❖ *Classification of computer:-*

- ✓ *Computers are classified on the basis of cost, speed, memory, size power supply and generation.*
- ✓ *Generation refers to major development in electronic data processing.*
- ✓ *There are given below some generation of computer:*

➢ *First generation computer:-*

- *They are based on vacuum tube technology.*
- *Thousand of vacuum tube where used to built a computer.*
- *This computer very large in size.*
- *One vacuum tube equal to one electric bulb uses the filament for electronic control of signal.*

➢ *Features:-*

i. *They were too large in size.*
ii. *Required large room for installation.*
iii. *They emit large amount of heat.*
iv. *They need AC to keep this computer.*
v. *Power consumption of these computers was very high.*
vi. *They had a limited life because vacuum tube burst frequently.*

Example: ENIAC, EDVAC, EDSAC.

➢ *Second generation computer:-*

- *The major contribution was three scientists John, William and Walter at Bell laboratories in 1947.*
- *They invented transistor is made up of semi-conductor material which is made up of silicon for which they received Nobel Prize.*
- *Vacuum tube replaced by the transistor.*

➢ *Features:-*

i. *10 time faster than first generation computer.*
ii. *They are much smaller requiring small space.*
iii. *They emit much less heat than first generation computer.*
iv. *They consume less power consumption in comparison to first generation computer.*
v. *They are more reliable.*
vi. *They had wide commercial use.*

Example: UNIVAC, IBM, CPC164 etc.

➢ *Third generation computer:-*

- *In third generation computer technology was completely changed.*
- *Transistor was replaced by IC in 1964.*
- *IC made up of transistor and other electric component.*
- *Initially IC contain only 10 to 20 electronic components these technology was named SSI.*
- *Later than advancement of this technology become possible to integrate up to 100 electronic components this is called MSI.*

➢ *Features:-*

i. They are much powerful than second generation computer.
ii. They are much smaller than second generation computer.
iii. They emit much less heat than second generation computer.
iv. They consume less power than second generation computer.
v. Commercial use is wider and cheaper.
vi. Many high level languages like BASIC, KOBOL, PASCAL etc were developed.

Example: Microsoft (main frame computer)

- Fourth generation computer:-
  - IC was replaced by the micro processor contain an entire electronic central processing.
  - Technologies: LSI, VLSI used in single chip.

- Features:-

i. Social revolution PC was used.
ii. It is faster and reliable.
iii. HLL was developed.
iv. Consume less power.
v. Total general purpose machine.
vi. Affordable by individual.

- Fifth generation computer:-
  - This are also based on micro processor but too advancement in computer science design into technology to enable the creation of fifth generation.

- *VAN NUMANN's single processor was replaced by parallel processing.*
- *VLSI replaced by ULSI contain 10 billion electronic component fused in a single chip.*

- *Features:-*

i. *Portable computer comes like laptop.*
ii. *Internet becomes a popular way for information exchange.*

Footer By:-Abhay Kumar Mishra
Maharaja college Ara