Psychology’s History and Approaches  Psychology traces its roots back to Greek philosophers’ reflections on human nature. Psychologists’ initial focus on mental life was replaced in the 1920s by the study of observable behavior. As the science of behavior and mental processes, psychology has its origins in many disciplines and countries. Psychology’s most enduring issue concerns the relative contributions of biology and experience. Today, psychologists recognize that nurture works on what nature endows. The biopsychosocial approach incorporates biological, psychological, and social-cultural levels of analysis. Although different perspectives on human nature have their own purposes and questions, they are complementary and together provide a fuller understanding of mind and behavior. Some psychologists conduct basic or applied research; others provide professional services, including assessing and treating troubled people. With its perspectives ranging from the biological to the social, and settings from the clinic to the laboratory, psychology has become a meeting place for many disciplines. Mastering psychology requires active study. A survey-question-read-rehearse-review study method boosts students’ learning and performance.

Research Methods: Thinking Critically With Psychological Science. The scientific attitude reflects an eagerness to skeptically scrutinize competing ideas with an open-minded humility before nature. This attitude, coupled with scientific principles for sifting reality from illusion, prepares us to think critically. Two reliable phenomena—hindsight bias and judgmental overconfidence—illustrate the limits of everyday intuition and our need for scientific inquiry and critical thinking. Psychologists construct theories that organize observations and imply testable hypotheses. In their research, they use case studies, surveys, and naturalistic observation to describe behavior; correlation to assess the relationship between variables; and experimentation to uncover cause-effect relationships. Researchers use statistics to describe their data, to assess relationships between variables, and to determine whether differences are significant. This unit concludes by briefly answering several questions that students commonly ask about psychology. These include concern over the simplification of reality in laboratory experiments, the generalizability of research in terms of culture and gender, the purpose of animal studies, the adequacy of research ethics, and the potential misuse of psychology’s knowledge.
Biological Bases of Behavior: 3A—Neural Processing and the Endocrine System. Our nervous system plays a vital role in how we think, feel, and act. Neurons, the basic building blocks of the body’s circuitry, receive signals through their branching dendrites and cell bodies and transmit electrical impulses down their axons. Chemical messengers called neurotransmitters traverse the tiny synaptic gap between neurons and pass on excitatory or inhibitory messages. The central nervous system consists of the brain and spinal cord. The peripheral nervous system consists of the somatic nervous system, which directs voluntary movements and reflexes, and the autonomic nervous system, which controls the glands and muscles of our internal organs. Hormones released by endocrine glands affect other tissues, including the brain. The most influential endocrine gland, the pituitary gland, releases hormones that influence growth, and its secretions also influence the release of hormones by other glands. The nervous system directs endocrine secretions, which then affect the nervous system.

Biological Bases of Behavior: 3A—Neural Processing and the Endocrine System. The brain’s increasing complexity arises from new brain systems built on top of old. Within the brainstem are the oldest regions, the medulla and the reticular formation. The thalamus sits atop the brainstem and the cerebellum extends from the rear. The limbic system includes the amygdala, the hippocampus, and the hypothalamus. The cerebral cortex, representing the highest level of brain development, is responsible for our most complex functions. Each hemisphere of the cerebral cortex has four geographical areas: the frontal, parietal, occipital, and temporal lobes. Although small, well-defined regions within these lobes control muscle movement and receive information from the body senses, most of the cortex—its association areas—are free to process other information. Experiments on splitbrain patients suggest that, for most people, the left hemisphere is the more verbal and the right hemisphere excels in visual perception and the recognition of emotion. Studies of people with intact brains indicate that each hemisphere makes unique contributions to the integrated functions of the brain. Consciousness is our awareness of ourselves and our environment. Cognitive neuroscientists study the links between brain activity and mental processes. Research indicates that we have a two-track mind. Conscious information processing enables us to exercise control and to communicate our mental states to others. Beneath the surface, unconscious processing occurs simultaneously on many parallel tracks. Our awareness focuses on a limited aspect of all that we experience.

BIOLOGICAL BASES OF BEHAVIOR: 3C—GENETICS, EVOLUTIONARY PSYCHOLOGY AND BEHAVIOR. Members of the human family share common behavioral tendencies but are also strikingly diverse. To what extent are we shaped by our heredity and to what degree by our life history? The conclusions—that nature is crucially important and that nurture is crucially important—are central to today’s psychology. Genes provide the blueprints that design both our universal human attributes and our individual traits. Behavior geneticists explore individual differences. By using twin, adoption, and temperament studies, they assess the heritability of various traits and disorders. Their research indicates that both nature and nurture influence our life courses. We are products of interactions between our genetic predispositions and our surrounding environments. Molecular geneticists search for genes that put people at risk for genetically influenced disorders, which has potential benefits as well as risks. Evolutionary psychologists focus on what makes us alike as humans. They study how natural selection favored behavioral tendencies that contributed to the survival and spread of our genes. For example, in explaining gender differences in sexual behavior, they argue that women most often send their genes into the future by pairing wisely, men by pairing widely. Critics maintain that evolutionary psychologists make too many hindsight explanations and underestimate the role of culture. The biopsychosocial approach to development recognizes that we are products of both nature and nurture, of genes and environment. We are also architects of our future. The stream of causation runs through our present choices.
Sensation and Perception. Sensation is the process by which we detect physical energy from our environment and encode it as neural signals. Perception is the process of organizing and interpreting sensory information, enabling us to recognize meaningful objects and events. The task of each sense is to receive stimulus energy, transform it into neural signals, and send those neural messages to the brain. In vision, light waves are converted into neural impulses by the retina; after being coded, these impulses travel up the optic nerve to the brain’s visual cortex, where they are interpreted. The Young-Helmholtz and opponent-process theories together help explain color vision. In hearing, sound waves are transmitted to the fluid-filled cochlea, where they are converted to neural messages and sent to the brain. We locate sounds by differences in the timing and loudness of the sounds received by each ear. Together, the place and frequency theories explain how we hear both high-pitched and low-pitched sounds. The sense of touch is actually four senses—pressure, warmth, cold, and pain—that combine to produce other sensations, such as “hot.” A kinesthetic sense and a vestibular sense together enable us to detect body position and movement. Taste, a chemical sense, is a composite of sweet, sour, salty, bitter, and umami sensations and of the aromas that interact with information from the taste buds. Smell, also a chemical sense, does not have basic sensations as there are for touch and taste. In organizing sensory data into whole perceptions, our first task is to discriminate figure from ground. We then organize the figure into meaningful form by following certain rules for grouping stimuli. We transform two-dimensional retinal images into three-dimensional perceptions by using binocular cues, such as retinal disparity, and monocular cues, such as the relative sizes of objects. In perceiving motion, we assume that shrinking objects are moving away from us and growing objects are moving toward us. The perceptual constancies enable us to perceive objects as enduring in shape, size, lightness, and color, regardless of viewing angle, distance, and illumination. The constancies explain several well-known illusions. Studies of sensory deprivation reveal that, for many species, infancy is a critical period during which experience must activate the brain’s innate visual mechanisms. For example, when cataracts are removed from adults who have been blind from birth, these persons can distinguish figure and ground and can perceive color but are unable to distinguish shapes and forms. At the same time, human vision is remarkably adaptable. Given glasses that turn the world upside down, people manage to adapt and move about with ease. Clear evidence that perception is influenced by our experience comes from the many demonstrations of perceptual set and context effects. Because perceptions vary, they may not be what the designer of a machine assumes. Human factors psychologists study how people perceive and use machines and how machines and physical environments can be better suited to their use. Although parapsychologists have tried to document ESP, most research psychologists remain skeptical, particularly because the results of experiments have not been reproducible.

States of Consciousness. Our daily schedule of waking and sleeping is governed by a biological clock known as circadian rhythm. Our sleep also follows a repeating cycle. Awakening people during REM sleep yields predictable “dreamlike” reports that are mostly of ordinary events. Freud’s view that dreams can be traced back to erotic wishes is giving way to newer theories, for example, that dreams help us process information and fix it in memory or that dreams erupt from neural activity. Studies of hypnosis indicate that, although hypnotic procedures may facilitate recall, the hypnotist’s beliefs frequently work their way into subjects’ recollections. Hypnosis can be at least temporarily therapeutic and has the potential of bringing significant pain relief. Hypnosis may be an extension both of normal principles of social influence and of everyday splits in consciousness. Psychoactive drugs also alter consciousness. Depressants act by depressing neural functioning.
Although their effects are pleasurable, they impair memory and self-awareness and may have other physical consequences. Stimulants act at the synapses by influencing the brain’s neurotransmitters. Their effects depend on dosage and the user’s personality and expectations. Hallucinogens can distort judgment of time and can alter sensations and perceptions. A number of those who survive a brush with death later recall visionary experiences. Some scientists point out that such near-death experiences closely parallel reports of hallucinations and may be a product of a brain under stress. Others reject this analysis.

Learning. Learning helps us adapt to our environment. Pavlov explored classical conditioning, in which we learn to anticipate events, such as being fed or experiencing pain. In his famous studies, Pavlov presented a neutral stimulus just before an unconditioned stimulus, which normally triggered an unconditioned response. After several repetitions, the neutral stimulus alone began triggering a conditioned response resembling the unconditioned response. The behaviorists’ optimism that learning principles would generalize from one response to another and from one species to another has been tempered. We now know that conditioning principles are cognitively and biologically constrained. While in classical conditioning we learn to associate two stimuli, in operant conditioning we learn to associate a response and its consequence. Skinner showed that rats and pigeons could be shaped through reinforcement to display successively closer approximations of a desired behavior. Researchers have also studied the effects of positive and negative reinforcers, primary and conditioned reinforcers, and immediate and delayed reinforcers. Critics point to research on latent learning to support their claim that Skinner underestimated the importance of cognitive constraints. Although Skinner’s emphasis on external control also stimulated much debate regarding human freedom and the ethics of managing people, his operant principles are being applied in schools, sports, the workplace, and homes. A third type of learning that is important among higher animals is what Albert Bandura calls observational learning. Children tend to imitate what a model does and says, whether the behavior is prosocial or antisocial. Research suggests that violence on television leads to aggressive behavior by children and teenagers who watch the programs.

Cognition: 7A—Memory. Memory is the persistence of learning over time. One helpful model of human memory is the Atkinson-Shiffrin three-stage processing model, which describes how information is encoded, stored, and retrieved. More recent research has modified this model to incorporate the concept of working memory. Although some types of information are encoded automatically, other types, including information involving meaning, imagery, and organization, require effort. Mnemonic devices that use imagery and that organize information into chunks aid memory. Organizing into hierarchies also helps. Information first enters the memory through the senses. We register visual images via iconic memory and sound via echoic memory. Although our memory for information just presented is limited to about seven items, our capacity for storing information permanently is essentially unlimited. The search for the physical basis of memory has focused on the synapses and their neurotransmitters and on brain circuits. The hippocampus processes explicit (declarative) memories; even more ancient brain regions—for example, the cerebellum—process implicit (nondeclarative) memories. To be remembered, information that is “in there” must be retrieved with the aid of associations that serve as primers. Returning to the original context sometimes aids retrieval. While in a good or bad mood we often retrieve memories
congruent with that mood. Forgetting sometimes reflects encoding failure. Without effortful processing, much of what we sense we never notice or process. Memories may also fade after storage—often rapidly at first and then leveling off. Retrieval failures may be caused by proactive or retroactive interference or even by motivated forgetting. Memories are not stored as exact copies. Rather, they are constructed, using both stored and new information. Thus, when eyewitnesses are subtly exposed to misinformation after an event, they often believe they saw the misleading details as part of the event. Memory researchers are especially suspicious of long-repressed memories of sexual abuse that are “recovered” with the aid of a therapist or suggestive book. Among strategies for improving memory are studying repeatedly, making material personally relevant, activating retrieval cues, using mnemonic devices, minimizing interference, getting adequate sleep, and self-testing.

Cognition: 7B—Thinking, Problem Solving, Creativity, and Language. Concepts, the building blocks of thinking, simplify the world by organizing it into a hierarchy of categories. Concepts are often formed around prototypes, or the best examples of a category. When faced with a novel situation for which no well-learned response will do, we may use problem-solving strategies such as trial and error, algorithms, heuristics, and insight. Creative people solve problems but in novel and valuable ways. Obstacles to successful problem solving include the confirmation bias, mental set, and functional fixedness. Heuristics provide efficient, but occasionally misleading, guides for making quick decisions. Overconfidence, belief perseverance, and framing further reveal our capacity for error. Still, human cognition is remarkably efficient and adaptive. With experience, we grow adept at making quick, shrewd judgments. Language facilitates and expresses our thoughts. Spoken language is built from phonemes, morphemes, words, and the semantics and syntax that make up grammar. The ease with which children master language has sparked a lively debate over whether children acquire language through association and imitation or are biologically prepared to learn words and use grammar. Thinking and language are difficult to separate. Although the linguistic determinism hypothesis states that language determines thought, we know that thinking can occur without language, that we often think in images, and so we might better say that thinking affects our language, which then affects our thoughts.

Motivation and Emotion: 8A—Motivation. Motivation is a need or desire that energizes and directs behavior. Under the influence of Darwin’s evolutionary theory, the popular view was that instincts control behavior. Drive-reduction theory maintains that physiological needs create psychological drives that seek to restore internal stability, or homeostasis. In addition, some motivated behaviors increase arousal, and we are pulled by external incentives. According to Maslow, some motives are more compelling than others. Hunger seems to originate from changes in glucose and insulin levels that are monitored by the hypothalamus, as well as changes in the levels of leptin, ghrelin, orexin, obestatin, and PYY. To control weight, the body also adjusts its basal metabolic rate. Body chemistry and environmental factors together influence our taste preferences. Psychological influences on eating behavior are evident in those who are motivated to be abnormally thin. In studying obesity, psychologists have found that a number of physiological factors make it difficult to lose weight permanently. Those who wish to diet should set realistic goals, minimize exposure to food cues, exercise, and make a lifelong change in eating patterns. Like hunger, sexual motivation depends on the interplay of internal and external stimuli. In nonhuman animals, hormones help stimulate sexual activity. In humans, they influence sexual behavior more loosely. One’s sexual orientation seems neither willfully chosen nor willfully changed; new research links sexual orientation to biological factors. The need to belong is a major influence in motivating human behavior. Social bonds boosted our ancestors’ survival rates. We experience our need to belong when feeling the gloom of loneliness or joy of love and when seeking social acceptance.
**Motivation and Emotion: 8B—Emotions, Stress, and Health.** Emotions are psychological responses that involve an interplay among (1) physiological arousal, (2) expressive behavior, and (3) conscious experience. James and Lange argued that we feel emotion after we notice our bodily responses. Cannon and Bard contended that we feel emotion when our body responds. Schachter and Singer’s twofactor theory states that to experience emotion, we must be aroused and cognitively label the emotion. Although the physical arousal that occurs with the different emotions is for the most part indistinguishable, researchers have discovered subtle differences in brain circuits, finger temperatures, and hormones. In using physiological indicators to detect lies, the polygraph does better than chance but not nearly well enough to justify its widespread use. Some emotional responses are immediate, as sensory input bypasses the cortex, triggering a rapid reaction outside our conscious awareness. Others, especially responses to complex emotions, require interpretation. We decipher people’s emotions by “reading” their bodies, voices, and faces. Although some gestures are culturally determined, facial expressions, such as those of happiness and fear, are universal. Facial expressions not only communicate emotion but also amplify the felt emotion. Carroll Izard has identified 10 basic emotions, most of which are present in infancy. This unit examines three human emotions in detail: fear, anger, and happiness. Although we seem biologically predisposed to acquire some fears, what we learn through experience best explains the variety of human fears. Anger is most often aroused by frustrating or insulting acts that seem willful, unjustified, and avoidable. Expressing anger may be temporarily calming, but in the long run, it can actually arouse more anger. Happiness boosts people’s perceptions of the world and their willingness to help others. However, even significant good events seldom increase happiness for long, a fact explained by the adaptation-level and relative deprivation principles. Exposure to prolonged stress can increase our susceptibility to serious illness. Health psychology provides psychology’s contribution to behavioral medicine. Among its concerns are the effects of stress and how to control it, how our emotions and personality influence our risk of disease, and the promotion of healthier living. Walter Cannon viewed our response to stress as a fight-or-flight system. Hans Selye saw it as a three-stage general adaptation syndrome. Modern research assesses the health consequences of various life experiences. Coronary heart disease has been linked with the anger-prone Type A personality. Stress may also affect the progression of other serious illnesses, including AIDS and cancer.

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**Developmental Psychology.** Developmental psychologists study the life cycle, from conception to death, examining how we develop physically, cognitively, and socially. Three issues pervade this study: (1) the relative impact of genes and experience on behavior, (2) whether development is best described as gradual and continuous or as a sequence of predetermined stages, and (3) whether the individual’s personality remains stable or changes over the life span. The life cycle begins when one sperm unites with a mature egg to form a zygote. Attached to the uterine wall, the developing embryo begins to form body organs and by 9 weeks, the fetus becomes recognizably human. With the aid of new methods of studying babies, researchers have discovered that newborns are surprisingly competent. Infants develop skills of sitting, standing, and walking in a predictable sequence; their actual timing is a function of individual maturation rate. Jean Piaget theorized that the mind develops by forming schemas that help us assimilate our experiences and that must occasionally be altered to accommodate new information. In this way, children progress from the simplicity of the sensorimotor stage through the increasingly complex preoperational and concrete operational stages to abstract formal operational thought. Infants become attached to their parents largely because they are comfortable, familiar, and responsive. Denied such care, children may become withdrawn, anxious, and eventually abusive. Self-concept develops gradually, but by age 10, children’s self-images are quite stable and are linked with their independence, optimism, and sociability. Children who develop a positive self-image tend to have been reared by parents
who are authoritative but at the same time allow their children a sense of control over their own lives. Child-rearing practices also reflect cultural values that vary across time and place. Parents and peers influence development in different, but usually complementary, ways. Parents influence children’s manners as well as their political and religious beliefs. Peers are important in learning cooperation, for finding the road to popularity, and for inventing styles of interaction among people of the same age. Adolescence typically begins at puberty with the onset of rapid growth and sexual maturity. Jean Piaget theorized that adolescents develop the capacity to reason abstractly. Following Piaget’s lead, Lawrence Kohlberg contended that moral thinking likewise proceeds through stages, from a morality of self-interest to a morality of universal ethical principles. Erik Erikson theorized that a chief task of adolescence is to form one’s identity. This struggle may continue into the adult years as new relationships emerge and new roles are assumed. The time from 18 to the mid-twenties is an increasingly not-yet-settled phase of life called emerging adulthood. The barely perceptible physical declines of early adulthood begin to accelerate during middle adulthood. For women, a significant change is menopause. After 65, declining perceptual acuity, strength, and stamina are evident, but short-term ailments are fewer. Fluid intelligence declines in later life, whereas crystallized intelligence does not. Research suggests that people are not as predictable as some stage theorists have argued. Life events and even chance occurrences influence adult life in unanticipated ways. Two basic aspects of our lives—love and work—dominate adulthood. Most people retain a sense of well-being throughout life. The normal range of reactions to a loved one’s death, or to our own impending death, is wider than most suppose. Those who face death with a sense of integrity, according to Erikson, feel that their lives have been meaningful and worthwhile. Although the major stage theories have been modified in the light of later research, they continue to alert us to differences among people of different ages. Researchers who have followed lives through time have found evidence for both stability and change.

PERSONALITY. Personality is one’s characteristic pattern of thinking, feeling, and acting. Sigmund Freud, in his psychoanalytic perspective, proposed that childhood sexuality and unconscious motives influenced personality. For Sigmund Freud, conflict between pleasure-seeking biological impulses and social restraints centered on three interacting systems: id, ego, and superego. Freud believed that children develop through psychosexual stages and that people’s later problems are rooted in how they resolve conflicts associated with these stages. The neo-Freudians agreed with Freud’s basic ideas but placed more emphasis on the conscious mind and on social influences. Today, psychodynamic theorists agree with many of Freud’s views but not his idea that sex is the basis of personality. Contemporary research confirms that, more than most of us realize, our lives are guided by unconscious information processing. The humanistic perspective emphasized the growth potential of healthy people. Abraham Maslow believed that if basic human needs are met, people will strive to actualize their highest potential. Carl Rogers suggested that being genuine, accepting, and empathic helps others to develop a positive self-concept. The trait perspective attempts to describe the predispositions that underlie our actions. Through factor analysis, researchers have isolated five distinct dimensions of personality. People’s specific behaviors vary across situations as their inner dispositions interact with particular environments. The social-cognitive perspective emphasizes how internal personal factors combine with the environment to influence behavior. More than other perspectives, it builds from research on learning, cognition, and social behavior. Researchers assess how people’s behaviors and beliefs both affect and are affected by their situations. Currently, the self is one of Western psychology’s more vigorously researched topics. Studies confirm the benefits of positive self-esteem but also point to the possible hazards of unrealistically high self-esteem. Compared with defensive self-esteem, secure self-esteem depends less on external evaluations and enables us to lose ourselves in
relationships and purposes larger than self. Cultures vary in the extent to which they give priority to the nurturing and expression of personal identity or group identity.

**UNIT 11**

**Testing and Individual Differences.** Today, intelligence is generally considered to be the ability to learn from experience, solve problems, and adapt to new situations. Psychologists debate whether intelligence is one general ability or several specific abilities. Some theorists have expanded the definition of intelligence to include social intelligence, especially emotional intelligence. Psychologists have linked people’s intelligence to brain anatomy and functioning as well as to cognitive processing speed. Modern intelligence testing began more than a century ago in France when Alfred Binet developed questions that helped predict children’s future progress in the Paris school system. Lewis Terman of Stanford University used Binet’s ideas to develop the Stanford-Binet intelligence test. German psychologist William Stern derived the formula for the famous intelligence quotient, or IQ. Modern aptitude and achievement tests are widely accepted only if they are standardized, reliable, and valid. Aptitude tests tend to be highly reliable, but they are weak predictors of success in life. One way to test the validity of a test is to compare people who score at the two extremes of the normal curve: the challenged and the gifted. Studies of twins, family members, and adopted children point to significant genetic determinants of intelligence test scores. These and other studies also indicate that environment significantly influences intelligence test scores. Psychologists debate evolutionary and cultural explanations of gender differences in aptitudes and abilities. Environmental differences are perhaps entirely responsible for racial gaps in intelligence. Aptitude tests, which predict performance in a given situation, are necessarily “biased” in the sense that they are sensitive to performance differences caused by cultural experiences. However, the major tests are not biased in that they predict as accurately for one group as for another. Stereotype threat can adversely affect performance and sometimes appears in intelligence testing among some minorities and women.

**UNIT 12**

**Abnormal Psychology.** Mental health workers label behavior psychologically disordered when it is deviant, distressful, and dysfunctional. The *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR) provides an authoritative classification scheme. Although diagnostic labels may facilitate communication and research, they can also bias our perception of people’s past and present behavior and unfairly stigmatize these individuals. Those who suffer from an anxiety disorder may for no reason feel uncontrollably tense (generalized anxiety disorder), may suffer a brief episode of intense dread (panic disorder), may have a persistent irrational fear (phobia), or may be troubled by repetitive thoughts and actions (obsessive-compulsive disorder). Symptoms may also follow the experience of some traumatic event (post-traumatic stress disorder). Somatoform disorders are psychological disorders in which the symptoms take a bodily form without apparent physical cause. In dissociative disorders, conscious awareness becomes separated from previous memories, thoughts, and feelings. Those afflicted with a dissociative disorder may even have two or more distinct personalities. Mood disorders include major depressive disorder and bipolar disorder. Current research on depression is exploring (1) genetic and biochemical influences and (2) cyclic self-defeating beliefs, learned helplessness, negative attributions, and aversive experiences. The symptoms of schizophrenia include
disorganized thinking, disturbed perceptions, and inappropriate emotions. Researchers have linked certain forms of schizophrenia to brain abnormalities. Studies also point to a genetic predisposition that may work in conjunction with environmental factors. Personality disorders are characterized by inflexible and enduring behavior patterns that impair social functioning. The most common is the remorseless and fearless antisocial personality. The U.S. National Institute of Mental Health estimates that 26 percent of adult Americans suffer from a diagnosable mental disorder in a given year. National population surveys indicate that the rates of disorder vary across the world. Most who suffer from a disorder show the first symptoms by early adulthood. Poverty is clearly a predictor of mental illness.

UNIT 13

Treatment of Psychological Disorders. Mental health therapies include psychological therapies and biomedical therapies. Therapists using an eclectic approach draw from a variety of techniques. In fact, half of all psychotherapists describe themselves as taking an eclectic approach. Psychotherapy integration attempts to combine a selection of assorted techniques into a single, coherent system. Psychoanalysts use free association and the interpretation of dreams, resistances, and transference to help their patients gain insight into the unconscious origins of their disorders and to work through the accompanying feelings. Humanistic therapy focuses on clients' conscious feelings and on their taking responsibility for their own growth. Client-centered therapists use active listening to express genuineness, acceptance, and empathy. Behavior therapists emphasize the direct modification of problem behaviors. They use exposure therapies, such as systematic desensitization and aversive conditioning, and they may also apply operant conditioning principles with techniques such as token economies. Cognitive therapies aim to change self-defeating thinking by training people to view themselves in new, more positive ways. Cognitive-behavioral therapists aim to change the way people act as well as alter the way they think. Except for traditional psychoanalysis, these various types of therapies may also occur in therapist-led small groups. One special type of group therapy, family therapy, assumes that no person is an island. Research on the effectiveness of therapy indicates that people who receive therapy are more likely to improve than the untreated. No one therapy is generally more effective, but some are better than others for treating certain problems.

Administration of antipsychotic, antianxiety, and antidepressant drugs and mood-stabilizing medications constitutes the most widely used biomedical therapy. Electroconvulsive therapy (ECT), although controversial, continues to be an effective treatment for many severely depressed people who do not respond to drug therapy. Gentler alternatives to ECT are now being used. Psychosurgery is rarely used to alleviate specific problems largely because the effects are irreversible and potentially drastic. The biopsychosocial approach acknowledges that effective treatment of psychological disorders must consider biological, psychological, and social-cultural factors. Therapeutic lifestyle change recognizes these factors in a training program that treats depression through aerobic exercise, adequate sleep, light exposure, social connections, anti-rumination, and nutritional supplements. Preventive mental health experts aim to change oppressive, esteem-destroying environments into more benevolent, nurturing environments that foster individual growth and self-confidence.

UNIT 14

Social Psychology. Social psychology is the scientific study of how people think about, influence, and relate to one another. In thinking about others' behavior and its possible causes, we tend to underestimate the influence of the situation, thus committing the fundamental attribution error. Attitudes affect behavior when external influences are minimal, especially when the attitude is
stable, specific to the behavior, and easily recalled. Our actions can also modify our attitudes, especially when we feel responsible for those actions. Research on social influence indicates that behavior is contagious. When we are unsure about our judgments, we are likely to adjust them toward the group standard. Sometimes, social influences are even strong enough to make people conform to falsehoods or capitulate to cruelty. The presence of others can arouse individuals, boosting their performance on easy tasks but hindering it on difficult ones. When people pool their efforts toward a group goal, individuals may freeride on others’ efforts. Sometimes, group experiences arouse people and make them anonymous, and thus less self-aware and self-restrained. Within groups, discussions can enhance members’ prevailing attitudes and produce groupthink. A minority committed to a position can, however, influence a majority. Prejudice can be both overt and subtle. As overt prejudice wanes, subtle prejudice lingers. Social barriers and biases are often unconscious. Prejudice arises from social inequalities, social divisions, and emotional scapegoating. Prejudice also has emotional and cognitive roots. Aggression is a product of nature and nurture. In addition to genetic, neural, and biochemical influences, aversive events heighten people’s hostilities. Aggressive behavior is also learned through rewards and by observing role models and media violence. Geographical proximity, physical attractiveness, and similarity of attitudes and interests influence our liking for one another. Passionate love is an aroused state we cognitively label as love. Companionate love often emerges as a relationship matures and is enhanced by equity and self-disclosure. Altruism is the unselfish regard for the welfare of others. The presence of others at an emergency can inhibit helping. The bystander effect is most apparent in situations where the presence of others inhibits one’s noticing an event, interpreting it as an emergency, or assuming responsibility for offering help. Many factors influence our willingness to help someone in distress, including cost-benefit analysis and social norms or expectations. Conflicts are fueled by social traps and by enemies forming mirror-image perceptions of one another. Enemies become friends when they work toward superordinate goals, communicate clearly, and reciprocate conciliatory gestures.