 <p>Universiti Malaysia PAHANG Engineering • Technology • Creativity</p> <p>FACULTY OF INDUSTRIAL SCIENCES & TECHNOLOGY</p>	SUBJECT: Biochemistry		MARKS: /10
	CODE: BSB1113	TOPIC: photosynthesis, glycogen metabolism, gluconeogenesis and pentose phosphate pathways	
	ASSESSMENT: Quiz 3	NO: 3 DUE/DURATION: 30 min	
NAME:		STUDENT ID:	SECTION:


For the pathways provided below state most appropriate answers of each question or statement:

1. Photosynthesis

Questions/Statement	Answers
1. During the light reactions, water is oxidized, O ₂ is released, and these are produced. What are they?	
2. Light reaction can be divided into cyclic and non-cyclic electron flow. State what decides on which of the two to be initiated.	

2. Glycogenesis

Questions/Statement	Answers
1. What is the name of the major polymerizing enzyme?	
2. “In the glycosyl transfer, UDP-glucose reacts to the reducing end of a glycogen primer” What is incorrect regarding the above statement?	


 <p>Universiti Malaysia PAHANG Engineering • Technology • Creativity</p> <p>FACULTY OF INDUSTRIAL SCIENCES & TECHNOLOGY</p>	SUBJECT: Biochemistry		MARKS: /10	
	CODE: BSB1113	TOPIC: photosynthesis, glycogen metabolism, gluconeogenesis and pentose phosphate pathways		
	ASSESSMENT: Quiz 3	NO: 3		DUE/DURATION: 30 min
NAME:		STUDENT ID:	SECTION:	

3. Glycogenolysis

Questions/Statement	Answers
1. Name the key regulatory enzyme.	
2. Glycogen breakdown is encouraged by which hormone?	

4. Pentose phosphate pathway

Questions/Statement	Answers
1. State the two main functions of this pathway.	
2. Name two intermediates this pathway similar to glycolysis at the non-oxidative phase.	

 <p>Universiti Malaysia PAHANG Engineering • Technology • Creativity</p> <p>FACULTY OF INDUSTRIAL SCIENCES & TECHNOLOGY</p>	SUBJECT: Biochemistry		MARKS: /10
	CODE: BSB1113	TOPIC: photosynthesis, glycogen metabolism, gluconeogenesis and pentose phosphate pathways	
	ASSESSMENT: Quiz 3	NO: 3	
NAME:			STUDENT ID:
			SECTION:

5. Gluconeogenesis

Questions/Statement	Answers
1. Metabolites such as propionate feed into this pathway. Explain the origin of propionate.	
2. Explain the meaning of futile cycle.	