FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA SCHOOL OF ENVIRONMENTAL TECHNOLOGY DEPARTMENT OF QUANTITY SURVEYING

FIRST SEMESTER EXAMINATION 2017/2018 SESSION

COURSE CODE: QTS 417/EVT411 COURSE TITLE: RESEARCH METHODS

INSTRUCTION: Answer All Ouestions

Question One:

a)	In your	own understanding, what is meant by "research"?	(5 Marks)
b)	Differe	ntiate between the following with respect to research:	
	i)	Reality and Facts	(5 Marks)

ii) Concepts and Constructs......(5 Marks)

iii) Probability and Non-probability sampling techniques......(5 Marks)

Question Two:

Research problem:

"Every progressive profession must respond to the ever increasing changes in the global business environment. The professional Quantity Surveying firms within Abuja, Nigeria cannot be absolved from this challenge. Thus, the need for a strategic approach towards sustaining and advancing their competitive drives. A study revealed that the COMPETITIVE APPROACH of about 87 financially registered Quantity Surveying firms within their business environment is elusive. There is little information regarding the conditions required by these firms to approach competitiveness in practice. For instance, the factors used in evaluating competitive strategies of the firms; the drivers and barriers to the firms' competitiveness; and appropriate strategies to be more competitive by these firms are NOT QUITE UNDERSTOOD and therefore remain a research issue."

Use the above stated **research problem** to write a research report comprising the following:

- a) A suitable title/topic for the problem, research questions, aim and objectives, scope, and justification for the research.....(10 Marks)
- b) Write out the methodological section for the work comprising: research design, research population, sample frame (if any), sample size, sampling technique, method of data collection, and method of data analysis.....(10 Marks)

Question Three:

Table 3.1 and 3.2 are the results of data collected on the factors causing delays in construction projects, divided into contractors' related factors and clients' related factors.

a) Analyse and rank the collected data (contractor's related factors) in Table 3.1 using Relative Importance Index (RII); and the results in Table 3.2 using Mean Item Score (MIS)......(10 Marks)

b) Interpret your results and write out the conclusion and recommendations based on the results/findings.....(10 Marks)

Table 3.1: Contractors' related factors causing delays

S/n	Factors	1	2	-3	4	5	W	RII	Ranking
1	Financial indiscipline/dishonesty	0	4	9	109	60			
2	Inadequate contractor experience	2	10	22	111	37			
3	Incompetent project team	0	12	36	87	47			
4	Slow mobilization of equipment	19	44	65	52	2			
5	Damage of materials	19	50	70	35	8			
6	Slow mobilization of labour	22	69	38	52	1			

Table 3.2: Clients' related Factors causing delays

S/n	Factors	1	2	3	4	5	W	MIS	Ranking
1	Intermittent stoppage of work due to cash flow constraints	0	4	9	109	60			
2	Change orders	2	10	22	111	37			
3	Delay in payments	0	12	36	87	47			
4	Inadequate information during feasibility study	19	44	65	52	2			
5	Lack of experience of owner in construction	19	50	70	35	8			
6	Lack of capable representative	22	69	38	52	1			