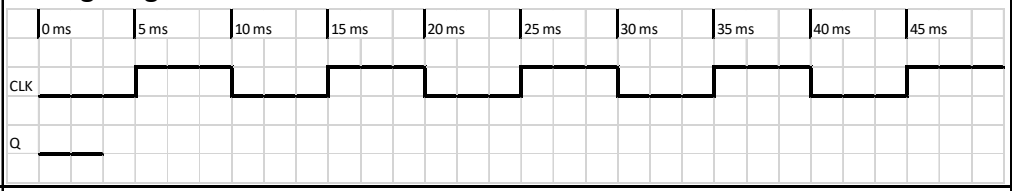
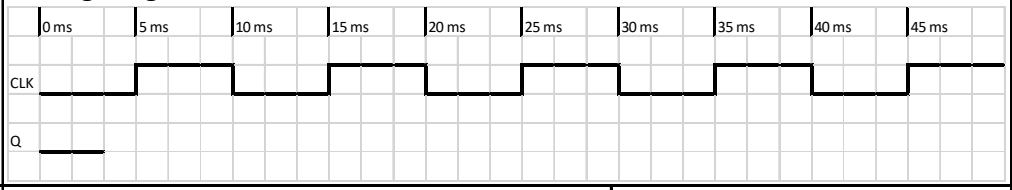
# IE1204 Digital Design Answer Form 2021-2022

| Full Name | Personal Number | Program |
|---|---|---|
| | | |

| # | Answer with | Answer | Points |
|---|---|---|---|
| 1 | Hexadecimal number | | |
| 2 | 8 bit two's complement binary number | | |
| 3 | 8 bit two's complement binary number | | |
| 4 | Circuit number(s) | | |
| 5 | Boolean expression, Y = | | |
| 6 | Boolean expression, Y = | | |
| 7 | MUX connections | | |
| | Row CD = 00 | | |
| | Row CD = 01 | | |
| | Row CD = 10 | | |
| | Row CD = 11 | | |
| 8 | Timing diagram |   | |
| 9 | Timing diagram |   | |
| 10 | Maximum clock frequency = | Hz | |
| 11 | Next state $Q_DQ_CQ_BQ_A$ = | | |
| 12 | 16 bit two's complement Product A x B MSB | | |
| | LSB | | |
| 13 | 8 bit two's complement Quotient A / B | | |
| | Remainder | | |
| 14 | Decimal number | | |
| 15 | 5 result bits (S4 S3 S2 S1 S0) | | |
| 16 | ALUControl (2 bits) | | |
| TOTAL POINTS | | Examiner sign | |