



**NATIONAL OPEN UNIVERSITY OF NIGERIA**

Plot 91, Cadastral Zone, Nnamdi Azikiwe Express Way, Jabi – Abuja

**FACULTY OF MANAGEMENT SCIENCES**

**DEPARTMENT OF ADMINISTRATION**

**2020\_1 EXAMINATION**

**COURSE CODE: BUS 406**

**COURSE TITLE: ANALYSIS FOR BUSINESS DECISIONS**

**CREDIT UNITS: 3**

**INSTRUCTION:**

1. Indicate your Matriculation Number clearly
2. Attempt question one (1) and any other three (3) questions – four questions in all
3. Question one (1) is compulsory and carries 25marks, while the other questions carry 15marks each.
4. Present all your points in coherent and orderly Manner

**TIME ALLOWED: 3Hrs**

**QUESTION ONE**

- (a) State the elements of a typical decision situation in Nigeria.
- (b) The matrix below shows the payoffs of an investor who has the choice either investing in the production of HB pencils, BB Pencils or crayon. The market demand forecast for any of the product are as depicted in the payoff. Calculate and show which product should be produced using maximax model.

Alternative products	Market demand		
	high	moderate	low
HB Pencil	500	250	-75
BB Pencil	700	300	-60
Crayon	400	200	-50

**25marks**

**QUESTION TWO**

- (a) The process of analysing decision can be grouped into four phases. List and explain these four phases. **8 marks**
- (b) Since decisions are made by human beings, certain errors are bound to happen. The decision maker need to be aware of them and guide against their occurrence. Please discuss such possible errors in real life situations. **7 marks**

**QUESTION THREE**

There are two broad objectives that decision makers can possibly set to achieve in. Explain them in detail. **15marks**

**QUESTION FOUR**

Chief Adakole is considering where to invest his BetNiaja win. He has received suggestions from friends to invest in the projects represented in the table below, along with their relevant probabilities of success given by agric consultants, as, indicated in the pay-off table below:

Using EMV criterion, advise him as to the best project to embark on.

	States of nature		
Decision to invest	good	poor	turbulent
D1	50	30	15
D2	100	40	10
D3	30	10	-2
P	0.5	0.3	0.2

**15marks**

**QUESTION FIVE**

(a) Define Modelling, with special reference to Operations Research. **5 marks**

(b) List and discuss the advantages of models. **10 marks.**

**QUESTION SIX**

(a) What is Operations Research? **5 marks**

(b) List and discuss the characteristics of Operations Research. **10 marks**