

GATE QUESTIONS OF PREVIOUS YEARS

1. Question

In 8086 microprocessor, if the code segment register contains 1FAB and IP register contains 10A1, the effective memory address is

- (a) 20B51 (b) 304C
(c) FBC0 (d) FDB5

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[IES-1999]

2. Question

To have the multiprocessing capabilities of the 8086 microprocessor, the pin connected to the ground is

- (a) $\overline{\text{DEN}}$ (b) ALE
(c) INTR (d) $\text{MN}/\overline{\text{MX}}$

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[IES-1999]

3. Question

In 8086, if the content of the code segment register is 1FAB and the content of the IP register is 10A1, then the effective memory address is

- (a) 1FBC0 (b) 304C
(c) FDB5 (d) 20B51

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[IES-2000]

4. Question

Consider the following instructions executed in 8086.

PUSH AX; AX has 20 Hex in it

PUSH BX; BX has 34 Hex in it

POP AX;

ADD AX, BX;

POP G

The value stored in G would be

- (a) 20 Hex (b) 34 Hex
(c) 54 Hex (d) 68 Hex

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[IES-2000]

5. Question

The 8086 arithmetic instructions work on

1. signed and unsigned numbers
2. ASCII data
3. unpacked BCD data.

Select the correct answer using the codes given below:

- (a) 1 and 2 (b) 2 and 3
(c) 1 and 3 (d) 1, 2 and 3

[IES-2001]

3. unpacked BCD data.

Select the correct answer using the codes given below:

- (a) 1 and 2 (b) 2 and 3
(c) 1 and 3 (d) 1, 2 and 3

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[IES-2001]

6. Question

In the 8086 instruction ADD DX, [BX] [CI], the addressing mode of source operand is
(a) Register (b) Register Indirect
(c) Based Indexed (d) Direct

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[IES-2002]

7. Question

Match List-I (8085 Register) with List-II (8086 Register) and select the correct answer using the code given below the lists:

List-I	List-II
A. A	1. CJ
B. H	2. AL
C. L	3. BL
D. B	4. BH

Codes:

	A	B	C	D
(a)	4	2	3	1
(b)	2	4	1	3
(c)	4	2	1	3
(d)	2	4	3	1

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[IES-2003]

8. Question

Consider the Motorola 68008, 68010, 68012 and 68020 microprocessors. In systems that are severely constrained by the space available for the printed circuit board, it is better to use

- (a) 68008 (b) 68010
(c) 68012 (d) 68020

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[IES-2003]

9. Question

```
PUSH    a
PUSH    b
PUSH    c
POP     AX
POP     BX
SUB     AX, BX
POP     BX
ADD     AX, BX
```

The expression computed by the above program and stored in AX is

- (a) $a + b - c$ (b) $c + b - a$
(c) $c - b + a$ (d) $c - b - a$

[IES-2003]

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10. Question

Match List-I (2 Pins of 8086) with List-II (Status) and select the correct answer using the code given below the lists:

List-I

	$\overline{\text{BHE}}$	A_0
A.	0	0
B.	0	1
C.	1	0
D.	1	1

List-II

What is read/written?

1. 1 byte from/to odd address
2. 1 byte from/to even address
3. 1 16-bit word
4. NOP

Codes:

	A	B	C	D
(a)	4	2	1	3
(b)	3	1	2	4
(c)	4	1	2	3
(d)	3	2	1	4

[IES-2005]