

Compiler Design UNIT–III PYQ Analysis

Type Checking & Run Time Environment

Tumhare uploaded PYQ papers me **Unit–III se direct aur indirect questions** mostly **Run Time Environment, Symbol Table, Type Checking, Storage Allocation** se aaye hain.

YEAR-WISE UNIT–III QUESTIONS

December 2017

Q5(a)

What are the difficulties faced by memory allocation for variable length required? Under what circumstances does external fragmentation happen?

 Topic:

Storage Allocation, Dynamic Storage Allocation, Fragmentation

 Very Important

Q5(b)

Explain the concept of type checking and type conversion with an example.

 Topic:

Type Checking, Type Conversion

 Most Important

Q8(b)

Write short notes on: Symbol Table

 Topic:

Symbol Table

 Very Important

 **June 2020**

Q4

What are the typical entries in a symbol table? What are the various data structures used to implement the table?

 Topic:

Symbol Table, Data Structures for Symbol Table

 Most Important



MOST REPEATED UNIT–III TOPICS

| Topic | Frequency | Importance |
|----------------------------|------------------|-------------------|
| Symbol Table | 2 times | ★★★★★ |
| Type Checking | 1 time | ★★★★ |
| Type Conversion | 1 time | ★★★★ |
| Storage Allocation | 1 time | ★★★★ |
| Dynamic Storage Allocation | 1 time | ★★★★ |
| External Fragmentation | 1 time | ★★★★ |



MOST EXPECTED QUESTIONS FOR EXAM

★ Very High Chance

1. Explain Symbol Table. What information is stored in it?
2. Explain type checking and type conversion with example.
3. Explain storage allocation strategies.
4. Explain dynamic storage allocation and fragmentation.

★ High Chance

5. Explain Run Time Environment with memory layout.
 6. Explain parameter passing methods.
 7. Explain type system and type equivalence.
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⚡ One Night Revision Priority

1. Symbol Table
2. Type Checking + Type Conversion
3. Storage Allocation Strategies
4. Dynamic Storage Allocation
5. Run Time Environment
6. Parameter Passing
7. Type Equivalence
8. Overloading and Polymorphism

✅ Final Prediction

Unit-III me sabse pehle **Symbol Table, Type Checking & Conversion**, aur **Storage Allocation** strong kar lo. Ye topics PYQ me clearly repeat hue hain aur 7-mark/14-mark dono me aa sakte hain.