in effective actions, to understand the words we read, to recognise the objects we see, to decode the auditory signals representing speech, and even to provide us with a personal identity and sense of self.

Learning is acquiring new knowledge, behaviours, skills, values, preferences or understanding, and may involve synthesising and processing different types of information.

Memory is usually divided into three storage systems: sensory, short-term, and long-term.

We then discussed Miller's Magic number. We pointed out how within STM, there are 3 basic operations, viz., iconic memory, acoustic memory and working memory. Long Term Memory has been then presented which includes schemas etc. Then the principles of information processing was taken up and and highlighted the limited capacity of the mental system and secondlhy the control mechanism is required to oversee the encoding, transformation, processing storage etc.

Then we dealt with information processing in learning and memory. It was pointed out that from an information processing perspective some of the most important aspects include

- Brain changes brought about by biological maturation or experience;

- Increased processing capacity, speed, and efficiency as a result of both maturation and knowledge development;

- Modifications of connections in a neural network;

- New emergent concepts arising from repeated self-organisation as a result of adapting to the demands of a changing environment; and

- Increased capacity for problem-solving and metacognition.

Then we discussed about encoding which involves structuring, organising, storage, retrieval etc. This was followed by theories of informationprocessing which highlighted Bloom's Taxonomy and Sternberg's information processing theory. It was pointed out that that new information can most effectively be learned if the material can be matched to memory structures already in place. Most theories hold that the mind contains some type of framework into which new information is placed. This structure is multi-leveled and has varying degrees of specificity. New information can be matched with, compared to, contrasted to, joined with, or modified to fit with existing structures.

2.7 UNIT END QUESTIONS

1) Describe two characteristics each of sensory memory, short term memory, and long term memory.

2) Discuss the information processing approaches of learning and memory.

3) How would you design a study program to process the information so that it can be retained in long term memory?

4) Describe the development of memory with reference to information processing.