

Revision Notes

Chapter 5: Sensory, Attentional and Perceptual Processes

- Knowledge of our internal and external world becomes possible with the help of senses. Five of them are external senses, and two are internal senses. The sense organs receive various stimuli and send them in the form of neural impulses to specialised areas of brain for interpretation.
- Vision and audition are the two most widely used senses. Rods and cones are the receptors for vision. Rods function in low intensities of light, whereas cones function at high intensities of light. They are responsible for achromatic and chromatic vision, respectively.
- Light and dark adaptations are two interesting phenomena of the visual system. Hue, saturation and brightness are the basic dimensions of colour.
- Sound serves as stimulus for auditory sensations. Loudness, pitch, and timbre are the properties of sound. Organ of corti located in the basilar membrane is the chief organ of hearing.
- Attention is a process through which we select certain information by filtering out many others that appear to be irrelevant at a given moment of time. Activation, concentration, and search are important properties of attention.
- Selective and sustained attention are two major types of attention. Divided attention is evident in the case of highly practiced tasks in which there is much automaticity of information processing.
- The span of attention is the magical number of seven plus and minus two.
- Perception refers to the processes of interpretation and informed construction of the information received from sensory organs. Human beings perceive their world in terms of their motivations, expectations, cognitive styles, and cultural background. • Form perception refers to the perception of a visual field set off from rest of the field by visible contours. The most primitive form of organisation takes place in the form of figure-ground segregation.
- Gestalt psychologists have identified several principles that determine our perceptual organisations.

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- The image of an object projected on to the retina is two dimensional. Three dimensional perception is a psychological process that depends on correct utilisation of certain monocular and binocular cues.
 - Perceptual constancies refer to invariance of our perceptions of an object seen from any position and in any intensity of light. There is good evidence for size, shape, and brightness Constancy.
 - Illusions are the examples of nonveridical perceptions. They refer to misperceptions resulting from misinterpretation of information received by our sensory organs. Some illusions are universal, while others are more personal and culture-specific.
 - Socio-cultural factors play an important role in our perceptions by generating differential familiarity with and salience of stimuli as well as certain habits of perceptual inference among people.