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## BC3402: FINANCIAL PROCESSES AND ANALYTICS

### QUIZ (2019)

**DURATION: 1 HOUR 30 MINS**

#### INSTRUCTIONS

- 1 This quiz contains **THREE (3)** questions and comprises of **ONE (1)** page.
  - 2 Answer all **THREE (3)** questions
  - 3 This is an **open-book** quiz.
  - 4 The number of marks allocated is shown at the end of each question.
  - 5 Type your answers in a MS Word document and submit the answers before 21 March 2019, 10:00pm (Singapore Time: GMT+8.00).
  - 6 Answers will be graded for content and appropriate presentation.
  - 7 Submit your answers via NTULearn in the course site under "Assignments"
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#### Questions

1. What is the role the central counterparty (CCP) plays in the post trade and post settlement of the trade cycle?

In the post trade cycle, at the clearing stage, the central counterparty compares both buying and selling side of the trade and provides the report containing the details of the executed order to the brokers from each side. In the settlement stage, the central counterparty will trace down financial and trade obligations and send this information to the brokers, who will then transfer the securities to the buyer and the payment to the seller. In the financial trade cycle, the Clearing Corporations acts as the counterparty for the buyer and seller transactions, making the buyer the seller, and the seller the buyer in a technique called novation. The main role that the CCP plays through novation is taking out the counterparty risk (the risk of defaulting or credit risk). From both the buyer and seller's side, the ownership is transferred from the clearinghouse to the buyer broker, and to the seller broker in the post-settlement stage. The credit risk is removed by not allowing the trading with non-creditworthy parties, and by leaving some collateral with the CCP for insurance.

(20 marks)

2. What are the risks the CCP faces and how does the CCP implement measures to manage or mitigate these risks?

Margin risk: the risk that the defaulter, the participant who pays the collateral, does not pay. Each clearing participant will deposit some collateral (margin) with the CCP for insurance. There are also higher risks with the liquidation of large and unspread positions, which the CCPs mitigate with collecting supplemental margins.

Pooled prefunded financial loss: Where the margin that the defaulter pays is not enough to cover the losses incurred from the money expected from the trade.

When the security traded is not OTC (over-the-counter), the clearing corporation executes novation to provide insurance against counterparty risk.

(20 marks)

3. What are the impacts of a shorter settlement cycle (e.g. T+1) on the operations of CCP?

A shorter settlement cycle reduces the operational and financial risk associated with the processing of transactions. Instead of a five-day settlement cycle, it is now three days. This will lead to straight-through-processing, where the settlement is taken care of within one day. (10 marks)