**30.18.2 Power Mechanics Paper 2 (447/2)**

**Station 1**

****

***(10 marks)***

**Station 3**

|  |  |  |  |
| --- | --- | --- | --- |
|  | ***Item*** | ***Material*** | ***Use*** |
| **A** | Exhaust Gasket. | Asbestos with copper or aluminium. | Seals between block and exhaust maniforld. |
| **B** | O ring. | Neopene rubber. | Prevents leakage between shafts and housing. |
| **C** | Brake fluid. | Vegetable oil. | Transmission of force in braking system. |
| **D** | Grease. | Mineral oil. | Lubrication of gears. |
| **E** | Oil strainer. | Steel. | Filter oil. |

 ***(10 marks)***

**Station 6**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Part*** | ***Name*** | ***Engine System***  | ***Identified Fault***  | ***Possible Cause*** |
| **J** | Commutator end. | Charging. | Worn carbon. | Normal wear and tear. |
| **K** | Mechanical fuel pump. | Fuel. | Inlett value wrongly installed. | Wrong assembly. |
| **L** | Shock absorber. | Suspension. | Worn out. | Excessive use. |
| **M** | Engine mounting. | Chasis. | Worn out or broken. | Excessive vibrations. |
| **N** | Tie rod end. | Steering. | Worn out. | Rough ride. |

 ***(10 marks)***

**Station 8**

1. Material A: Filler rod used to fill joint when brazing or welding.

 B: Flux used to clean metals and prevents oxidation or corrosion.

 ***(2 marks)***

**Station 9**

(a) (i) Depth of keyway.

(ii) Length of keyway. ***(2 marks)***

1. (i) Diameter of crankpin.

(ii) Diameter of camshaft. ***(2 marks)***

1. Crankshaft teeth.

Camshaft teeth. ***(4 marks)***

Ratio : 