

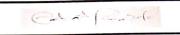
FACULTY: Basic and Applied Sciences

DEPARTMENT: Physical and Chemical Sciences

FIRST SEMESTER EXAMINATIONS 2018/2019 ACADEMIC SESSION

COURSE CODE:

BCH 409



	OURSE TITLE: TRATION:	INTERMEDIARY METABOLISM 120 MINS	C1 x1 (2.50)
DC	MATION,	120 MINS	HOD's SIGNATURE
Ins	truction: Attempt	any three (3) of the five (5) questions	
(1a) (1b) (1c)	Describe the ι	lationship between glucose metabolism and lipogurea cycle. Flow rate of a metabolite with a pool size of 50 and	10 marks
(2a)	galactose meta		6 marks
(2b)		res classical galactosemia.	4 marks
(2c)	State the funct	ions of five (5) types of protein.	10 marks
(3a) (3b)	With the aid of a well labeled diagram describe the lactose operon10 marks Explain the relationship of acetyl CoA to amino acids and pyrimidine metabolism 10 marks.		
(4a)	· ·	e the following terms;	
	•	titive inhibition petitive inhibition	5 marks
	(ii) Uncom	pentive initiation	5 marks
(4b)	Describe the si each case	x top level classification of enzymes; giving at	least one (1) example in 6 marks
(4c)	Briefly differentiate between the Induced fit and Lock and key hypothesis 4 mark		
(5a)	With the aid of a well labeled diagram, describe enzyme-substrate complex using the enzyme and substrate of the last step of the glycolytic pathway 10mark		
(5b)	With the aid of appropriate mechanism of action, extensively describe the role of		

inhibitors on the action of any two (2) of the following enzymes; Acetylcholinesterase (i) ---- 5 marks HMG CoA Reductase (ii) ---- 5 marks (iii) Angiotensin-1 Converting Enzyme ---- 5 marks (iii) α-Glucosidase ---- 5 marks