



**B.Sc. (Electronics) SEMESTER VI**

**Paper I**

**(Programming In 'C')**

**Unit I**

History of C, Character set, C tokens, Constant, Variables, Keyword, Identifiers, C-operators, C-expressions, formatted input, formatted output instruction ( simple program based on C)

[https://www.youtube.com/watch?v=7Dh73z3icd8&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=1](https://www.youtube.com/watch?v=7Dh73z3icd8&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=1)

[https://www.youtube.com/watch?v=Wa-kgmSLs4&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=2](https://www.youtube.com/watch?v=Wa-kgmSLs4&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=2)

[https://www.youtube.com/watch?v=9xCskNFVt2c&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=3](https://www.youtube.com/watch?v=9xCskNFVt2c&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=3)

[https://www.youtube.com/watch?v=5SIBB589fAg&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=4](https://www.youtube.com/watch?v=5SIBB589fAg&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=4)

[https://www.youtube.com/watch?v=PrVOM7M5nEY&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=5](https://www.youtube.com/watch?v=PrVOM7M5nEY&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=5)

[https://www.youtube.com/watch?v=EcUGDTs4RyY&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=6](https://www.youtube.com/watch?v=EcUGDTs4RyY&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=6)

[https://www.youtube.com/watch?v=V4Wwuu05\\_t4&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=7](https://www.youtube.com/watch?v=V4Wwuu05_t4&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=7)

[https://www.youtube.com/watch?v=XETsCR2bXJI&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=9](https://www.youtube.com/watch?v=XETsCR2bXJI&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=9)

**Unit II**

Decision making and branching statement: simple if statement, if-else statement, else-if ladder statement, nested if-else statement,

[https://www.youtube.com/watch?v=D0ACZ0uU\\_2g&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=10](https://www.youtube.com/watch?v=D0ACZ0uU_2g&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=10)

switch statement,

[https://www.youtube.com/watch?v=E8weUIY2-iw&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=11](https://www.youtube.com/watch?v=E8weUIY2-iw&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=11)

Decision making and looping:

[https://www.youtube.com/watch?v=A\\_IgufxmIHk&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=12](https://www.youtube.com/watch?v=A_IgufxmIHk&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=12)

while loop, do-while loop,

[https://www.youtube.com/watch?v=0KzWpgMLDmk&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=14](https://www.youtube.com/watch?v=0KzWpgMLDmk&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=14)

[https://www.youtube.com/watch?v=S2z0OTZozI&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=13](https://www.youtube.com/watch?v=S2z0OTZozI&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=13)



for loop,

[https://www.youtube.com/watch?v=T5\\_qpdDtTZ0&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=15](https://www.youtube.com/watch?v=T5_qpdDtTZ0&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=15)

break statement and continue statement

[https://www.youtube.com/watch?v=yeH9DZlpbmM&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=16](https://www.youtube.com/watch?v=yeH9DZlpbmM&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=16)

[https://www.youtube.com/watch?v=AWUxfROdzPc&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=17](https://www.youtube.com/watch?v=AWUxfROdzPc&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=17)

[https://www.youtube.com/watch?v=qc7FU9jWAXk&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=18](https://www.youtube.com/watch?v=qc7FU9jWAXk&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=18)

### **Unit III**

Array: declaration and initialization of one dimensional and two dimensional arrays,  
Character array, accessing array element,

[https://www.youtube.com/watch?v=qKFBtCPwjI&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=23](https://www.youtube.com/watch?v=qKFBtCPwjI&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=23)

Structure: defining, declaring and accessing, initialization of structure, array of structure

[https://www.youtube.com/watch?v=J464pe6ZTrE&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=37](https://www.youtube.com/watch?v=J464pe6ZTrE&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=37)

Union: defining, declaring and accessing, initialization of union

[https://www.youtube.com/watch?v=C3zS6WPxHPY&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=39](https://www.youtube.com/watch?v=C3zS6WPxHPY&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=39)

Standard string handling functions: strlen(), strcpy(), strcat(), strcmp()

[https://www.youtube.com/watch?v=fltaqGek-oA&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=34](https://www.youtube.com/watch?v=fltaqGek-oA&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=34)

[https://www.youtube.com/watch?v=L2aTSqTcJs8&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=35](https://www.youtube.com/watch?v=L2aTSqTcJs8&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=35)

### **Unit IV**

Function: Need of function, scope and lifetime of variable, delay function, return values,

[https://www.youtube.com/watch?v=CSJLuARMzg0&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=19](https://www.youtube.com/watch?v=CSJLuARMzg0&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=19)

category of function, recursion

[https://www.youtube.com/watch?v=P5TdIWxYz4I&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=21](https://www.youtube.com/watch?v=P5TdIWxYz4I&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=21)

function call, call by value, call by reference,

[https://www.youtube.com/watch?v=6R0jNW6j2NA&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=31](https://www.youtube.com/watch?v=6R0jNW6j2NA&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=31)



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Pointers: defining pointer, declaring pointer variable, initialization of pointer variable, accessing address of variable, pointer expression, pointer arithmetic

[https://www.youtube.com/watch?v=HQzIJJTTCBk&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=52](https://www.youtube.com/watch?v=HQzIJJTTCBk&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=52)

[https://www.youtube.com/watch?v=lWX0nSBxcrc&list=PLu0W\\_9III9aiXIHcLx-mDH1Qul38wD3aR&index=53](https://www.youtube.com/watch?v=lWX0nSBxcrc&list=PLu0W_9III9aiXIHcLx-mDH1Qul38wD3aR&index=53)