



ZIMBABWE

MINISTRY OF HIGHER AND TERTIARY EDUCATION

**HIGHER EDUCATION EXAMINATIONS COUNCIL
(HEXCO)**

NATIONAL CERTIFICATE

IN

DIESEL PLANT FITTING

SUBJECT: Workshop Practice

PAPER NO: 319/S02

OCTOBER/NOVEMBER 2013 EXAMINATION

REQUIREMENTS

Pen, pencil, rubber, drawing instruments and rule.

INSTRUCTIONS TO CANDIDATE

1. Section A: Answer ALL questions. (20 marks)
2. Section B: Answer ALL questions. (20 marks)
3. Section C: Answer any six (6) questions. (60 marks)

This paper consists of 5 printed pages.

SECTION A

QUESTION 1

- (a) State the effects of incorrect valve clearance. (4 marks)
- (b) Outline the three major functions of an inline injection pump. (6 marks)

QUESTION 2

- (a) State the reason for having piston side ring clearance. (2 marks)
- (b) State effects of the following faulty valves in an air brake system:
- (i) pressure regulator valve stuck open
 - (ii) tri-stop relay valve
 - (iii) pressure phase lead relay valve over adjusted.
 - (iv) quick – release valve on rear axle stuck closed.
 - (v) solenoid relay valve
 - (vi) trailer valve with throttle (6 marks)
- (c) Define cetane rating. (2 marks)

