20181CSE0621
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Part - C

Q.2] No. of networks = 10
Binary of 10 => $(10)_2$ = 1010
∴ 4 bits are required.

Given : 200.0.0.0
* We infer 200 belongs to class C.
• Default bits in C = 24 bits.

Subnet mask :-
11111111.11111111.11111111.11110000

(i) — Host Bit => (32-28) = 4 bits.
Max networks = $2^n = 2^4 = 16$.
Max host ID = $2^n - 2 = 2^4 - 2 = 14$

(11110000)
∴ Obtained mask of subnet => 255.255.255.240

(ii) To find Block size:
200.0.0.11110000
$2^4 = 16$.

Last Network bit value is 16.
Hence Block size = 16.

(iii) Proceeding to calculate
First Host ID.
Broadcast address.
Network address.

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	Address	Network 1	Network 2	Network 3
(1)	Network Address	200.0.0.0	200.0.0.16	200.0.0.32
(2)	First Host address	200.0.0.1	200.0.0.17	200.0.0.33
(3)	Broadcast Address	200.0.0.15	200.0.0.31	200.0.0.47