6188 Paper 2

General comments

The DNEA gives thanks to all the center's that put in effort to have all materials and tools ready for the examination. The performance has slightly declined compared to 2020. It could be noticed that in some regions centres find it difficult to get all the materials needed for the practical test. Photographic evidence also shows that some centres do not have the proper required tools and had to use improvised equipment. DNEA would also like to thank centres who had to think out of the box solve certain problems with regards to materials they could not find. E.g the prescribed 25mm x 3mm mild steel ran out of stock at one centre but this challenge did not prevent them from conducting the practical test. Alternatively, the centre provided a 25mm x 5mm flat bar for the practical test to be conducted. Thank you for the constructive yet guiding comments on the examination which was received. These comments are regarded as inputs from the centres and have been critically analyzed for implementation.

Comments on individual questions

Part A

1 Candidates where requested to list cutting tools needed to make the product. (List below)

The following was expected and most of the learners got it right. hacksaw

- Angle grinder
- · Cut off saw/tool
- Drill bits
- Electrical hand drill (Any 2) [2]
- 2 Candidates were expected to list the safety protection required during welding:
 - · Leather hand gloves
 - · Spats / shoe protection
 - Leather apron
 - · Welding bonnet/helmet, etc.
 - Overalls

• Safety boots (Any 2) [2]

- 3 Candidates were expected to state the safety precautions required during arc welding and not state safety clothing /PPE:
 - Don't use defective cables.
 - Make sure the earthing clamp is properly clamped
 - Switch machine off when work is completed.
 - · Check the cables of welding machines for defects.
 - Clean tools and equipment after use.

(Any 1)

[1]

To the Metalwork and Welding teacher

Please note that **Part A** should be marked by DNEA and not by the teachers at center's. There were centres who marked Part A which is an indication that instructions were not read and followed.

Part B

Photographic evidence had to be attached to the script and sent to DNEA. NB: It is imperative that photographic evidence of various processes per candidate is captured and attached to the scripts. For example, DNEA is interested to see photographic evidence on measuring and marking, cutting, welding, grinding of joint (removing of burrs) and the final product for verification. Some centres did not attached Photographic evidence while some only submitted photographic of the final product per candidate. The quality of welding and neatness was somehow compromised which could be attributed to the fact that candidates were rushing to finish on time. It is strongly recommended that centres start with practical activities for candidates from as early as in the Junior Secondary phase in preparation for the NSSCO practical examination. Congratulations to all ten center's offering Metalwork and Welding for complying with proper PPE protocols. However, safety was compromised at centres in that welding took place without few candidates wearing leather hand gloves.

Advise to the teachers

Teachers are not allowed to assist in the preparation of the material besides what was required by DNEA.

Part C

To the Metalwork teacher

Please note that $\mathbf{Part}\ \mathbf{C}$ should be marked by DNEA and not by the teachers at centres. There are centres who marked Part C. Kindly read the instructions for compliance.

1	(a)	Square tube Flat bar Angle iron	(Any 2)	[2]
	(b)	Fireproof metal paint Polishing Grinding	(Any 2)	[2]