

OLABISI ONABANJO UNIVERSITY
DEPARTMENT OF BIOCHEMISTRY
REMO CAMPUS, IKENNE
2016/2017 HARMATTAN SEMESTER EXAMINATIONS

COURSE CODE: BCH307

TIME ALLOWED: 2 Hours

COURSE TITLE: METABOLISM OF NUCLEIC ACIDS

DATE: 1ST MARCH, 2017

INSTRUCTION: Answer Question 1 and any other 3 questions

1. A 10 year old boy suffered from pain in joints, showed signs of mental retardation and had self-mutilation. His serum uric acid level was 12mg/dl
- What is the probable diagnosis?
 - Which enzyme is defective in this disease?
 - What is the normal level of serum uric acid in human?
 - What is the mode of inheritance of this disease?
 - What is the likely drug that could be administer to this boy?
- (25 Marks)

2. Show the pathway for the following reaction
- dUMP to dTMP
 - IMP to GMP
- (15 Marks)

3. In a tabular form differentiate between the denovo synthesis of Purines and Pyrimidine nucleotides
- (15 Marks)

4. Outline the process of transcription in eukaryotic organism
- (15 Marks)

5. Give detailed description on denovo biosynthesis of Pyrimidine nucleotides
- (15 Marks)