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|  |  | COURSE CODE/ COURSE NAME | PBM1035 INTENSIVE MATHEMATICS |
| COURSEWORKASSESSMENT | END OF CHAPTER 2 |
| SESSION | DECEMBER 2018 |
| **JABATAN MATEMATIK, SAINS DAN KOMPUTER** | DURATION | 60 MINS | CLO1 |  |
| NAME |  | CLO2 | 20 MARKS |
| REGISTRATION NO. |  | CLO3 |  |
| PROGRAMME/ SECTION | IPP1 | TOTAL MARKS | 20 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**

|  |  |
| --- | --- |
| CLO1, C2 | [2 marks] |
| Given a function $f\left(x\right)=-3x^{2}+2x+4$, identify $f(-5)$ and $f\left(0\right).$$f\left(-5\right)=-3\left(-5\right)^{2}+2\left(-5\right)+4=-81$ **(1 mark)** |

$f\left(0\right)=4$ **(1 mark)**

**Question 2**

|  |  |
| --- | --- |
| CLO1, C2 | [5 marks] |
| 1. Complete the following table for the function of a straight line $y=6x-3$ for range $-2\leq x\leq 2$.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| $$x$$ | $$-2$$ | $$-1$$ | 0 | 1 | 2 |
| $$y$$ | $$-15$$ | $$-9$$ | $$-3$$ | **3** | **9** |

 |

**Note: Each correct answer will be given 1 mark.**

|  |  |
| --- | --- |
| CLO1, C3 | [4 marks] |
| 1. Plot the graph of straight line $y=6x-3$ for range $-2\leq x\leq 2$.

 $y$$ x$ 0 0.5 $-3$  |

**Note:**

**Correct x-intercept and y-intercept each will be given 1 mark.**

**Plot straight line within the range will be given 1 mark.**

**Complete labeling of x-axis and y-axis will be given 1 mark.**

**Question 3**

|  |  |
| --- | --- |
| CLO1, C2 | [3 marks] |
| Given the straight line AB with the equation of $y=2x-3$. 1. Identify the y-intercept and x-intercept.

**y-intercept:** $-3$ **(1 mark)****x-intercept: 1.5 (2 marks with calculations)** |
| CLO1, C3 | [4 marks] |

1. Given another equation $y=-2x+3$. Draw the graph of both lines on the same graph paper.

**Graph paper is needed for this question.**

 $y$

 $y=2x-3$

 3

$ x$

 $1.5$

 $-3$

 $y=-2x+3$

**Note:**

**2 marks for each correct line drawing.**

|  |  |
| --- | --- |
| CLO1, C3 | [2 marks] |

1. Graphically, identify the intersection point of these two lines.

**(1.5, 0)**