

FEDERAL UNIVERSITY OF TECHNOLOGY OWERRI
SCHOOL OF ENVIRONMENTAL SCIENCES
DEPARTMENT OF ARCHITECTURE

2014/2015 Rain Semester Examination
Research Methods (ARC 512)

Time: 9.00am-11.00am (2Hrs.)

Date: 20/08/2015

Instructions: Answer question one and two other questions

(1) Your synopsis for the design of a sports stadium for the city of Owerri has been approved. In your problem analysis, you have discovered that the existing stadium has:

- A very steeply gallery for seating spectators.
- Inadequate circulation area.
- No sufficient security for players.
- Capacity problem.
- No efficient control at the gates.

Develop a succinct aim, objectives, research questions and hypothesis to address these problems. (Clarity is essential to attract marks) (30 marks)

(2) Briefly analyze the data collection technique(s) and strategy (ies) you have adopted in your final research project. (20 marks)

(3) The data below shows temperature readings collected all year round for three buildings (A, B and C) in a Building Information Modeling (BIM) System research. Use any form of graphical representation to present the data. (20 marks)

BUILDINGS	MONTHS OF THE YEAR											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A	30°C	31°C	30°C	28°C	28°C	26°C	25°C	24°C	25°C	26°C	28°C	29°C
B	28°C	28°C	27°C	26°C	25°C	24°C	22°C	23°C	24°C	25°C	26°C	27°C
C	26°C	26°C	25°C	25°C	24°C	22°C	21°C	21°C	22°C	24°C	25°C	25°C

(4) You have cited some resource materials in your research report which comprises of a book, a journal paper and a conference paper with the following details:

	BOOK	JOURNAL PAPER	CONFERENCE PAPER
PUBLISHER	Hardgrave	-	-
VOLUME	-	12 (3)	-
TITLE	Architectural Graphics	Pushing forward the frontiers of contemporary Nigerian Architecture	Obstacles for the Use of Modern Methods of Construction
AUTHOR(S)	John R. Hanson	Tunde K. Oyedere; Chidi R. Okere; Ciroma G. Mohammad and Dennis B. White	Grace T. Ikeoha and John S. Aturuocha
PAGE(S)	73	11	3
EDITION	3 rd edition	-	-
YEAR OF PUBLICATION	2008	2014	2010

Use any referencing style known to you (e.g. oxford, Harvard, APA etc) to capture these on your referencing list. (20 marks)