



12 Pages

1. Please give the information requested in the boxes.
2. Enter your name in the space provided to the right, fold over the flap and seal down (using the label provided) to hide your name.
3. The answers must be legibly written. The Examiners can either ignore illegible answers or have it typed and the expense of typing charged to the candidate.
4. Write your answers in ink.
5. Begin each answer on a fresh page. Do all rough work in the answer book and cross it through.
6. No part of this book is to be torn out; it must be handed in complete.
7. If more books than one are used, fasten them together using the tags available from the invigilator(s).
8. **Every book must be handed in. In no circumstances may answer books, used or unused, be taken out of the examination venue.**

[illegible]

①

256 128 64 32 16 8 4 2 1

B) i. $245 = \longrightarrow 1 \quad 1 \quad 1 \quad 0 \quad 0 \quad 1 \quad 0 \quad 1$

ii. $512 = \longrightarrow 1 \quad 1 \quad 1 \quad 1 \quad 1 \quad 1 \quad 1 \quad 1$

C) i. 11010101

$= 213_{10}$

128 64 32 16 8 4 2 1

1 1 0 1 0 1 0 1

ii. 101011001

$= 345_{10}$

256 128 64 32 16 8 4 2 1

1 0 1 0 1 1 0 0 1

D)

i. 11101101011

E A B

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

8 4 2 1

1 1 1 0

1 0 1 1

ii. 100111110010

9 F 2

8 4 2 1

1 0 0 1

0 0 1 0

E) i. C3

$1100/0011 = 195_{10}$

ii. 66

$0110/0110 = 102_{10}$

F) $2^3 = 8$

G) $\frac{36}{10} = 3,6$

② QUESTION TWO

C₀/25

③ C₀/25

(4)

A)

C 1/15

