CS & IT ENGINEERING

C-Programming

Data Types and Operator

DPP 01 Discussion Notes

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[MCQ]

#Q. Which of the following is not a valid identifier?

A main ← Identifier

B sizeof - keyword

C _pw - Identifier

D _pw_ Identifier

[13]

[MCQ]

#Q. Which of the following is not a keyword?

A goto keyward

B volatile – keyword

C main ← Name of function

D unsigned – keyword

[c]

[MCQ]

#Q. What is the output of below C Code?

```
void main()
{
int a=7,b=5,c,d;
c= a++ + ++b;
d= --b + a--;
printf("%d %d", d, c);
}
```

13 , 13

post increment

a | 7 | 8 | 7 | b | 5 | 6 | 5 |

c = 7 + 6 = 13

d = 5 + 8 = 13

[D] Ans

A 13, 12

B 12, 12

C 12, 13

[✓ D] 13, 13

[MCQ]

#Q. The output of below C code is ______

```
void main()
{
int i=9, j=12, k, x;
k=i=j;
x=i==j;
printf("%d %d", k, x);
}
```

12, 1

i $\boxed{\cancel{9}}\boxed{12}$

j $\boxed{12}$

k $\boxed{12}$

k = i = j

Right Associative

x = $\underline{i==j}$ ← Relational operator

12 == 12

x = 1

[B]

A 9, 12

[✓ B] 12, 1

C 12, 0

D 9, 0

[MCQ]

#Q. The smallest individual element of any 'C' program is called as ________

A variables

B constants

[✓ C] Tokens

D Keywords

tokens [c]

[MCQ]

#Q. Which of the below is not a 'C' Token?

- A Identifiers
- B Keywords
- C Operators
- D Expressions ✓

Six category of token

[D]

Identifier
Operator
keywords
Leterals
Constant
Special character

[MCQ]

#Q. Any number with fractional part is said to be ______

A Integer Constant ×

B Real Constant ✓

C Character Constant ×

D String Constant × Literals

Constant : Real No.

[B]

[MCQ]

#Q. What will be the output of below 'C' code?

```
void main()
{
int i=+17, j=-7;
printf("%d,%d", i/j, i%j);
}
```

+17

↑ as Numeric constant

integer and integer

$17/-7$

Q : -2

R : 3

$17/-7$

Q = -2

Remainer -3

-2

$-\frac{\cancel{17}^{2}}{7} = 1 = -2$

[✓ A] -2, 3

B 2, -3

C 2, 3

D -2, -3

Remainder :

Dividend +ve

Remainder +ve

[A]

[MCQ]

#Q. Identify the correct Precedence of below operators:

I) ++ (Postfix)

II) && (Logical AND)

III) ^ (Bitwise XOR)

IV) >> (Right Shift)

unay operator

Rightshift Operator

Bitwise XOR

Logical AND

A I, II, III, IV

B I, III, II, IV

C I, IV, II, III

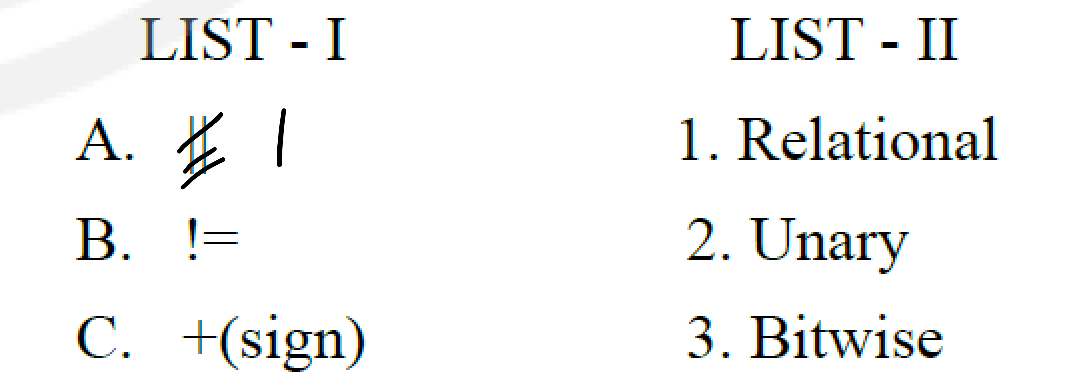
[✓ D] I, IV, III, II

[D]

[MCQ]

#Q. Match the following:

|| Logical or



LIST - I	LIST - II
A. ~~||~~ |	1. Relational
B. !=	2. Unary
C. +(sign)	3. Bitwise

A — 3

B — 1

C - 2

A. A-2, B-3, C-1

B. A-3, B-2, C-1

[✓ C.] A-3, B-1, C-2 [C] Answer

D. A-2, B-1, C-3

[MCQ]

#Q. Which of the below operators associativity is Right To Left?

A Shift Operators - Left to Right

B Logical Operators Left to Rig

C Prefix, Unary Operators

✓

D Arithmetic Operators

Associativity Right to Left

[C]

operator = operator

? operator

prefix

$$\underline{*}\ \underline{\&}\ \sim\ \underline{!\ a}$$

↑

←

Right to Left.

[MCQ]

#Q. Which of the below operators Which combination of the integer variable x, y and z makes the variable a get the value 4 in the following is expression?

a = (x > y) ? ((x > z) ? x : z) : ((y > z) ? y : z)

3 4   3 2   3 2   4 2 4 2

? 3   4

[✓ A] x = 3, y = 4, z = 2

B x = 6, y = 5, z = 3

C x = 6, y = 3, z = 5

D x = 5, y = 4, z = 5

MCQ — [A]

[MCQ]

#Q. The output of below C code is ______

```
void main()
{
int x;
x= 7 + 4 * 5 / 2 - 2;
printf("%d", x);
}
```

Left

↙

$$x = 7 + \underline{4 * 5}/2 - 2$$

$$= 7 + \underline{20/2} - 2$$

$$= 7 + 10 - 2$$

$$= 17 - 2 = 15$$

[A]

[✓ A] 15

B 13

C 25

D 11

[MCQ]

#Q. The output of below code will be ______

```
void main()
{
int i=5, j=-3, k=0;
int x;
x= i ? j ? k ? k : i : j : k;
printf("%d", x);
}
```

$\boxed{5}$

? operator is Right Associative

$5 ? -3 ? \boxed{0 ? 0 : 5} : 3 : 0$

$= 5 ? \boxed{-3 ? 5 : 3} : 0$

$= 5 ? 5 : 0$

$x = 5$

A 0

B -3

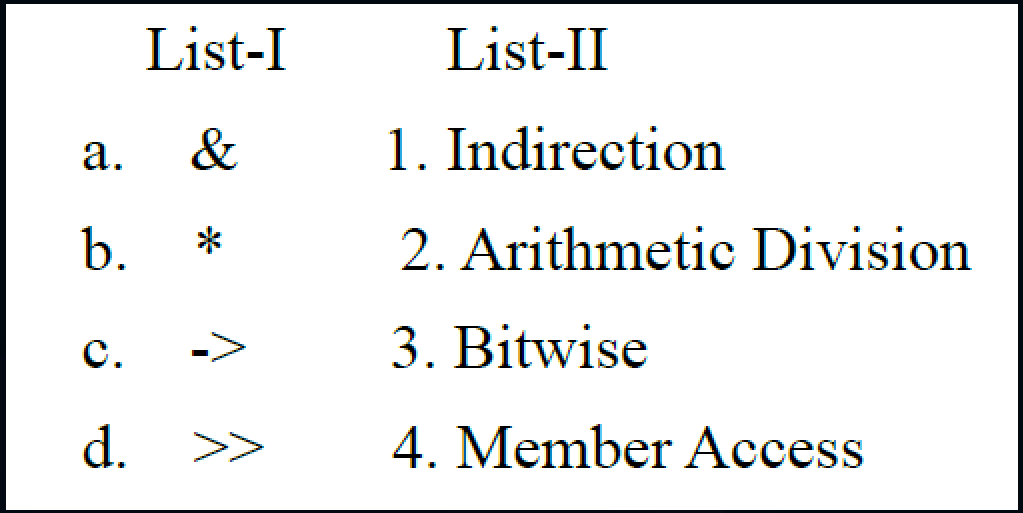
[✓ C 5]

D Error

[c] Ans

[MCQ]

#Q. Match The Following:



	List-I	List-II
a.	&	1. Indirection
b.	*	2. Arithmetic Division
c.	->	3. Bitwise
d.	>>	4. Member Access

& - bitwise AND a - 3

* → Indirection — b - 1

→ . Member Access - C-4

>> Right shift - Divide by 2

d - 2

A a-2, b-3, c-1, d-4

B -a-3, b-1, c-2, d-4

[✓ C] a-3, b-1, c-4, d-2

D a-3, b-4, c-1, d-2

[C] Ans

[MCQ]

+ and - having higer precedence than >>

#Q. What is the output of below code?

```
int main()
{
int a;
a= 18 + 43 / 2 * 3 >> 4 – 2;
printf(“%d”, a);
return 0;
}
```

$a = 18 + \underline{43/2} * 3 >> 4 - 2$

$= 18 + 21 * 3 >> 4 - 2$

$= 18 + 63 >> 4 - 2$

$= 81 >> 2 = \frac{81}{2^2}$

$= \frac{81}{4} = 20$

A 3

B 4

C 5

[✓ D] 20

Ans - $\underline{D}$ 20 Ans

THANK - YOU