

(d) **HARMONES** — Hormones are the chemical secretion of endocrine glands responsible for change in behaviour. The role of a hormone can be assessed either by the administration of exogenous hormone or by removal of endocrine gland.

LEARNING — The process of learning can be defined as an adaptive change of behaviour from past experiences, this process is characterized by fluidity, what is learned may vary very individual to another and resulting behaviour can be modified if there are environmental changes.

CATEGORIES OF LEARNING — It can be classified into five categories -

(i) **HABITUATION** — It is the process in which the animal learns not to react to any particular repeated stimuli.

For example, *Isabella*.
If touched *Isabella* frucks
back into its tube. If a
tentacle is repeatedly stimu-
lated the worm quickly
stops reacting through it
may continue to give slow
movements of the body.
Eventually time also sees
that adaptation of touch
receptors. Its not involved
can be explained by sti-
mulating another region
of the tentacle.

(ii) ASSOCIATIVE LEARNING — In this
process an animal learns
to associate a particular
response with a reward or
punishment. The words
rewards and punishment
are applicable only in the
artificial condition. In nat-
ural environment their
winter part can be used.
Finding food or mate is equi-
valent to a reward and
being attack by another animal
is equivalent a punishment.
In associative learning, the
animal remembers its past experi-

comes and modifies its behaviour accordingly.

EXPLORATORY — If a rat is placed in a maze, in its preliminary experience the rat subsequently used in finding its way from one end to the other. It is very striking that how a well nourished rat, which has no need to search for food or water will nevertheless run busily here and there sniffing into corners and investigating every nook and cranny. This is what is meant by exploratory learning. The exploration

Learning is extremely important in the lives of many animals for it enables them to find their ways about their environment.

(iv) IMPRINTING — According to Konrad Lorenz, the young geese follow the first thing they see after they are born. Generally, after their birth, the first object they see is their mother and the geese follow them. This is what the child imprints on or follow as their parents.

(v) INSIGHT LEARNING — It can be defined as the ~~own~~ comprehension and response to a new situation without trials and errors. As such it would appear to involve some kind of mental reasoning or intelligence. In human behaviour the concept of insight is perhaps applicable.

SOCIAL BEHAVIOUR — According to Allie, social behaviour in animals follows three general principles — Territorial rights

dominance and subordination relationship and leadership behaviour.

TERRITORIAL DOMINANCE, SUBORDINANCE RELATIONSHIP

→ In this type of social behaviour one animal in a group dominates over the others. It was first observed by Ebbe in 1922. In a poultry flock, one hen dominates over the others and pecks the other members without without being pecked in turn. Male dominance is seen in the case of a Sage grouse in Western prairie. In this case a dominant male occupies an area at the time of breeding season while the other less dominant forms form a ring around that area.