NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI, ABUJA
FACULTY OF MANAGEMENT SCIENCES
JANUARY 2018 EXAMINATION

COURSE CODE: BFN728 **CREDIT UNITS: 2**
COURSE TITLE: Quantitative Techniques for Financial Decisions
TIME ALLOWED: 2 Hrs
INSTRUCTIONS: 1. Attempt question number one (1) and any other (2) questions.
2. Question number 1 carries 30 marks, while the other two (2) questions carry 20 marks each.
3. Present all your points in coherent and orderly manner.

1a. The following data presents the profit ranges of 100 firms in a given industry.

Profits (N'millions)	No. of Firms (f)
10 – 15	8
16 – 21	18
22 – 27	20
28 – 33	12
34 – 39	15
40 – 45	17
46 – 51	10
	$\Sigma f = n = 100$

You are required to compute the variance and standard deviation of profits within the industry. **20marks**

b. Consider the following raw data on hourly wage rate for six executive secretaries:

Raw data (in =N=): $X_1 = 950$, $X_2 = 300$, $X_3 = 1000$, $X_4 = 950$, $X_5 = 850$, $X_6 = 750$

Compute the median hourly wage rate for the six secretaries. **10marks**

2. Discuss the following inventory control systems terms;

i. Re-order Level **4marks**

ii. Minimum level **4marks**

iii. Maximum level **4marks**

iv. Ordering (Replacement) Costs **4marks**

v. Stock out Costs **4marks**

3a. A total of N10, 000 was invested in two business ventures, A and B. At the end of the first year, A and B yielded returns on the original investments of 6 percent and 5.75 percent respectively. How was the original amount allocated if the total amount earned was N588.75? **12marks**

b. Solve for the unknowns in the following linear equations:

(i) $\frac{7X + 3}{2} - \frac{9X - 8}{4} = 6$ **4marks**

(ii). $2(p + 4) = 7p+2$ **4marks**

4a. What do you understand by the following statistical tools?

i. The Measures of Skewness **2marks**

ii. The Range **2marks**

iii. The Median **2marks**

iv. The Mode **2marks**

v. The arithmetic mean **2marks**

b. List and discuss four basic laws of probability. **10marks**

5a. Discuss different types of forecasting. **10marks**

b. Discuss the tools of quantitative analysis. **10marks**