**6 Consciousness**

What is consciousness

* Consciousness has been defined as consisting of inner, qualitative, subjective states and feelings or awareness.
* The ‘hard problem’ of consciousness is the question of how a physical organ (the brain) produces the seemingly disembodied subjective state of consciousness.
* Altered states of consciousness (ASC) include sleep, dreams, hypnosis, hallucinations, meditations, and drug states.

Sleep

* The urge to sleep is profound, although individuals vary in the amount of sleep they need. Total sleep deprivation results in severe impairments in functioning.
* Sleep patterns are regulated by the circadian pacemaker and sleep homeostat. There are two types of sleep: REM and NREM.
* REM is characterized by high levels of nervous system activity and vivid dreaming.
* NREM, which covers the greater portion of sleep time, is characterized by the deepest levels of relaxation. Sleep is experienced in five sleep stages, which play out in a 90–110-minute repeated cycle throughout the night.
* The function of sleep is unknown, but the most often-discussed current theories are the ideas that sleep promotes memory consolidation and that sleep allows for synaptic pruning.

Dreaming

* There is little agreement as to the nature and function of sleep mentation, which can be categorized as cognitive activity, ordinary dreaming, and apex dreaming.
* Cognitive activity during sleep is often called ‘sleep thinking’.
* Ordinary dreaming involves recognizable characters engaged in relatively realistic activities.
* Apex dreaming are the most intense, vivid, bizarre, hallucinatory dreams.
* Of the numerous theories advanced regarding the purpose of dreams, none is accepted by all, but it is clear is that dreams have meaning to the dreamer, consisting of content drawn from each person’s life history, circumstances, emotions, and subjective experience.

Sleep disorders

* Many people have problems sleeping, but only a few experience a genuine sleep disorder.
* Insomnia is a chronic difficulty falling asleep, staying asleep, and/or being unable to obtain restful sleep.
* Obstructive sleep apnoea (OSA) is marked by frequent—and usually unrecognized— moments of awakening throughout the night, caused by the inability to breathe.
* Parasomnias are characterized by unusual or bizarre physical behaviours, perceptions, dreams, or emotions during sleep.
* Narcolepsy is characterized by abruptly falling asleep at inappropriate times and places.

Hypnosis: an altered state of consciousness?

* The question of whether hypnosis is an actual ASC is known as the ‘special state’ vs ‘non-state’ debate.
* State theory proposes that hypnosis is a true ASC, whereas sociocognitive theory proposes that behaviours seen under hypnosis can be produced without any special procedures.
* Research suggests that a hypnotic state can be induced merely by giving suggestions when the subject believes he or she is being hypnotized. Hypnotized individuals do not have improved recall of past events, cannot ‘regress’ to infancy or ‘past lives’, can lie just as easily as at other times, and cannot achieve feats of strength or endure pain beyond their ordinary capabilities.

Psychoactive drugs and consciousness

* A psychoactive drug is any substance with properties that affect mental life or consciousness. Non-medical or ‘recreational’ drug use includes all uses specifically intended to alter consciousness.
* Most humans worldwide use psychoactive drugs such as alcohol, nicotine, or caffeine.
* It is difficult to obtain accurate information about non-medical drug use because powerful moral, social, economic, and political interests are involved.
* Addiction was traditionally defined as dependent and compulsive use of a drug which resulted in withdrawal, craving, and tolerance. However, so-called non-addictive drugs can produce craving and dependence as powerful as addictive drugs.
* All substances are potentially toxic if taken in sufficient quantities.

The most dangerous drugs in terms of potential for death and disease are alcohol and tobacco, although when taken in moderation, alcohol is safe and may even have beneficial properties.