

USE OF MATHEMATICAL TABLES MR STEPHEN OGANA

1. Use reciprocals to evaluate.

(2marks)

$$\frac{8.1}{0.375} - \frac{7.5}{37.5}$$

2. Use square roots, reciprocal and square tables to evaluate to 4 significant figures the expression;

(4marks)

$$(0.06458)^{\frac{1}{2}} + \left(\frac{2}{0.4327}\right)^2$$

3. Use logarithms, correct to 4 decimal places, to evaluate

$$\frac{3\sqrt{82.51 \times 0.0062}}{\log 2.502}$$

(3marks)

4. Use logarithms to evaluate correct to 4 s.f

(4 marks)

$$\left(\frac{54.5221 - 0.3521}{\tan 24.8^\circ \times \cos 78^\circ}\right)^{\frac{1}{2}}$$

5. Use logarithms to evaluate;

(3marks)

$$\sqrt[3]{\frac{4.68 \times 0.1324^2}{5 \log 7}}$$

6. Evaluate using logarithms.

(4 marks)

$$\sqrt[3]{\frac{(0.07432)^2 \times (48.38)^3}{8458}}$$

7. Given that $Y = \frac{1}{0.1748} + (1.523)^3$. Find the value of $\frac{2}{y}$. Using reciprocal tables and cubes.

(4marks)

8. Use logarithms correct to 4 decimal places.

(4marks)

Evaluate: $\frac{(0.528)^{\frac{2}{3}}}{3.25 \times \log 4.8}$

9. Use tables of square root, square and reciprocal to evaluate:

$$\frac{1}{x} = \frac{1}{\sqrt{4.296}} + \frac{1}{1.872^2} \quad (2\text{marks})$$

10. Use the tables of logarithms to evaluate

$$\sqrt{\frac{80.26 \log 7.25}{(9.367 + 1.98)^2}} \quad (4\text{marks})$$

11. Use logarithm, correct to 4 decimal places to evaluate

$$\sqrt[3]{\frac{7.071}{456.3 \sin 45^\circ}} \quad (4\text{marks})$$

12. Evaluate using Logarithms

(4marks)

$$\frac{(0.0021 + 0.0035)^{\frac{1}{2}}}{1.38 \times 27.42}$$

13. Use tables of reciprocals only to work out.

(3marks)

$$\frac{5}{0.0396} + \frac{12}{0.593}$$

14. Use logarithms, correct to 4 decimal places, to evaluate;

(4marks)

$$\frac{(1934 \times 0.0569)^2}{436}$$

15. Use reciprocal, cosine and square tables only to evaluate to 4.s.f the expression.

$$\frac{1}{15.79} - (\cos 73.61)^2 \quad (4\text{marks})$$

16. Use logarithms to evaluate

$$\sqrt[4]{\left(\frac{4.562 \times 0.038}{0.82}\right)} \quad (4\text{marks})$$

17. Use tables of reciprocal and squares roots to evaluate

$$\frac{3}{\sqrt{179} - \sqrt{69}} \quad (4\text{marks})$$

18. Find the reciprocal of 0.324 correct to 4 significant figures, hence evaluate

$$\frac{\sqrt[3]{0.512}}{0.324} \quad (3\text{marks})$$