1). What is c language?

sol C is a general-purpose, Procedural programming language developed by Dennis Ritchine in the 1970s. It is simple, fast, and is often used to write system software like operating systems, device drivers, and embedded systems. C gives direct access to memory, uses a structured approach (breaks code into functions) and is protable across different computer platforms. It forms the foudation for many other popular programming languages such as C++ Java and python.

② Application of C?

sol

1). Operating systems Development :-

Major parts of windows, Linux, and unix are written in C.

② Device Drivers :- Drivers for printers, tablets, scanners, graphics card are written in C

③ Embedded systems :- Used in devices like microwave ovens, washing machines, cameras, and smart watches.

④ Game Development :

C (and C++) is used to develop high-performance games.

④ What is variable?

In c programming, a variable is a named storage location in memory. A collection of elements of the same data type.

B) Pointer:- stores the memory address of another variable.

c) structure:- used to combine different data types into a single unit.

d) union:- similar to structure but memory is shared b/w members.

e) function:- A block of code that performs a specific task.

f) User-Defined Data Types

These are created by the programmer to specific needs.

g) Typedef

Used to give a new name to an existing data type.

h) Enum

Used to assign names to integer constants, improving code readability.

⑤. What is format specific.

Sol A format specifier is a special symbol used in functions like printf() and scanf to tell the compiler what type of data want to print or that holds a value. This value can be changed. or "varied" during the execution of a program. Variables are fundamental for storing and manipulating data

-Within a c program.

(4). What is the different data types

(1) Primary (Basic) Data Types:-

These are the fondamental data types provided by the clanguage

a) int ⇒ used to store whole numbers
size:- 2 (or) 4 bytes

b). float ⇒ used to store decimal numbers
size:- 4 bytes.

c) Double ⇒ used to store large floating-point numbers with doobe predision
size:- 8 bytes

d). char ⇒
used to store a single character
size :- 1 byte

(2) Derived Data Types

These data types are derived from the basic data types

a) Array

Data Type	F.S	Example
int	%d	Printf("%d",a);
float	%f	Printf("%f",b);
Double	%lf	Printf("%lf",c);
char	%c	Printf("%c",ch);
string	%s	Printf("%s",a);