

 Universiti Malaysia PAHANG <small>Engineering • Technology • Creativity</small>	SUBJECT: ORDINARY DIFFERENTIAL EQUATIONS		MARKS: /10	
	CHAPTER: 3			CODE:
	ASSESSMENT: QUIZ	NO: 4		DURATION: 10 MIN
NAME:		STUDENT ID : SECTION :		

1. Given

$$f(t) = -\frac{3}{2}t^6 + \frac{1}{5}e^{-6t} - 4\cos\frac{1}{\sqrt{2}}t.$$

Find the Laplace transform of the function.

[5 marks]

2. (i) State the First Shift Theorem.

(ii) By using the First Shift theorem, find the Laplace transform of

$$f(t) = e^{-5t} \cos 7t$$

[5 marks]

