

15/11/2020

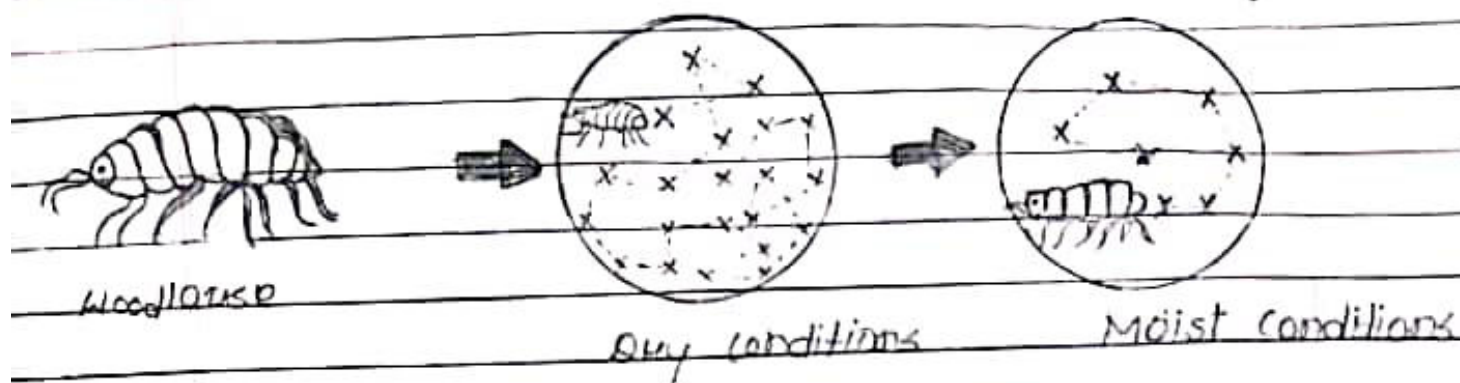
Dr. Rajesh Verma, Assistant Professor and Head, U.G. Department of Zoology, D.K. College Dumraon, (Bhokra). Notes for B.Sc part 1st, paper 2(A).

Question :- Write notes on an INNATE BEHAVIOUR ?

Answer :- Instinct or innate behavior is the inherent inclination of a living organism towards a particular complex behavior. The simplest example of an instinctive behavior is a fixed action pattern (FAP), in which a very short to medium length sequence of actions, without variation, are carried out in response to a corresponding clearly defined stimulus. Any behavior is instinctive if it is performed without being based upon prior experience (that is, in the absence of learning), and is therefore an expression of innate biological factors. sea turtles, newly hatched on a beach, will automatically move toward the ocean.

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Innate Behaviour

History :-

In animal biology :-

Jean Henri Fabre (1823 - 1915), an entomologist, considered instinct to be any behavior which did not require any cognition or consciousness to perform. Fabre's inspiration was his intense study of insects, some of whose behaviors he wrongly considered fixed and not subject to environmental influence.

Instinct as a concept fell out of favor in the 1920s with the rise of behaviorism and such thinkers as B.F. Skinner, which held that most significant behavior is learned.

In humans :-

The existence of simplest instincts in humans is a widely debated topic.

- ① Congenital fears of snakes and spiders was found in six-month-old babies.
- ② Infant cry is a manifestation of instinct. The infant cannot otherwise protect itself for survival during its long period of maturation. The maternal instinct manifest particularly in response to the infant cry, has long been regarded as one of the most powerful. Its mechanism has been partly elucidated by observations with functional MRI of the mother's brain.
- ③ The head instinct is found in human children and chimpanzee cubs, but is apparently absent in the young orangutans.
- ④ Testosterone (main male sex hormone) primes several instincts.

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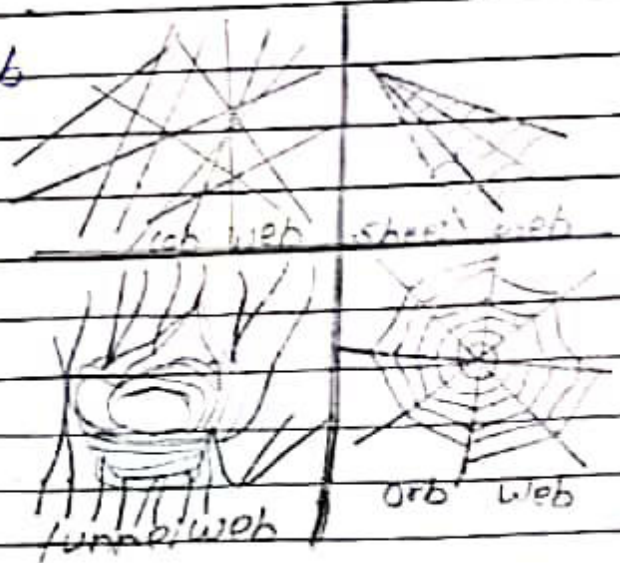
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Final

especially sexuality, also dominance, manifest in self-affirmation, the urge to win over rivals (see competitiveness), to dominate a hierarchy (see dominance hierarchy), and to respond to violent signals in men (see aggression), with weakening of empathy.

Innate Behaviour

- spider spins web correctly first time
- wasp builds paper nest
- Termites build mounds



Maturational :-

Some instinctive behaviors depend on maturational processes to appear. For instance, we commonly refer to birds "learning" to fly. However, young birds have been experimentally reared in devices that prevent them from moving their wings until they reached a