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, tables, 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.

③ 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.

a) User - Defined Data Types
These are created by the programmer f8 specific needs.

a). Typedef
Used to give a new name to an existing data Type.

b) Enum
Used to assign names to integer contants, improving code readability.

⑤. What is format specific.

S1 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 funda-mantal for storing and manipulating data

- Within a c program.

④. What is the different data types

(1) Primary (Basic) Data Types:-
These are the Fundamental data Types provided by the c language

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 double precision
  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);