



KEMENTERIAN
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JABATAN MATEMATIK, SAINS DAN KOMPUTER

NAME		COURSE CODE/ COURSE NAME	PBM1035 INTENSIVE MATHEMATICS
REGISTRATION NO.		COURSEWORK ASSESSMENT	TUTORIAL 1
PROGRAMME/ SECTION	IPP1	SESSION	DECEMBER 2018
		DURATION	60 MINS
		TOTAL MARKS	10 MARKS

Instructions

- Answer ALL questions. Write your answers in the spaces provided.
- Show your working to get marks. You may use a non-programmable scientific calculator.

Question 1

[2 marks]

CL01, C1

- (a) Given the expression $x^2 + 5xy - 3$. Identify the total variable term(s) and constant term(s) in this expression.

Total variable term(s) = x^2 ; constant term = 1

[2 marks]

CL01, C2

- (b) Simplify the expression $11c^5 - 9c^6 + 15c^5 - 2(-2c + 3c^2)$.

$$\begin{aligned} & 11c^5 - 9c^6 + 15c^5 + 4c - 6c^2 \\ & = 26c^5 - 9c^6 + 4c - 6c^2 \end{aligned}$$

Question 2

[3 marks]

CL01, C2

Simplify the polynomial $3x^2(x^2 + x + 2) - (x^4 + 2x^3 - 2x)$.

$$\begin{aligned} & 3x^4 + 3x^3 + 6x^2 - x^4 - 2x^3 + 2x \\ & = 2x^4 + x^3 + 6x^2 + 2x \end{aligned}$$

Question 3

[3 marks]

CL01, C3

Use polynomial division to simplify the following.

$$\begin{array}{r} n^2 + 10n + 18 \\ \hline n+5 \end{array}$$

$$\begin{array}{r} n+5 \\ \hline n+5) \overline{n^2+10n+18} \\ \rightarrow n+5n \\ \hline 5n+18 \\ \rightarrow 5n+25 \\ \hline -7 \end{array}$$