## **Marking Criteria for COMN Assignment 2**

- 1. Global rules:
  - 1.1. Failure to submit both sender and receiver source files: 0
  - 1.2. Any single case where programs do not terminate for a given part (e.g., part 2): 20% mark deduction from the corresponding implementation mark
  - 1.3. Runtime error: 10% reduction from the implementation mark for each runtime error out of 10 attempts
  - 1.4. Any incorrect file transfer out of 10 attempts: 20% reduction from the implementation mark

Regarding rules (1.2), (1.3) and (1.4), we will apply rule (1.3) first, rule (1.4) next and rule (1.2) finally. Regarding rule (1.2), consider the following situation. Suppose you got 30 out of 40 marks for implementation of Part 2. But, in one case, your program kept running and didn't finish within a reasonable amount of time (e.g., 2-3 min for one run); then we will treat your program as if it fails to terminate properly. You will get 20% deduction from the total implementation mark. Thus, the final implementation mark will be 24.

- 2. Part 1 (total mark: 29):
  - 2.1. Compliance to the packet header format (data packet): 12
  - 2.2. Correct file transfer: 17
- 3. Part 2 (total mark: 57 implementation: 40, worksheet: 17):
  - 3.1. Correctness of sender behavior (e.g., timer, retransmission, etc.): 23
  - 3.2. Correctness of receiver behavior (e.g., duplicate packet handling, etc.): 11
  - 3.3. Compliance to the packet header format (data packet and ACK packet): 6
  - 3.4. Runtime error: 10% reduction from the implementation mark for each runtime error (out of 10 attempts)
  - 3.5. Any incorrect file transfer out of 10 attempts: 20% reduction from the implementation mark
  - 3.6. Worksheet (17):
    - 3.6.1. Q1 (7)
    - 3.6.2. Q2 (10)

Regarding rules (3.4) and (3.5) in Part 2, we will apply rule (3.4) first and rule (3.5) next.

- 4. Part 3 (total mark: 57 implementation: 38, worksheet: 19):
  - 4.1. Implementation (38):
    - 4.1.1. Optimal retransmission time-out for 25 and 100 msecs (4)
    - 4.1.2. Duplicate packet handling (4)
    - 4.1.3. Correct sender packet transmission process (16)
      - 4.1.3.1. According to window size (8)
      - 4.1.3.2. Go-back-N Retransmission/time-out (8)

- 4.1.4. Correct receiver message handling (14)
  - 4.1.4.1. Following Go-Back-N Ack Process (7)
  - 4.1.4.2. And out of order discard mechanism (7)
- 4.1.5. Runtime error: 10% reduction from the implementation mark for each runtime error (out of 10 attempts)
- 4.1.6. Any incorrect file transfer out of 10 attempts: 20% reduction from the implementation mark
- 4.2. Worksheet (19)
  - 4.2.1. Q3 (10)
    - 4.2.1.1. Table (5)
    - 4.2.1.2. Graph (5)
  - 4.2.2. Q4 (9)
- 5. Part 4 (total mark: 57 implementation: 28, worksheet: 29):
  - 5.1. Implementation (28)
    - 5.1.1. Duplicate packet handling (2)
    - 5.1.2. Correct packet transmission process (12)
      - 5.1.2.1. Sender Window Size implementation (6)
      - 5.1.2.2. Selective Repeat Retransmission/time-out (6)
    - 5.1.3. Correct packet reception process (14)
      - 5.1.3.1. Receiver Window Size implementation (6)
      - 5.1.3.2. Selective Repeat ACK process (8)
    - 5.1.4. Runtime error: 10% reduction from the implementation mark for each runtime error (out of 10 attempts)
    - 5.1.5. Any incorrect file transfer out of 10 attempts: 20% reduction from the implementation mark
  - 5.2. Worksheet (29)
    - 5.2.1. Q5 (7)
    - 5.2.2. Q6 (6)
    - 5.2.3. Q7 (10)
    - 5.2.4. Q8 (6)