



*Chartered Insurance
Institute of Nigeria*

Chief Examiners' Report
October 2021

Diploma In Insurance (101-109)

GENERAL RELATED ISSUES TO WATCH OUT FOR IN FUTURE SITTINGS

DO'S	DON'TS
Start studying for the next diet early (from November/December for April diets and May for October diets)	Concentrate all your time and effort on Part 1 @ the detriments of Parts B & C (Diploma & Advanced)
Start each question on a fresh page	Write after invigilators have declared "time-up"
Read and follow instructions clearly (ensure you download and read the "students' instructions" from the website)	Write your name on any part of the answer scripts
Master the tricks of answering questions intelligently by following tips learnt before the exams and concentrating on questions that would fetch you more marks.	Nurture fear on any subject. There is no subject that distinction cannot be obtained.
Attend the Annual Students' Forum	Avoid the Annual Students' Forum
<p>CANDIDATES SHOULD VISIT & UNDERSTAND THE CONTENTS, REGULATIONS AND GUIDELINES/MARKET AGREEMENTS ETC ON THE FOLLOWING SITES naicom.com (NAICOM), nigeriainsurers.org (NIA), ncrib.net (NCRIB), nigeriailan.com (ILAN), cinigeria.com (CIIN)</p>	
<p>INFRACTIONS ON ANY OF THE INSTRUCTIONS COULD LEAD TO STIFF SANCTIONS. DO NOT BE A CULPIT. ANY CANDIDATE CAUGHT AND/OR FOUND TO BE CHEATING/HAVE CHEATED, WILL BE BARRED FROM PARTICIPATING IN ANY OF THE INSTITUTE'S EXAMINATION ACTIVITY FOR TWO (2) YEARS AND THE EMPLOYER WILL BE DULY INFORMED OF ANY SUCH INCIDENCE(S).</p>	
<p>STOP WORKING HARD TO FAIL!!! START WORKING EFFORTLESSLY TO PASS OUTSTANDINGLY!!!</p>	

LOGO

CHARTERED INSURANCE INSTITUTE OF NIGERIA
INTERMEDIATE

OCTOBER 2021 DIET EXAMINATION PAPER

SUBJECT I01
INSURANCE LAW

All answers are to be written on the answer booklet(s) supplied in accordance with the following instructions:

- Three hours are allowed for this paper.
- Fill in the information requested on the answer booklet and on form B.
- Handle the answer booklet with care.
- Do not write on the question paper.
- The answer booklet should be handed over personally by you to the invigilator before you leave the Examination Hall.
- Insert your candidate's number as given on your admission permit and any other particulars required on the cover and flap of the answer booklet.
- Ensure that you write the full and correct candidate's number.
- No name should be written on any leaf of the book, or on any supplementary leaves that may be issued to the candidates.
- The answer to each question must be commenced on a separate page. Where however, a question consists of two or more parts, this instruction does not apply to the separate parts.
- Write in the ruled margin the number and question attempted.
- Leave no blank pages among your answers.
- Where supplementary leaves are used, the candidate's number should be written in the space provided on them and fastened at the end of the book inside the cover.

**FAILURE TO ADHERE TO INSTRUCTIONS (WRITTEN AND VERBAL)
WILL ATTRACT STATED SANCTIONS AS STATED IN THE OCTOBER
2021 DIET CANDIDATES' INSTRUCTIONS.**

CHARTERED INSURANCE INSTITUTE OF NIGERIA

I01 - INSURANCE LAW

INSTRUCTIONS TO CANDIDATES

Three hours are allowed for this paper.

You should answer all questions in Part I and two (2) out of the four (4) questions in Part II.

The paper carries a total of 200 marks distributed as follows:

Part I - 140 marks.

Part II - 60 marks.

You are advised to spend not more than two (2) hours on Part I. You are strongly advised to attempt ALL the required questions to score maximum possible marks.

Where a question is split into parts (a), (b), etc, marks for each part are only shown if they are split unevenly between the parts and you should spend your time in accordance with the allocation.

In attempting the questions, you may find it helpful in some places to make rough notes in the answer booklet. If you do this, you must cross through these notes before you hand in the booklet.

It is important to show each step in any calculation, even if you have used a calculator.

Answer each question on a new page. If a question has more than one part leave several lines blank after each part.

Chief Examiner's Comments

Question 1

This question was designed to test candidates' knowledge of recent regulatory efforts in the industry by National Insurance Commission (NAICOM). Performance was good as 70% of the candidates that attempted the question passed. Candidates are advised to be up-to-date with the activities of NAICOM and other Agencies involved in the education and regulation in the industry.

Question 2

Attempt on this question was good because candidates understood the topic well which is an evidence of adequate preparation. Performance was excellent.

Question 3

This was a test on what negligent misstatement meant. Attempt was above 80% but candidates could not use the specific words needed to explain the phenomenon. Candidates failed to name the elements of what will lead to liability under negligent misstatement.

Question 4

This question tested candidates' knowledge of the concept of "offer" in contracts. Attempt was good but about 90% of the candidates could not answer the question properly as they failed to state how an offer could be made.

Question 5

The question tested candidates' knowledge of what a defective contract is. Attempt was good but performance was poor as candidates confused factors that will make a contract defective with factors that will make for the formation of contract.

Question 6

This question tested candidates' knowledge of the concept of agency authority. Many candidates did not have a good understanding of the diagram which was well designed to assist them. Performance was poor.

Question 7

This question tested candidates' knowledge of the exception to the concept of subrogation. Attempt was about 70% of which 50% passed. This could have been better had the candidates prepared well.

Question 8

This question tested candidates' knowledge of the concept of indemnity and methods of providing it. Candidates' appreciation of the question and its requirement was good. Over 90% passed.

Question 9

This question tested candidates' knowledge of the legal maxim "caveat emptor", its application and relevance to insurance. Attempt was poor. About 30% of those who attempted it got full marks. Candidates are encouraged to get good understanding of the topics of the course books.

Question 10

This question tested candidates' awareness of the requirements and methods to which insurance contract with minor and persons with mental disability could be concluded. Attempt was average but performance was above 60%. It is one aspect of the course book that the candidates mastered well before coming to write the examination. It is advised that the same attitude should be shown towards other aspects of the course book.

Question 11

This question tested candidates' knowledge of the concept of subrogation rights; how it would arise in law. It seemed candidates glossed over this aspect of their study pack. Attempt was good but performance was below average. There were many spelling errors and this affected candidates' response to the question.

Question 12

This question tested candidates' knowledge of tort generally and tort of defamation, trespass and nuisance. Attempt was good but performance was above 30%.

Question 13

This question tested candidates' knowledge of some concepts in law. Attempt was good and performance was also good.

Question 14

This question tested candidates' knowledge of rudiments of company law. Attempt was good and performance was fairly good.

Question 15

This question dealt with the issue of misrepresentation and its relevance to insurance practice. Attempt was good and performance was above average. There is room for improvement.

Question 16

This question tested candidates' knowledge of the concept of privity of contract and its applicability to insurance. Good attempt and good performance on the whole. However, candidates for future examinations to come to terms with the exceptions which poses a little challenge this time.

Question 17

This question tested candidates' knowledge of termination of insurance contract. Attempt was less than 60% and performance was woeful. Candidates wrote mainly from experience and not from the coursebook.

Question 18

This question tested candidates' knowledge of qualification and the concept of indemnity. Attempt was over 70% and performance was average. Not many candidates got pass 17 marks.

Chief Examiner's Comments on Overall Performance

The overall performance is not encouraging as less than 30% pass was recorded in the examination.

Chief Examiner's Suggestion on Improvement

Candidates are advised to study widely and also take interest in industry practice and/or events and/or journals.

Part I**Answer ALL questions in Part I.****Each question carries 10 marks.**

1. Account for the noticeable improvements in the insurance industry in the last decade with five (5) distinct and completely stated points.

Solution

The noticeable improvements in the insurance industry in the last decade include:

- prompt claims settlement in recent times. This shows that the industry is more responsive to claims settlements;
- the regulatory body- NAICOM is more alert to its responsibility i.e. adequate monitoring, supervision and enforcing standards and regulations. NAICOM is adequately empowered to enhance proper regulations of the industry;
- enforcement of high ethical standards among individual practitioners;
- insurance education
 - reviews of syllabus by CIIN.
 - establishment of college of insurance.
 - accreditation of more institutions of higher learning.
 - awareness programmes by NAICOM or CIIN;
- organization of loss-free service/courses by NAICOM and the institute;
- social responsibilities- the corporate bodies are alive to social responsibility projects;
- diversification of business base e.g., incursion of some firms into stock broking, tile communications;
- professionalism strictly adhere to for top management positions;
- more firms are going public, enlisted on the Nigerian Stock Exchange;
- increase in the operating capital base, to further enhance the profitability of the firms;
- merger and acquisition of insurance firms which may lead to increased profitability on the long-run.

(2 marks for each correct and completely stated improvement. Maximum of 5 to be graded. Total: 10 marks)

2. (a) Explain the term "law"? (2 marks)
 (b) "Law" can be classified in two (2) major ways. List these two ways and enumerate any two sections under each classification. (8 marks)

Solution

- (a) The term "law" is a body of general rules which governs and controls the behaviour of people in the country we live; whenever there is a breach of these rules, sanctions are applied. (2 marks)

b. The classification of law is as shown in the table below:

Private	Public
Law by contract	Constitutional law
Law of torts	Administrative law
Law torts	Criminal law
Law of property	
Law succession	
Family law	

(2 marks for each correctly stated class. 1 mark for any correctly stated section of these two classes. Maximum of 2 sections to be graded under each class. Sub-Total per class: 4 marks. Grand Sub-Total: 8 marks)
(Grand Total: 10 marks)

3. (a) What is "Negligent Misstatement"? (4 marks)
(b) What are the elements that are to be established before a defendant will be held liable for negligent misstatement? (6 marks)

Solution

(a) Negligent Mis-Statement is any **negligent word or advice** that **give rise to liability**.
(2 marks for each bolded phrase. Sub-Total: 4 marks)

(b) The elements that are to be established before a defendant will be held liable for negligent misstatement are:

- i. there is a special relationship between parties where it is reasonable for the claimant to rely on the advice given;
- ii. the giver of the advice can reasonably foresee that the advice is likely to be acted upon and that the recipient is likely to suffer if it is accurate;
- iii. the claimant relied on the advice, acted upon it and it caused a loss to the claimant;
- iv. the advice is in fact acted upon, causing loss to the claimant, having relied on the advice.

(2 marks for each correctly stated element. Sub-Total: 6 marks) (Grand Total: 10 marks)

4. (a) Within the context of the law of contract, define "an offer". (4 marks)
(b) State any three (3) ways by which an offer in contract would be made. (6 marks)

Solution

(a) An offer in the law of contract is a **promise to do or not to do something in exchange for something else**.

(2 marks for each bolded phrase. Sub-Total: 4 marks)

- (b) An offer in contract may be made
 (i) in writing; (ii) orally; (iii) by conduct (iv) to one person
 (v) to a group of people (vi) to the public.
 (2 marks for each correctly stated way. Maximum of 2 marks for each bolded phrase. Sub-Total: 4 marks) (Grand Total: 10 marks)

- 5 (a) When should a contract be described as “defective”? (4 marks)
 (b) Enumerate three (3) examples of such a contract. (6 marks)

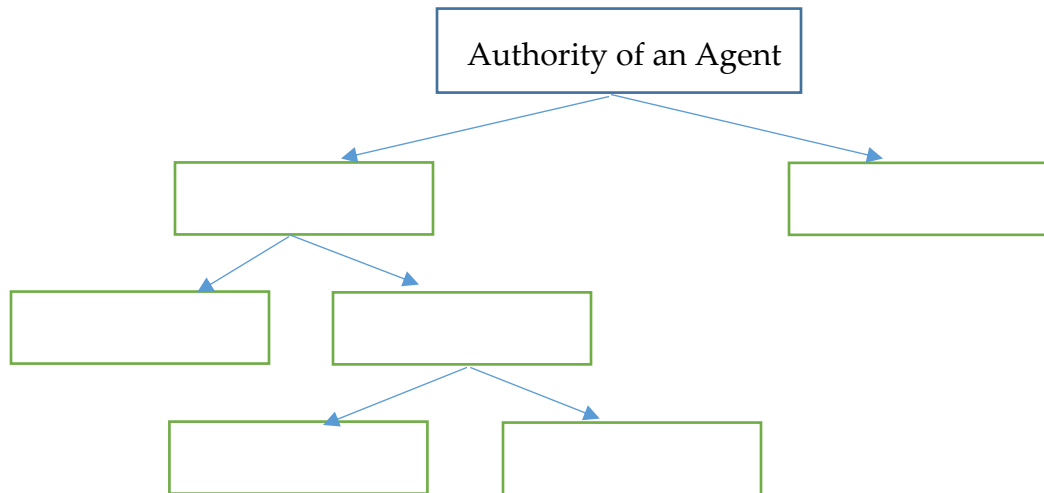
Solution

(a) A contract should be described as defective **if it exhibits some characteristics that destruct its validity.**

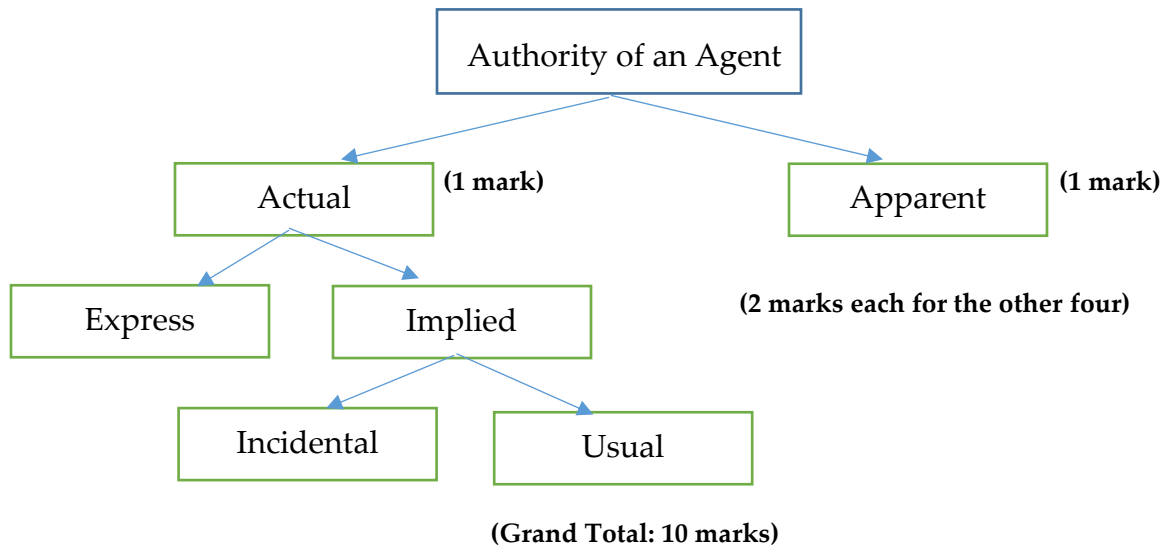
(2 marks for each bolded phrase. Sub-Total: 4 marks)

- (b) The following are examples of defective contracts:
 (i) illegal contracts because they are contrary to law or public policy;
 (ii) sexual immorality; (iii) affecting freedom of marriage;
 (iv) encouraging trade with the enemy;
 (iv) breaking the law of a friendly foreign State;
 (v) deceptive public activities (vi) corrupt public life; (vii) pervert court of justice.
 (2 marks for each correctly stated example. Maximum of 3 to be graded. Sub-Total: 6 marks)
 (Grand Total: 10 marks)

6. Using this diagram, demonstrate your understanding of classification of an “agent’s authority” by filling the blank spaces:



Solution



7. The doctrine of subrogation aims at preventing the insured from recovering for the same loss from multiple sources. This statement has some exemptions to it. Enumerate and briefly discuss any two (2) of these exemptions.

Solution

The doctrine of subrogation aims at preventing the insured from recovering for the same loss from multiple sources. The exemptions to the statement are:

- i. the insured must be indemnified first. The insured is only accountable to the insured only if the insured had indemnified him/her. So if the insured had not been indemnified, he can recover from multiple sources;
- ii. the second exception is where the insured receives a gift (voluntary payment) after having suffered a loss usually from somebody other than the wrongdoer;
- iii. situations where it appears that the giver intends the money to be for the sole benefit of the insure. This cannot be denied to or received back by the insurer or claimed by way of subrogation.

(2½ marks for each correct and completely stated point. Maximum of 2 points under each exemption. Sub-total per reasons: 5 marks. Grand Total: 10 marks)

8. (a) Explain indemnity. (2 marks)
(b) List four (4) ways of providing indemnity. (8 marks)

Solution

(a) Indemnity can be explained as **protection or security against damage or loss**. It translates to provision of financial compensation for a loss which the insured has suffered and put him on the same position after the loss as he enjoyed immediately before the loss. (2 marks)

(b) Indemnity can be provided in any of these ways:

- (i) cash payments; (ii) reinstatements;
(iii) repair; (iv) replacement.

(2 marks for each correctly stated way. Sub-Total: 8 marks) (Grand Total: 10 ways)

9. (a) What does the doctrine of “caveat emptor” means? (2 marks)
(b) Is the doctrine applicable to insurance contracts? If yes, discuss. If no, explain the reasons why with a brief explanation on the doctrine that is applicable in its stead. (8 marks)

Solution

(a) The doctrine “caveat emptor” means “buyers beware”. This principle is applied in sale of goods transaction where parties contract to sell and buy tangible items. The buyer is enjoined or has the opportunity to examine whatever he wants to buy the seller is not bound to do no more than act truthfully. (2 marks)

(b) No, the doctrine is not applicable in insurance. (2 marks)

The applicable doctrine in insurance is utmost good faith. (2 marks)

Here, the parties deal in an intangible product. With only one party being involved with all the necessary information and data. Also, insurance policy unlike car cannot be tested by the proposer before it is bought; all information regarding the vehicle lies with the proposer. Also, the proposer will have to trust the insurer to pay his claims when the time comes. The proposer will not know the details of the cover that they are to receive unless insurers make the information available to them.

(2 marks for each correctly and completely stated explanation. Maximum of 2 to be graded. Sub-total: 4 marks. Grand Sub-Total: 8 marks).

(Grand Total: 10 marks)

10. Briefly discuss how an insurance contract may be made with:
(a) a minor (6 marks) (b) a person with mental disability. (4 marks)

Solution

(a) **An insurance contract may be made with a minor** (i.e. a person below the age of 18 years) on the ground that the insurance product has been classified as a necessary good or service. This is because a minor has the right to enter into a contract for necessities

only. Necessaries are goods and services necessarily needed by the minor for his position in life. An example of insurance that is classified as necessary is motor insurance. The rule, under such “necessaries”, would be that a minor will not be able to recover premium paid by him/her under an insurance contract that is void and unenforceable unless there has been a total failure of consideration i.e. the risk has not started to run and/or the insurer has given nothing in return. If the insurer has provided cover., premium is not returnable.

(2 marks for each correctly and completely stated point. Maximum of 3 to be graded. Sub-Total: 6 marks)

(b) **An insurance contract may be made with a person with mental disability**, with the following applicable rule. A mentally ill person is bound by the insurance contract he enters into. The exception that will make the contract void is if (s)he can show that at the time of the contract, he did not what he was doing and that fact was to the knowledge of the other party. Otherwise he is bound by the contract.

(2 marks for each correctly and completely stated point. Maximum of 2 to be graded. Sub-Total: 4 marks)

(Grand Total: 10 marks)

11. (a) List two (2) ways through which subrogation rights could arise? (2 marks)
(b) Enumerate four (4) ways on how the doctrine of subrogation could be modified by or denied by insurers? (8 marks)

Solution

(a) The ways by which subrogation rights could arise are:

- (i) tort (ii) contract (ii) Statute

(1 mark for each correctly stated way. Maximum of 2 ways to eb graded. Sub-Total: 4 marks)

(b) The four (4) ways on how the doctrine of subrogation could be modified by or denied by insurers are:

- (i) by way of market agreements; (ii) contractual waiver;
(iii) co-insurance cases; (iv) public policy.

(2 marks for each correctly stated way. Sub-Total: 8 marks)

(Grand Total: 10 marks)

12. (a) Define tort. (1 mark)
(b) State two (2) types each of the following tortious actions
(i) defamation (ii) trespass (iii) nuisance. (9 marks)

Solution

(a) **Tort is a civil wrong** arising from the breach of a duty primarily fixed by law.

(1 mark).

(b)

Defamation	Trespass	Nuisance
(i) Libel (ii) Slander	(i) Trespass to person (ii) Trespass to land (iii) False imprisonment (iv) Trespass to goods	(i) Public nuisance (ii) Private nuisance

(2 marks for each correctly stated type. Maximum of 2 under each term is to be graded. Sub-total: 8 marks)

(Grand Total: 10 marks)

13. Write short notes on the following:

- (a) adversarial legal system (4 marks) (b) balance of probability (2 marks)
(c) solicitor (2 marks) (d) barrister (2 marks)

Solution

(a) **Adversarial Legal System:** refers to a legal system in which the court is neutral in which the judge or the judges or jury does not investigate any party before it but rather listens to all the parties and gives judgement to the deserving party based on the evidence before the court.

(2 marks for each correctly and completely stated explanation. Maximum of 2 to be graded. Sub-Total: 4 marks)

(b) **Balance of Probabilities:** this means “more likely than not” when a judge or court in civil matters or cases, listens to parties before it arrives at a conclusion or gives judgement based the side whose story or evidence is more likely to be true-balance probabilities.

(2 marks for any correctly and completely stated explanation. Sub-Total: 2 marks)

(c) **Solicitor:** a solicitor is a trained lawyer who offers professional advice on all kinds of legal matters from buying home to matters of family law to major commercial deals e.g. selling of a major corporation, or representing his client in court, e.t.c.

(2 marks for any correctly and completely stated explanation. Sub-Total: 2 marks)

(d) **Barrister:** is also a trained lawyer but he acts on instructions from solicitors and often have little direct contact with members of the public. In England, Barristers give specialist expertise on complex matters of law and represent clients in court. In Nigeria, the work of both the solicitor and barrister is fused in Nigeria because a trained lawyer is both a solicitor and a barrister in Nigeria.

(2 marks for any correctly and completely stated explanation. Sub-Total: 2 marks)

14. (a) What are corporations? (2 marks)
(b) List, and explain with an example each, the two (2) ways by which corporations may be classified. (8 marks)

Solution

(a) Corporations are non-human legal entities. They are artificial loyal persons or juristic persons. They are formed by people who wish to combine their resources for a common purpose which may be a non-consumer enterprise, or involve social or other activities.

(2 marks for each correctly and completely stated definition. Sub-Total: 2 marks)

(b) Corporation may be classified into:

- (i) corporation sole and
- (ii) corporation aggregate.

Corporation sole is a legal person representing an official position which will be occupied by a series of different persons in succession and different times. They are legal entities distinct from the people holding the position and who merely act on behalf of the corporation. It can be created by statute and cannot die. Examples are the stool of the Oba of Lagos, Nigeria's Presidency, Bishops of the Church of Nigeria, e.t.c.

Corporation aggregate is a legal person consisting of a number of people. It is different and distinct from its members. An example is the Chartered Insurance Institute of Nigeria. It may be formed by either way of royal charter, or by way of Act of Parliament or through registration with the company's registry as private limited liability companies or public companies, companies limited by shares or limited by guarantee.

(2 marks for each correct classification. 2 marks for complete explanation of the classification. Sub-total per classification: 4 marks). Grand Sub-Total: 8 marks).

(Grand Total: 10 marks)

Part II

Answer TWO (2) out of the following FOUR (4) questions.

Each question carries 30 marks.

15. (a) Define misrepresentation. (4 marks)
(b) Distinguish between fraudulent misrepresentation and innocent misrepresentation. (8 marks)
(c) Explicitly enumerate misrepresentation in insurance with any four (4) examples. (8 marks)
(d) Enumerate any four (4) conditions that must exist for misrepresentation to affect the validity of an insurance contract. (10 marks)

Solution

(a) Misrepresentation is a **false statement of fact that induces the other party to enter into a contract.**

(2 marks for each of the coloured phrases. Sub-Total: 4 marks)

(b) **Fraudulent misrepresentation** is **false statement with the deliberate intention of misleading another and putting these at a disadvantage**, while **innocent misrepresentation** is a **false statement but with no intention to mislead the other party.**

(2 marks for each of the coloured phrases. Sub-Total: 8 marks)

(c) The examples of misinterpretation in insurance are:

- proposer for theft insurance says that the premises are protected by a burglar alarm when they are not;
- proposer for motor insurance declares that his car has not been modified in anyway when it has;
- proposer for life insurance gives his age as 25years when he is infact 35 years old;
- proposer for property insurance says property is in a good state of repair when it is in a poor condition;
- proposer for property insurance implies, in respect of a previous fire at his residence, that fire had occurred at other premises and had been the fault of contractors. The fire had been at his house and the contractors were the insured's alter ego.

(2 marks for each complete and correctly stated example. Sub-Total: 8 marks)

(d) The conditions that must exist for misrepresentation to affect the validity of an insurance contract are that the misrepresentation must:

- be of fact and not of law. Everyone is defined to know the law;
- be made by a party to the contract;
- be material;
- induce the contract;
- cause some loss or disadvantage to the person who received upon it.

(2½ marks for each complete and correctly stated condition. Maximum of 4 to be graded. Sub-Total: 10 marks)

(Grand Total:) 30 marks)

16. (a) Explain the concept of privity of contract. (3 marks)
- (b) Why is the doctrine of privity of contract not strictly applicable to insurance? (2 marks)
- (c) How have the following concepts and statutes affected the doctrine of privity of contract?
- | | |
|------------------------------------------------------|----------------------------|
| (i) assignment | (ii) agency |
| (iii) trust | (iv) Road Traffic Act 1988 |
| (v) Third Parties (Right Against Insurers) Act 1930. | (25 marks) |

Solution

(a) The concept of privity of contract is a major principle in the law of contract. **It means that only parties to contract can sue and sued on it.** (3 marks)

- (b) The doctrine of privity of contract is not strictly applicable to insurance because:
- the term insured may mean or cover a number of different people, some of whom did not make the original contract with the insurer;
 - some people who are not named in the policy at all may be able to enforce the insurance contract or at least benefit from it.
- (2 marks for any of correct and completely stated reason. Sub-Total: 2 marks)

(c) The following concepts and statutes affected the doctrine of privity of contract:

(i) **Assignment:**

- benefit of a contract is assignable to third party;
- there are a statutory and equitable assignments by which contract or benefits of it can be legally or equitably assigned to parties who are not original parties to the contract.

(ii) **Agency:** a third party can gain the right to claim on an insurance policy under the rules of agency. The doctrine of undisclosed principal can apply to insurance so also is the doctrine of ratification.

(iii) **Trust:** sometimes a person who insures is deemed to have established a trust for the benefit of a third party, who can enforce the policy. An example is found in the field of life insurance where the insured insures his life expressly for the benefit of another.

(iv) **Road Traffic Act 1988:** this is legislature intervention. S.148(7) provides the exception to the doctrine of privity of contract thus “ ... a person issuing a policy of insurance under S.145 of this Act shall be liable to indemnify the person or classes of persons specified in the policy in respect of any liability which the policy purports to cover in the case of those persons or classes of persons”. The effect of the provision is to

allow persons other than the policy holder to enforce the policy directly when in actual fact they were not parties to the original contract.

(v) **Third Parties (Right Against Insurers) Act 1830:** this is another statutory exception of privity of contract. This is to take care of the victim of an accident if the wrongdoer becomes bankrupt or goes into liquidation if a company. At common law, such a victim might be with nothing and would have lined-up amongst the creditor of such insolvent company. The Act has provided that the rights of an insolvent insured to an indemnity from its insurers under a liability policy would be transferred to the third party - the victim.

(2½ marks for each correct and completely stated point. Maximum of 2 points to be graded under each term. Sub-total per term: 5 marks. Grand Sub-total: 25 marks)
(Grand Total: 30 marks)

17. With respect to formation of a typical insurance contract, discuss the following:
- (a) invitation to treat; **(2 marks)**
 - (b) who makes an offer? **(4 marks)**
 - (c) acceptance and communication of acceptance; **(6 marks)**
 - (d) position at renewal of policy a contract; **(4 marks)**
 - (e) intention to enter into legal relationship; **(2 marks)**
 - (f) consideration and return of premium, **(12 marks)**

Solution

(a) **Invitation to Treat:** insurance is different from true offer. A prospectus published by an insurance company which contains details of cover and standard rates of premium would be an invitation to treat with respect to a typical insurance contract.

(2 marks for a complete and correctly stated point. Sub-Total: 2 marks)

(b) **Who Makes and Offer:** the one who constitute offeror or offeree is not clear in the formation of an insurance contract. The proposal form submitted to the insurer may be an offer that the insurer accepts by confirming cover or issuing policy. At other times, insurer quotes premium based on the information supplied in the proposal form thereby making an offer which the proposer can accept or decline. The net effect is that before a typical insurance contract is closed, there may be series of offers, counter-offers, rejection, e.t.c.

(2 marks for any complete and correctly stated point. Maximum of 2 points to be graded. Sub-Total: 4 marks)

(c) **Acceptance and Communication of Acceptance:** there must be acceptance of offer and acceptance cannot be made without doing nothing. If the proposer acts in reliance on an offer made by the insurers valid contract will be formed. Acceptance in insurance will be effective only if parties agree on the following:

- nature of the risk and subject matter of insurance
- duration of the contrary
- the amount of the premium.

(2 marks for any complete and correctly stated point. Maximum of 3 points to be graded. Sub-Total: 6 marks)

(d) **Position at Renewal of Policy or Contract:** at the time that a new contract is envisaged, the insurer's renewal notice constitutes an offer which the insured accepts by payment of premium to form a new contract provided there are no changes in the risk. If there are changes, the insured must notify the insurer in which case the insured would be making a counter offer to the insurer's offer which the latter may accept or reject.

(2 marks for any complete and correctly stated point. Maximum of 2 points to be graded. Sub-Total: 4 marks)

(e) **Intention to Enter into a Legal Relationship:** this is a matter of operation of law. This is imputed because insurance, as a commercial transaction, parties are presumed in law to intend enter into it.

(2 marks for a complete and correctly stated point. Sub-Total: 2 marks)

(f) **Consideration and return of premium:** consideration in an insurance contract is the premium payable by the insured and the cover provided by the insurer. Once a risk starts running, premium is not returnable except there is total failure of consideration. This total failure could be situations where:

- proposal is withdrawn after premium has been stated;
- policy may be void for mistake or because there was no consensus idea;
- the policy is void for lack of insurable interest;
- policy may be void abinitio.

(3 marks for any complete and correctly stated point. Maximum of 4 points to be graded. Sub-Total: 12 marks)

(Grand Total: 30 marks)

18. Discuss fully all the factors that will enable an insured recover more than an indemnity in an indemnifiable insurance contract.

Solution

The factors that will enable an insured recover more than an indemnity in an indemnifiable insurance contract are when:

i. Cover on a Reinstatement Basis:

- cover on ordinary indemnity basis may not give the insured enough;
- reinstatement cover solves this challenge by providing that in the event of a loss, the insurer will pay a sum equivalent to the cost of rebuilding will pay a sum equivalent to the cost of rebuilding or replacing the property to a

condition equivalent to a substantially the same as but not better or more extensive than its condition when new.

- -this means that no deduction is made for wear and tear and the insurance pays for full cost of rebuilding – “as new”
- in this way, one can say that the insured is getting more than a mere indemnity.

(3 marks for correctly stated factor. 2 marks for each complete and correctly stated point. Maximum of 4 points to be graded. Sub-Total: 11 marks)

ii. “New for Old” Cover

This relates to insurances of household goods and personal possessions including household contents and personal “all risk” policies. By it, insurers agree to pay the full replacement cost “as new” of any insured item which is lost or destroyed, with no deduction for wear, tear or depreciation. This might seem to contradict the indemnity principle; the truth is that insurance arranged on this basis reflects the total replacement cost of all items as new and a more substantial premium is payable.

(3 marks for correctly stated factor. 2 marks for each complete and correctly stated point. Maximum of 2 points to be graded. Sub-Total: 7 marks)

iii. Agreed Value Cover

Under this, parties agree that in the event of a loss, a particular sum, fixed at the outset of the insurance will be paid regardless of the actual value of the property at the time of claim payment. The object of valued policy is to avoid disputes as to the value of the property at the time of the loss. This is employed where property is unique or a type for which there is a limited market. Examples of items insured under agreed value cover are works of art and veteran vintage or classic cars. Under it, the insurers must pay the agreed value regardless of the value at the time of the loss even if they can prove that the value of the property has declined since the insurance commenced. In this way, the insured may be said to have received more than an indemnity.

(3 marks for correctly stated factor. 3 marks for each complete and correctly stated point. Maximum of 3 points to be graded. Sub-Total: 12 marks)

(Grand Total: 30 marks)

LOGO

CHARTERED INSURANCE INSTITUTE OF NIGERIA
INTERMEDIATE

OCTOBER 2021 DIET EXAMINATION PAPER

SUBJECT I02
COMMERCIAL PROPERTY AND
BUSINESS INTERRUPTION INSURANCES

All answers are to be written on the answer booklet(s) supplied in accordance with the following instructions:

- Three hours are allowed for this paper.
- Fill in the information requested on the answer booklet and on form B.
- Handle the answer booklet with care.
- Do not write on the question paper.
- The answer booklet should be handed over personally by you to the invigilator before you leave the Examination Hall.
- Insert your candidate's number as given on your admission permit and any other particulars required on the cover and flap of the answer booklet.
- Ensure that you write the full and correct candidate's number.
- No name should be written on any leaf of the book, or on any supplementary leaves that may be issued to the candidates.
- The answer to each question must be commenced on a separate page. Where however, a question consists of two or more parts, this instruction does not apply to the separate parts.
- Write in the ruled margin the number and question attempted.
- Leave no blank pages among your answers.
- Where supplementary leaves are used, the candidate's number should be written in the space provided on them and fastened at the end of the book inside the cover.

**FAILURE TO ADHERE TO INSTRUCTIONS (WRITTEN AND VERBAL)
WILL ATTRACT STATED SANCTIONS AS STATED IN THE OCTOBER
2021 DIET CANDIDATES' INSTRUCTIONS.**

CHARTERED INSURANCE INSTITUTE OF NIGERIA

I02 - COMMERCIAL PROPERTY AND BUSINESS INTERRUPTION
INSURANCES

INSTRUCTIONS TO CANDIDATES

Three hours are allowed for this paper.

You should answer all questions in Part I and two (2) out of the four (4) questions in Part II.

The paper carries a total of 200 marks distributed as follows:

Part I - 140 marks.

Part II - 60 marks.

You are advised to spend not more than two (2) hours on Part I. You are strongly advised to attempt ALL the required questions to score maximum possible marks.

Where a question is split into parts (a), (b), etc, marks for each part are only shown if they are split unevenly between the parts and you should spend your time in accordance with the allocation.

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It is important to show each step in any calculation, even if you have used a calculator.

Answer each question on a new page. If a question has more than one part leave several lines blank after each part.

Chief Examiner's Comments

Question 1

This question was attempted by all the candidates but only about 38% of them scored above average.

Question 2

A popular question and well attempted by candidates that sat for this examination. 85% of the candidates scored above average.

Question 3

Many candidates struggled with the question. Only about 63% scored below average.

Question 4

The question was on the causes of impact damage and possible causes of sprinkler leakage. 48% of the candidates scored above 50%.

Question 5

The question was on the definition of theft and robbery by the Theft Act of 1968. Candidates made beautiful attempt and 85% of the candidates scored above average.

Question 6

The question requested candidates to explain indemnity and three alternative bases considered by the judge in the case of Reynolds and Anderson V. Phoenix (1978). About 41% of the candidates passed.

Question 7

The question was on the typical exclusions in fidelity guarantee policy. Performance was woeful and about 13% of the candidates scored above average.

Question 8

Question was on the risk insured by a business interruption policy and generic grouping of compensation when making claims under business interruption insurance. More than 72% of the candidates passed this question.

Question 9

Question was on factors to be considered by an underwriter on deciding whether to incur the cost of a survey and the main objectives of survey. 46% of the candidates passed.

Question 10

This tested candidates' knowledge of risk classification under fire. Performance was woeful and about 6% passed the question.

Question 11

The question was on maximum possible loss (MPL), Probable Maximum Loss, and Estimated Maximum Loss. About 44% of the candidates passed.

Question 12

Question was on excess and aggregate deductible. 61% pass rate was achieved.

Question 13

Question was on the essential of "Fire Tetrahedron". 55% pass rate was achieved.

Question 14

Question was on items that should be found on a survey report on business interruption policy. About 33% pass rate was achieved.

Question 15

Question was on calculation of provisional premium, total declaration, average declaration, earned premium, and additional premium. 61% of the candidates that attempted it passed.

Question 16

Question was largely an example of poor housekeeping and problem arising from it. Almost the most popular question. More than 80% of the candidates did well.

Question 17

Question was on subsidence and heave. Some candidates avoided this question. 55% pass rate was achieved.

Question 18

Question was on additional cost of reinstatement, debris removal cost, professional fees, and local authority cost. Nearly everyone that attempted this question scored above average.

Chief Examiner's Comments on Overall Performance

55% pass rate was achieved.

Chief Examiner's Suggestion on Improvement

Candidates should embrace tutorial centres and study more diligently.

Part I**Answer ALL questions in Part I.****Each question carries 10 marks.**

1. List five (5) classes of general insurance business as classified in the Insurance Act 2003.

Solution

The classes of general insurance business are-

- Fire Insurance business
- General accident insurance business
- Motor Vehicle insurance business
- Marine and aviation insurance business
- Oil and Gas insurance business
- Engineering insurance business
- Bonds, credit guarantee and surety cling insurable business
- Miscellaneous insurance business

(2 marks for each correctly stated class. Maximum of 5 to be graded. Total: 10 marks)

2. (a) What is a “multi-tenure building”? (4 marks)

(b) Enumerate any six (6) factors that affect the propagation of fire. (6 marks)

Solution

(a) A multi-tenure building is **one where several firms occupy parts of the same building.**

(2 marks for each coloured phrase. Sub-Total: 4 marks)

(b) The factors that affect the propagation of fire are:

- | | |
|----------------------------------------------------------|---------------------------------|
| (i) fire resistance of floors, ceilings, roof and walls; | (ii) fire resistance of opening |
| (iii) fire detection | (iv) combustibility |
| (v) house-keeping standards | (vi) waste removal |
| (vii) storage of flammable liquids | |
| (viii) active monitoring of all the above feature. | |

(1 mark for each correctly stated factor. Maximum of 6 to be graded. Sub-Total: 6 marks)

(Grand Total: 10 marks)

3. (a) How are automatic fire alarms categorised? (4 marks)

(b) Enumerate two (2) reasons why flammable liquids and gases are potential explosion hazards? (6 marks)

Solution

(a) The reasons why flammable liquids and gases are potential explosion hazards are because they:

- are sensitive to unusual rises in temperature;
- detect the presence of smoke or other combustion products in abnormal amounts;
- can detect infrared radiation or ultra-violet radiation omitted by flames. (4 marks)

- (b) When the vapour of a flammable liquid or gas mixes with air, it may form an explosive mixture. Here, the volumes of air and vapour are exactly right for an instantaneous combustion of all the gas which produces immense expansion of the products of combustion in the form of an explosion (6 marks)

(3 marks for each correct and completely stated reason. Maximum of 2 reasons to be graded. Sub-Total: 6 marks)

4. (a) List two (2) causes of impact damage. (4 marks)
(b) State three (3) examples of possible causes of sprinkler leakage. (6 marks)

Solution

(a) The causes of impact damage are:

- (i) motor vehicle; (ii) forklift trucks (iii) animals.

(2 marks for each correctly stated cause. Maximum of 2 causes to be graded. Sub-Total: 4 marks)

(b) Some examples of possible causes of sprinkler leakage are:

- a sprinkler head damaged by accidental impact;
- accidental sudden released of heat from a portal heater;
- accidental sudden released of heat from a portal plant for applying heat;
- mechanical defect in the installation freezing of water in the installation.

(2 marks for each correctly stated example. Maximum of 3 examples to be graded. Sub-Total: 6 marks)

(Grand Total: 10 marks)

5. Give the definition of the following terms as in the Theft Act 1968.

- (a) Theft; (b) Robbery.

Solution

(a) A person is **guilty of theft if he dishonestly appropriates property belonging to another with the intention of permanently depriving the other of it**, and 'thief' and 'steal' shall be construed accordingly.

(2½ marks for each coloured phrase. Sub-Total: 5 marks)

(b) A person is guilty of robbery **if he steals and immediately before or at the same time doing so and in order to do so, he uses force on any person or puts or seek the put any person in fear of being then and here subjected to force.**

(2½ marks for each coloured phrase. Sub-Total: 5 marks)

(Grand Total: 10 marks)

6. (a) Explain "indemnity". (4 marks)
(b) Mention three (3) alternative bases considered by the Judge in the case of *Reynolds and Anderson V. Phoenix (1978)*. (6 marks)

Solution

(a) Indemnity means **putting the insured in the same financial position he was immediately before the loss.**

(2 marks for each coloured phrase. Sub-Total: 4 marks)

(b) The alternative bases considered by the Judge in the case of *Reynolds and Anderson V. Phoenix (1978)* are:

- (i) market value;
- (ii) the cost of erecting a modern replacement building;
- (iii) the cost of rebuilding in its original firm.

(2 marks for each corrected stated base. Sub-Total: 6 marks)

(Grand Total: 10 marks)

7. Enumerate any five (5) typical policy exclusions in a fidelity guarantee policy.

Solution

The typical policy exclusions are in a fidelity guarantee policy:

- loss of interest;
- consequential loss;
- loss of confidential information;
- further losses involving an employee occurring after the discovery of dishonesty by the employee;
- malicious damage including denial of service attacks, computer viruses and worms;
- losses caused by or involving the principal of the business;
- losses occurring outside the geographical limits;
- unexplained stock shortage.

(2 marks for each correctly stated exclusion. Maximum of 5 to be graded. Grand Total: 10 marks)

8. (a) What is the risk insured in Business Interruption if an insured event should occur? (4 marks)
- (b) What are the two (2) generic grouping of compensation which can be claimed under Business Interruption Insurance? (6 marks)

Solution

(a) The risk insured in Business Interruption if an insured event should occur is that of **the damage making it impossible for the business to operate at all (or to severely restrict its ability to operate) as a result of essential parts of the activities being no longer available.**

(2 marks for each coloured phrase. Sub-Total: 4 marks)

(b) The two generic grouping of compensation which can be claimed under Business Interruption Insurance compensation are:

- (i) the loss of gross profit (or other insured income resulting from a reduction turnover in consequence of that inability (or reduced ability to operate); plus
- (ii) the additional costs incurred to reproduce these lost activities in some way and avoid or diminish the reduction in turnover.

(3 marks for each complete and correctly stated grouping. Sub-Total: 6 marks)

(Grand Total: 10 marks)

9. (a) List two (2) factors to be considered by an underwriter on deciding whether to incur the cost of a survey. (4 marks)
- (b) Enumerate three (3) main objectives of surveys. (6 marks)

Solution

(a) The factors to be considered by an underwriter on deciding whether to incur the cost of a survey are the:

- i. risk characteristics such as location, claims experience, trade or a combination of these;
- ii. amount of information provided by the proposer and intermediary;
- iii. underwriter's own experience of the class of risk;
- iv. overall size of the risk;
- v. size of the premium which the case is likely to generate.

(2 marks for each correct and completely stated factor. Maximum of 2 to be graded. Sub-Total: 4 marks)

(b) The main objectives are to:

- provide an assessment of the risk;
- suggest improvement to the commercial features of the risk;
- offer benefits to the parties concerned;
- develop risk management programme.

(2 marks for each correct and completely stated objective. Maximum of 3 to be graded. Sub-Total: 6 marks) (Grand Total: 10 marks)

10. Most insurers classify fire risks into a number of classifications file in the type of list from the diagram below. Complete the table below in this regard.

Class	Type of Risk
A	
B	
C	
D	
E	
F	

Solution

Class	Type of Risk
A	Offices
B	Colleges
C	Light engineering, hospitals, churches
D	Textile manufacturers, TV manufacturers
E	Furniture manufacturers
F	Refer to senior underwriter

(2 marks for each correctly stated type of risk. One per row. Total: 10 marks)

11. Explain the following terms:
- | | | |
|-----|------------------------------|-----------|
| (a) | Maximum Possible Loss (MPL) | (3 marks) |
| (b) | Probable Maximum Loss (PML) | (3 marks) |
| (c) | Estimated Maximum Loss (EML) | (4 marks) |

Solution

a) **Maximum Possible Loss (MPL):** It is the loss that is likely to occur when the most unfavourable circumstances are more or less exceptionally combined and when as a consequence the fire is not or unsatisfactorily fought against and therefore is only stopped by impassable obstacles or by lack of substance. (3 marks)

(b) **Probable Maximum Loss (PML):** This is the estimated maximum loss which must be expected if a loss occurs allowance being exercised. (3 marks)

(c) **Estimated Maximum Loss (EML):** This is an analysis of the extent of the fire that is likely to occur in the normal conceptions of activity, occupancy and firefighting of the range of buildings occurred. (4 marks)

(Grand Total: 10 marks)

12. (a) Explain the term “excess”. (4 marks)
 (b) What is an aggregate deductible? (6 marks)

Solution

(a) Excess **relieve the insurer from liability to pay the specified (first) amount otherwise payable under the policy, even though the particular event gives rise to a claim admissible in the terms of the policy.**

(2 marks for each coloured phrase. Sub-Total: 4 marks)

(b) **Aggregate Deductible: an insured with a substantial deductible included within their policy may suffer several losses. They usually look to protect their balance sheet and choose an aggregate deductible above which their trading position would be seriously affected. This aggregate deductible imposes an upper limit on the amount they will pay in any period of insurance.**

(2 marks for each coloured phrase. Sub-Total: 6 marks)

(Grand Total: 10 marks)

13. State and briefly explain the four (4) essential elements of “Fire Tetrahedron”.

Solution

The four essential elements of “fire tetrahedron” are:

- (i) fuel (ii) heat (iii) oxygen and (iv) chemical reaction.

(1½ marks for each correctly stated element. 1 mark for each brief explanation of the stated element.

Sub-Total per element: 2½ marks. Grand Total: 10 marks)

14. List out any ten (10) items that should be found in a survey report on a business interruption policy.

Solution

The items that should be found in a survey report on a business interruption policy are:

- | | |
|-------------------|-------------------------|
| * Insured | * Location |
| * Premises | * Explosive |
| * Business | * Usage and Suitability |
| * Housekeeping | * Fire extinguishment |
| * Operations | * Heating |
| * Previous losses | * Lighting and Power |
| * Construction | * Flammables |
| * Tenure | * Contingencies |
| * Occupation | * Theft protection |
| * Theft detection | * Special risks |

(1 mark for each correctly stated item. Maximum of 10 to be graded. Grand Total: 10 marks)

Part II

Answer TWO (2) out of the following FOUR (4) questions.

Each question carries 30 marks.

15. Mator Sawmill Plc has a stock policy covering timber at the sawmill. The Company has estimated the maximum value at risk for Year January 2020 to January 1st 2021 to be ~~₦~~2,000,000.00. The Company has agreed to make monthly declarations on the total stock.

The insurers charge a rate of 0.15% for fire only. The following are the declarations:

	₦
January	1,600,000.00
February	1,800,000.00
March	1,400,000.00
April	1,400,000.00
May	1,200,000.00
June	1,100,000.00
July	1,200,000.00
August	1,500,000.00
September	1,800,000.00
October	1,800,000.00
November	1,900,000.00
December	1,800,000.00

Calculate the:

- (a) provisional premium;
(b) total declaration;

- (c) average declaration;
- (d) earned premium;
- (e) additional premium.

Solution

(a) The Provisional Premium = 75% * Sum Insured * Rate%
 = 75/100 * 2,000,000 * 0.15
 = ₦2,250.00

(b) Total Declaration = summation of the monthly declaration
 = ₦18,500,000.00

(c) Average Declaration = $\frac{\text{total declaration}}{12 \text{ months}} = \frac{18,500,000}{12}$
 = ₦1,541,666.66

(d) Earned Premium = monthly declaration * rate
 = 1,541,666.66 * 0.15%
 = ₦2,312.49

(e) Additional Premium = earned premium – provisional premium
 = ₦2,312.49 - ₦2,250.00
 = ₦62.49

16. A prudent underwriter is considering the acceptance of risk as well as price and terms and condition of a manufacturing company will like to consider the occupation and housekeeping as relates to the fire insurance.
- (a) What is occupation and housekeeping in insuring a building for fire insurance? (5 marks)
 - (b) Identify five (5) examples of poor housekeeping. (15 marks)
 - (c) State four (4) problems that can arise from poor housekeeping. (10 marks)

Solution

(a) **Occupation in insuring a building for fire insurance** is the use that the building is put up for e.g. school premises merits the premium that the building is used for, e.t.c. while **housekeeping in insuring a building for fire insurance** can generally be referred to as the general order in which an insured maintains and manage the insured premises. This refers to layout and suitability of the premises occupied and the day-to-day management and the cleanliness.

(2½ marks for each correct and complete explanation/definition. Sub-Total: 5 marks)

(b) Some examples of poor house-keeping are:

- * Untidy environment
- * High piles of storage
- * No compartmentation
- * Unprofessional storage of goods to ceiling and close to lightening units.
- * congested premises
- * accumulation of waste
- * multi-tenancy with varied exposure hazard

(3 marks for each correctly stated example. Maximum of 5 to be graded. Sub-Total: 15 marks)

(c) The problems that can arise from poor housekeeping are:

- * Probability of increased inception of fire
- * More prevalent occurrence of fire
- * Aiding the propagation of fire
- * Aiding the spread of fire
- * Hindering fire fighters' efforts.

(2½ marks for each correctly stated problem. Maximum of 4 to be graded. Sub-Total: 10 marks)

(Grand Total: 30 marks)

17. Subsidence and heave are other contingencies that are normally grouped with fire in the property damage policy.

- (a) What is the difference between the two contingencies. (10 marks)
- (b) What are the underwriting considerations for granting such covers by the underwriter? (15 marks)
- (c) What is the difference between fire and explosion? (5 marks)

Solution

(a) **Subsidence** can be caused by the presence of underground working or shrinking of subsoil prominently occur when the removal of water either by a period of drought or by the tree roots. The rate of shrinking determine stresses and cracking. **Heave** is the opposite of subsidence and this occurs when water returns to the ground after a drought or if a tree is felled.

(2½ marks for each correct and completely stated point. Maximum of 2 to be graded under each heading. Sub-Total per term: 5 marks. Grand Total: 10 marks)

(b) The underwriting considerations for granting such covers by the underwriter are:

- type of subsoil present
- whether any mining is done
- whether other underground activities have previously been done around that area
- any signs of tracking or fracturing in/on the building
- age and construction of the building
- age and proximity of trees and vegetation
- condition of drainage

- climatic condition
- type and depth of foundation.

(3 marks for each correctly stated consideration. Maximum of 5 to be graded. Sub-Total: 15 marks)

(c) Fire is defined as actual ignition of something which ought not to be on fire. It is the presence of smoke and condition of burning. The basic difference between the two terms is **the speed of ignition which is higher in explosion than in fire.** (5 marks)

(Grand Total: 30 marks)

18. Aside from the three basic items on property and stock, insurer provide the additional covers. Explain the following of such covers:

- | | |
|--------------------------------------|-----------|
| (a) Additional cost of reinstatement | (8 marks) |
| (b) Debris removal cost | (8 marks) |
| (c) Professional fees | (8 marks) |
| (d) Local authority cost | (6 marks) |

Solution

(a) **Additional Cost of Reinstatement:** when building or machinery are damaged or destroyed, there is often need to engage specialists to help design replacement, or arrange planning permission, or remove debris, or assist with terms of complying with local authority regulation. These extra costs of reinstatement are insurable and can be termed miscellaneous cover.

(4 marks for each coloured phrase. Sub-total: 8 marks)

(b) **Debris Removal Cost:** this may be minimal and incorporated in the building cost. There may arise reason(s) to rebuild on the same site and if this is not forthcoming, the insured may have to move their whole operation to another site. The cost to clear the old site and leave it safe is incurred under the debris removal cost.

(4 marks for each complete and correctly stated point. Maximum of 2 to be graded. Sub-total: 8 marks)

(c) **Professional Fees:** these include fees payable to architects, surveyors, consulting engineers, solicitors, whose services may be required to draw plans, specifications, design and layouts of new premises required to replace those destroyed by insured perils. The standard clauses make it clear that the sum insured include such costs.

(4 marks for each complete and correctly stated point. Maximum of 2 to be graded. Sub-total: 8 marks)

(d) **Local Authority Cost:** the insured's advisers should be able to quantify costs to comply with requirements that it is @KNOWN TO BE APPLICABLE@ but not YET made the subject of an order to comply. The relevant sum insured can then be suitably marked up to take care of this.

(3 marks for each complete and correctly stated point. Maximum of 2 to be graded. Sub-total: 8 marks)

(Grand Total: 30 marks)

LOGO

CHARTERED INSURANCE INSTITUTE OF NIGERIA
INTERMEDIATE

OCTOBER 2021 DIET EXAMINATION PAPER

SUBJECT I03
INSURANCE BUSINESS AND FINANCE

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CHARTERED INSURANCE INSTITUTE OF NIGERIA

I03 – INSURANCE BUSINESS AND FINANCE

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In attempting the questions, you may find it helpful in some places to make rough notes in the answer booklet. If you do this, you must cross through these notes before you hand in the booklet.

It is important to show each step in any calculation, even if you have used a calculator.

Answer each question on a new page. If a question has more than one part leave several lines blank after each part.

Chief Examiner's Comments

Question 1

Attempt was good (more than 90%) but it was badly handled. Few candidates got the vision and the Institute's core values. Candidates are encouraged to get familiarised with the Institute's vision and core values.

Question 2

2(a) Nice attempt and well handled. The performance was great.

2(b) Performance was not encouraging. Candidates provided the attributes of a good marketer instead of CRM.

Question 3

Nice attempt. Candidates were able to distinguish between the two pieces of information.

Question 4

Over 95% of the total candidates attempted this question. About 85% were able give detailed answers and scored pass marks.

Question 5

The performance was average. Less than 35% of the candidates were able to score pass marks. However, over 50% of the candidates could not explain standards of corporate governance for Nigerian companies.

Question 6

Most candidates attempted this question and more than 50% of the total candidates gave satisfactory answer but most candidates could not give the generic name of the key risks in (6a).

Question 7

Candidates' performance was average.

Question 8

This is a question that required candidates to discuss outsourcing but less than 50% of the candidates enumerated the four benefits of outsourcing.

Question 9

There was an average performance by the candidates for this question. Most candidates misinterpreted the control models.

Question 10

About 90% of the candidates attempted this question. The (a) part was well understood but the (b) part was misinterpreted.

Question 11

The (a) part of the question was poorly attempted but the (b) part was well answered.

Question 12

The concept tested here is very key. This is a concept that all candidates should understand. But very few candidates understood and gave satisfactory answer to part (a). However, the attempt and performance of part (b) was commendable.

Question 13

This question was attempted by over 90% of the candidates but less than 60% were able to give satisfactory explanation on the types of data and scored pass marks.

Question 14

This is a popular question and attempt was close to 95% by the candidates but some found it difficult to explain the working capital in part (a). The candidates were able to score above average of total marks allocated.

Question 15

Less than 40% of the candidates attempted this question. Many candidates avoided the question. Those that attempted could not provide the proper definition of combined ratio in part (a) of the question. In part (b) most candidates could not provide the groups that are intended in the ratio or how the ratios are calculated.

Question 16

The attempt was very poor. Of the candidates that attempted part (a), less than 40% scored the pass mark. Most candidates did not understand the acronyms SCR & MCR. However, the (b) and (c) parts of the question were well attempted.

Question 17

Very few candidates attempted this question and the performance was below average. The performance of the candidates showed they did not prepare adequately for this sort of question.

Question 18

The question was standard and straightforward. But the candidates' performance was just average. Most candidates could not identify properly what constitutes current assets and current liabilities

Chief Examiner's Comments on Overall Performance

The overall performance was close to average

Chief Examiner's Suggestion on Improvement

It appears most candidates did not prepare adequately for the subject. All the questions were from the Institute's recommended course book. Candidates are encouraged and enjoined to read, study and prepare adequately for future examination.

Part I**Answer ALL questions in Part I.****Each question carries 10 marks.**

1. As a student member of the Chartered Insurance Institute of Nigeria,
- (a) What is the vision of the Institute? (2 marks)
- (b) What are the Institute's core values? (8 marks)

Solution

a) **CIIN Vision:** - To remain a world class professional body committed to the provision of an efficient and effective manpower for the insurance industry. (2 marks)

b) **CIIN Core Values:** * Members' Satisfaction * Knowledge
* Trust * Efficiency.

(2 marks for each correctly stated value. Sub-Total: 8 marks)

(Grand Total: 10 marks)

2. (a) What two (2) types of businesses will mutual companies usually transact? (4 marks)
- (b) Enumerate any six (6) characteristics that are associated with the delivery of excellent Customer Relationship Management (CRM). (6 marks)

Solution

(a) Mutual Companies will usually transact life (2 marks) or general business (2 marks) , although the majority operate in the long-term (life) sector. (4 marks)

(b) The characteristics that are associated with the delivery of excellent Customer Relationship Management (CRM) are:

(i) reliability (ii) responsiveness (iii) accessibility (iv) safety (v) courtesy
(vi) consideration (vii) communication (viii) recognising the customer (ix) competence.

(1 mark for each correctly stated characteristic. Sub-Total: 6 marks)

(Grand Total: 10 marks)

3. In management information terms, who use the following pieces of information and what are they used for?
- (a) tactical information (b) operational information

Solution

(a) **Tactical information** is used by the middle management (2 marks). It is used to ensure the resources of the business are employed (the efficiency and effectiveness of their use monitored) to achieve the strategic objectives of the organization (3 marks). (5 marks)

(b) **Operational information** is used by front-line managers (2 marks) such as supervisors to ensure that specific tasks are planned and carried out properly (3 marks). (5 marks)

(Total: 10 marks)

4. Explicitly explain how the following terms are used in the context of company growth: (a) organic growth (b) non-organic growth.

Solution

(a) **Organic Growth:** this happens where the company develops and expands its sales and revenue and output through its own current businesses, activities and effort. (5 marks)

(b) **Non- Organic Growth:** this happens where a company merges with or acquires another company with the aim of rapidly growing its business. Non- Organic growth happens mainly through Mergers and Acquisitions (M & A). (5 marks)

(Total: 10 marks)

5. The Nigerian Corporate Governance Code is a document setting the corporate governance standards for Nigerian Companies. The Code sets out standards of good practice in relation to some *issues*. Enumerate any four (4) of these issues that sets out the standard of good practice.

Solution

The issues that set out the standard of good practice in the Nigerian Corporate Governance Code are:

- Board Composition and Development (2½ marks)
- Remuneration (2½ marks)
- Relations with shareholders (2½ marks)
- Accountability and Audit (2½ marks)

(Grand Total: 10 marks)

6. Firms, at intervals, gather information on the risks inherent in their operations.
- (a) What is the generic name given to these key risks identified? (2 marks)
- (b) Enumerate any four (4) information that the gathering exercise is expected to cover. (8 marks)

Solution

(a) The generic name given to these key risks identified is “key risk indicators” (2 marks)

(b) The information that the gathering exercise is expected to cover are:

- (i) I.T. down time
- (ii) examples of fraud (internal and external)
- (iii) complaints
- (iv) property loss or damage
- (v) employee injury or illness.

(2 marks for each correctly stated information. Maximum of 4 to be graded. Sub-total: 8 marks)

(Grand Total: 10 marks)

7. (a) Enumerate any three (3) regulator in the Nigerian Financial Services Sector. (3 marks)
- (b) List any seven (7) users of Financial Information of an insurance organisation. (7 marks)

Solution

(a) The regulators in the Nigerian Financial Services are:

- (i) Federal Reporting Council (FRC)
- (ii) the Security Exchange Commission (SEC)
- (iii) National Insurance Commission (NAICOM)
- (iv) Central Bank of Nigeria (CBN)
- (v) National Pension Commission (PENCOM).

(1 mark for each correctly stated regulator. Maximum of 3 to be graded. Sub-Total: 3 marks)

(b) The users of Financial Information of an insurance organisation are the:

- (i) creditors/lenders
- (ii) competitors
- (iii) financial analysts
- (iv) brokers
- (v) general public
- (ix) customers/clients
- (vii) owners/shareholders
- (viii) directors and managers
- (ix) employees
- (x) regulators
- (xi) tax authorities.

(1 mark for each correctly stated user. Maximum of 7 to be graded. Sub-Total: 7 marks)

(Grand Total: 10 marks)

8. Many insurance companies within the insurance sector are outsourcing some of their functions. Enumerate four (4) of the benefits of outsourcing.

Solution

The benefits of are:

- payment is made only on what volume or level of service is required;
- agreed service level benchmarks are experienced
- there is regular performance reporting and follow-up
- there is access to specialists' skills
- more flexibility in terms of engagement is experienced.

(2½ marks for each correct and completely stated benefit. Maximum of 4 to be graded. Total: 10 marks)

9. The top and senior managements of an insurance entity have a number of control models available to them to monitor the achievement of their business plans. State any five (5) of such control models.

Solution

The control models available are:

- (i) management accounting;
- (ii) budgeting;
- (iii) critical success factors;
- (iv) key performance indicators;
- (v) key risk indicators;
- (v) balanced scorecards;
- (vi) benchmarking
- (vii) management by objectives

(2 marks for each correctly stated model. Maximum of 5 to be graded. Total: 10 marks)

10. (a) What is variance analysis? (2 marks)
(b) List, and concisely but briefly, describe the two types of variance. (8 marks)

Solution

- (a) Variance analysis is the difference between actual and budgeted performance in any given enterprise. (2 marks)
- (b) The two types of variance are:
- (i) **favourable variance**: this happens when budgets are exceeded.
 - (ii) **unfavourable variance**: this happens when budgets are not met.
- (2 marks for each correctly stated type. 2 marks for the correct explanation. Sub-Total per type: 4 marks. Grand Sub-Total: 8 marks)
(Grand Total: 10 marks)

11. (a) Enumerate the three (3) main types of assets that insurance companies hold in order to fund and manage their businesses. (9 marks)
(b) What minimum information would a property underwriter require when insuring a commercial property? (1 mark)

Solution

- (a) The three (3) main types of assets that insurance companies hold in order to fund and manage their businesses are:
- (i) premium;
 - (ii) claim reserves
 - (iii) shareholders' funds, retained profit and loans.
- (2 marks for each correctly stated type of asset. Sub-Total: 4 marks)
- (b) The minimum information that a property underwriter would require are:
- (i) details of the construction
 - (ii) layout of the building.
- (4 marks for any correctly stated information. Only one is to be graded)
(Grand Total: 10 marks)

12. (a) The financial statements should reflect and comply with "*substance over form*" concept. What does this concept mean? (6 marks)
(b) Under the context of risk management, what is *Risk Register* used for? (4 marks)

Solution

- (a) The concept means that the **financial statements should show the economic substance of transactions rather than the legal form.**
(2 marks for each bolded phrase. Sub-Total: 6 marks)
- (b) The "*risk register*" is used for **recording the risks** that have been **identified** and **analysed**.
(2 marks for the coloured bolded phrase. 1 mark each for the other two bolded words. Sub-Total: 4 marks)
(Grand Total: 10 marks)

13. Explain in one sentence each the following type of data under the General Data Protection Regulation (GDPR):
- | | |
|-----------------------------|----------------------------|
| (a) Personal Data | (b) Ordinary Personal Data |
| (c) Sensitive Personal Data | (d) Data Subject |
| (e) Data Processor | |

Solution

(a) **Personal Data:** any information which relates to an identified or identifiable natural person.

(b) **Ordinary Personal Data:** include names, address and telephone number of the object.

(c) **Sensitive Personal Data:** information relating to racial or ethnic origin, political opinions, religious or philosophical beliefs , trade union membership , genetic data, biometric data , data concerning health , a person' sex life or sexual orientation.

(d) **Data Subject:** any living individual who is the subject of personal data.

(e) **Data Processor :** a person who processes the data on behalf of the data controller, but who is not an employee of the data controller.

(2 marks for each correct and completely stated explanation. Grand Total: 10 marks)

14. (a) What is working capital? **(4 marks)**
- (b) There are two aspects of accounting which serve separate but inter-related purposes in the operation and control of an insurance organization, list and briefly explain these two (2) accounting aspects. **(6 marks)**

Solution

(a) **Working capital** is the difference between current assets and current liabilities. **(4 marks)**

(b) The two accounting aspects are:

(i) **financial accounting:** which is concerned with providing historic information to external stakeholders and interested parties.

(ii) **management accounting:** which is concerned with the internal planning and control of an organization to enable its managers make sound decisions.

(1 mark for correctly stated aspect. 2 marks for correct explanation. Sub-total per aspect: 3 marks. Grand Sub-total: 6 marks)

(Grand Total: 10 marks)

Part II

Answer TWO (2) out of the following FOUR (4) questions.

Each question carries 30 marks.

15. (a) Explicitly explain what “combined ratio” measure in underwriting performance. (2 marks)
- (b) List the three (3) groups that are interested in using the combined ratio in an underwriting firm and briefly explain the interest of the listed groups in using the ratio. (12 marks)
- (c) State the formula for the following ratios in an insurance firm:
- | | |
|-----------------------|---------------------|
| (i) claim ratio | (ii) expenses ratio |
| (ii) commission ratio | (iv) combined ratio |
- (16 marks)

Solution

(a) **Combined Ratio** measures the underwriting performance by combining the loss ratio with expense ratio and the commission ratio. (2 marks)

(b) The three groups that are interested in using the combined ratio in an underwriting firm and their interest in using the ratio are:

- (i) **underwriters, accountants and analysts:** to ascertain how effectively the lines of business are performing;
- (ii) **competitors:** to ascertain how effectively the competition is underwriting.
- (iii) **Senior Executives:** to ascertain how effectively the underwriting divisions are performing.

(2 marks for each correctly stated group. 2 marks for each correctly stated interest. Sub-total per group: 4 marks. Grand Sub-total: 12 marks)

(c)

$$(i) \text{ Claim Ratio} = \frac{\text{Claims Incurred Net of Reinsurance}}{\text{Earned Premium Net of Reinsurance}} \times 100$$

$$(ii) \text{ Expenses Ratio} = \frac{\text{Administrative Expenses}}{\text{Earned Premium Net of Reinsurance}} \times 100$$

$$(iii) \text{ Commission Ratio} = \frac{\text{Acquisition Costs}}{\text{Earned Premium Net of Reinsurance}} \times 100$$

$$(iv) \text{ Combined Ratio} = \frac{\text{Claims Incurred Net of Reinsurance} + \text{Administrative Expense} + \text{Commission}}{\text{Earned Premium Net of Reinsurance}} \times 100$$

(2 marks each for complete and correct numerator and denominator. Sub-Total per formula: 4 marks.

Grand Sub-Total: 16 marks)

(Grand total: 30 marks)

16. (a) Under Solvency II, clearly explain the terms SCR and MCR. (20 marks)
 (b) Explain the term “outsourcing”. (5 marks)
 (c) What accounting standards must a company listed on the Nigerian Stock Exchange use to prepare its consolidated accounts as-at-date? (5 marks)

Solution

(a) **Solvency Capital Requirement (SCR):** this is the **quantity of capital that is intended to provide protection against the unexpected losses , over the following year, up to the statistical level** of a ‘1 in 200 -year event.’ This is a **robust requirement that is designed so that insurers should be able to withstand all but the most severe of shocks.**

(b) **Minimum Capital Requirement (MCR) :** This denotes a **level below which policyholders would be exposed to an unacceptable level of risk** and **is intended to correspond to an 85% probability of adequacy over the following year.**

(2 marks for correctly stating the meaning of the abbreviation. 4 marks for each correct and completely stated explanation centering on those coloured phrases. Maximum of 2 complete ones to be graded.

Sub-total per abbreviation: 10 marks)

(b) **Outsourcing** is the subcontracting of a business activity with the aim of improving the overall efficiency and/or effectiveness of the company. A strategy to manage costs and access specialist skills and knowledge often results in the outsourcing of certain functions. (5 marks)

(c) A company listed on the Nigeria Stock Exchange must use the Nigerian-adopted International Financial Reporting Standards (IFRS) when preparing its consolidated accounts. (5 marks)

(Grand Total: 30 marks)

17. Mergers and Acquisitions are known as M&As. They take place in order to attain some strategic positioning and to achieve synergy. M&A can however be divided into two sets of integration.
 (a) State and briefly describe the two (2) sets of integration. (10 marks)
 (b) Clearly explain the aims of the two sets of integration. (20 marks)

Solution

(a) The two sets of integration are:

(i) **horizontal integration:** where the two companies are in the same market.

(ii) **vertical integration:** where a company is attempting to control a stage either a stage closer to the source of the manufacturer or to the source of customer.

(3 marks for each correctly stated set. 2 marks for correct explanation. Sub-Total per set: 5 marks. Grand Sub-Total: 10 marks)

(b) The aims of these two sets of integration are:

Horizontal Integration	Vertical Integration
Improving a mediocre performance to a better market position.	Reduce costs , again through economies of scale
Achieving economies of scale	Gain more control of the market , including supply
Improving Competitiveness	Adding greater value to the whole customer proposition
Possible opportunities for diversification	Minimise supply disruptions

(5 marks for each correct and completely stated aim. Maximum of 2 to be graded under each set. Sub-Total per set: 10 marks. Grand Sub-Total: 20 marks)
(Grand Total: 30 marks)

18. An insurance company has the following details as at Jan 11, 2021:

Cash at Bank:	₦100,000,000.00
Rent and Rates Payable:	₦130,000,000.00
Investment in Nigeria Treasury Bill:	₦350,000,000.00
Overdraft from Banks:	₦ 40,000,000.00
Prepayments on Adverts for the next 12 months:	₦10,000,000.00
Trade Payable for an Auto Dealer:	₦60,000,000.00

Required:

- (a) Calculate the Current Assets. (10 marks)
 (b) Calculate the Current Liabilities. (10 marks)
 (c) Calculate the Current Ratio. (10 marks)

Solution

(a) Current Assets:

Cash at bank = ₦100,000,000.00	(2 marks)
Investment in Nigeria Treasury Bill = ₦350,000,000.00	(2 marks)
Prepayments on Adverts for the next 12 months = ₦10,000,000.00	(2 marks)
Current Asset = ₦100,000,000.00 + ₦350,000,000.00 + ₦ 10,000,000.00	
= ₦ 460,000,000	(4 marks)

(b) (Sub-Total: 10 marks)

(b) Current Liabilities:

Rent and Rates Payable = ₦130,000,000.00	(2 marks)
Overdraft from Banks = ₦40,000,000.00	(2 marks)
Trade payable for an Auto Dealer = ₦ 60,000,000.00	(2 marks)
Current Liability = ₦130,000,000.00 + ₦40,000,000.00 + ₦60,000,000.00	
= ₦ 230,000,000	(4 marks)

(Sub-Total: 10 marks)

$$\begin{aligned} \text{(c) Current Ratio} &= \frac{\text{Current Assets}}{\text{Current Liabilities}} && \text{(4 marks)} \\ &= \frac{\text{N } 460,000,000.00}{\text{N } 230,000,000.00} && \text{(4 marks)} \\ &= 2 && \text{(2 marks)} \end{aligned}$$

(Sub-Total: 10 marks)

(Grand Total: 10 marks)

LOGO

CHARTERED INSURANCE INSTITUTE OF NIGERIA
INTERMEDIATE

OCTOBER 2021 DIET EXAMINATION PAPER

SUBJECT I04
BUSINESS AND ECONOMICS

All answers are to be written on the answer booklet(s) supplied in accordance with the following instructions:

- Three hours are allowed for this paper.
- Fill in the information requested on the answer booklet and on form B.
- Handle the answer booklet with care.
- Do not write on the question paper.
- The answer booklet should be handed over personally by you to the invigilator before you leave the Examination Hall.
- Insert your candidate's number as given on your admission permit and any other particulars required on the cover and flap of the answer booklet.
- Ensure that you write the full and correct candidate's number.
- No name should be written on any leaf of the book, or on any supplementary leaves that may be issued to the candidates.
- The answer to each question must be commenced on a separate page. Where however, a question consists of two or more parts, this instruction does not apply to the separate parts.
- Write in the ruled margin the number and question attempted.
- Leave no blank pages among your answers.
- Where supplementary leaves are used, the candidate's number should be written in the space provided on them and fastened at the end of the book inside the cover.

**FAILURE TO ADHERE TO INSTRUCTIONS (WRITTEN AND VERBAL)
WILL ATTRACT STATED SANCTIONS AS STATED IN THE OCTOBER
2021 DIET CANDIDATES' INSTRUCTIONS.**

CHARTERED INSURANCE INSTITUTE OF NIGERIA

I04 - BUSINESS AND ECONOMICS

INSTRUCTIONS TO CANDIDATES

Three hours are allowed for this paper.

You should answer all questions in Part I and two (2) out of the four (4) questions in Part II.

The paper carries a total of 200 marks distributed as follows:

Part I - 140 marks.

Part II - 60 marks.

You are advised to spend not more than two (2) hours on Part I. You are strongly advised to attempt ALL the required questions to score maximum possible marks.

Where a question is split into parts (a), (b), etc, marks for each part are only shown if they are split unevenly between the parts and you should spend your time in accordance with the allocation.

In attempting the questions, you may find it helpful in some places to make rough notes in the answer booklet. If you do this, you must cross through these notes before you hand in the booklet.

It is important to show each step in any calculation, even if you have used a calculator.

Answer each question on a new page. If a question has more than one part leave several lines blank after each part.

Chief Examiner's Comments

Question 1

The question sought to know the improvements in the insurance industry in the last decade. A popular question with great performance (above 65% pass rate).

Question 2

The question sought to know the economic terms; candidates had very poor performance (less than 30% pass rate).

Question 3

The question requested for the contribution of petroleum industry in Nigeria. Candidates could not score average mark (50%) due to non-mastery of the question. Performance was poor.

Question 4

The question was practical in nature. The candidates were requested to enumerate effects of the changes in the interest rate by the MPC of the FGN on the insurance industry. The question was averagely attempted. Candidates exhibited good knowledge of the question.

Question 5

The question sought to know ways of minimizing fraud in insurance companies. A very poor performance as majority of the candidates (over 80% of them failed it.). They did not understand what the question required from them.

Question 6

The question sought to know the way resources are classified or categorised. Well attempted question (100%) and performance was excellent (above 70%).

Question 7

The question sought to know major changes likely to affect the insurance industry. Good performance generally (above 70%).

Question 8

The question sought to have the advantages of merger. Majority of the candidates got it right (above 65%) performance.

Question 9

The question sought to know which are the insurance companies faces major changes in information technology. A good question with a good performance (more than 70% pass rate)

Question 10

The question tested candidates' knowledge of the supply of insurance in Nigeria. Performance was okay (above 50% pass rate).

Question 11

The question sought for definitions of some terms in the theory of cost. Candidates showed very good understanding of the question thereby scoring good marks.

Question 12

The question sought to know the revenue formulars in economics. Percentage of attempt was less than 10% and less than 5% of them passed.

Question 13

The question sought to know what B2B markets and B2C markets are and the difference between the two. Not a popular question and performance was less than 50%.

Question 14

The question sought to know the difference between VAT and WHT. Poor performance (less than 40% pass) as most of them only defined them.

Question 15

The question sought to know the appropriate marketing mix. Majority of the candidates that attempted the question passed it. Pass mark was about 70% pass rate.

Question 16

The question sought to know the contribution of insurance to the economy. Performance was great because it is a direct question (above 70% performance).

Question 17

This is based on the basic principle of economics. Attempt was 100% and performance was excellent (above 70%)

Question 18

The question sought to know the unethical behaviour as it relates to insurance. Well attempted and candidates showed very good understanding of the question. An excellent performance (above 70% performance).

Chief Examiner's Comments on Overall Performance

The overall success rate was poor.

Chief Examiner's Suggestion on Improvement

Candidates need to put in more efforts, pay more attention to the syllabus and the recommended textbooks.

Part I**Answer ALL questions in Part I.****Each question carries 10 marks.**

1. Account for the noticeable improvements in the insurance industry in the last decade with five (5) distinct and completely stated points.

Solution

The noticeable improvements in the insurance industry in the last decade include:

- prompt claims settlement in recent times. This shows that the industry is more responsive to claims settlements;
- the regulatory body- NAICOM is more alert to its responsibility i.e. adequate monitoring, supervision and enforcing standards and regulations. NAICOM is adequately empowered to enhance proper regulations of the industry;
- enforcement of high ethical standards among individual practitioners;
- insurance education
 - reviews of syllabus by CIIN.
 - establishment of college of insurance.
 - accreditation of more higher institutions of learning.
 - awareness programmes by NAICOM or CIIN;
- organization of loss-free service/courses by NAICOM and the institute;
- social responsibilities- the corporate bodies are alive to social responsibility projects;
- diversification of business base e.g. incursion of some firms into stock broking, tile communications;
- professionalism strictly adhere to for cop management positions;
- more firms are going public enlisted on the Nigerian Stock Exchange;
- increase in the operating capital base to further enhance the profitability of the firms;
- merger and acquisition of insurance firms which may lead to increased profitability on the long-run.

(2 marks for each correct and completely stated improvement. Maximum of 5 to be graded. Total: 10 marks)

2. Differentiate between
- (a) positive and normative economics. (4 marks)
- (b) microeconomics and macroeconomics. (6 marks)

Solution

(a) **Positive economics** is concerned with value-free statement that can be tested empirically positive propositions are statements of what is or will be (2 marks) **while**

normative economics is concerned with statements based on value judgements. Thus, its propositions are statements of opinion or what should be (2 marks).

(Sub-Total: 4 marks)

(b) **Microeconomics** is the study of the small parts of the economy. It is concerned with the behavior of (and interaction between) individual units, including individual firms, industries, consumers and markets; (3 marks) **while macroeconomics** is the study of the economy as a whole. It is interactions between economic aggregates, including the total level of output and employment, and average level of prices (3 marks).

(Sub-total: 6 marks)

(Grand Sub-Total: 10 marks)

3. List any five (5) contributions of the petroleum industry to the Nigeria economy.

Solution

The contributions of the petroleum industry to the Nigerian economy include:

- * Source of investments revenue;
- * Infrastructural development;
- * Major source of energy risk in the country;
- * Establishments of oil related industry.
- * generation of employment;
- * source of foreign exchange;

(2 marks for each complete and correctly stated contribution. Maximum of 5 to be graded. Total: 10 marks)

4. Enumerate any four (4) effects of the changes in the interest rate by the monetary policy committee of the Federal Government of Nigeria on the insurance industry.

Solution

The effects of the changes in the interest rate by the monetary policy committee of the Federal Government of Nigeria on the insurance industry are on:

- the amount of investment income that an insurance company can earn from premium;
- consumers spending habits;
- consumers demand for insurance;
- commercial customers spending habits and demand for insurance;
- levels of competitions increase as the higher the interest rates, the more eager insurance companies as are to generate more premium income and gain market share;
- the cost of reinsurance is affected because the higher the interest rates, the higher the investments income earned on the client's premium before claims are paid.

(2½ marks for each complete and correctly stated effect. Maximum of 4 to be graded. Total: 10 marks)

5. In fraud prevention, insurance companies need to consider a number of matters to minimise fraud. Enumerate any four (4) of such matters.

Solution

The matters to be considered by insurance companies in order to minimize fraud are:

- how to store, hold, retrieve and analyses data;
- how to ensure a proper operational structure with appropriate liaison between underwriting functions;
- greater use of targeting and profiling techniques;
- how to combat fraud, whilst at the same time providing a service to the vast majority of non-fraudulent customers;
- proper liaison and support of governmental and other anti-fraud organizations
- international efforts as appropriate as many fraudsters operate remotely away from the targeted country(ies).

(2½ marks for each complete and correctly stated matter. Maximum of 4 to be graded. Total: 10 marks)

6. List any five (5) ways in which resources may be classified/ categorized.

Solution

Resources may be classified/categorized as:

- * capital
- * land
- * for business
- * for countries
- * labour
- * entrepreneurship entities

(2 marks for each correctly stated way. Maximum of 5 to be graded. Total: 10 marks)

7. The global economy faces a number of major changes that are likely to affect the insurance industry. List any five (5) of such changes.

Solution

The major changes include:

- * climate changes
- * Brexit
- * economic instability
- * population growth and ageing demographics
- * digital revolution
- * financial instability.

(2 marks for each correctly stated changes. Maximum of 5 to be graded. Total: 10 marks)

8. (a) What is a merger? (2 marks)
(b) Enumerate four (4) advantages of a merger for the insurance industry. (8 marks)

Solution

(a) A (a) A merger is a **voluntary fusion** of **two companies** on **broadly equal terms** into **one new legal entity**. (1 mark for each bolded phrase. Sub-total: 4 marks)

(b) The advantages of merger or acquisition are:

- i. a merger with a competitor may be an effective way of gaining a competitive advantage from the remaining companies in the industry;

- ii. a merger may be an effective way for a company to purchase new skills or enter a new market without having to develop the knowledge originally;
- iii. a merger may provide an investment opportunity to an insurable company that require capital;
- iv. the larger company will have access to new distribution channels
- v. the larger company would achieve greater cost efficiently in the shape of lower must cost through economies of scale
- vi. the only way to operate successfully within a global market is to be sufficiently large in size and this may require growth through mergers.

(2 marks for each correct and completely stated advantage. Maximum of 4 advantages to be graded.

Sub-Total: 8 marks)

(Grand Total: 10 marks)

9. List five (5) areas that insurers have made considerable use of information technology.

Solution

The areas that insurers have made considerable use of information technology are:

- * electronic placement
- * claims payment and services
- * control of distribution channels
- * provision of solution
- * management information
- * mass marketing
- * business communications

(2 marks for each correctly stated area. Maximum of 5 to be graded. Total: 10 marks)

10. Enumerate any four (4) factors that can affect the supply of insurance in Nigeria.

Solution

The factors that affect the supply of insurance in Nigeria are:

- * level of premium in the market
- * costs
- * level of capacity available
- * reinsurance
- * uncertainty

(2½ marks for each correctly stated factor. Maximum of 4 to be graded. Total: 10 marks)

11. Define the following terms and state their mathematical calculations:

- (a) average cost
- (b) marginal cost.

Solution

a) Average cost is the cost of a unit output. **(3 marks)**. It is expressed as total cost divided by the level of output.

i.e. $AC = TC \text{ divided by } Q = TC/Q$ **(2 marks)**.

b) Marginal cost is the change in the total cost caused by a one-unit change in the level of output. **(3 marks)**

i.e. $MC = \Delta TC / \Delta Q$ where ΔQ represents a small change in output **(2 marks)**.

(Grand Total: 10 marks)

12. Enumerate any five (5) of the appropriate marketing mix for an insurance company.

Solution

The appropriate marketing mix for an insurance company are:

- * product
- * price
- * promotion
- * place
- * people
- * process
- * physical evidence.

(2 marks for each correctly stated mix. Maximum of 5 to be graded. Total: 10 marks)

13. (a) What do you understand by
(i) B2B markets (ii) B2C markets (4 marks)
(b) State three (3) differences between the two markets above. (6 marks)

Solution

a) (i) B2B means business to business. (2 marks)
(ii) B2C means business to consumer. (2 marks)

(Sub-Total: 4 marks)

(b) The differences between these two are:

- the products (including insurance policies) demanded by businesses can be more complex than those demanded by individual consumers
- some would need to be customer-designed and prices may be negotiated with the buyers
- the buying dynamics of larger organisations can be more complex than those in the B2C market
- the marketing of insurance in the B2B market requires personal contacts and strong relationship marketing techniques
- business buyers impose strict quality standards.

(2 marks for each correctly stated difference. Maximum of 3 to be graded. Sub-Total: 6 marks)

(Grand Total: 10 marks)

14. (a) Identify the difference between VAT (Value Added Tax) and WHT (Withholding Tax) (4 marks)
(b) Differentiate between business ethics and business culture. (6 marks)

Solution

a) **VAT (Value Added Tax)** is a consumption tax payable on goods and services consumed by any person whether government agencies, business organization (2 marks); while **WHT (Withholding Tax)** is an advanced payment of income tax and the purpose is to bring the prospective taxpayer to the tax net thereby widening the income tax base. (2 marks).

b) **Business ethics** are the standards and conduct that a company or business sets for itself in the dealings within the organisation and externally within the business and social environment (3 marks); while **business culture** relates to written and unwritten codes of principles and values that govern the decisions and actions within a company (3 marks).

(Grand Total: 10 marks)

Part II

Answer TWO (2) out of the following FOUR (4) questions.

Each question carries 30 marks.

15. In a competitive market,

(a) Show that the Average Revenue (AR) = Price (P). (10 marks)

(b) Differentiate between total utility and marginal utility by way of definition. (10 marks)

(c) The utility function of a product is given as:

$$U = 32q - 3q^2$$

Calculate the marginal utility when the quantity (q) is 4 units. (10 marks)

Solution

a) Total Revenue, TR = Total Sales * Quantity (2 marks)

$$\text{i.e. } = TR = P * Q \quad (2 \text{ marks})$$

Average Revenue, AR = Total Revenue / Quantity (2 marks)

$$\text{i.e. } AR = P * Q / Q \quad (2 \text{ marks})$$

$$= P \quad (2 \text{ marks})$$

(Sub-Total: 10 marks)

b) **Total Utility** is the total satisfaction obtained by a consumer from the consumption of goods and services (5 marks); while the **Marginal Utility** is the change in total utility in the consumption of a commodity per unit of time (5 marks).

(Sub-Total: 10 marks)

c) $U = 32q - 3q^2$

$$\frac{dU}{dq} = 32 - 6q \quad (4 \text{ marks})$$

i.e. $MU = 32 - 6(4)$ (4 marks)

$$= 32 - 24$$

$$= 8 \text{ units} \quad (4 \text{ marks})$$

(Sub-Total: 10 marks)

(Grand Total: 30 marks)

16. Enumerate and explain five (5) distinct ways that the insurance industry contributes to the economy of Nigeria.

Solution

The following are distinct ways that the insurance industry contribute to the economy of Nigeria:

- i. **Provision of Employment:** The insurance industry is made up of 59 insurance companies, hundreds of insurance brokers, over 30 loss adjusters and about 30,000 insurance agents. There are other experts that contribute their services to the industry seen as marine superintendents, risk surveyors, fire surveyors, medical doctors, lawyers and accountants. All the above contribute effectively to the Gross Domestic Product (GDP) per capital of Nigeria.
- ii. **Wealth Creation:** The industry is a major creator of wealth in Nigeria. This "wealth" comprises its stock of resources (i.e. land, buildings, machinery and skills) as well as the goods and services that are used to satisfy consumers requirements. The industry

- is part of the wealth creation process as it provides a service. This service, when purchased, delivers benefits to consumers. Hence, the insurance industry contributes both directly and indirectly to wealth creation.
- iii. **Release of Internally Generated Funds:** Insurance also helps companies to release internally generated investment funds. If insurance firms were not available, firms would have to retain cash balances themselves. The insurance industry makes large sums of money potentially available for investment and other purposes. The industry does more to help at stimulating both the private and public sectors investments through financial intermediation.
 - iv. **Financial Intermediation:** insurance industry accepts deposits from savers and then make them available to households, businesses, local governments and central governments. The industry also uses the banks as intermediaries to achieve this manner of contribution to the economy. This is done by also done by pooling the premiums received as payment for insurance policies from their various customers and then using the pooled funds to pay for the losses of the few customers who experience such insured events. The industry also attempt to generate a return on the premiums collected by investing them.
 - v. **Provision of Private Sector Finance:** Nigeria insurance companies has significant investments in other sectors of the economy. They usually purchase share capital or bonds. By purchasing these shares and other companies' securities, they provide the much-needed investment funds by the economy. In addition, they also sell their shares on the Stock Exchange to the public. Right issues are made available to existing shareholders to raise more funds for their use.
 - vi. **Provision of Public Sector Finance**
 - vii. **Provision of Savings by Individuals**
 - viii. **Promotion of bilateral and multinational trade.**

(3 marks for each correctly stated "way". 1½ marks for any correct and complete explanation. Maximum of two points to be graded under each way. Grand Sub-total per "way": 6 marks. Grand Total: 30 marks)

17. (a) Define price elasticity of demand. State this definition in its mathematical formula also. (5 marks)
- (b) Explain each of the following terms:
- | | |
|---------------------------------|-------------------------------|
| (i) elastic demand | (ii) inelastic demand |
| (iii) unitary demand | (iv) perfectly elastic demand |
| (v) perfectly inelastic demand. | (15 marks) |
- (c) State and explain any two (2) of the main determinants of the price elasticity of demand. (10 marks)

Solution

a) **Price Elasticity of Demand:** this is a measure of the responsiveness of quantity demands of a commodity to small change in the price of the commodity. (3 marks)

i.e. Price Elasticity of Demand = $\frac{\% \text{change in quantity demanded}}{\% \text{change in price}}$ (2 marks)

(Grand Sub-Total: 5 marks)

b) (i) **Elastic Demand:** describes a demanded relationship in which the percentage change in quantity demanded is a larger than the percentage change in price. (3 marks)

(ii) **Inelastic Demand:** this is a demand that responds somewhat, but not a great deal, to change in prices. It has a numerical value between 0 and 1 (3 marks)

(iii) **Unitary Demand:** describes a demand relationship in which the percentage change in quantity of a product demanded is the same as the percentage change in price. Its numerical value is 1 (3 marks)

(iv) **Perfectly Elastic Demand:** this when price elasticity of demand is infinite. It represents a situation when a small change in price derives demand to zero. (3 marks)

(v) **Perfectly Inelasticity Demand:** this describes a demand relationship in which the price elasticity of demand is zero the quantity demanded is fixed. Its numerical value is 0. (3 marks)

c) The determinants of the Price Elasticity of Demand are as tabled below:

Determinant	Explanation
The availability of substitutes	Demand will be more elastic, the more substitutes a good has, and the closer they are as substitutes.
The proportion of income spent on the good	Goods like cars that take up a large proportion of a household's spending will tend to have more elastic demand than goods like pepper that take up only a small proportion.
Time	Since it takes time for buyers to become aware of and react to price changes, many goods have inelastic short-term demand, but more elastic long-term demand.

(3 marks for each correctly stated determinant. 2 marks for correct explanation. Maximum of 2 to be graded. Sub-Total per determinant: 5 marks. Grand Total: 10 marks)

18. (a) Define the term unethical behavior as relates to insurance industry. (6 marks)
 (b) Explain six (6) types of unethical behaviour that insurance brokers can exhibit during the discharge of duties to their clients. (12 marks)
 (c) Enumerate any six (6) types of ways of preventing such unethical practices in the insurance industry as given in (b) above. (12 marks)

Solution

a) **Unethical Behavior** can be explained as **careless or irregular act, misrepresentation, falsification of record or information instrument aimed at defrauding or gaining undue advantage.**

(3 marks for each of the coloured/bolded phrases. Sub-Total: 6 marks)

OR **Unethical Behavior** can be explained as **illegal or unacceptable behavior by somebody in a professional or official position.**

(3 marks for each of the coloured/bolded phrases. Sub-Total: 6 marks)

b) The types of unethical behaviour that insurance brokers can exhibit during the discharge of duties to their clients are:

- potential failure of insurance broker to identify customers' needs and recommend appropriate products to meet those needs;
- misrepresentation to insurers;
- misrepresentation to clients;
- conflicts of interest;
- obtaining a letter of appointment without fully informing the client of the consequences;
- commission churning i.e. frequent replacement of policies to maximise commission payments without offering full disclosure of consequences to the client;
- selling insurance products by non-authorized insurers;
- claiming that the marketed policy and competitor's policies are equivalent when in fact they are not;
- offering a lower price policy without disclosing fees, higher deductibles or other changes in in the policy wordings;
- connivance.

(2 marks for each of the correct and completely stated type. Maximum of 6 to be graded. Sub-Total: 12 marks)

c) The types of ways of preventing such unethical practices in the insurance industry as given in (b) above are:

- i) motivation of staff by way of good remuneration or pay;
- ii) training and retraining of staff
- iii) enforcement of code of ethics as agreed by NAICOM and NCRIB
- iv) adequate punishment law offenders
- v) move purposeful inspection by regulations
- vi) proper orientation on the job.

(3 marks for each of the correct and completely stated type. Maximum of 4 to be graded. Sub-Total: 12 marks)

(Grand Total: 34 marks)

LOGO

CHARTERED INSURANCE INSTITUTE OF NIGERIA
INTERMEDIATE

OCTOBER 2021 DIET EXAMINATION PAPER

SUBJECT I05
BUSINESS STATISTICS AND OPERATIONS RESEARCH

All answers are to be written on the answer booklet(s) supplied in accordance with the following instructions:

- Three hours are allowed for this paper.
- Fill in the information requested on the answer booklet and on form B.
- Handle the answer booklet with care.
- Do not write on the question paper.
- The answer booklet should be handed over personally by you to the invigilator before you leave the Examination Hall.
- Insert your candidate's number as given on your admission permit and any other particulars required on the cover and flap of the answer booklet.
- Ensure that you write the full and correct candidate's number.
- No name should be written on any leaf of the book, or on any supplementary leaves that may be issued to the candidates.
- The answer to each question must be commenced on a separate page. Where however, a question consists of two or more parts, this instruction does not apply to the separate parts.
- Write in the ruled margin the number and question attempted.
- Leave no blank pages among your answers.
- Where supplementary leaves are used, the candidate's number should be written in the space provided on them and fastened at the end of the book inside the cover.

**FAILURE TO ADHERE TO INSTRUCTIONS (WRITTEN AND VERBAL)
WILL ATTRACT STATED SANCTIONS AS STATED IN THE OCTOBER
2021 DIET CANDIDATES' INSTRUCTIONS.**

CHARTERED INSURANCE INSTITUTE OF NIGERIA

I05 - BUSINESS STATISTICS AND OPERATIONS RESEARCH

INSTRUCTIONS TO CANDIDATES

Three hours are allowed for this paper.

You should answer all questions in Part I and two (2) out of the four (4) questions in Part II.

The paper carries a total of 200 marks distributed as follows:

Part I - 140 marks.

Part II - 60 marks.

You are advised to spend not more than two (2) hours on Part I. You are strongly advised to attempt ALL the required questions to score maximum possible marks.

Where a question is split into parts (a), (b), etc, marks for each part are only shown if they are split unevenly between the parts and you should spend your time in accordance with the allocation.

In attempting the questions, you may find it helpful in some places to make rough notes in the answer booklet. If you do this, you must cross through these notes before you hand in the booklet.

It is important to show each step in any calculation, even if you have used a calculator.

Answer each question on a new page. If a question has more than one part leave several lines blank after each part.

Chief Examiner's Comments

Question 1

The question was enumerated by majority of the candidates. However, some candidates went outside the Nigerian Insurance market as requested in the question by mentioning or including CBN, ICAN, e.t.c. in their answers.

Question 2

The candidates demonstrated their knowledge and understanding in non-parametric statistics and sequential analysis and they were able to outline the field of studies where statistics can be applied.

Question 3

Majority of the candidates performed very well and very few performed below expectations.

Question 4

Majority of the candidates performed very well and very few performed below average.

Question 5

The candidates demonstrated their knowledge and understanding on characteristics of a good Questionnaire.

Question 6

The question is very standard enough and candidates performed very well.

Question 7

The candidates' performance in this question is above average. They still need to be committed to the statistical aspect of the course especially in their subsequent professional examination.

Question 8

Most of the candidate mis-interpreted the question and did not answer it correctly.

Question 9

Almost all the candidate attempted this question and score were below average.

Question 10

Only few candidates attempted the question and they performed very well.

Question 11

Candidates did not really understand the question.

Question 12

Only few candidates attempted this question and they did not perform very well. Most candidates could not provide the characteristics of Linear programming and Algorithms to solve a linear programming.

Question 13

Only few candidates attempted this question and they performed below average.

Question 14

The question was well attempted but the performance was below average

Question 15

Almost all the candidate attempted the question performed above average.

Question 16

Only a few candidates answered this question and their performance is above average.

Question 17

The question was well attempted but the performance was very poor, as the candidate cannot group the data into various classes.

Question 18

None of the candidates attempted this question.

Chief Examiner's Comments on Overall Performance

The overall performance is not encouraging.

Chief Examiner's Suggestion on Improvement

Candidates should study hard in order to perform very well in their subsequent examination.

Part I**Answer ALL questions in Part I.****Each question carries 10 marks.**

1. Enumerate any five (5) organisations/trade associations that are involved in promoting ethical standards and professionalism in Nigeria Insurance Market.

Solution

The Organisation/ trade association that are involved in promoting ethical standards and professionalism in Nigeria Insurance Market are:

- Nigerian Insurers Association (NIA)
- Nigerian Council of Registered Insurance Brokers (NCRIB)
- Institute of Loss Adjusters of Nigeria (ILAN)
- National Insurance Commission (NAICOM)
- Chartered Insurance Institute of Nigeria (CIIN)
- Professional Reinsurance Association of Nigeria (PRAN)
- Association of Registered Insurance Agents of Nigeria (ARIAN)

(2 marks for each correctly stated organisation/association. Maximum of 5 to be graded. Total: 10 marks)

2. (a) Differentiate between nonparametric statistics and sequential analysis. (6 marks)
- (b) Outline any four (4) fields of studies where Statistics can be applied. (4 marks)

Solution

a) Non-Parametric Statistics is the branch of statistics that is not based solely on parameterized families of probability distributions (3 marks); while sequential analysis is statistical analysis where the sample size is not fixed in advance. (3 marks)

(Sub-Total: 6 marks)

b) The fields of studies where statistics can be applied are:

- | | | | |
|--------------|-------------|--------------------------------------|-------------|
| * insurance; | * banking; | * agriculture | * economics |
| * planning; | * medicine; | * statistics and modern applications | |

(1 mark for each correctly stated field. Maximum of 4 to be graded. Sub-Total: 4 marks)

(Grand Total: 10 marks)

3. Enumerate four (4) reasons why a researcher would prefer sample to population.

Solution

The reasons why a researcher would prefer sample to population are:

- complete enumerations are practically impossible when the population is infinite;
- when the results are required in a short time (sample saves time);
- when the area of survey is wide (large scope);

- when resources for survey are limited particularly in respect of money and trained persons (saves cost);
- when the item or unit is destroyed under investigation (destructive nature of items under study);

(2½ marks for each complete and correctly stated reason. Maximum of 4 to be graded. Total: 10 marks)

4. Enumerate any four (4) objectives of collecting statistical information.

Solution

The objectives of collecting statistical information are:

- to describe the methods of collecting primary statistical information;
- to consider the status involved in carrying out a survey;
- to analyze the process involved in observation and interpreting;
- to define and describe sampling;
- to analyze the basis of sampling;
- to describe a variety of sampling methods.

(2½ marks for each complete and correctly stated objective. Maximum of 4 to be graded. Total: 10 marks)

5. Enumerate any four (4) characteristics of a good questionnaire.

Solution

The characteristics of a good questionnaire are:

- number of questions should be minimized;
- questions should be in logical orders, moving from easy to more difficult questions;
- questions should be short and simple;
- technical terms and vague expressions capable of different interpretations should be avoided;
- questions fetching yes or no answers are preferable. there may be some multiple choice questions requiring lengthy answers are to be avoided;
- personal questions and questions which require calculations should be avoided;
- question should enable cross check. deliberate or unconscious mistakes can be detected to an extent;
- questions should be carefully framed so as to cover the entire scope of the survey;
- the wording of the questions should be proper without hurting the feelings or rousing resentment;
- leading questions should be avoided.

(2½ marks for each complete and correctly stated characteristic. Maximum of 4 to be graded. Total: 10 marks)

6. (a) Outline three (3) advantages of using Random Numbers. (6 marks)
 (b) Outline two (2) types of sampling (4 marks)

Solution

a) The advantages of using random numbers are:

- personal bias is eliminated as a selection depends solely on chance;
- a random sample is in general a representative sample for a homogenous population;
- there is no need for the thorough knowledge of the units of the population;
- the accuracy of a sample can be tested by examining another sample from the same universe when the universe is unknown;
- this method is also used in other methods of sampling.

(2 marks for each complete and correctly stated advantage. Maximum of 3 to be graded. Total: 6 marks)

b) The types of sampling are:

- * probability sampling; * non-probability sampling; * mixed sampling.
 (2 marks for each correctly stated type. Total: 6 marks)

7. Compute the median for the following data.

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	
Frequency (f)	7	10	15	17	9	8	6	8	80

Solution

Here values in multiples of 10, so width of the class interval is 10.

Class	Frequency (f)	Cumulative Frequency	Mid-Value (X)
0 – 10	7	7	5
10 – 20	10	17	15
20 – 30	15	32	25
30 – 40	17	49	35
40 – 50	8	57	45
50 – 60	8	61	55
60 – 70	6	67	65
70 – 80	8	74	75
	80		

(1 mark for Cumulative Frequency; 1 mark for Mid-Value)

$$\frac{N}{2} = \frac{80}{2} = 40, \text{ class is } 30 - 40 \quad (2 \text{ marks})$$

Here $L = 30, N = 80, f_m = 17, c = 10, cf = 32$ (2 marks)

$$\text{Median} = L + \left(\frac{\frac{N}{2} - cf}{f_m} \right) \times c \quad (2 \text{ marks})$$

$$= \text{Median} = 30 + \left(\frac{40 - 32}{17} \right) \times 10 \quad (1 \text{ mark})$$

$$= 30 + 4.7 = 34.7 \quad (1 \text{ mark})$$

(Total: 10 marks)

8. (a) State the Basic Rules of Probability. (6 marks)

(b) In a certain company, two training workshops are available in a month. An employee has 0.65 probability of being selected to attend the first and 0.25 probability of attending the two workshops. What is the probability that an employee selected will attend the second workshop? (4 marks)

Solution

a) The following rules are applicable in probability theory whether it be objective or subjective probability.

Let event A be in sample space S, then

(i) $P(A) \geq 0$ (1½ marks)

(ii) $P(S) = \sum P(A_i) = 1$ (1½ marks)

Then for every event A, $0 \leq P(A) \leq 1$ (1½ marks)

$P(A^1) = 1 - P(A)$ Where A^1 means "not in A" (1½ marks)

(Sub-Total: 6 marks)

b) Let M_1 be the event he attends the first workshop

Let M_2 be the event he attends the second workshop

$P(M_1) = 0.65, P(M_1 \cap M_2)$

$$P(M_2/M_1) = \frac{P(M_1 \cap M_2)}{P(M_1)} \quad (2 \text{ marks})$$

$$= \frac{0.25}{0.65} = 0.3846 \quad (2 \text{ marks})$$

(Sub-Total: 4 marks)

(Grand Total: 6 marks)

9. Outline and explain any four (4) stages in an operational research project.

Solution

The stages in an operational research project are:

Stage	Explanation
Definition of Problems and Objectives	There has to be a clear objective which should be that, the result of the Study will form the basis or managerial decision had in to an improvement in the way in which the business is run
Identification of Variables	The decision variables are the key to a convenient formulation of the problem. The variables must be carefully chosen so as not to get a clumsy problem.
Construction of a Model	Having identified the variable, a model must be developed which hopefully can be solved through the appropriate techniques. The model developed must be of the, real world situation under study.
Manipulation of the Model to Produce Solution	After the construction of the model the next thing is to provide Solution by a standard mathematical means using a recognized operations research method.
Testing the Model and the Solution	The solution given to the model must satisfy the constraints and must get the support for the current organizational objective after the operations research experts must have interpreted the results.
Implementation of Final Solution	After careful interpretation of the results of the operations research study, the resulting solution would be implemented.
Review and maintenance	After implementation the performance of the model should be carefully monitored to ensure that it actually does work and fulfill its objective.

(1½ marks for correctly stated stage; 1 mark for correct explanation. Sub-Total per Stage: 2½ marks. Maximum of 4 to be graded. Grand Total: 10 marks)

10. (a) Outline any three (3) limitations to an operations research approach (6 marks)
 (b) Outline any two (2) characteristics of a good operations research. (4 marks)

Solution

a) The limitations to an operations research approach are:

- it is often difficult to balance the requirement of reality and simplicity;
- the quality of data collection may be poor;
- the quality of data collection may be inaccurate;
- in many case, the solution of operations research problems is restricted by the lack of a suitable solution technique;
- the derived solution may be sub-optimal;
- the boundary of the problems may be too narrow.

(2 marks for each correctly stated limitation. Maximum of 3 to be graded. Sub-Total: 6 marks)

(b) The characteristics of a good operations research are:

- the solution should be appropriate;
- the solution should be reliable;
- the solution should be economically viable;
- the solution should be accurate.

(2 marks for each correctly stated limitation. Maximum of 2 to be graded. Sub-Total: 4 marks)

(Grand Total: 10 marks)

11. Identify any four (4) characteristics of a linear programming problem.

Solution

The characteristics of a linear programming problem are:

- well defined objective functions;
- alternative course of action;
- additive of resources and activities;
- linearity of the objective function and constraints;
- non-negative of decision variables;
- divisibility of activity and resources;
- finiteness of the activities and resources;
- single valued expectations.

(2 marks for each correctly stated characteristic. Maximum of 4 to be graded. Total: 10 marks)

12. Outline any five (5) of the algorithms steps to solve a Linear Programming Problem.

Solution

Step I: If the problem is of minimization, convert it to a maximization problem by multiplying the objective function Z by -1 .

Step II: See that all b_i 's are positive, if a constraint has negative b_i multiply it by 1 to make b_i positive, convert all the inequalities to equations by addition of slack variables, artificial variables or by subtraction of surplus variable as the case may be.

Step III: Find the starting Basic Feasible Solution

Step IV: Construct the starting simplex table as follow

Step V: Testing for the optimality of BFS by computing $j = z_j - C_j$. If $z_j - c_j \geq 0$, the solution is optimal, otherwise we proceed to the next step.

Step VI: To improve on the BFS, we find the *incoming vector*, entering the basic matrix. The variable that corresponds to the most negative $Z_j - C_j$ is the incoming vector; while the variable that corresponds to the minimum ratio b_i/a_{ij} for a particular i and $a_{ij} > 0$, $i = 1, 2 \dots m$ is the *outgoing vector*.

Step VII: The *key element* or the pivot element is determined by considering the intersection between the arrows that correspond to both incoming and outgoing vectors. The key element is used to generate the next table.

Step VIII: Test this new BFS for optimality as in step VI. If it is not optimal repeat the process until the optimal solution is obtained

(2 marks for any complete and correctly stated step. Maximum of 5 to be graded. Total: 10 marks)

13. Outline the four (4) classes of a queuing system.

Solution

The classes of a queuing system are:

- Single Queue – Single Service Point
- Multiple Queues – Multiple Service Points
- Single Queues – Multiple Service Points
- Multiple Queues – Single Service Points

(2½ marks for each correctly stated class. Total: 10 marks)

14. Outline any four (4) characteristics of a simple queue.

Solution

Simple queue has the following characteristic;

1. Single queue and single service point

2. There are discrete customers from an infinite population of potential customers. e.g. Customer in the bank or air craft waiting to take off.

3. There is an infinite maximum queue.

4. There are no simultaneous arrivals customers at a queue.

5. The queue discipline is on a first served based i.e. with no priorities and that the customer leave before being served.

6. The queue is in a steady state of operation. (The theory for system in transient state just after the operations have started is more complicated.

7. The number of arrivals in a unit of time follow the poisson distribution.

8. Service times are random, and follow a negative exponential distribution.

9. Traffic intensity is less than 1.

(2½ marks for each correctly stated characteristic. Maximum of 4 to be graded.

Total: 10 marks)

Part II

Answer TWO (2) out of the following FOUR (4) questions.

Each question carries 30 marks.

15. (a) (i) Define the term Statistics (3 marks)
(ii) Distinguish between primary and secondary data. (4 marks]
(b) Explain the following methods of data collections; stating one advantage and one disadvantage each:
(i) interview method (8 marks]
(ii) mailed questionnaire method (8 marks]
(iii) registration method (7 marks]

Solution

a) (i). **Statistics** is a body of theories and methods which have been developed for handling the collection and description of sample data for the purpose of drawing useful conclusion. (3 marks)

(ii). **Primary Data**: is data collected at first hand for specific raw purpose e.g. social, industrial survey (2 marks); while **Secondary Data** is already existing information collected for use (2 marks) (or data obtained from someone else's record (2 marks).

(Grand Sub-Total: 4 marks)

b) (i) **Interview Method**: the interviewers visit the informant at home, shop, office, market place or on the street to ask questions and enter replies in a specific place.

(3 marks)

Advantages

- people usually respond more when confronted in person;
- interviewer note specific reaction and eliminate misunderstanding about the question;
- interviewer is able to give his personal assessment of the responded.

(2½ marks for any correctly stated advantage. Only 1 to be graded. Sub-total: 2½ marks)

Disadvantages

- expensive – time consuming;
- bias of interviewer if not well trained;
- decline response in face-to-face interview.

(2½ marks for any correctly stated disadvantage. Only 1 to be graded. Sub-total: 2½ marks)

• (Grand Sub-Total: 8 marks)

(ii) **Mailing Questionnaire Method**: in this case, a set of question called questionnaire is mailed to the informant who answers and returns completed form to the office of origin.

(3 marks)

Advantages

- it is cheap and quick;
- more reliable information could be obtained;
- confidential questions are answered;
- no interviewer bias.

(2½ marks for any correctly stated advantage. Only 1 to be graded. Sub-total: 2½ marks)

Disadvantages

- problem of non-response;
- no interviewer present to explain ambiguous questions;
- wrong person may complete the form.

(2½ marks for any correctly stated disadvantage. Only 1 to be graded. Sub-total: 2½ marks)

(Grand Sub-Total: 8 marks)

iii) **Registration Method**: by this method, data are collected by keeping records of events immediately they occur or as soon after their occurrences; birth, death, divorces e.t.c.

(2 marks)

Advantages

- more efficient
- reliable information collected
(2½ marks for any correctly stated advantage. Only 1 to be graded. Sub-total: 2½ marks)

Disadvantages

- very costly
- burden of reporting on informant
(2½ marks for any correctly stated disadvantage. Only 1 to be graded. Sub-total: 2½ marks)
(Grand Sub-Total: 7 marks)
(Grand Sub-Total: 30 marks)

16. Adeoye Sand and Gravel Company Limited, has been contracted to provide topsoil for the residential housing developments. Topsoil can be supplied from different farms as follows:

Farm	Weekly Capacity (in cubic meters)
A	80
B	200
C	200

Demand for the topsoil generated by the construction project is:

Project	Weekly Capacity (in cubic metres)
1	50
2	150
3	280

The manager of the sand and gravel company limited has estimated the cost per cubic meters to transport over each of the possible routes as follows:

Farm	Project 1	Project 2	Project 3
A	4	2	8
B	5	1	9
C	7	6	3

- (a) Arrange the information into a transportation table. (4 marks]
- (b) Formulate this information as a linear programming problem (8 marks]
- (c) (i) Obtain the initial feasible solution using North-West;
(ii) Is the solution feasible for Corner Rule and Least Cost Rule? (8 marks]
- (d) (i) Obtain the initial feasible solution using Least Cost Rule
(ii) Is the solution feasible (8 marks]
- (d) Which of the methods in (c) and (d) above is preferable and why? (2 marks]

Solution

a) Transportation table for Adelara Sand and Company Limited:

	Project 1	Projects 2	Projects 3	Supply
Farm A	X ₁₁ <input type="text" value="4"/>	X ₁₂ <input type="text" value="2"/>	X ₁₃ <input type="text" value="8"/>	80
Farm B	X ₂₁ <input type="text" value="5"/>	X ₂₂ <input type="text" value="1"/>	X ₂₃ <input type="text" value="9"/>	200
Farm C	X ₃₁ <input type="text" value="7"/>	X ₁₂ <input type="text" value="6"/>	X ₃₃ <input type="text" value="3"/>	200
Demands	50	150	280	

(4 marks)

b) $\text{Min } Z = 4X_{11} + 2X_{12} + 8X_{13} + 5X_{21} + X_{22} + 9X_{23} + 7X_{31} + 6X_{32} + 3X_{33}$ (2 marks)

s.t

$$X_{11} + X_{12} + X_{13} = 80$$

$$X_{21} + X_{22} + X_{23} = 200$$

$$X_{31} + X_{32} + X_{33} = 200$$

$$X_{11} + X_{21} + X_{31} = 50$$

$$X_{12} + X_{22} + X_{32} = 150$$

$$X_{13} + X_{23} + X_{33} = 280$$

$$X_{ij} \geq 0 \text{ for all pairs of } (i,j)$$

(6 marks)

c) Initial Feasible Solution Using North West Corner Rule

To	M ₁	M ₂	M ₃	Supply
From W ₁	50 <input type="text" value="4"/>	30 <input type="text" value="2"/>	<input type="text" value="9"/>	80
W ₂	<input type="text" value="5"/>	120 <input type="text" value="1"/>	80 <input type="text" value="9"/>	200
W ₃	<input type="text" value="7"/>	<input type="text" value="6"/>	200 <input type="text" value="3"/>	200
Demand	50	150	280	480
s				

(4 marks)

The Solution is feasible because the number of feasible Solutions is 5:

$$(m + n - 1) = (3 + 3 - 1) = 5 \text{ (1 mark)}$$

$$X_{11}, =50, X_{12} = 30, X_{22} = 120, X_{23} = 80, X_{33} = 200 \text{ (1 mark)}$$

$$\text{Total Cost } Z = 4(50) + 2(30) + 1(120) + 9(80) + 3(200)$$

$$\text{Total Cost} = 200 + 60 + 120 + 720 + 600 = \# 1700 \text{ (2 marks)}$$

d) Initial Feasible Using Least Rule

To From	M ₁	M ₂	M ₃	Supply
W ₁	50 <input type="text" value="4"/>	<input type="text" value="2"/>	30 <input type="text" value="9"/>	80
W ₂	<input type="text" value="5"/>	150 <input type="text" value="1"/>	50 <input type="text" value="9"/>	200
W ₃	<input type="text" value="7"/>	<input type="text" value="6"/>	200 <input type="text" value="3"/>	200
Demand s	50	150	280	480

(4 marks)

The initial solution is feasible because the number of variables is, $m + n - 1 = 5$ (1 mark)

Solution is:

$$X_{11} = 50, X_{13} = 30, X_{22} = 150, X_{23} = 50, X_{33} = 200 \text{ (1 mark)}$$

$$\text{Total Cost } Z = 4(50) + 9(30) + 150(1) + 9(50) + 3(200)$$

$$\text{Total Cost } Z = 200 + 270 + 150 + 450 + 600 = \text{N}1670 \text{ (2 marks)}$$

e) Comparing the solution with the North West Corner Rule, this has a total cost that is ~~N~~30.00 less. Therefore, least cost rule gives better approximation than the North West Corner Rule. (2 marks)

17. The data below shows the premium of some clients in an insurance company in a given day in thousands of Naira:

77	33	76	47	41	45	65	41	83	58	55	43	39	55	66	43
66	32	45	36	54	45	41	25	71	69	56	51	61	77	37	57
40	44	68	82	44	38	55	40	47	42	51	32	58	49	66	72
39	51	80	55	62	78	50	51	56	48	38	64	59	45	46	63
68	26	61	49	33	64	45	44	29	45	73	73	92	37	47	55
44	50	45	48	51	36	92	46	72	38	59	53	44	71	57	61
41	39	57	83												

- (a) Construct a group frequency distribution table using the class interval of:
25 - 31; 32 - 38; e.t.c. (8 marks]
- (b) Calculate the average weight, median weight and modal weight. (22 marks]

Solution

Premium	LB	Tally	f	x	f _i x _i
25 - 31	24.5 - 31.5		3	28	84
32 - 38	31.5 - 38.5		11	35	385
39 - 45	38.5 - 45.5		24	42	1008
46 - 52	45.5 - 52.5		15	49	735
53 - 59	52.5 - 59.5		17	56	953
60 - 66	59.5 - 66.5		11	63	693
67 - 73	66.5 - 73.5		9	70	630
74 - 80	73.5 - 80.5		5	77	385
81 - 87	80.5 - 87.5		3	84	252
88 - 94	87.5 - 94.5		2	91	182
(3 marks)	(5 marks)	(5 marks)			(5 marks)
			Σf = 100		5306
			(1 mark)	(1 mark)	(1 mark)

(i). $\bar{x} = \frac{\sum f_i x_i}{\sum f_i} \text{ (1 mark)} = \frac{5306}{100} \text{ (1 mark)} = 53.06 \text{ (1 mark)}$

∴ Average premium is 53.06

$$(ii). \quad \text{Median} = \text{Med} = L_1 + \left(\frac{\frac{\Sigma f}{2} - \Sigma f_i}{f_m} \right) c \quad (1 \text{ mark})$$

$$= 45.5 + \left(\frac{50 - 38}{15} \right) 7 \quad (1 \text{ mark})$$

$$= 45.5 + (0.8)7$$

$$= 45.5 + 5.6$$

$$= 51.1 \quad (1 \text{ mark})$$

$$(iii). \quad \text{Mode} = M_o = L_1 + \left(\frac{f_1 - f_o}{2f_1 - f_o - f_2} \right) c \quad (1 \text{ mark})$$

$$= 38.5 + \left(\frac{24 - 11}{2(24) - 11 - 15} \right) 7 \quad (1 \text{ mark}) = 38.5 + \left(\frac{13}{22} \right) 7$$

$$= 38.5 + 4.136$$

$$= 42.636 \approx 43 \quad (1 \text{ mark})$$

(Grand Total: 30 marks)

18. The data below shows the age and premium of some clients in an insurance company in a given day in thousands of Naira:

Client	1	2	3	4	5	6	7	8	9	10	11	12	13
Age	14	3	5	6	14	9	18	5	16	10	17	11	25
Premium	22	12	15	17	15	19	24	13	27	20	28	18	32

- (a) Fit a least squares regression line that determine the relationship between the age and premium.
 (b) Determine the expected premium if the age of the client is forty-five.
 (c) Determine the degree of relationship between the premium and the age.

Solution

X	14	3	5	6	14	9	18	5	16	10	17	11	25	153
y	22	12	15	17	15	18	24	13	27	20	28	18	32	262
xy	308	36	75	102	210	162	432	65	432	200	476	198	800	3505
x ²	196	9	25	36	196	81	324	25	256	100	289	121	625	2283
y ²	484	144	225	289	225	324	576	169	729	400	784	324	1024	5734

($\frac{1}{4}$ mark each for all the bold values in each row. Sub-Total: 10 $\frac{1}{2}$ marks)

(a) $Y = a + bx$

(2 marks)

$$b = \frac{n\sum xy - (\sum x)(\sum y)}{n\sum x^2 - (\sum x)^2} \text{ (2 marks)} = \frac{13(3505) - (153)(262)}{13(2283) - (153)^2} \text{ (2 marks)}$$

$$= 0.8738 \text{ (1 mark)}$$

$$a = \bar{y} - b\bar{x} \text{ (1/2 mark)} = 20.1538 - (0.8738) 11.769 \text{ (1 mark)} = 9.8694 \text{ (1 mark)}$$

$$\therefore Y = 9.8694 + 0.8738 (X) \text{ (1 mark)}$$

$$\text{Premium} = 9.8694 + 0.8738 (\text{Age}) \text{ (2 marks)}$$

b). Age of 45 \rightarrow Premium = 9.8694 + 0.8738 (45) (2 marks) = 49.192

$$= 49 \text{ [(1 mark)]}$$

c)
$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}} \text{ (2 marks)}$$

$$= \frac{13(3505) - (153)(262)}{\sqrt{[13(2283) - (153)^2][13(5734) - (262)^2]}} \text{ (2 marks)}$$

$$= 0.90098 \text{ (1 mark)}$$

(Grand Total: 30 marks)

LOGO

CHARTERED INSURANCE INSTITUTE OF NIGERIA
INTERMEDIATE

OCTOBER 2021 DIET EXAMINATION PAPER

SUBJECT I06
OPERATIONAL MANAGEMENT

All answers are to be written on the answer booklet(s) supplied in accordance with the following instructions:

- Three hours are allowed for this paper.
- Fill in the information requested on the answer booklet and on form B.
- Handle the answer booklet with care.
- Do not write on the question paper.
- The answer booklet should be handed over personally by you to the invigilator before you leave the Examination Hall.
- Insert your candidate's number as given on your admission permit and any other particulars required on the cover and flap of the answer booklet.
- Ensure that you write the full and correct candidate's number.
- No name should be written on any leaf of the book, or on any supplementary leaves that may be issued to the candidates.
- The answer to each question must be commenced on a separate page. Where however, a question consists of two or more parts, this instruction does not apply to the separate parts.
- Write in the ruled margin the number and question attempted.
- Leave no blank pages among your answers.
- Where supplementary leaves are used, the candidate's number should be written in the space provided on them and fastened at the end of the book inside the cover.

**FAILURE TO ADHERE TO INSTRUCTIONS (WRITTEN AND VERBAL)
WILL ATTRACT STATED SANCTIONS AS STATED IN THE OCTOBER
2021 DIET CANDIDATES' INSTRUCTIONS.**

CHARTERED INSURANCE INSTITUTE OF NIGERIA

I06 - OPERATIONAL MANAGEMENT

INSTRUCTIONS TO CANDIDATES

Three hours are allowed for this paper.

You should answer all questions in Part I and two (2) out of the four (4) questions in Part II.

The paper carries a total of 200 marks distributed as follows:

Part I	-	140 marks.
Part II	-	60 marks.

You are advised to spend not more than two (2) hours on Part I. You are strongly advised to attempt ALL the required questions to score maximum possible marks.

Where a question is split into parts (a), (b), etc, marks for each part are only shown if they are split unevenly between the parts and you should spend your time in accordance with the allocation.

In attempting the questions, you may find it helpful in some places to make rough notes in the answer booklet. If you do this, you must cross through these notes before you hand in the booklet.

It is important to show each step in any calculation, even if you have used a calculator.

Answer each question on a new page. If a question has more than one part leave several lines blank after each part.

Chief Examiner's Comments

Question 1

The question was technical in nature. 12% pass rate not encouraging.

Question 2

The question is direct and friendly. 42% pass rate.

Question 3

Views of leadership question is a popular question among candidates. 45% pass rate achieved.

Question 4

82% pass rate. Good attempt.

Question 5

30% pass rate. Very fair question.

Question 6

73% pass rate. Fair attempt.

Question 7

45% pass rate.

Question 8

27% pass rate.

Question 9

27% pass rate. Harder study can produce better results.

Question 10

18% pass rate. Question in call centres should be popular.

Question 11

30% pass rate. Technical but friendly.

Question 12

61% pass rate. Question is fair

Question 13

40% pass rate

Question 14

12% pass rate

Question 15

33% attempted. 5% pass rate

Question 16

79% attempted. 54% pass rate. Fair attempt.

Question 17

36% pass rate. 67% of candidates attempted

Question 18

40% pass rate. 30% of candidates attempted

Chief Examiner's Comments on Overall Performance

30% overall pass rate not good

Chief Examiner's Suggestion on Improvement

A better preparation is needed.

Part I**Answer ALL questions in Part I.****Each question carries 10 marks.**

1. NAICOM specified certain risks that insurance operators must arrange to cover as regards risk management framework. Enumerate any five (5) types of risks that the risk management department must ensure are well covered in this risk management framework.

Solution

The types of risks that the risk management department must ensure are well covered in this risk management framework of NAICOM are:

- * All material risks;
- * Claims management risks;
- * Reinsurance risks;
- * market risks;
- * operating risks;
- * underwriting risks;
- * investment risks;
- * liquidity risks;
- * credit risks.

(2 marks for each correctly stated type. Maximum of 5 to be graded. Total: 10 marks)

2. State any five (5) examples of materials resources at the disposal of a business to enable it to achieve its objectives.

Solution

Examples of materials resources at the disposal of a business to enable it to achieve its objectives are:

- * Plants;
- * Vehicles;
- * equipment;
- * IT/Communication systems
- * office space
- * any other physical resource

(2 marks for each correctly stated example. Maximum of 5 to be graded. Total: 10 marks)

3. Enumerate five (5) of the eight main views of leadership.

Solution

The eight main views of leadership are:

- * The existence of special leadership traits;
- * Action central leadership
- * Facilitative leadership
- * Transactional leadership
- * behavioural theories;
- * transformational leadership
- * situational leadership
- * intrapreneurship.

(2 marks for each correctly stated example. Maximum of 5 to be graded. Total: 10 marks)

4. State any five (5) signs of a poorly motivated workforce.

Solution

The signs of a poorly motivated work-force are:

- * Abnormally high turn-over of personnel;
- * Absenteeism;
- * Persistent lateness;
- * Fixed ideas and excessive resistance to change;
- * A plethora of petty complaints and grievances
- * Lack of acceptance of responsibility
- * low productivity;
- * poor quality of work;
- * couldn't care less attitude;

(2 marks for each correctly stated example. Maximum of 5 to be graded. Total: 10 marks)

5. Tuckman model suggests that teams go through four (4) stages of development. State these four (4) stages.

Solution

The four stages of team development according to Tuckman model are:

- * Forming; * storming; * norming; and * performing.
- (2½ marks for each correctly stated step. Total: 10 marks)

6. Proper preparation for a meeting involves five key actions. Name these five (5) keys actions.

Solution

Proper preparation for a meeting involves these five key actions:

- establishing the objectives
- determining who should attend
- circulation of agenda prior to the meeting.
- * identifying the agenda items
- * arranging an appropriate venue

(2 marks for each correctly stated example. Maximum of 5 to be graded. Total: 10 marks)

7. Give four (4) examples of job-related causes of stress.

Solution

Examples of job-related causes of stress are:

- work overload;
- person mismatch with the job;
- work hours
- * role ambiguity;
- * poor work environment;

(2½ marks for each correctly stated example. Maximum of 4 to be graded. Total: 10 marks)

8. Enumerate the four (4) stages of the basic control process or control cycle.

Solution

The four stages of control process are:

- making a plan; * recording the plan formally or informally;
- carrying at the plan; * comparing actual results against the plan.

(2½ marks for each correctly stated step. Total: 10 marks)

9. Performance standards may be quantitative or qualitative. Briefly explain the two (2) with one example of each.

Solution

Quantitative: this is measuring the standards in terms of number and not figures e.g. amount of premium earned, market share, number of clients, number of intermediaries, e.t.c.

Qualitative: this is measuring the standards in terms of certain qualities other than numbers of figures e.g. attitude of employees, purchasing pattern of clients, types/categories of intermediaries, profiles of clients, e.t.c.

(3 marks for correct and complete explanation. 2 marks for any correctly stated example. Sub-total per term: 5 marks. Grand Total: 10 marks)

10. Enumerate any five (5) areas that call/contact centres can help improve customer service.

Solution

The areas that call/contact centres can improve customer service are:

- increased availability – e.g. 24 hours a day; * speed of answer;
- skilled staff – calls can be routed to appropriate skilled staff;
- multi contact channels – e.g. telephone, post, internet etc;
- internet * economics of scale
- use of technology – to reduce cost and increase efficiency

(2 marks for each correctly stated area. Maximum of 5 to be graded. Total: 10 marks)

11. Define performance management and performance appraisal to show difference in meaning.

Solution

Performance management is a **systematic approach to the management of people using performance and development as forces to motivate individual employees**; while **Performance appraisal** is a **methodical assessment of how effectively each job in the organisation is being performed**.

(2 marks for each bolded and coloured phrase. Total: 10 marks)

12. Give five (5) examples of fringe benefits under reward management.

Solution

Examples of fringe benefits under reward management are:

- * Holiday entitlement;
- * Medical insurance schemes;
- * Subsidised loans;
- * Catering, welfare and recreational facilities
- * non-contributory pensions;
- * company cars;
- * co-ownership schemes;
- * working conditions.

(2 marks for each correctly stated example. Maximum of 5 to be graded. Total: 10 marks)

13. (a) Any training delivered should be aimed at achieving four major objectives.

Enumerate any three (3) of these major objectives. (9 marks)

(b) State the full meaning of ITF. (1 mark)

Solution

(a) The four major training objectives are:

- improved efficiency
 - improved productivity
 - improved effectiveness
 - improved productivity
- (3 marks for each correctly stated objective. Maximum of 3 to be graded. Sub-Total: 9 marks)

(b) ITF means Industrial Training Fund . (1 mark)

(Grand Total: 10 marks)

14. (a) State any three (3) reasons why performance-related rewards have become more popular in recent years. (6 marks)

(b) (i) What does the acronym MCPD mean? (2 marks)

(ii) Define MCPD. (2 marks)

Solution

a) The reasons why performance-related rewards have become more popular in recent years are because:

- they fit with the development of a result-oriented culture;
 - they focus efforts on the organisation's priorities;
 - financial rewards can be used as a substitute for lack of internal promotion opportunities;
 - they help to retain valuable individual employees
- (2 marks for each correctly stated reason. Maximum of 3 to be graded. Sub-Total: 6 marks)

b) (i) **MCPD** means Mandatory Continuing Professional Development. (2 marks)

(ii) MCPD is the planned acquisition of knowledge, experience and skills and the development of personal qualities necessary for the execution of professional and technical duties throughout working life. (2 marks)

(Grand Total: 10 marks)

Part II

Answer TWO (2) out of the following FOUR (4) questions.

Each question carries 30 marks.

15. Dr. John Adair, under his Action Centered Leadership, (ACL) identified three (3) key areas of effectiveness:

(a) Briefly explain these three (3) keys areas. (12 marks)

(b) State three (3) examples of the needs under each of the three (3) areas. (18 marks)

Solution

a) The three key areas of Action Centered Leadership (ACL) by Dr. John Adair are:

The Task: The primary need to get the job done

The Team: The need to build a cohesive unified team. A bunch of star players does not always equate to a team.

The Individual: We all have a variety of needs which motivate us into action to satisfy them. If these needs are not met, we become frustrated and performance is affected.

(2 marks for each correctly stated key area. 2 marks for correct explanation. Sub-total per key area: 4 marks. Grand Sub-total: 12 marks)

(b) Examples of each key area are:

Task Needs	Team Needs	Individual Needs:
The leader should: * Define the teams' goals and objectives * Ensure the appropriate resources are available * Develop work plans and define team tasks * Allocate the work and resources * Control the work rate and qualify * Check performance against plans * Adjust the plans as necessary	The leader should: * Set and agree standards and maintain discipline * Build and maintain team spirit and morale * Encourage., motivate and give a sense of purpose * Ensure communication within the team * Appoint sub-leaders * Train and develop the team	The Leader should: * Agree individual objectives * Attend to any personnel problem * Give precise and rewards to individuals * Train and develop individuals * Recognize and use individual abilities

(2 marks for each correctly stated example. Maximum of 3 examples to be graded under each key area.

Sub-total per key area: 6 marks. Grand Sub-total: 18 marks)

(Grand Total: 30 marks)

4	Poor Delegation	Not passing work and responsibility on, doing jobs because you like doing them.	Correctly apply the delegation process when passing on tasks to others.
5	Failure to Prioritise	Spending time on unnecessary and unimportant tasks	On your 'to do list' clearly indicate the priority, the important and the others.
6	Perfectionism	Working for perfect result when it is not absolutely necessary	Stop doing repeated checks. Do not keep repeating the checking.

(2 marks for each correctly stated time stealer. 2 marks for each correct explanation of the time stealer. 2 marks for any correctly stated example. Sub-Total per time stealer: 6 marks. Maximum of 5 time stealers to be graded. Grand Total: 30 marks)

- 18 (a) Define Key Performance Indicators (KPIs). (5 marks)
- (b) KPI can be result-oriented or effort-oriented. Give four (4) examples of each class. (16 marks)
- (c) State and explain the three (3) types of benchmark that are usually used by organisations. (9 marks)

Solution

a) Key Performance Indicators (KPIs) are **those quantifiable points in the development of a company's strategy that show whether or not the company is reaching its targets and objectives.**

(2½ marks for each bolded and coloured phrase. Sub-Total: 5 marks)

b)

Examples of Result Oriented KPIs	Examples of Effort Oriented KPIs
* sales volume * sales revenues * rates of return on investment * market share * asset growth	* number of potential customers contacted * number of complaints handled * extent of relationships with customers * efforts applied to improve staff relationship * active pursuits of debtors

(2 marks for each correctly stated example. Maximum of 4 to be graded under each KPI type. Grand sub-total per KPI: 8 marks. Grand Total: 16 marks)

c) The three types of benchmarks that are usually used by organizations are:

- i) **Internal Benchmarking:** these compare the performance of departments within the organization.
- ii) **External Benchmarking:** these compare the company's performance with competing firms.
- iii) **Function Benchmarking:** an assessment of the organizations main functions and compares them against the same functions in other companies.

(2 marks for each correctly stated type. 1 mark for correct explanation. Sub-Total per type: 3 marks.

Grand Sub-total: 9 marks)

(Grand Total: 30 marks)

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CHARTERED INSURANCE INSTITUTE OF NIGERIA
INTERMEDIATE

OCTOBER 2021 DIET EXAMINATION PAPER

SUBJECT I07
MARINE AND AVIATION INSURANCE

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- Ensure that you write the full and correct candidate's number.
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CHARTERED INSURANCE INSTITUTE OF NIGERIA

I07 - MARINE AND AVIATION INSURANCE

INSTRUCTIONS TO CANDIDATES

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Answer each question on a new page. If a question has more than one part leave several lines blank after each part.

Chief Examiner's Comments

Question 1

The question was intended to test candidates' knowledge of the insurance industry. Good performance. 100% success.

Question 2

The question was intended to test candidates' knowledge of earth movement around the sun. 33% success.

Question 3

The question was meant to test candidates' knowledge of aircraft types and their uses. There was no pass. Percentage pass - Nil.

Question 4

The question was designed to test candidates' knowledge of export products of Nigeria and where they are produced. Candidates recorded zero (0%) percentage pass.

Question 5

It was intended to test candidates' knowledge of important export documents. No candidate passed.

Question 6

The question was designed to test candidates' knowledge of limitation of liability by shipowners and their advantages to marine insurers. It was a zero percent pass.

Question 7

The question tested candidates' knowledge of carriage by rail and the use of consignment note. About 50% success. Candidates are required to understand main international marine market.

Question 8

The question was to test candidates' knowledge of UK marine market. Over 50% success rate was recorded.

Question 9

This question tested candidates' knowledge of business placement by marine insurers and problems sometimes encountered. Zero percent pass was recorded.

Question 10

The question was to test knowledge facultative/obligatory reinsurance as well as surplus treaty as used in marine insurance. 30% success. Knowledge of basic reinsurance practice is necessary in marine insurance.

Question 11

The question was to test the knowledge of disclosure requirement of a marine broker. 50% success. Candidates should know areas where a broker may not disclose.

Question 12

The question was to test subrogation in marine insurance. 50% success. Candidates should know how subrogation is practiced in marine insurance.

Question 13

The question was to test knowledge of "actual total loss". 50% success. Candidates should know the distinction between partial and total loss.

Question 14

The question was to test the knowledge of the aviation policy forms. Zero%. Candidates should be familiar with policy forms mainly used in aviation insurance.

Question 15

The question was to test knowledge of ocean currents. 33% success. Surface current is very important in the speed of ocean-going vessels and fuel consumption by them.

Question 16

The question was to test the use of commercial document as the document the exporter uses to demand payment. 100% success rate.

Question 17

The question was to test the knowledge of information usually contained on the marine slip. 75% success by the only candidate who answered it. Broking as a practical aspect of insurance must be mastered.

Question 18

The question was on the Marine Insurance Act (1906) and it was not attempted by any of the candidates. Marine Insurance Act 1906 should be well studied.

Comments on overall performance:

Marine Insurance requires diligent study and thorough understanding by candidates. This result shows that candidates must work harder to ensure success.

Suggestions on improvement (if any):

Candidates must not only study their course books; they must also ensure they take the revision tests.

Part I**Answer ALL questions in Part I.****Each question carries 10 marks.**

1. The NAICOM Act 1997 has some statutory functions for the National Insurance Commission when it was established. List any five (5) of these functions.

Solution

The statutory functions of the National Insurance Commission as established by NAICOM Act 1997 are:

- establish standards for the conduct of insurance business in Nigeria
- approve rates of premium to be paid in respect of all classes of insurance business
- approve rates of commission to be paid in respect of all classes of insurance business
- ensure adequate protection of strategic government assets and other properties
- regulate transactions between insurers and reinsurers in Nigeria and those outside Nigeria
- act as adviser to the Federal Government on all insurance related matters
- approve standards, conditions and warranties applicable to all classes of insurance business
- protect insurance policyholders, beneficiaries and third parties to insurance contracts
- publish, for sale and distribution to the public, annual reports and statistics of insurance industry
- liaise with and advice Federal Ministries, parastatals, statutory bodies and other government agencies on all matters relating to insurance contained in any technical agreements to which the country is a signatory to
- contribute to educational programmes of the Chartered Institute of Nigeria and the West African Insurance Institute
- carry out other activities connected or included to its other functions.

(2 marks for each correctly stated function. Maximum of 5 to be graded. Total: 10 marks)

2. What date does the overhead sun appear to move from the Tropic of Cancer and what date does it arrive at the Tropic of Capricorn?

Solution

The overhead sun moves from the tropic of cancer on 21 June **(5 marks)** and arrives at the Tropic of Capricorn on 22 December **(5 marks)**. **(Grand Total: 10 marks)**

3. (a) List two (2) aircrafts typically used for Air Taxi/Private Charter. **(4 marks)**
 (b) List three (3) aircrafts used as passenger airlines scheduled operations. **(6 marks)**

Solution

a. Aircraft used for private/air taxi charter are:

- * Beech King Air
- * Cessna Citation
- * Bell Jet Ranger Helicopter
- * Eclipse 500 VLJ

(2 marks for each correctly stated type. Maximum of 2 to be graded. Sub-Total: 4 marks)

b. Aircraft used as passenger airlines in scheduled operations are:

- * Fair Child Dornier 228;
- * Airbus A330;
- * Airbus A340;
- * Boeing 747;
- * Boeing 747-400;
- * Boeing 777;
- * Boeing 787 Dreamliner.

(2 marks for each correctly stated type. Maximum of 3 to be graded. Sub-Total: 6 marks)

(Grand Total: 10 marks)

4. (a) Enumerate the two (2) prominent cocoa processing plant in Nigeria. (6 marks)

(b) Enumerate any two (2) produces from cocoa processing plants in Nigeria.

(4 marks)

Solution

a) The two prominent cocoa processing plant in Nigeria are

- Ede Cocoa Processing Plant in Osun State;
- Cross River State Cocoa Processing Plant.

(3 marks for each correctly stated plant. Sub-Total: 6 marks)

b) The cocoa processing plants in Nigeria produce the following cocoa products:

- * cocoa powder;
- * chocolate;
- * cocoa butter; and
- * cocoa cake.

(2 marks for each correctly stated product. Maximum of 2 to be graded. Sub-Total: 4 marks)

(Grand Total: 10 marks)

5. Give a complete legal definition of 'a bill of exchange'.

Solution

A bill of exchange is an unconditional order in writing (2 marks), addressed by one person to another (2 marks), signed by the person to which it is addressed (2 marks), to pay on demand or at a fixed or determinable future time (2 marks), a sum certain in money, to or to the order of, a specified person or bearer (2 marks).

(Grand Total: 10 marks)

6. (a) Under the convention for the Limitation of Liability for Maritime Claims 1976, apart from the shipowner, state the three (3) other persons that are entitled to limit their respective liabilities. (6 marks)

(b) How does the insurer benefit from the limitation of claims liability by these other persons? (4 marks)

Solution

a) The three other persons that are entitled to limit their respective liabilities under the convention for the Limitation of Liability for Maritime Claims 1976 are the:

- * charterer;
- * manager or operator; and
- * salvor.

(2 marks for each correctly stated person. Sub-Total: 6 marks)

b) Where the shipowner, the master and the charterer are sued for their fault in causing a particular collision, all the claims will be subject to one limitation amount (2 marks); and the insurer benefits because he needs only to pay out a maximum of the and the limitation sum (2 marks). (Sub-Total: 4 marks)

7. (a) In carriage by rail, when does the contract of carriage come into existence? (4 marks)
(a) What are the three (3) important reasons for a Rail Consignment Note? (6 marks)

Solution

a) The contract of carriage comes into existence as soon as the forwarding railway has accepted the goods for carriage with the consignment note (2 marks). The forwarding station signifies acceptance of the goods by affixing to the consignment note, its stamp, bearing the date of acceptance (2 marks). (Grand Total: 4 marks)

- b) The three important reasons for the consignment note are that:
- when stamped is the evidence of the marking and content of the contract;
 - it is however, not a negotiable instrument or a document of title;
 - it is a receipt for the goods and evidences the terms of the contract and thus a document of fundamental importance in regulation the contract of carriage between the parties.
- (2 marks for each correct and completely stated reason. Sub-Total: 6 marks)
(Grand Total: 10 marks)

8. (a) Enumerate two (2) important operators of the Marine Insurance Market of London. (4 marks)
(b) Enumerate any three (3) main uses that the UK marine insurers put their collected premiums to. (6 marks)

Solution

- a) Important operators of the Marine Insurance Market of London are:
- Lloyd;
 - The principal British Insurance Companies;
 - The agencies and branches of many overseas companies;
 - Underwriting agency companies writing on behalf of member companies and mutual associates.
- (2 marks for each correctly stated operator. Maximum of 2 to be graded. Sub-Total: 4 marks)

- b. The main uses that the UK marine insurers put their collected premiums to are:
- payment of claims;
 - payment of expenses;
 - building reserve funds against future losses; and
 - securing a margin of profit.
- (2 marks for each correctly stated use. Maximum of 3 to be graded. Sub-Total: 6 marks)
(Grand Total: 10 marks)

9. (a) How does 'failure to complete' arise in the course of risk placement by a broker; (4 marks)
(b) Enumerate in any two (2) ways, how the problem may be resolved. (6 marks)

Solution

a) "Failure to complete" sometimes arise in the course of risk by a broker, where some insurers consider the rate too low (2 marks). In such circumstance, the broker has to inform his principal before the attachment of the risk so that he may not be found negligent (2 marks). (Sub-Total: 4 marks)

b) To resolve the problem:

- the broker may contact another broker for assistance in another market which may accept the rate;
- the broker may increase the rate to place the balance of the risk but this may be to the displeasure of the insurers who had accepted the lower rate;
- the risk may be rewritten altogether to ensure its complete placement;
- the broker may resort to accommodation and oblige approach, where he simply asks the underwriters for help in accepting the risk, based on the existing goodwill between them.

(3 marks for any correctly stated way. Maximum of 2 to be graded. Sub-Total: 6 marks)

(Grand Total: 10 marks)

10. Explain concisely:

(a) facultative/obligatory reinsurance. (4 marks)

(b) surplus treaty or surplus line. (6 marks)

Solution

a) Facultative/obligatory reinsurance is a contract where the insured can select which risks, they cede to the reinsurer and how much of each risk. (2 marks) The reinsurer is however obliged to accept all cessions made (2 marks). It is often abbreviated as fac/oblig. (2 marks)

(Maximum of 2 points to be graded. Sub-Total: 4 marks)

b) Surplus treaty or surplus line is a reinsurance contract where the surplus of the reinsurer's retention is ceded up to an agreed amount. (3 marks) The reinsurers will normally base their participation on the retention of the ceding insurer. (3 marks) Once accepted, the reinsured and the reinsurers pay their proportions of losses arising. (3 marks).

(Maximum of 2 points to be graded. Sub-Total: 6 marks)

(Grand Total: 10 marks)

11. In the duty of disclosure of the assured, which facts may he not disclose, unless asked by the marine underwriter?

Solution

In the duty of disclosure of the assured, the following facts may not be disclosed, unless asked by the marine underwriter:

- facts of common notoriety, such as appearing in the newspapers; and
- facts which the underwriters should know in the ordinary course of their business, such as trade wages, shipping routes, information in Lloyd's Register
(5 marks on each correct and completely stated fact. Maximum of 2 to be graded. Grand Total: 10 marks)

12. (a) When does the right of subrogation accrue to a marine insurer in respect of a claim? (4 marks)
- (b) State the three (3) different types of claim where marine insurer may recover from third parties in subrogation. (6 marks)

Solution

- a) The right of subrogation accrues to a Marine Insurer after he must have paid the claim. (4 marks)
- b) Three different types of claims where a marine underwriter may recover from third parties are:
- liabilities for damage in collision where the other vessel is at fault;
 - recovery from parties under contract, such as ship owners' liability for damage to cargo;
 - general average contributions to property sacrificed.
- (2 marks for each correct and completely stated type. 6 marks)
(Grand Total: 10 marks)

13. (a) What is Actual Total Loss, according to the Marine Insurance Act 1906?
(b) Can a missing ship constitute a "total loss"?

Solution

- a) Actual total loss, according to the Marine Insurance Act 1906 is where the subject-matter insured is destroyed or so damaged (2 marks) as to cease to be a thing of the kind insured or where the assure, is irretrievably deprived thereof (2 marks). In the case of actual total loss, no notice of abandonment need be given (1 mark). (Sub-Total: 5 marks)
- b) A missing ship can constitute a total loss (2 marks), when after the lapse of a reasonable time (1 mark), no news of her has been received, an actual total loss may be presumed (2 marks).
(Sub-Total: 5 marks)
(Grand Total: 10 marks)

14. List the four (4) policy forms popularly used in Aviation Insurance.

Solution

The 4 forms popularly used in Aviation Insurance are:

- AVN1C: hull and liability insurance.
 - AVN16: US general aviation hulls.
 - AVN20: US general aviation liabilities.
 - Ariel: airport owners 'and operators' liabilities.
- (2½ marks for each correctly stated form. Grand Total: 10 marks)

Part II

Answer TWO (2) out of the following FOUR (4) questions.

Each question carries 30 marks.

15. (a) What causes surface currents, and in what direction do they move in each of the two hemispheres? (10 marks)
- (b) What are the different effects of warm and cold currents respectively on ship navigation, giving examples, in the Northern hemisphere? (20 marks)

Solution

a) What causes surface currents is the direction of the wind blowing on the sea surface. (4 marks)

- Surface currents and their effects on ship are of particular interest to the mariner.
- Ocean currents circulate around the subtropical high pressure area in a clockwise direction in the Northern hemisphere. (3 marks)
- It circulates in the anticlockwise direction in the Southern Hemisphere (3 marks)

b) The effects of warm currents are:

- Currents flowing from the Equator will be warm,
- An example is the warm Gulf Stream which flows up the east coast of the United States and later becomes North Atlantic Drift.
- The effect on the Norwegian coast and ports, such as Narvice, is to keep them free from ice throughout the year.
- As it is a strong current, it increases ships speed moving in its direction.
- It has adverse effect on ships moving against its direction.

The effects of cold currents are as follows:

- Current flows the Arctic circle are cold currents.
- An example is the cold Labrador Current which flows from the Arctic Circle down the Labrador coast, bringing with it sea ice and icebergs.
- The ice and icebergs cause serious hazards cause to shipping off Newfoundland.
- The cold currents result in the additional hazard of sea fog when it meets the warm Gulf Stream off Newfoundland.

- (2½ marks for each correctly stated points. Sub-Total: 20 marks)

- (Grand Total: 30 marks)

16. (a) What is the main essence of Commercial Invoice in exporting trade? (5 marks)
- (b) List any five (5) of the key information normally stated on a Commercial Invoice. (15 marks)
- (c) Enumerate the four (4) certificates that are used in exporting trade. (10 marks)

Solution

a) The main essence of the commercial invoice is that it is *the document made by the exporting company or a shipper* which is *a claim for payment for the goods under the commercial contract with the buyer.*

(2½ marks for each bolded phrase. Sub-Total: 5 marks)

b) The key information normally stated on the Commercial Invoice include the following:

- description of the goods;
 - unit prices;
 - total weight;
 - terms of payment;
 - packing details;
 - shipping marks;
 - packing list where several packages are involved in one consignment.
- (3 marks for each correctly stated information. Maximum of 5 to be graded. Sub-Total: 15 marks)

c) The four (4) certificates that are used in export trade are:

- insurance certificate.
- certificate of origin.
- certificate of health, quality or inspection.
- certificate of blacklist.

(2½ marks for each correctly stated certificate. Sub-Total: 10 marks)

(Grand Total: 30 marks)

17. List out, and explain in a sentence what the information mean, any ten (10) important information often contained in the slip of a Marine Insurance Broker.

Solution

The important information often contained in the slip of a Marine Insurance Broker are:

- **type:** total loss, partial loss, all risks etc
- **form:** which policy form and appropriate institute clauses
- **insured:** name, address and business/occupation
- **period:** the term of insurance
- **interest:** subject-matter, hull, cargo or freight
- **sum insured or value:** value of subject-matter
- **situation:** trading area of vessel or voyage intended
- **condition:** various institute clauses required
- **premium:** usually designated as rates
- **brokerage:** usually a percentage of total gross premium
- **information:** broker's representation usually accompanied by a phrase 'not limit or warranty' (nlow)

(Candidates are required to correctly explain in one sentence any stated information. 2 marks for each correctly stated information. 1 mark for each correct explanative sentence. Sub-Total per information: 3 marks. Maximum of 10 to be graded. Grand Total: 30 marks).

18. How does the Marine Insurance Act 1906 describe the following:

- (a) variations in the voyage; (b) general average loss.

Solution

The Marine Insurance Act 1906 describes:

a) variations in voyage as follows:

- where the place of departure is specified by the policy, and the ship instead sails from a different place, the risk does not attach;
- where the destination is specified by the policy, and the ship instead sails for a different destination, the risk does not attach;
- where the destination of the ship is voluntarily changed from the destination contemplated by the policy, after the commencement of the risk, there is said to be a change in the voyage;
- unless the policy otherwise provides, where there is a change of voyage, the insurer is discharged from liability as from the time when the determination to change it is manifested;
- it is immaterial that the ship may not in fact have left the course of the voyage contemplated by the policy when the loss occurs.

(5 marks for each correct and completely stated description. Maximum of 3 to be graded. Sub-Total: 15 marks)

b) general average loss as follows:

- a general average loss is a loss voluntarily incurred for the common safety and is made good proportionately by all parties concerned in the marine adventure;
- a general average loss is a loss caused by or directly consequential on a general average act. it includes general average expenditure as well as a general average sacrifice;
- there is a general average act where any extraordinary sacrifice or expenditure is voluntary and reasonably made or incurred in time of peril for the purpose of preserving the property imperiled in the common adventure;
- where there is a general average loss, the party on whom it falls is entitled, subject to the conditions imposed by maritime law, to a rate able contribution from the other parties interested as such contribution is called a general average contribution;
- subject to any express provision in the policy, where the assured has incurred a general average expenditure, he may recover from the insurer in respect of the proportion of the loss which falls upon him and in the case of a general average sacrifice, he may recover from the insurer in respect of the whole loss without having enforced his right of contribution from the other parties liable to contribute;
- subject to any express provision in the policy, where the assured has paid or is liable to pay a general average contribution in respect of the subject-matter insured, he may recover therefore from the insurer.

(5 marks for each correct and completely stated description. Maximum of 3 to be graded. Sub-Total: 15 marks)

(Grand Total: 30 marks)

LOGO

CHARTERED INSURANCE INSTITUTE OF NIGERIA
INTERMEDIATE

OCTOBER 2021 DIET EXAMINATION PAPER

SUBJECT I08
AVIATION AND SPACE INSURANCE

All answers are to be written on the answer booklet(s) supplied in accordance with the following instructions:

- Three hours are allowed for this paper.
- Fill in the information requested on the answer booklet and on form B.
- Handle the answer booklet with care.
- Do not write on the question paper.
- The answer booklet should be handed over personally by you to the invigilator before you leave the Examination Hall.
- Insert your candidate's number as given on your admission permit and any other particulars required on the cover and flap of the answer booklet.
- Ensure that you write the full and correct candidate's number.
- No name should be written on any leaf of the book, or on any supplementary leaves that may be issued to the candidates.
- The answer to each question must be commenced on a separate page. Where however, a question consists of two or more parts, this instruction does not apply to the separate parts.
- Write in the ruled margin the number and question attempted.
- Leave no blank pages among your answers.
- Where supplementary leaves are used, the candidate's number should be written in the space provided on them and fastened at the end of the book inside the cover.

**FAILURE TO ADHERE TO INSTRUCTIONS (WRITTEN AND VERBAL)
WILL ATTRACT STATED SANCTIONS AS STATED IN THE OCTOBER
2021 DIET CANDIDATES' INSTRUCTIONS.**

CHARTERED INSURANCE INSTITUTE OF NIGERIA

I08 - AVIATION AND SPACE INSURANCE

INSTRUCTIONS TO CANDIDATES

Three hours are allowed for this paper.

You should answer all questions in Part I and two (2) out of the four (4) questions in Part II.

The paper carries a total of 200 marks distributed as follows:

Part I - 140 marks.

Part II - 60 marks.

You are advised to spend not more than two (2) hours on Part I. You are strongly advised to attempt ALL the required questions to score maximum possible marks.

Where a question is split into parts (a), (b), etc, marks for each part are only shown if they are split unevenly between the parts and you should spend your time in accordance with the allocation.

In attempting the questions, you may find it helpful in some places to make rough notes in the answer booklet. If you do this, you must cross through these notes before you hand in the booklet.

It is important to show each step in any calculation, even if you have used a calculator.

Answer each question on a new page. If a question has more than one part leave several lines blank after each part.

Chief Examiner's Comments

Question 1

The question attempted to test the knowledge of the candidates about the classes of general insurance business classification according to Insurance Act 2003. It was poorly attempted by the candidate.

Question 2

The question was on the three axes around the centre of gravity and the meaning of the term "free flight". Candidates scored average on the term "free flight" but scored woefully in the three axes (100% failure).

Question 3

Question was on elements that govern Warsaw Convention and Hague Protocol. Candidate that attempted it scored zero.

Question 4

The question was on how to arrange deductible insurance and the return premium will be made under the aircraft return clause. Candidate scored zero.

Question 5

The question was on the functions of Directorate of the Aerodrome and Airspace Standards (DAAS). 40% pass mark was achieved.

Question 6

The question was on the aspect that claims adjuster must be satisfied with to validate claim. Candidate scored 60%.

Question 7

Question was on conventions in force related to offences committed on board of an aircraft in flight and insurance covers available in respect of cargo. Candidate scored zero.

Question 8

Question was on the main application for which satellites are used. Candidate scored poorly (about 20%)

Question 9

Question was on the applicable area of some statues that concerns aviation. Candidate scored zero.

Question 10

The question was on the division of aviation and space insurance market. Poorly answered.

Question 11

The question was on the schedule of an aviation/space insurance policy. Candidates scored 50%.

Question 12

The question was on the categories of passengers' claim. It was poorly attempted leading to 100% failure.

Question 13

Question was on the indemnity by third party policy and discount that could be given after expiry of an aircraft policy. The candidate scored 70%.

Question 14

Question was on disposition, purpose of a pre-trial conference and definition of flight under Hague convention 1970. The candidate scored very high mark of 90%.

Question 15

This question was not attempted. It was a question on cyber risk and Warsaw convention system and Montreal convention 1999.

Question 16

Question was on documents to be carried in compliance with Article 29 of Chicago convention 1944 and sources by which aviation laws were created. The candidate did well by scoring above 50%.

Question 17

The question was on captive insurance and factors that governs choice of location and numbers that affect rates applicable on hull coverage. The candidate scored 30%.

Question 18

The question tested candidates' knowledge of categories of space insurance coverage. Not attempted by the candidate.

Comments on overall performance:

It was a poor performance despite the importance of the aviation industry.

Suggestions on improvement (if any):

Aviation is a big business in the world and any candidate that desires to attempt the course must thoroughly study the course and be well prepared so as to have great understanding of the course contents. Attending tutorial classes is also encouraged.

Part I**Answer ALL questions in Part I.****Each question carries 10 marks.**

1. List five (5) classes of general insurance business as classified in the Insurance Act 2003.

Solution

The classes of general insurance business are-

- Fire Insurance business
- General accident insurance business
- Motor Vehicle insurance business
- Marine and aviation insurance business
- Oil and Gas insurance business
- Engineering insurance business
- Bonds, credit guarantee and surety cling insurable business
- Miscellaneous insurance business

(2 marks for each correctly stated class. Maximum of 5 to be graded. Total: 10 marks)

2. (a) An aircraft has to be controlled in three axes covering three (3) main focal points around its centre of gravity. What are these three axes? (6 marks)
- (b) What does the term “free flight” refer to? (4 marks)

Solution

- (a) An aircraft has to be controlled in three axes covering **roll, pitch** and **yaw**.

(2 marks for each correctly stated axes. Sub-Total: 6 marks)

- (b) Free Flight refers to a situation **where aircrafts are able to select or change their own track, altitude and speed as they wish (within given parameters)** and **provide their own separation from other traffic when outside a terminal area with only minimal intervention from air traffic control.**

(2 marks for each correctly stated coloured phrase. Sub-Total: 4 marks)

(Grand Total: 10 marks)

3. The Warsaw Convention and Hague protocol contain substantive elements that significantly govern air travels. Enumerate any four (4) of those elements.

Solution

The elements are:

- 1) Definitions of Key Terms
- 2) Documents of Carriage
- 3) Liability of the Carrier
- 4) Provisions Relating to Combined Carriage
- 5) General and Final Provisions.

(2½ marks for each correctly stated element. Maximum of 4 elements to be graded. Total: 10 marks)

4. (a) In aviation and space insurance, deductible insurance can be arranged in a number of different ways. State any two (2) of these ways. (4 marks)
- (b) (i) What return of premium will typically be made under the aircraft laying-up returns clause? (4 marks)
- (ii) When will this be usually made? (2 marks)

Solution

(a) In aviation and space insurance, deductible insurance can be arranged in the following ways:

- reducing, by a fixed amount, the deductible on all aircraft
- reducing the deductible on all aircraft to the same level, irrespective of the type of aircraft
- limiting the total amount they could pay during any one year, irrespective of the number of claims.

(2 marks for each completely and correctly stated way. Maximum of 2 to be graded. Sub-Total: 4 marks)

(b) (i) **Seventy-five per cent** (2 marks) of **the difference between the hull flight rate and ground rate** (1 mark) **for any lay-up of 30 days or more** (1 mark).

(Sub-Total: 4 marks)

(ii) Return of premium will be made at expiry. (2 marks)

(Grand Total: 10 marks)

5. The Directorate of Aerodrome and Airspace Standards (DAAS) has its objective to ensure that the provision of aviation safety and security at all Nigerian aerodromes and the airspace. Enumerate any five (5) functions of the Directorate.

Solution

The functions of the Directorate are:

- 1) Ensuring that aerodromes and airspace are safe and secure in accordance with the convention on International Civil Aviation and Nigerian Civil Aviation Regulations (hereafter referred to as "Nig. CARs").
- 2) Reviewing ICAO state letters on the subject of Aerodromes and Airspace, and preparing response thereto and taking action thereon.
- 3) Notifying ICAO of differences between national regulations and SARPs contained in ICAO annexes 2,3,4,5,9,10,11,12,14,15,16 and 18.
- 4) Carrying out of aerodrome and heliport with the Nigerian Civil Aviation Act of 2006 and Nig. CARs.
- 5) Participation in site selection for construction of aerodromes.
- 6) Inspection of aerodrome operational activities including airside management, Aero-bridge operation, Aircraft slot Allotment, Carousels.
- 7) Oversight and licencing of ground handling operation and activities to ensure compliance with ICAO and National Standards, and best practices.
- 8) Ensure compliance of aerodrome operator / owner to the ICAO and National Standards of Bird / Wild life Management.

9) Conduct aerodromes related incident investigation.

(2 marks for each correctly stated function. Maximum of 5 to be graded. Total: 10 marks)

6. In aviation and space insurance, state five (5) aspects that a claims adjuster must be satisfied with to validate a claim.

Solution

In aviation and space insurance, the aspects that a claims adjuster must be satisfied with to validate a claim are:

- The aircraft was one of the aircraft insured under the policy.
- The policy was in effect when the accident occurred.
- The accident occurred within the geographical limits of the policy.
- The purpose of use to which the aircraft was being put at the time of the accident was a purpose of use covered by the policy.
- The pilot was a permitted pilot under the terms of the policy.
- None of the general exclusions apply or the general conditions have been breached.
- The proposed settlement represents an equitable settlement under the terms of the policy.

(2 marks for each correctly stated function. Maximum of 5 to be graded. Total: 10 marks)

7. (a) What are the three (3) conventions in force related to offences committed on board an aircraft in flight? (6 marks)

(b) What insurance covers are available in respect of cargo? (4 marks)

Solution

(a) The three (3) conventions in force related to offences committed on board an aircraft in flight are the:

- (1) Tokyo Convention 1963
- (2) Hague Convention 1970
- (3) Montreal Convention 1971.

(2 marks for each correctly stated convention. Sub-Total: 6 marks)

(b) The insurance cover available in respect of cargo are **cargo liability** and **cargo all-risks**.

(2 marks for each correctly stated cover type. Sub-Total: 4 marks)

(Grand Total: 10 marks)

8. List the five (5) main applications for which satellites are used.

Solution

The five main applications for which satellites are used are:

- * communication services;
- * earth observation;
- * science.
- * meteorology;
- * navigation systems; and

(2 marks for each correctly stated application. Total: 10 marks)

9. Complete in the table below the areas in the aviation industry that the any four (4) of the following statutes apply to:

S/No	Statutes	Applicable Areas
a.	Air Carrier Access Act 1996	???
b.	Air Transportation Safety Act 1974	???
c.	Aviation Security Improvement Act 1990	???
d.	General Aviation Revitalization Act 1994 (GARA)	???
e.	Air Transportation Safety and System Stabilization Act 2001	???
f.	Aviation and Transportation Security Act 2001	???

Solution

S/No	Statutes	Applicable Areas
a.	Air Carrier Access Act 1996	relates to access of handicapped persons on airlines.
b.	Air Transportation Safety Act 1974	introduced requirement that all passengers be screened by weapon detecting procedures.
c.	Aviation Security Improvement Act 1990	strengthened passenger screening and required background checks of security personnel.
d.	General Aviation Revitalization Act 1994 (GARA)	discussed later in this chapter in Section F2B.
e.	Air Transportation Safety and System Stabilization Act 2001	set out a framework for the preservation and viability of the US air transport industry and a mechanism for compensation for victims of the events of 9/11.
f.	Aviation and Transportation Security Act 2001	established the Transportation Security Administration, following 9/11, giving it responsibility for security and law enforcement in the aviation industry.

(2½ marks for each complete and correctly stated area. Maximum of 4 to be graded. Total: 10 marks)

10. The aviation and space insurance market is fundamentally divided into five segments as it relates to the aerospace industry. Enumerate any four (4) of these segments.

Solution

The segments that the aviation and space insurance market is fundamentally divided into, as it relates to the aerospace industry, are:

- general aviation operators, including light aircraft operations;
- airline operators, both passenger and cargo operations;
- product manufacturers, airframe, engine and component manufacturers;
- airport owners/operators and third-party service providers at airports such as cleaners, caterers, refuellers and security providers;
- space vehicle launch and in-orbit.

(2½ marks for each correctly stated segment. Maximum of 4 to be graded. Total: 10 marks)

11. List any five (5) details that the schedule of an aviation/space insurance policy will have.

Solution

The details that the schedule of an aviation/space insurance policy will have are:

- | | |
|------------------------------------|-----------------------------------|
| * Policy number | * insured's name and address |
| *Policy period | * details of the aircraft insured |
| * Uses covered | * geographical limits |
| * Pilots' proficiency requirements | * policy limits. |

(2 marks for each correctly stated detail. Maximum of 5 to be graded. Total: 10 marks)

12. List any four (4) categories that passenger claims may be divided into in aviation and space insurance.

Solution

The categories that passenger claims may be divided into in aviation and space insurance are:

- Accident site survey and investigation.
- Survey of aircraft damage.
- Survey of engines and components.
- Meetings to discuss costs and settlement matters.
- Meetings with repairers.
- Meetings with owners and lessor.

(2½ marks for each complete and correctly stated category. Maximum of 4 to be graded. Total: 10 marks)

13. (a) What is the indemnity provided by third-party policies issued by aviation insurers? (4 marks)
(b) What types of discount may be given after expiry of an aircraft policy? (6 marks)

Solution

(a) The indemnity provided by third-party policies issued by aviation insurers is similar to the cover provided by general insurers where the basic cover applies **when the insured becomes legally liable to pay for third-party personal injury (2 marks) and for third-party property damage (2 marks).** (Sub-Total: 4 marks)

(b) The types of discount that may be given after expiry of an aircraft policy are:

- * no-claims bonus * profit commission.
(2 marks for each correctly stated type. Sub-Total: 4 marks)

(Grand Total: 10 marks)

14. In relation to Aviation insurance, what is:

- (a) a deposition? (3 marks)
(b) the purpose of a pre-trial conference (3 marks)
(c) the definition of "flight" under the Hague Convention 1970? (4 marks)

Solution

(a) a deposition is the proceeding in which the person requested to appear (the deponent) can be asked questions under oath by attorneys for any of the parties. The deposition testimony may be used at trial to discredit a deponent if their trial testimony conflicts with their prior deposition testimony. (3 marks)

(b) the purpose of a pre-trial conference is to determine whether a pre-trial settlement can be reached or if the action will ultimately go to trial. (3 marks)

(c) "Flight" under the Hague Convention 1970 is defined as commencing once the external doors of the aircraft are closed and lasts until the doors are opened for disembarkation. (4 marks)

(Grand Total: 10 marks)

Part II

Answer TWO (2) out of the following FOUR (4) questions.

Each question carries 30 marks.

15. (a) Cyber risk has been described as the biggest and most systemic risk facing the insurance market in the last half century. These risks are both first party and third party in nature. Enumerate two examples each of first party risks and third-party risks. (8 marks)

(b) The various conventions and protocols governing travels have interactions and similarities, which guides the affairs of air travels within member participating nations. Fully explain the following between the Warsaw Convention System and the Montreal Convention 1999:

(i) the interaction; (12 marks)

(ii) the similarities. (10 marks)

Solution

(a) **First Party Risks:** property damage, business interruption, theft and loss of data.

Third Party Risks: litigation, regulatory investigations

(2 marks for each correctly stated example. Maximum of 2 points to be graded under each term. Sub-Total: 8 marks)

(b) (i) **The interactions are as explained below:**

The Montreal Convention prevails expressly over the Warsaw Convention system. Consequently, the Warsaw Convention, The Hague Protocol, the Guatemala City Protocol 1971 and the Montreal Additional Protocols 1–4 (commonly known as MAP 1–4), as well as the *Guadalajara Convention 1961*, will cease to have any effect in respect of international carriage which is now governed by the Montreal Convention. However, until all States have ratified the Montreal Convention, these conventions will coexist, raising thus questions as to which convention applies to the flight in question. This question is replied on the basis of the ‘highest common denominator’: the most recent applicable convention to which both the country of origin and destination are parties will apply. A few examples will illustrate this point.

A passenger is flying one way from Singapore to Cambodia on Singapore Airlines. Singapore as the place of departure has ratified the Warsaw Convention as amended by The Hague Protocol and as amended by MAP 4, as well as the Montreal Convention. Cambodia, as the country of destination has ratified the Warsaw Convention as amended by The Hague Protocol, but it has not ratified either the MAP 2 and MAP 4 or

the Montreal Convention – the highest common denominator is the Warsaw Convention as amended by The Hague Protocol.

If the same passenger was flying a round trip from Singapore to Cambodia and back to Singapore, as Cambodia is an agreed stopping place and it is irrelevant for determining which convention applies. In this scenario, the place of origin and destination is Singapore and as such the Montreal Convention will apply since this is the most recently applicable convention in Singapore.

If the same passenger was flying one way from Singapore to Cambodia on a British Airways or any other European carrier, the Montreal Convention would apply by virtue of EU Regulation 2027/97 as amended by EU Regulation 889/2002. This is because the Montreal Convention applies to all European carriers irrespective of their actual routes.

However, the Montreal Convention only applies to **international carriage** and consequently, the existing rules relating to domestic carriage (or non-international carriage) will still apply subject, in the EU, to the aforementioned regulation, thus applying a modified version of the Montreal Convention to all carriage performed by community air carriers.

(4 marks for each complete and correctly stated point. Maximum of 3 to be graded. Sub-Total: 12 marks)

(ii) The similarities are as explained below:

The Montreal Convention includes large elements of the Warsaw Convention, as amended by The Hague Protocol, together with substantive provisions of MAP 4, the Guadalajara Convention and key elements of the IATA Intercarrier Agreements.

However, the main feature of the Montreal Convention is that it clarifies a number of issues that have been litigated around the world. It deals clearly with the issue of postal items, for example, setting out in Article 2 that the carrier will only be liable to the relevant postal administration in accordance with any rules applicable between the two parties. With this one exception, the Convention does not apply to the carriage of postal items. This approach can be contrasted with that under the Warsaw Convention which, while excluding postal claims, does not give guidance concerning how such claims should be dealt with.

Courts in the UK (*Barclay v. British Airways plc (2009)*) and the USA (*Baah v. Virgin Atlantic (2007)*) have decided that the judicial decisions interpreting terms of the Warsaw Convention system are to be preserved when dealing with the same terms in the Montreal Convention. This way time and money will be saved. For example, the decision of the US Supreme Court in *Air France v. Saks*, which defines the term accident

in Article 17 of the Warsaw Convention, remains the leading authority under the Montreal Convention which uses the same term in Article 17.

(5 marks for each complete and correctly stated point. Maximum of 2 to be graded. Sub-Total: 10 marks)
(Grand Total: 30 marks)

16. (a) When an aircraft is engaged in international navigation, some documents are required to be carried in the aircraft in compliance with Article 29 of the Chicago Convention 1944. Enumerate any four (4) of these documents. **(8 marks)**
- (b) (i) Enumerate, with a very brief explanation, the three (3) sources by which law itself is created in the Aviation Industry. **(6 marks)**
- (ii) Explain, giving four (4) reasons why major aviation litigation take place in federal courts. **(16 marks)**

Solution

(a) The documents are required to be carried by an aircraft that is engaged in international navigation in compliance with Article 29 of the Chicago Convention 1944 are:

- (i) aircraft's certificate of registration and airworthiness
(ii) appropriate licences for crew
(iii) log book requirements
(iv) radio station licence (if applicable)
(v) passenger manifest
(vi) cargo manifest
(2 marks for each correctly stated document. Maximum of 4 to be graded. Sub-Total: 8 marks)

(b) The three sources by which law itself is created in the aviation industry are:

- (i) federal statutes, treaties, executive agreements
(ii) common law
(iii) State statutes.

(2 marks for each correctly stated source. Sub-Total: 6 marks)

(ii) The reasons why major aviation litigation take place in federal courts are:

- federal laws generally are involved;
- federal judges are more familiar with federal laws;
- federal court cases tend to move more quickly than state court cases;
- federal court juries are drawn from a wider pool of people than state court juries, thereby tending to lessen local biases;
- federal procedures are more uniform and allow for national as opposed to intra-state consolidation of cases;
- most aviation trial lawyers, both claimant and defence, prefer to be in federal courts.

(4 marks for each correctly stated reason. Maximum of 4 to be graded. Sub-Total: 16 marks)

(Grand Total: 30 marks)

17. (a) In aviation and space insurance, captive insurers are generally domiciled in locations where legislation is specifically geared to their needs. Concisely enumerate five (5) factors that govern the choice of location. (20 marks)
- (b) The majority of aircraft are rated for hull coverage at a percentage of the agreed value of the aircraft. This rate depends on a number of factors. List and briefly explain any two (2) of these factors. (10 marks)

Solution

(a) The factors that govern the choice of location are:

- domicile's experience of captives and reputation as a credible financial services centre
- availability of other necessary service companies (legal, accountancy, actuarial, banking, e.t.c.)
- reduced operating costs (cost of renting an office, wage level, e.t.c.)
- fiscal considerations including levels of corporation and personal tax
- accessibility in terms of travel
- accessibility in terms of communication networks
- beneficial regulatory framework.

(4 marks for each correctly stated factor. Maximum of 5 to be graded. Sub-Total: 20 marks)

(b) The factors that affects the rating of majority of aircraft for hull coverage are:

- * aircraft type
- * use of the aircraft
- * experience of pilots
- * past experience of the operator/insured

(3 marks for correctly stated factor. 2 marks for each correct explanation on each. Sub-Total per factor: 5 marks. Maximum of 2 factors to be graded. Sub-Total: 10 marks)

(Grand Total: 30 marks)

18. Space insurance coverages fall into only two categories. Enumerate and explain these two (2) categories.

Solution

Space insurance coverages fall into two categories. These are:

(i) **risks of physical loss, damage or failure:** is, itself, broken down into three distinct classes: pre-launch, launch and in orbit and finally in orbit. *Pre-launch insurance* applies while a satellite is being transported to the launch site and undergoing last minute testing, fuelling and mating with the launch vehicle for the purpose of launch. From the moment of launch the coverage converts to what is known as *launch and in-orbit insurance* (sometimes referred to as launch and early orbit insurance; the terms being generally interchangeable), which usually covers the satellite up until the first anniversary of the launch. After that a third coverage, known simply as *in-orbit insurance* comes into effect which covers the satellite, one year at a time, for the remainder of its life. Some insurers offer coverage for more than one year and many satellite operators choose to hedge their insurance procurement; buying some multi-year cover, as well as some one-year cover,

thus reducing their insurance spend if the market were to harden and rates start to increase.

(2 marks for each complete and correctly stated point. Maximum of 3 points to be graded. 3 marks for the three bolded items. Sub-total: 15 marks)

(ii) **third-party liability risks: For a launch to be conducted in a safe manner, minimising to the greatest extent possible any threat to public health or to the safety of persons or property.**



The parties involved in launching activities agree to a no fault, inter-party waiver of liability for damage to, or injury suffered by, its own personnel or property while at the launch site.

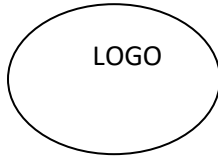


One Party, most usually the licensee, process third party liability insurance for a limit of indemnity as required.

In particular, the third-party liability insurance must include the launching State as an insured party but, without exception where such insurance is a condition of the licence; all parties to the mission have to be covered. In many cases, the licensee, usually the launch contractor, will pass responsibility for the procurement of insurance to their customer, the satellite operator.

(2 marks for each complete and correctly stated point. Maximum of 3 points to be graded. 3 marks for the three bolded/coloured statements. Sub-total: 15 marks)

(Grand Total: 30 marks)



CHARTERED INSURANCE INSTITUTE OF NIGERIA
INTERMEDIATE

OCTOBER 2021 DIET EXAMINATION PAPER

SUBJECT I09
INSURANCE PRACTICE AND REGULATION

All answers are to be written on the answer booklet(s) supplied in accordance with the following instructions:

- Three hours are allowed for this paper.
- Fill in the information requested on the answer booklet and on form B.
- Handle the answer booklet with care.
- Do not write on the question paper.
- The answer booklet should be handed over personally by you to the invigilator before you leave the Examination Hall.
- Insert your candidate's number as given on your admission permit and any other particulars required on the cover and flap of the answer booklet.
- Ensure that you write the full and correct candidate's number.
- No name should be written on any leaf of the book, or on any supplementary leaves that may be issued to the candidates.
- The answer to each question must be commenced on a separate page. Where however, a question consists of two or more parts, this instruction does not apply to the separate parts.
- Write in the ruled margin the number and question attempted.
- Leave no blank pages among your answers.
- Where supplementary leaves are used, the candidate's number should be written in the space provided on them and fastened at the end of the book inside the cover.

**FAILURE TO ADHERE TO INSTRUCTIONS (WRITTEN AND VERBAL)
WILL ATTRACT STATED SANCTIONS AS STATED IN THE OCTOBER
2021 DIET CANDIDATES' INSTRUCTIONS.**

CHARTERED INSURANCE INSTITUTE OF NIGERIA

I09 - INSURANCE PRACTICE AND REGULATION

INSTRUCTIONS TO CANDIDATES

Three hours are allowed for this paper.

You should answer all questions in Part I and two (2) out of the four (4) questions in Part II.

The paper carries a total of 200 marks distributed as follows:

Part I - 140 marks.

Part II - 60 marks.

You are advised to spend not more than two (2) hours on Part I. You are strongly advised to attempt ALL the required questions to score maximum possible marks.

Where a question is split into parts (a), (b), etc, marks for each part are only shown if they are split unevenly between the parts and you should spend your time in accordance with the allocation.

In attempting the questions, you may find it helpful in some places to make rough notes in the answer booklet. If you do this, you must cross through these notes before you hand in the booklet.

It is important to show each step in any calculation, even if you have used a calculator.

Answer each question on a new page. If a question has more than one part leave several lines blank after each part.

Chief Examiner's Comments

Question 1

The question was well understood by all the candidates that attempted the question and this understanding was reflected in their individual performances.

Question 2

The question was well attempted and the performance was excellent.

Question 3

The question was well attempted and the performance was encouraging.

Question 4

The question was fairly understood by the majority of the candidates but only few of them had a good understanding of the question.

Question 5

Most of the candidate did well in this question and many of the candidates score all the marks allocated to this question.

Question 6

The candidates did not understand the meaning of money laundering and it was not well answered.

Question 7

This question was attended by about 98% of the candidates but only few of the candidates that attempted the question perform average.

Question 8

This question was well attended and most of the candidates perform very well.

Question 9

The question was well attempted.

Question 10

The candidates were tested on the knowledge of what make an insurance application acceptable, this question was well answered by the candidates.

Question 11

Many candidates attempted this question but they were unable to score the full marks in the question.

Question 12

This question was well understood by all the candidates that attempted the question. They all did well in this question.

Question 13

Majority of the candidates attempted this question and all those who attempted it passed the question.

Question 14

This question was well understood by all the candidates and that was reflected in their performance.

Question 15

Most candidates did well in attempting parts a & c but they didn't get that of part b.

Question 16

The question was well attempted by the candidates and they really understand the question very well.

Question 17

The question was optional and most of the candidates that attempted it did not perform very well.

Question 18

Question 18a was well understood by majority of the candidates that answered the question, while question 18c was not really understood by the candidates.

Comments on overall performance:

The general overall performance of the candidate was excellent, about 78.76% of the candidates passed the course.

Suggestions on improvement (if any):

Candidates should continue to prepare very well in order to have good grades.

Part I**Answer ALL questions in Part I.****Each question carries 10 marks.**

1. Enumerate any five (5) segments that the buyers of insurance can be segmented into in Nigeria.

Solution

In Nigeria, the buyers of insurance can be segmented as follows:

- * Individuals and families
- * Governments (federal, state, local) and their agencies
- * Parastatals
- * Conglomerates
- * Manufacturing industrial concerns
- * Banking industry
- * Tourist and hospitality industries, hotels
- * Other corporate bodies
- * Oil and energy industry
- * Multinationals
- * Small and medium scale industries
- * Health institutions
- * Transport industry
- * Educational institutions

(2 marks for each correctly stated segment. Maximum of 5 to be graded. Total: 10 marks)

2. List any four (4) commonly encountered types of marine policy.

Solution

The commonly encountered types of marine policy are:

- * Time
- * Voyage
- * Mixed
- * Building Risk
- * Small Craft
- * Slip
- * Open Cover

(2½ marks for each correctly stated type. Maximum of 4 to be graded. Total: 10 marks)

3. (a) Enumerate three (3) reasons why some insurances are compulsory. **(6 marks)**
 (b) Enumerate any two (2) of the three (3) categories of person in the insurance marketplace? **(4 marks)**

Solution

(a) The reasons for compulsory insurance are:

- * to provide funds to meet awarded damages;
- * to ease the State's financial burden;
- * in response to national concern; and
- * for protection.

(2 marks for each correctly stated reason. Maximum of 3 to be graded. Sub-Total: 6 marks)

(b) The three categories of person in the insurance marketplace are the insurers, buyers and intermediaries.

(2 marks for each correctly stated category. Maximum of 2 to be graded. Sub-Total: 4 marks)

(Grand Total: 10 marks)

4. What does it mean when NAICOM refer to a 'risk-based' system of supervision?

Solution

It means that NAICOM **seeks to identify the key risks to its statutory objectives posed by individual firms, markets and market mechanisms, new developments and occurrences**, and then allocates its supervisory resources according to the degree of risk assessed.

(2½ marks for each correctly stated phrase. Total: 10 marks)

5. List five (5) of the powers of control and intervention that are available to NAICOM.

Solution

The powers of control and intervention that are available to NAICOM are:

- i) by order remove from office any director or other officer of the insurance institution.
- ii) by order appoint any person or persons as a director or directors, of the insurance institution and provide in the order for the person or persons so appointed to be paid by the insurance institution such remuneration as may be set out in the order.
- iii) appoint any person to advise the insurance institution in relation to the proper conduct of its business, and provide in the order for the person so appointed to be paid by the insurance institution such remuneration as may be set out in the order.
- iv) withdraw authorisation to operate within a regulated market;
- v) temporarily suspend authorisation to operate;
- vi) impose a fine – this is what tends to hit the headlines, particularly large fines imposed on well-known institutions;
- vii) initiate a criminal prosecution;
- viii) impose a limitation on authorised activity (e.g. temporary closure to new business);
- ix) specify remedial action requirements – actions required to correct the identified problem; or
- x) a combination of more than one of the above.

(2 marks for each correct and completely stated power. Maximum of 5 to be graded. Total: 10 marks)

6. What is money laundering?

Solution

The process whereby **criminals attempt to hide and disguise the true origin and ownership of the proceeds of their criminal activities, thereby avoiding prosecution, conviction and confiscation of the criminal funds.**

(5 marks for each correct and completely stated phrase. Total: 10 marks)

7. What would the implications be to the insured if:
a) a co-insurer; **or** b) a reinsurer
of their risk becomes insolvent, and is unable to meet a valid claim?

Solution

a) In co-insurance, if one co-insurer is unable, e.g. through insolvency, to meet its share of a claim, there is no liability to the customer on the other insurers to cover that proportion of the loss belonging to the insolvent insurer. (5 marks)

b) In reinsurance, if a reinsurer is unable to pay its share of the claim, the primary insurer is still liable to the customer for the whole of the loss. (5 marks)

(Grand Total: 10 marks)

8. List any four (4) of the five elements that are considered in the calculation of insurance premiums?

Solution

The elements to be considered in the calculation of insurance premiums are:

- * expected claims * estimated outstanding claims at the year-end
- * reserves * expenses; * profit.

(2½ marks for each correctly stated element. Maximum of 4 to be graded. Total: 10 marks)

9. (a) What is the purpose of a proposal form? (4 marks)
(b) There are some questions that are common to all proposal forms. List any three (3) generalisations of these questions. (6 marks)

Solution

(a) The purpose of a proposal form are to gather together all the material facts which are necessary for deciding on the acceptance and terms for the risk. (4 marks)

(b) The questions that are common to all proposal forms are the generalised questions regarding name, address, occupation, age, past claims and period of insurance.

**(2 marks for each correctly stated question. Maximum of 3 to be graded. Sub-Total: 6 marks)
(Grand Total: 10 marks)**

10. Enumerate any four (4) main common features of insurable risks.

Solution

The main common features of insurable risks are:

- the risk must be pure in nature
- the risk must be determinable
- the risk must be fortuitous in nature
- the risk must have insurable interest at inception
- the risk must be homogenous
- the risk must be independent of each other
- the risk must not be against public policy.

(2½ marks for each correctly stated feature. Maximum of 4 to be graded. Total: 10marks)

11. List any four (4) of the five (5) special features of life assurance policies.

Solution

The special features of life assurance policies are:

- Premium Payments
- Participation in Profits
- Surrender Values
- Paid-up Policies
- Investments

(2½ marks for each correctly stated feature. Maximum of 4 to be graded. Total: 10marks)

12. (a) What is a complaint? (2 marks)

(b) Explain any four (4) reasons why complaints are important to firms. (8 marks)

Solution

(a) A complaint is 'any expression of dissatisfaction, whether written or oral, whether justified or not.' (2 marks)

(b) Complaints are important to firms because:

- complaints may be the most valuable form of feedback available to a company;
- they are a source of information about where its customers want it to improve its service and product offering;
- complaints represent an opportunity for direct personal contact with the customer and a chance to save business, rebuild trust and enhance customer loyalty;
- they also provide important information to help a company to improve its products and service;
- handling complaints effectively and efficiently makes good commercial sense (i.e. it is good for the company);
- it ensures compliance with regulation.

(2 marks for each correctly stated reason. Maximum of 4 to be graded. Total: 8marks)

(Grand Total: 10 marks)

13. Enumerate four (4) main tasks of an underwriter.

Solution

The main tasks of an underwriter are to:

- * Manage the common pool in an effective, profitable manner;
- * Assess risks brought to the pool;
- * Decide whether or not to accept a risk, or part of a risk;
- * Determine the terms, conditions and scope of cover to be offered; and
- * Calculate suitable premiums

(2½ marks for each correctly stated task. Maximum of 4 to be graded. Total: 10marks)

14. List any four (4) carriers of reinsurance risks.

Solution

The following are the carriers of reinsurance risks:

- * Reinsurance companies * primary insurers
- * Captive Insurance Companies * pools
- * Lloyd's syndicates

(2½ marks for each correctly stated task. Maximum of 4 to be graded. Total: 10 marks)

Part II

Answer TWO (2) out of the following FOUR (4) questions.

Each question carries 30 marks.

15. (a) Enumerate with examples the main differences between moral hazards and physical hazards. (15 marks)
- (b) Mention the characteristics of physical hazards. (10 marks)
- (c) State the five (5) common features of insurable risks. (5marks)

Solution

a) Hazard is a factor that might likely alter the frequency or severity of an insured peril. However, the major differences between moral and physical hazards are enumerated below:

Moral Hazards: relates to attitude of the insured or proposer rather than the subject matter of insurance. The insured is the prime source of moral hazards e.g. the behaviour of the insured, whether the insured lack the duty of care or he is dishonest or he is a regular claimant.

Physical Hazards: relates to or attaches to physical characteristics of the subject matter of insurance e.g. property insurance – the nature/ mode of construction of a building, whether there is fire extinguisher or water hose reel in the building, to reduce the effect of fire damage.

(5 marks for each correctly stated/related point. Maximum of 2 points to be graded. 5 marks for a correct example. Sub-Total: 15 marks)

b) Characteristics of Physical Hazards:

- Mode of construction of the building – whether the building is built with concrete or blocks
- Mode of lightening
- Nature of operations
- Method of cleaning, housekeeping and disposal of waste, e.t.c

(5 marks for each correctly stated characteristic. Maximum of 2 points to be graded. Sub-Total: 10 marks)

c) **Common Features of Insurable Risks:**

- the risk must be pure in nature
- the risk must be determinable
- the risk must be fortuitous in nature
- the risk must have insurable interest at inception
- the risk must be homogenous
- the risk must be independent of each other
- the risk must not be against public policy.

(1 mark for each correctly stated/related feature. Maximum of 5 points to be graded. Sub-Total: 5 marks)
(Grand Total: 30 marks)

16. (a) Briefly explain the following terms:
- (i) facultative reinsurance (ii) treaty reinsurance. (25 marks)
- (b) Enumerate the importance of treaty retention limit. (5 marks)

Solution

Facultative Reinsurance: this is a reinsurance arrangement that is placed after the consideration of the individual risk presented by the ceding office and the reinsurer has the option of either accepting or rejecting the offered business and also of stating the terms of acceptance on each and every of such offered risks.

Treaty Reinsurance: this is a reinsurance arrangement that the terms are pre-agreed by the ceding office and the reinsurer such that all businesses placed on the arrangement is automatically accepted by the reinsurer. It prevents anti-selection against the reinsurer and also enables the ceding office to protect its pool of risks by having maximum cover for all its placed businesses. It involves an agreement between the primary insurer and the reinsurer to the effect that all risks within certain parameters will be automatically ceded to the reinsurer and the reinsurer cannot decline any of such risks EXCEPT the business was not placed within the agreed parameters. This type of reinsurance can be of two types - proportional treaties e.g. quota share, or surplus treaty; and non-proportional treaties e.g. excess of loss or stop loss.

(5 marks each on all correctly stated points. Maximum of 5 points to be graded. Sub-Total: 25 marks)

The importance of treaty retention limit is to improve the capacity of the ceding company and also assist the ceding company in ensuring that it does not retain

more than its capacity because the treaty retention limit is usually set, after considering a lot of factors, to ensure that the ceding company retains only the portion its financials can comfortably bear.

(2½ marks each on all correctly stated points. Maximum of 2 points to be graded. Sub-Total: 5 marks)
(Grand Total: 30 marks)

17. (a) How does the use of call centre to receive claim notification have a significant fraud detection and prevention role? (14 marks)
- (b) Justify with reasons (minimum of four (4) justifications should be justified) why we have State intervention with regulation, on insurance activities. (16 marks)

Solution

a) The following are some of the ways by which the use of call centre to receive claim notification have a significant fraud detection and prevention role:

- where an insured is asked to complete a claim form over the phone, the chances of making an inflated claim is drastically reduced as it has been shown by psychologists that individuals find it more difficult to lie directly to another person, as opposed to in written form
- some insurers have introduced voice stress analysers to their call centres' phone systems. These are like lie detectors and they have a deterrent effect because the claimant is informed of their use before proceeding to give the claim details. It also has a detective effect in identifying potential fraud indicators in the claimant's voice pattern
- the computer system used will also commonly use software that looks for "indicators" of potential fraud as the data is captured, and can ask additional questions of the claimant or initiate other detective activities (e.g. assignment/appointment of loss adjuster or arrangement of a claims inspection visit)

(7 marks for each correctly stated/related point. Maximum of 2 full points to be graded. Total: 14 marks)

ii) The following are the justifiable reasons why we have state intervention with regulation, on insurance activities:

- a) **Maintain Solvency:** to ensure that insurance companies have a reasonable level of capital that support the business written and enable them to withstand "shocks" or unforeseen losses without going out of business
- b) **Equity:** to ensure that there is an element of fairness or reasonableness between companies and policyholders, the insurance contract is one of

considerable complexity and it is essential that controls exist for the protection of policyholders.

- c) **Competence:** the fact that insurance products are intangible with a promise to provide indemnity or a payment at a future date implies that those who deal in such promises must be competent persons and able to fulfil their pledges when the need arises. Therefore, regulations are necessary for the management of insurance and investment business.
- d) **Insurable Interest:** government has found it necessary to introduce legislation in order to eradicate any element of gambling.
- e) **Provision of Certain Forms of Insurance:** this is applicable in cases where government made some insurances compulsory like Motor Insurance, employers liability, e.t.c.
- f) **National Insurance:** for some areas of social provision, government's intervention became necessary in order to ensure that there are basic medicare for the masses, although this is becoming more and more increasingly excessive and unbearable for the government to continue with.

(2 marks for each correctly stated/related point. 2 marks for each correct explanation. Sub-Total: 4 marks per point. Maximum of 4 points to be graded. Grand Total: 16 marks)
(Grand Total: 30 marks)

18. (a) Mention the detailed information contained in a standard policy schedule for a typical General Business Insurance policy. (6 marks)
- (b) State the usefulness of any five (5) of the information stated above. (20 marks)
- (c) Explain the use of standard and non-standard clauses and endorsements in General Insurance. (4 marks)

Solution

The detailed information contained in a standard policy schedule for a typical General Business Insurance policy are:

- Address of the Insured
- Nature of the business
- Period of Insurance
- Annual Premium Payable
- Renewal Period
- Limits of Liability
- Policy Number

(1 mark for each correctly stated information. Maximum of 6 points to be graded. Sub-Total: 6 marks)

- (b) State the usefulness of any five (5) of the information stated above. (20 marks)

Solution:

- **Address of the Insured:** apart from showing evidence of having complied with KYC regulatory requirement, it also enables the Insurer to know the location of the risk being covered and provide required information on the risks associated with the location of the risk.
- **Nature of the business:** it enables the Insurer to be able to rate as most appropriate and also gives a guide to what terms and conditions to be imposed on the policy.
- **Period of Insurance:** for immediate and easy understanding of when the effective period of cover is so as to prevent any ambiguity regarding when liability is engaged is not.
- **Annual Premium Payable:** to be able to know how much was paid for the cover being provided. This also helps in assuring all parties that compliance with the “No Premium, No Cover” Rule has been effected.
- **Renewal Premium Payable:** to be able to know how much is required to be paid for subsequent periods so as to continue to keep the policy in force.
- **Limits of Liability:** to enable all parties to the contract, and also any other person with access to the document, know the extent of liability without having to go through the whole policy document.
- **Policy Number:** this is useful so the office can be able to trace the policy easily and it is also a unique identify for the insured on which when required it will be readily and easily retrieved.

(2 marks for each correctly stated point. Maximum of two points per information should be graded. Sub-Total: 4 marks per information. Maximum of 5 explained information to be graded. Total: 20 marks)

- (c) The use of standard and non-standard clauses and endorsements in General Insurance is to reflect changes made to the policy during the continuation of cover. It also is used to bring more clarity to the cover terms. These changes may be requested by the Insured Brokers by notifying the Insurer of review of certain changes e.g. limits of liability, addition of items, deletion of items, extension of cover, inclusion of new clauses to the policy, e.t.c.

(2 marks for each correctly stated point. Maximum of two points to be graded. Total: 4 marks)

(Grand Total: 30 marks)