

SHEET 1

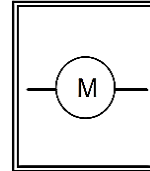
PENANG SANGAM HIGH SCHOOL
YEAR 13
TECHNICAL DRAWING
WORKSHEET – 3

QUESTION 1

Multiple Choice

1. The electrical symbol shown on the right is

- A. mechanical winding.
- B. electric motor.
- C. generator.
- D. machine.



2. The axial line of the telescope of an astronomical or geodetic instrument is known as

- A. back sight.
- B. collimation.
- C. bench mark.
- D. reduce level.

3. The method of surveying that has been carried out along the central line of a track of land on which a linear engineering work is to be constructed is called

- A. Differential leveling.
- B. In-direct leveling.
- C. Vertical leveling.
- D. Profile leveling.

4. Which of the following is not part of a business plan?

- A. Obtaining funds
- B. Validating an idea
- C. Managing a business
- D. Legalising a business

DESIGN

(20 marks)

Problem:

Domestic rubbish packed in garbage bags placed alongside the road is not hygienic. It becomes a hazard when the rubbish trucks do not turn up on time.

Brief:

Design a **garbage stand** for ease of collection and prevention from stray animals.

Specification: The **garbage stand** should be:

- 1. safe from stray animals;
- 2. made from combination of materials;
- 3. be stable and safely fixed on the ground;
- 4. have a storage capacity to store at least 5 garbage bags.

Requirements:

(a) Produce **two** freehand pictorial sketches of the **garbage stand**. **(8 marks)**

(b) Evaluate each sketch on the following criteria:

- (i) materials
- (ii) functionality

(4 marks)

(c) Explain with the help of sketches how the **garbage stand** will be fixed to the ground. **(3 marks)**

(d) Draw a pencil-rendered or a colour-rendered pictorial sketch of the final solution. **(5 marks)**

SHEET 2

(a) Possible Solution 1 (4 marks)				Possible Solution 2 (4 marks)				(c) (3 marks)																																																			
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Functionality																																																											
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