Use of Calculator Questions

Q1.

Work out $\frac{4 \times 10^9 + 3.2 \times 10^7}{1.6 \times 10^{-6}}$

Give your answer in standard form.

$$\frac{(4 \times 10^9) + (3.2 \times 10^7)}{(1.6 \times 10^{-6})}$$

$$= 2.52 \times 10^{15}$$

.....

(Total for Question is 2 marks)

Q2.

Work out $\frac{(2.6 \times 10^7) - (5 \times 10^6)}{2.8 \times 10^{-3}}$

Give your answer in standard form.

$$= 7500000000$$

$$= 7.5 \times 10^9$$

.....

(Total for question = 2 marks)

Q3.

(a) (i) Use your calculator to work out $\frac{\sqrt{46.2 - 17.5}}{2.39 \times 0.7}$ $= \frac{\sqrt{(46.2 - 17.5)}}{(2.39 \times 0.7)}$

Write down all the figures on your calculator display.

$= 3.202174593$

(ii) Give your answer to (i) correct to 3 significant figures.

$= 3.20$

(3)

(b) Work out $(2.34 \times 10^5) \times (5 \times 10^4)$

Give your answer in standard form.

$= 1.17 \times 10^{10}$

(2)

(Total for Question is 5 marks)

Q4.

(a) Calculate the value of $\frac{\sqrt{100 - 4.5^3}}{0.73}$ $= \frac{\sqrt{(100 - 4.5^3)}}{0.73}$ $= 4.08095$

Give your answer correct to 3 decimal places.

$= 4.081$

(2)

(b) Calculate the value of $\frac{1.2 \times 10^3}{3 \times 10^5}$

Give your answer in standard form.

Possible Non-Calculator Question

$= \frac{1.2}{3} \times 10^{-2}$

$= 0.4 \times 10^{-2}$

$= 4 \times 10^{-3}$

$= 4 \times 10^{-3}$

(2)

(Total for question = 4 marks)

Q5.

Use your calculator to work out $\frac{\sqrt{40.96}}{7.1 - 2.48}$

Write down all the figures on your calculator display.
You must give your answer as a decimal.

$$= \frac{\sqrt{40.96}}{(7.1 - 2.48)}$$

$$= 1.385281385$$

.....

(Total for Question is 2 marks)

Q6.

Use a calculator to work out

$$\frac{\sqrt{20.4}}{6.2 \times 0.48}$$

Write down all the figures on your calculator display.
Give your answer as a decimal.

$$= \frac{\sqrt{20.4}}{(6.2 \times 0.48)}$$

$$= 1.5176868$$

.....

(Total for Question is 2 marks)

Q7.

$x = 0.7$

Work out the value of $\frac{(x+1)^2}{2x}$

Write down all the figures on your calculator display.

$$= \frac{(0.7+1)^2}{2 \times 0.7}$$

$$= \frac{1.7^2}{1.4}$$

$$= 2.064285714$$

.....

(Total for Question is 2 marks)

Q8.

Calculate the value of $\sqrt{\frac{\tan 60° + 1}{\tan 60° - 1}}$

Write down all the figures on your calculator display.
You must give your answer as a decimal.

$$= \sqrt{\frac{(\tan 60° + 1)}{(\tan 60° - 1)}}$$

$$= 1.931851653$$

.....

(Total for Question is 2 marks)

Q9.

(a) Work out the value of $\frac{4.5 + \sqrt{10}}{3.1}$

Give your answer correct to 2 decimal places.

$= \frac{(4.5 + \sqrt{10})}{3.1}$

$= 2.4717$

$= 2.47$

.....

(2)

(b) Work out the value of

$$\frac{1}{2.5 \times 10^{-3}}$$

$= 400$

.....

(1)

(Total for question = 3 marks)

Q10.

(a) Use your calculator to work out $\frac{38.5 \times 14.2}{18.4 - 5.9}$

Write down all the figures on your calculator display.

You must give your answer as a decimal.

$= \frac{(38.5 \times 14.2)}{(18.4 - 5.9)}$

$= 43.736$

.....

(2)

(b) Write your answer to part (a) correct to 1 significant figure.

40

.....

(1)

(Total for Question is 3 marks)

Q11.

(a) Use your calculator to work out $\frac{\sqrt{7056}}{0.35 \times 12.8}$

$= \frac{\sqrt{7056}}{(0.35 \times 12.8)}$

Write down all the figures on your calculator display.

You must give your answer as a decimal.

$= 18.75$

.....

(2)

(b) Write your answer to part (a) correct to 1 significant figure.

$= 20$

.....

(1)

(Total for Question is 3 marks)

Q12.

Use your calculator to work out $\frac{\sqrt{70.25}}{4.2 - 2.37}$

$= \frac{\sqrt{70.25}}{(4.2 - 2.37)}$

(a) Write down all the figures on your calculator display.
You must give your answer as a decimal.

$= 4.580069567$

.....

(2)

(b) Write your answer to part (a) correct to 4 decimal places.

$= 4.5801$

.....

(1)

(Total for question = 3 marks)