SFE 30

SECOND YEAR - FIRST TERM EXAM

COMPUTER SCIENCE

1. dot operator

2. Pointer

3. object

4. Traversal

5. Link

6. Transmission Control Protocol / Internet Protocol

7. The dereference operator (*) Retrieves the value at the location pointed to by the pointer

8. New - Allocation of memory during Run time

   Delete - To ~~deallocate~~ de-allocate the memory.

9. == (Equality) and

   != (non-equality)

10.
```
class classname
{
  private:
      variable declarations;
      function declarations;

  public
      variable declarations;
      function declarations;
};
```

11. Implementation denotes how variables are declared, how functions are coded etc:- It is through interface (function header/function signature) a communication is send to the object as messages.

12. Inheritance is the process by which objects of one class acquire the properties and functionalities of another class.

13. Data structure is a particular way of organising similar or dissimilar logically related data items which can be processed as a single unit.

14. Linked List is a dynamic data structure. It grows as and when new data items are added in the list and shrinks whenever any data is removed from the list Memory will not be allocated in advance for the entire list

15. The limitations of linear queue can be overcome by circular queue. Circular queue is a queue in which the two end point meet [Ref: example given in Page 73 SCERT Text Book]

16. A Web Server consists of a Server Computer that runs a Server operating system and a web server software installed on it for providing services like www, e-mail etc:- over the internet.

17. Page No 99 SCERT Text Book.

18. Page No : 102 SCERT Text Book.

19. Page No: 18 SCERT Text Book.

20. Static Memory Allocation - Memory allocation

that takes place before the execution of the program ⑧

Dynamic Memory allocation - Memory allocated during the execution of the program.

21. Page No : 32 SCERT Text Book.

22. Structure pointer and an element is connected using arrow operator (→)

Structure pointer → element name.

23. Page 46 SCERT Text Book.

24. Page No 54 - 56 SCERT Text Book.

25.

Stack	Queue
LIFO Principle	FIFO principle
Inserting new data is called Push	Insertion is the process of adding a new item
Deleting an item is called Pop	Deletion is the process of removing an item

26. Page 61 SCERT Text Book.

27. overflow :- once the stack is full and if we attempt to insert an item, an impossible situation arises. This is known as stack overflow

underflow :- The stack is empty and if we try to delete an item from the stack, an unfavourable situation arises. This situation is known as stack underflow.

28. Page No 95 SCERT Text Book

29. Page 92 SCERT Text Book

30. Client to web server Communication and web server to web server Communication [Ref Page 88, SCERT Text Book]

~~31.~~

31. a) struct date
```
{ int day;
  char month[10];
  int year;
};
```

b) struct studata
```
{
  char name[10]
  date dob;
}
```

c) struct employee
```
{ int ecode;
  char ename[15];
  employee *ep;
}
```

32. a) Page 67 SCERT Text Books
b) Page 72 SCERT Text Books
c) Page 67/72 SCERT Text Book.

33. a) SMTP, POP3

b) Traditional programming languages are set of instructions carried out by the computer hardware with the help of an operating system, whereas scripting languages are interpreted by a web server or by a web server software.

c) Page 104 SCERT Text Book.