | | | |
| MATERIAL: MILD STEEL | | | |
| HEAT TREATMENT: NORMALISE | | | |
| SCALE: 1:2 | | | |
| PROJECTION SYMBOL | | | |
| NAME | | | |
| NAME | | | |
| NAME | | | |