UGANDA INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY
END OF SEMESTER I EXAMINATION ACADEMIC YEAR 2024/2025

DEPARTMENT	**:**	**MANAGEMENT**
YEAR OF STUDY	**:**	**TWO**
PROGRAM	**:**	**PLM**
COURSE	**:**	**PROCUREMENT RISK MANAGEMENT**
COURSE CODE	**:**	**BAD 2101**
DATE	**:**	**TUESDAY 17TH DECEMBER, 2024**
TIME	**:**	**09:00-12:00 HOURS**
DURATION	**:**	**3 HOURS**

INSTRUCTIONS:

i. This paper consists of **TWO** sections, **SECTION A & B**
ii. Answer **FOUR (4)** Questions in all.
iii. Section A is **COMPULSORY**, Answer any **THREE** questions from **Section B**
iv. Credit will be given for the use of relevant examples and illustrations.
v. Mobile phones are **NOT** allowed in the exam room.
vi. **DO NOT** write anything on this question paper, rough work should be done in the answer booklet and cancelled through.
vii. Start a new number on a new fresh page.

SECTION A (THIS SECTION IS COMPULSORY)

QUESTION ONE

Provide short answers for the following items

a) Explain any five (5) reasons why a procuring organization should manage its procurement risks throughout the supply chain. **(10 marks)**

b) List five (5) types of procurement risks found in Ugandan markets. **(05 marks)**

c) As a student of procurement risk management, explain how UICT can use the following risk response strategies, to treat the above listed procurement risks.

   i. Avoid **(03 marks)**

   ii. Mitigate **(03 marks)**

   iii. Transfer **(03 marks)**

   iv. Accept **(03 marks)**

d) Describe the role technology can play to mitigate the risks in the Ugandan supply chain. **(06 marks)**

e) Distinguish between Procurement Risk Management Plan and a Procurement risk register. **(04 marks)**

f) Identify three (3) techniques used to identify procurement risks. **(03 marks)**

g) Give three (3) reasons why a procurement officer should monitor and review the performance of the risk management system. **(03 marks)**

SECTION B (ATTEMPT ANY (3) QUESTIONS FROM THIS SECTION

QUESTION TWO

As an aspiring Procurement officer;

a) Educate tertiary Institutions on why it's important for them to prepare a procurement risk management plan. **(10 marks**

b) Enlighten them of the contents of a procurement risk management plan. **(10 marks)**

QUESTION THREE

Looking out for suppliers and providers is such a complex task faced by procurement staffs. The main objective is to meet the right supplier at the right time and place, however, to get a suitable supplier requires risk management. In view of this,

a) Identify the possible risks that occur during the bidding stage of the procurement process **(08 marks)**

b) Explain the possible consequences of these risks and their mitigating strategies **(12 marks)**

QUESTION FOUR

Having underdeveloped contract management processes is a common procurement risk. Without defined contract management processes and subject matter expertise, you may create a contract that inadvertently breaks a law, enters a legal gray area, or has inadequate or unclear KPIs and review processes.

a) Identify the potential risks that occur in the contract management process and their likely consequences. **(10 marks)**

b) What action can a Procuring and Disposing Entity (PDE) take to mitigate the effect of these risks? **(10 marks)**

QUESTION FIVE

During risk management planning, the procurement risk team identified three risks with probabilities of 10%, 50%, and 35%. If the first two risks occur, they will cost the supply chain buyers UGX 5,000,000 and UGX 8,000,000 respectively; however, if the third risk occurs it will give the organization a benefit of UGX 10,000,000.

a) Determine the expected monetary value of these risk events. **(10 marks)**

b) Summarize the inputs used for quantitative risk analysis **(10 marks)**

QUESTION SIX

a) Explain the types of controls a Procurement Officer should take into consideration while preparing Procurement risk response plan. **(08 marks)**

b) Identify the important criteria to effective risk response. **(12 marks)**

QUESTION SEVEN

a) With the aid of an illustration, explain the following terms used in procurement risk management

i. Risk averter **(04 marks)**

ii. Risk taker **(04 marks)**

iii. Risk neutral **(04 marks)**

b) Explain the challenges faced by an organization that does not manage its procurement risks. **(08 marks)**

*****END*****

Marking guide –Procurement risk management

a) Reason for managing risk include:

- Early identification of potential issues;
- Increased probability of success;
- Enable more efficient use of resources;
- Promote teamwork by all stakeholders; and
- Make decisions based on priorities and quantified assessment of risks.
- Increase Efficiency and Reduce Procurement Time
- Reduce delay
- Deliver value for money

b) Supply chain risks in the Ugandan market;

- cyber-threats,
- supplier failure,
- changing regulations,
- logistic and transport issues,
- raw material obstacles
- financial,
- operational,

- functional,
- reputational, and
- legal risks. Etc   10 marks

c) Application of the risk response strategies

Strategy	Treatment Actions
Risk Avoidance	• Avoid the risk by deciding not to proceed with the project or activity. • Ceasing the activity affected by the risk. • Extending schedule of the job • . Reducing scope of the job.
Risk Mitigation	• Reduce the likelihood of the occurrence, e.g., procurement approach, contract terms and conditions, contract management activities, quality control manuals, training, etc. • Reduce the consequence of the occurrence, e.g., contingency planning, relocation of an activity or operation, etc. • Reviewing contract terms and conditions. • Upgrade supervisory requirements of procurement analysis. • Taking early actions. • Adopting less complex processes. • Conduction more tests. • Choosing more stable suppliers. • Going in for prototyping. • Introducing redundancy.
Risk Transference	• Taking insurance policies or contractual agreements with third parties. • Minimising financial risk exposure. • Seeking warranties and guarantees. • Outsourcing the job. • Transfer the risk to another party, e.g., contract terms, regarding liability and indemnity, insurance, etc.
Risk Acceptance	Accept the risk without mitigation. Appropriate where the impact of the risk is minimal or insignificant and outweighs the measures, financial or other-wise, required to control or eliminate the risk. • Reduce the likelihood of the occurrence, e.g., procurement approach, contract terms and conditions,

	contract management activities, quality control manuals, training, etc. • Reduce the consequence of the occurrence, e.g., contingency planning, relocation of an activity or operation, etc. • the risk rating is so low as to not warrant mitigation, there is no treatment available, and/or the costs of treatment outweigh the benefits. • Managing the risk using existing procedures. Passive acceptance: no action except to document the strategy and leave it to the procurement team to deal with it. Active acceptance: establishing contingency reserve for money, time, and resources.

d)Role technology can play in risk mitigation

- Develop methods
- digitization,
- new systems, and
- speed
- automation continues enter the world of production and manufacturing etc

e)A Procurement Risk Management Plan is a document that summarises the proposed procurement risk management approach for the procurement job. It is usually included as a section in the Procurement Business Plan.

A risk register is a risk management tool commonly used in risk management and regulatory compliance. It acts as a central repository for all risks identified by the organization and, for each risk, includes information such as source, nature, treatment option, existing counter-measures, recommended counter-measures and so on. ISO 73:2009
(4 marks)

f) techniques of risk identication

- Brainstorming
- Interviews
- The Delphi technique
- Root cause identification
- Documentation reviews
- Assumptions analysis
- Checklist analysis
- SWOT analysis
- Diagramming techniques etc 3 @ 1 mark = 3 marks

g) Reasons for monitoring and reviewing risks

- Provide currency of risk information
- Identifying emerging risks.
- Provide feedback on control efficiency and effectiveness.
- Identify whether any further treatment is required.
- Provide a basis to reassess risk priorities.
- Capture lessons learnt from event failures, near –misses and successes (3 x2) =6 marks

QUESTION TWO

a) Importance of a procurement plan

- provide a useful tool for managing and reducing the risks identified before and during the procurement job.
- document risk mitigation strategies being pursued in response to the identified risks and their grading in terms of likelihood and seriousness.
- provide the Procurement Job Sponsor, Steering Committee/senior management with a documented framework from which risk status can be reported upon .
- ensure the communication of risk management issues to key stakeholders .
- provide a mechanism for seeking and acting on feedback to encourage the involvement of the key stakeholders.
- identify the mitigation actions required for implementation of the plan and associated costings 10 marks

b) Contents of the Procurement Risk Management Plan

The procurement risk management plan includes the following:

- Methodology. This defines the approaches, tools, and data sources that may be used to perform risk management on the procurement job.
- Roles and responsibilities. This defines the lead, support, and procurement risk man-agement team members for each type of activity in the procurement risk management plan, and clarifies their responsibilities.
- Budgeting. This assigns resources, estimates funds needed for procurement risk management for inclusion in the cost performance baseline, and establishes protocols for application of contingency reserve.
- Timing. This defines when and how often the procurement risk management process will be performed throughout the procurement job life cycle, establishes protocols for application of schedule contingency reserves, and establishes procurement risk management activities to be included in the procurement job schedule.

- Risk categories. This provides a structure that ensures a comprehensive process of systematically identifying risks to a consistent level of detail and contributes to the effectiveness and quality of the Procurement Risk Identification process.
- Definition of procurement risk probability and impact. The quality of the Procurement Risk Analysis process requires that different levels of the risks' probabilities and impacts be defined.
- Probability and impact matrix. This gives a prioritisation of procurement risks based on their potential implications for having an effect on the procurement job's objectives.

Question THREE

a) Risks in contract management
    - Variations in price and foreign exchange
    - Unwillingness of the supplier to accept the contract
    - Failure of either party to fulfil the conditions of the contract
    - Inadequately administering the contract
    - Commencement of work by the supplier before contract is exchanged or letter of acceptance issued
    - Unauthorised increase in scope of work
    - Loss of intellectual property
    - Failure to meet liabilities of third parties (eg. royalties or third party property insurance
    - Loss or damage to goods in transit
    - Fraud
    - Key personnel not available (10 marks)

    Etc

b) Mitigating strategies

- Agree on a formula for calculating variations
- Seek legal redress if non-acceptance causes loss
- Negotiate but retain integrity of the contract
- Accept all contracts in writing
- Ensure approvals are received before allowing work to start
- Ensure good contract administration and performance management
- Hold regular inspections / meetings and ensure progress reports
- Ensure all staff know responsibilities and conditions

QUESTION FOUR

a) Expected monetary value of three events = EMV of the first event + EMV of the second event + EMV of the third event

EMV of the first event = 0.10 * (-5,000,000)= -500,000

EMV of the second event = 0.50 * (-8,000,000)= -400,000

EMV of the third event = 0.35 * 10,000,000= 350,000

EMV of all three events = EMV of the first event + EMV of the second event + EMV of the third event

= – 500.000 – 400,000 + 350,000= -100,000

The expected monetary value (EMV) of all three events is UGX 100,000 (5 marks)

b) Inputs used for quantitative procurement risk analysis

- Organisational Process Assets
- Procurement Risk Management Plan
- Procurement Risk Register
- Procurement Job Schedule Management Plan
- Procurement Job Cost Plan (5 marks)

QUESTION FIVE

a) Types of controls

- Preventive controls
- Corrective controls
- Detective controls
- Directive controls

b) To be effective, procurement risk responses must meet a number of important criteria. All responses must be:

- **1. Appropriate** — The correct level of procurement risk response must be determined, based on the ***size*** of the risk. This ranges from a crisis response where the procurement job cannot proceed without the risk being addressed, through to a ***do nothing*** response for minor procurement risks. It is important not to spend too much time or effort developing inappropriate responses for minor risks, and also not to spend too little time considering how to respond to key procurement risks.
- **2. Affordable** — The cost-effectiveness of procurement risk responses must be determined, so that the amount of time, effort and money spent on addressing the risk does not exceed the available budget or the degree of risk exposure. Each procurement risk response should have an agreed budget.
- **3. Actionable** — An action window should be determined, defining the time within which procure-ment risk responses need to be completed in order to address the risk. Some procurement risks require immediate action, while others can safely be left until later.
- **4. Achievable** — There is no point in describing procurement risk responses which are not realistically achievable or feasible, either technically or within the scope of the respondent's capability and responsibility.
- **5. Assessed** — All proposed procurement risk responses must work! The effectiveness of a procure-ment risk response is best determined by making a ***post-response risk assessment*** of the size of the procurement risk assuming effective implementation of the response.
- **6. Agreed** — The consensus and commitment of stakeholders should be obtained before agreeing on procurement risk responses.
- **7. Allocated and Accepted** — Each procurement risk response should be owned and accepted to ensure a single point of responsibility and accountability for implementing the response. (6 x2)=12 marks

QUESTION SIX

a)

Risk Preference and the Utility Function

i. With the **risk averter**, utility rises at a ***decreasing*** rate. In other words, when more money is at stake, the procurement manager's satisfaction diminishes. (4 marks)

ii. With a **risk neutral** position, utility rises at a ***constant*** rate. (Note: A risk neutral position is a specific course of action, and not the average of risk averter and risk taker positions as is sometimes erroneously claimed.) (4 marks)

iii. With the **risk taker**, the procurement manager's satisfaction increases at an ***increasing*** rate when more money is at stake. A risk averter prefers a more certain outcome and will demand a premium to accept risk. A risk taker prefers the more uncertain outcome and may be willing to pay a penalty to take a risk. While the procurement manager's, or other key decision-makers', tolerance for procurement risk may vary with time, different representations of this tolerance (e.g., risk averter and risk taker) should not exist at the same time else inconsistent decisions may be made ***(illustrated in diagrammatic format)***

(4 marks)

a) The risks of no procurement risk management are:

- Profit, budgets, and cash flow are all hurt: substantial reductions in shareholder value occur
- There is need to maintain a far higher than necessary level of risk capital.
- Customers are kept waiting or turned down.
- There is helplessness in dealing with supplier price increases.
- Output prices are forced up with loss of competitiveness.
- There is poor supplier performance or, worse, allocation or loss of supply.
- There is fragmentation and loss of procurement negotiating leverage.
- There are legally unsound contracts heavily biased in suppliers' favour.
- Unproductive use of human resources.
- Insufficient 'internal challenge' of specifications and decision-making.
- Decision-makers become prey to the tactics of salespeople.
- Political embarrassment or damage to company image and reputation.
- Vulnerable to internal and external fraud.
- Exploited and manipulated by monopolies, cartels and hostile contractors.
- Supplier innovations passed to competitors.
- Beaten to the market by competitors with new products or services.
- Too quick or too late to market with own new offerings.
- Damage to brand and company reputation by unethical behaviour or incompetence.
- Organisation is penalised for non-compliance with regulatory requirements.
- Organisation's activities become subject of public scrutiny and investigation

(10 marks)

QUESTION SEVEN

b) The following are the factors that influence the opportunities for corruption:

- Size of the contract:
- Complexity of technology
- Type of sector involved:
- Discretion:
- Lack of financial controls
- Restricted access to information
- Funding Schemes
- **Immediacy:** The more urgent it is to complete a contract, the more opportunities there are to inflate the price of the contract
- **Soft social control:** The acceptance for corruption-like practices differs between countries
- **Conflict of interest:** The risk of corruption increases when public duties and the private interest of an involved actor are conflicting, because there is a chance that the public position might be exploited (12 marks)

c) Types of Bid Rigging Comprising Official Procurement Officers

- **Excluding qualified bidders**
  Qualified bidders can be inappropriately disqualified in order to promote a favoured bidder. This may entail limited publication of requests for bids, unreasonably limited time allowed to respond to requests for bids, unreasonably narrow contract specification or intimidating behaviour in order to discourage potential bidders from taking part in the bidding process.
- **Manipulation of bids**
  The procurement officer can tamper with bids after submission in order to ensure that a predesignated firm is winning the bid.
- Rigged specification-modifying the criteria in request for proposals to fit a particular company.
- **Unbalanced bidding**
  The procurement officer provides the favoured firm relevant information which is not shared with other participants in the bidding process. This information gives the favoured firm a competitive advantage in tailoring its bid and thus increasing its likelihood of winning the contract.
- **Unjustified no-bid awards** Improper no-bid contracts is a common mean of avoiding competition, and can be set up by:
  - falsifying documentation needed for justification for issuing no-bid contracts, or
  - ignoring the requirement for no-bid contracts, or
  - splitting up purchases in order to stay below the competitive bidding limits.

(08 marks)