

Unit – V

Physical Basis of Mental Life.

**I. VSAQ.**

1. CNS stands for Central Nervous System and PNS stands for Peripheral Nervous system.
2. a) Parasympathetic.  
b) Parasympathetic.  
c) Sympathetic.  
d) Parasympathetic.  
e) Parasympathetic.
3. The two divisions of the nervous systems are:
  - i. Central nervous system
  - ii. Peripheral nervous system.
4. Neurotransmitter.
5. a) The iris is a thin, circular structure in the eye responsible for controlling the diameter and size of the pupil.  
b) The Ciliary muscles which are circular contract and tend to reduce the circumference of the eyeball.  
c) The pupil is the opening in the centre of the iris, regulates and controls how much light is allowed to enter the eye.  
d) The vitreous humour is a clear fluid which fills the eye between the lens and the retina. This fluid helps the eye hold its shape, with light being transmitted through it to the retina.  
e) Retina is the innermost sensitive layer. Its functions to receive and pass on all the colour and brightness we see.
6. a) Retina.  
b) Myopia.  
c) Cataract.  
d) Accommodation.
7. a) Cartilage.  
b) Vestibule.  
c) Pain, cold.

**II. SAQ.**

1. The nervous system is composed of two major parts or subdivisions – the central nervous system (CNS) and the peripheral nervous system (PNS). The CNS includes the brain and Spinal cord. The brain is the body's "control centre". The CNS has various centres located within it that carry out the sensory, motor, and integration of data. These centres can be subdivided to lower centres including the spinal cord and brain stem and higher centres communicating with the brain via the effectors.
2. The Nervous system is classified into three systems:
  - a) **The Central Nervous system:** It includes the brain and the spinal cord. The CNS has various centres located within it that carry out the sensory, motor and integration of data.
  - b) **The Peripheral nervous system:** It consists of nerves arising from the brain and the spinal cord. It has two kinds of pathways, the afferent or receiving sensory pathways and efferent or carrying away the motor pathways.
  - c) **The Autonomic nervous system:** This system is essentially a motor system, which regulates the involuntary actions of the internal organs. It consists of two parts, sympathetic nervous system and parasympathetic nervous system.

3. The parts of brain are:  
**FOREBRAIN**- consisting of cerebrum and diencephalon.  
**MIDBRAIN** – a small tubular part between the fore and the hindbrain.  
**HINDBRAIN**- consists of cerebellum, Pons and medulla oblongata.
4. a) Sympathetic Nervous System- prepares the body for facing emergency situation ,  
b) Parasympathetic Nervous System- re-establishes the normal conditions once the emergency is over.
5. The outer region of cerebral cortex contains cell bodies of the nerve cells and being greyish in colour it is called gray matter.
6. a) **Cerebrum** – it carries out all mental activities of thinking, reasoning, planning, memorising etc.  
b) **Cerebellum**- it maintains the balance of the body.  
c) **Medulla oblongata** – it is the centre for breathing, coughing, swallowing etc.  
d) **Hypothalamus** – it controls motivation behaviour such as, eating, drinking and sex.
7. Olfactory nerve and Optic nerve. They are purely sensory nerve that carries sense of smell and visual images respectively.
8. Retina is the innermost sensitive layer. It contains two kinds of cells – the rods, which is sensitive to light, the area called no vision or blind spot. The cone, which is sensitive to bright light and colours, the area called yellow spot with best vision.
9. The nerves are going from different sense organs the brain are called sensory nerves. They are also known as ingoing nerves as they go or run towards the brain. When muscles on the body parts acts according to the instruction given by the brain is called motor nerves. In other words motor nerves carry orders for movements.
10. It connects the tympanic cavity with pharynx. It equalises the pressure on both sides of the eardrum or tympanum.
11. It is the last part of the brain, which is connected to the spinal cord. Its functions are:  
i) It is the centre for breathing, coughing, swallowing etc.  
ii) It controls heartbeat, the movements of alimentary canal and many other involuntary actions.

### III. LAQ.

1. The nervous system is composed of specialised cells called nerve cells or neurons. A neuron is a nerve cell which has two types of branches – one single axon and a number of dendrites. The dendrites are short tree like branches while the axon is smooth and slender and may be over a meter long. The function of the Dendron is to receive the nerve impulse and transmit it to the cell, while that of the axon is to conduct the nerve impulse to the muscle or gland.

Neurons are of two kinds – sensory or afferent and motor or efferent. The cell body of an afferent neuron is situated in some or other sense organ, while that of an efferent neuron is situated in some motor centre of the brain or the spinal cord. There is a third kind of neuron from the point of view of its function. It connects the afferent and efferent neurons, so it may be called connective neuron; these are central, and these are situated in the centre of the central nervous system.

When the neuron is stimulated, a nervous impulse of electrical character is produced. A nerve impulse is an energy change in the neuron. A stimulus is a “change in the environment of nervous tissue which is sufficient to excite it”.

2. Both are part of the autonomic nervous system. The sympathetic and parasympathetic nervous system work involuntarily. Sympathetic is responsible for the response commonly referred to as “fight or flight”. While parasympathetic is referred to as “rest and digest”. The sympathetic nervous system is the part of the automatic nervous system that prepared the body to react to stresses such as threat or injury. It caused muscles to contract and heart rate to increase.

Whereas, parasympathetic nervous system is part of the autonomic nervous system that control functions of the body at rest. It helps maintain homeostasis in the body. It caused muscles to relax and heart rate to decrease.

3. **a) Synapse** – Neurons begin life as separate, and remain separate cells. The form of connection, by contact only, is called a synapse. The synapse is not a physical object like the neuron. It is the point of junction between the axon of the neuron and the Dendron of the next or two neurons in the conduction path of a nerve impulse. The function of a synapse is to resist the nervous impulse, as it is conducted from one neuron to a Dendron of another.
- b) Stimulus**- A stimulus is a “change in the environment of nervous tissue which is sufficient to excite it”. Stimulation does not mean the transmission of energy into the reacting nerve cell. The energy change is connected within the neuron. It is simply released by the dendrites. It is then transmitted by way of the axon. End organs have their adequate stimulus to which they most easily react. For example, the eye reacts to light and the skin to temperature changes.
- c) Impulse**- The nature of the nervous impulse is partly electrical, partly chemical, and partly thermal. A nervous section is called a nerve current or nervous impulse, because electrochemical waves are produced in the process of nervous action.
4. **a) Cerebrum** – This is the largest part of the brain, divided into two – the right and the left called cerebral hemispheres. The functions of the cerebrum are-  
 i) It controls and initiates voluntary muscle contractions.  
 ii) It receives and processes information from the sense organs, like eyes, ear, nose etc.  
 iii) It carries out mental activities of thinking, reasoning, planning, memorising etc.
- b) Cerebellum** – The Cerebellum is a smaller region of the brain located at the base and under the cerebrum. It has numerous furrows. It also has a cortex of gray matter. Its two main functions are –  
 i) Maintain the balance of the body and  
 ii) Coordinates muscular activities.
- c) Medulla Oblongata** – This is the last part of the brain, which is connected to the spinal cord. Its functions are as follows-  
 i) It is the centre for breathing, coughing, swallowing etc.  
 ii) It controls heartbeat, the movements of alimentary canal and many other involuntary actions.
5. It is an accepted fact that there is a close relation between mind and body. Injury or disease of a part of the brain produces mental disorder or loss consciousness. Some of the influences of bodily conditions on mental processes are matters of common observation. For example, the mental stimulation but drinking strong coffee, or the various effects of alcohol at different stages of inebriation, the sedative influence if sleeping drugs is common facts. As to the influence if mental processes on bodily conditions – under hypnotic suggestion a strong pinprick ma not hurt at all; and that ordinary walking suggestion may banish fatigue.

We also find the advancement of behaviour of animals is connected with development of their nervous system. The evolution of brain, in particular, corresponds to that of intelligence. Emotional life is closely connected with thalamus, sympathetic, and parasympathetic system. There are many such instances.

There are different theories regarding the relation between mind and body. There is the theory of psychophysical parallelism, and there is also the theory of interactionism. Actually the solution of the final relation between mind and body is beyond the scope of psychology. It becomes a metaphysical problem; as it is difficult to understand how mind and body, being two entirely different entities in nature, could act and interact upon one another.

6. Perception refers to interpretation of what we take in through our senses. The way we perceive our environment is what makes us different from other animals and different from each other.

Sensation is the processes by which our senses gather information and send it to the brain. Sensation allows a child to gather information that he sees, hears, tastes and smells. These senses must first be transformed into signals that the brain can understand. The perceptual process allows the child to take in sensory information and convert it into a signal that the brain can understand and act upon.

The world is full of an endless amount of sensory experiences. Conception involves making meaning out of all this incoming information by reducing our experience of the world down to the fundamentals.

In other words, sensation involves the process of sensing our environment through touch, taste, sight, sound and smell. This information is sent to our brains in raw form where perception comes into

play. Perception is the way we interpret these sensations and therefore make sense of everything around us. Conception organises this information into categories for better understanding and comprehension.

Hence, cognition involves transforming sensory input, reducing sensory input, elaborating information, storing and recovering information, and using information.

7. Assignment – from page 54.

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## Unit – VI MENTAL HEALTH AND HYGIENE

### I. Question and Answer.

**1. Who would you call a maladjusted person?**

Ans: A person having trouble or failure to adjust to the needs of self and demands of the environment are called maladjusted person.

**2. What do you understand by the term health?**

Ans: The term 'health' is often refers to a stage of physical, mental, social and spiritual well being of an individual.

**3. Indicator/Sings of poor health.**

- 1) Restlessness.
- 2) Short-tempered and irritating behaviour.
- 3) Anger and aggressive behaviour.
- 4) Anxiety and worry.
- 5) Negative attitude towards self and others.
- 6) Excessive use of drugs.

4. Mental health and mental hygiene are closely related as both deals with the wellbeing of the mind. Mental health is the condition of having a mind that is the healthy and functioning well, while mental hygiene is the condition to promote, maintain, develop effective and efficient mental health.

5. Desirable personality, proper emotional, social and moral development and to prevent mental illness.

### II. SAQ.

1. Characteristics of Mental Health:-

- i) Mental health is a dynamic concept.
- ii) Mental health can't be decline without physical health.
- iii) Mental health and efficiency are not the same thing.
- iv) Mental health and social ability are not the same thing.

2. The indicators of poor mental Health are:-

- i) Haphazard and disorganises daily life routine.
- ii) Short –tempered and irrigating behaviour.
- iii) Anger and aggressive behaviour.
- iv) Restlessness.
- v) Increases or poor appetite and indigestion.
- vi) Irregular sleeping pattern such as insomnia, disturbed sleep, on narcolepsy.
- vii) Poor interpersonal relationship.
- viii) Anxiety and worry.
- ix) Negative attitude towards self and others.

3. Maladjustment refers to disharmony between the person and his/ her environment. Contrary to adjustment, maladjustment represents a condition or a state in which one feels that one's needs are not fulfilled and he/ she has been a failure in establishing harmony with his/ herself and the environment.

4. The causes of maladjustment are :
  - i) **Unhealthy home environment:-** includes separated family, divorced family, step parent, drunkard or drug addicted parents, single parenting, low moral and social standard of family.
  - ii) **Heredity causes:-** One may feel inferior because of inherited defective mental set up, physiological structure, colour of the skin, which could lead to maladjustment.
  - iii) **Poverty:-** when poor children meet rich children in the school, they sometimes develop jealousy, worries and inferiority complex which lead to emotional disturbances.
  - iv) **Environment causes:-** the forces of the environment begin to play their role from the conception of the child in the womb of the mother in the form of defective nourishment available to him/her.
  - v) **Faulty method of teaching:-** Faulty method of teaching does not motivate students. The lesson becomes dull and drudgery. The students begin to hate every process of education. It creates emotional tension which leads to mental illness.
  - vi) **Strict discipline:-** some traditional schools impose strict discipline, such schools are just like jails and the teachers jailors. Those students are always suffering from fear and worry.
  - vii) **Lack of guidance and counselling:-** Mastery over content and subject matter only without caring for the interest of students causes maladjustment. No guidance is provided for various areas at different levels. Students become confused, frustrated and maladjustment.
  - viii) **Mass Media:-** children are exposed to mass media, explosion of knowledge, adult issues nowadays. If the child witnesses films which depict low sexuality and violence, it may lead to maladjustment.
  - ix) **Social Laws and bindings:-** the social laws and legal binding are the most common sources of frustration in one's life. Similarly restrictions imposed by parents, teachers, ethical and other groups are common sources of maladjustment.
  - x) **Bad company/ neighbourhood:-** neighbourhood is an important conditioner of a child's behaviour. Many of our youngsters develop delinquencies because such patterns of behaviour are as seen in their neighbourhood patterns like lying, stealing, absence talk, promiscuous sex interest affect them adversely.
5. Taking care of myself, eating nutritional foods, take recreational activities, spend time in nature, go for peer support, maintain a positive attitude etc.
6. Home - Assignment.
7. Prevention of mental illness and preservation of mental health are the two major general principle of mental hygiene.
8. Maladjustment literally means 'faulty' or 'unsatisfactory' adjustment. Maladjustment refers to the failure or difficulty of the individual to adjust to the needs of self and demands on the environment.
 

Signs of maladjustment are:

  - i) Nervous disorders.
  - ii) Habit disorders.
  - iii) Behavioural disorders.
  - iv) Organic disorders.
  - v) Psychotic disorders.
  - vi) Educational and vocational difficulties.
9. The main causes of maladjustment are unhealthy home environment, heredity, social environment, poverty, mass media, social laws and binding etc.
 

Preventive measures of maladjustment are:-

  1. Proper Encouragement
  2. Proper Appreciation
  3. Delegating Responsibilities
  4. Provision of Entertainment
  5. Testing
  6. Timely help
  7. Moral Education
  8. Guidance and counselling

### III. LAQ.

1. The strategies that can adopt to maintain good health and hygiene:
  - i) **Right food:** Food is the most important aspects of life. For better health one must eat fresh fruits and vegetables with enough fibre content.
  - ii) **Right Routine:-** Routine consists of three kinds of activities in which an individual indulges in. These are taking food and doing activities as per the seasonal demands. We must eat and act according to the characteristics of seasons of the year and time of the day, i.e. day routine and night routine.
  - iii) **Recreation:** Doing exercise and morning walk are the most important components of recreation. It makes the body light and strong. It increases the immunity, resistance power of the body and capacity to work.
  - iv) **Right Thinking:-** Sound and positive mental health can only be maintained with right kind of thinking. A person who is mentally fit and healthy has self- satisfaction, accommodative intellect, ability to accept criticism, understanding of the emotional needs of others and self control.
  
2. The preventive measures of maladjustment are:-
  - i) **Proper Encouragement:-** Parents and teachers should speak daily with the child about his/her daily activities. So the child can begin to learn the principles of socialisation.
  - ii) **Proper appreciation:-** Parents and teachers should directly praise the child for the good things he/she has done.
  - iii) **Delegating responsibility:-** Parents and teachers should assign some responsibility to the child. This responsibility should evolve tasks which the child perceives as real and important.
  - iv) **Provision of Entertainment:** Provide entertainment facilities like parks, sports, clubs, amusement places theatres, museum to children. We should encourage the child to engage in playing with his/her peers.
  - v) **Testing:** In some instances, maladjustment children are eligible for special education services.
  - vi) **Pattern of relaxation:-** The teacher should set a pattern of calmness. Yoga, meditation, stress management courses etc, play very important roles in preventing maladjustment.
  - vii) **Informing progress:-** The teacher should inform the child of the progress he/she is making.
  - viii) **Timely Help:-** The teacher should help the child when he/she needs it and not only when he/she asks for it. If a teacher is wise enough to know when the child requires help, he/she may be able to help him/her avoid many traumatic failure experiences.
  - ix) **Moral Education:-** School should provide value education through various methods. Self-confidence, co-operation, caring, and sharing are the values that can be inculcated through co – curricular programmes.
  - x) **Guidance and counselling:-** If the teacher works as a guide and counsellor for parents and children, many of the negative situations can be turned into positive ones, which are beneficial for students.
  
3. According to WHO: “Mental health is a state of well – being in which an individual realises his or her own abilities, can cope with the normal stress of life, can work productively and is able to make a contribution to his or her community.”

Mental health and mental illness are increasingly being used as if they mean the same thing, but they do not. Everyone has mental health, just like everyone has health. When we talk about mental health, we are talking about our mental well- being, our emotions, our thoughts and feelings, our ability to solve problems and overcome difficulties, our social connections, and our understanding of the world around us. While, mental illness is an illness that effect the way people think, feel, behave or interact with others.

People may have poor mental health without mental illness. We all have days where we feel a bit down, or stressed out, or overwhelmed by something that’s happening in our lives. An important part of good mental health is the ability to look at problems or concerns realistically. Good mental health is not about feeling happy and confident 100% of the time and ignoring any problems. It is about living and coping well despite problems.

4. Mental health means the health of the mind. It is a state or ability of maintaining harmony or balance between the needs, desires aspiration, and attitudes of the individual with respect to the prevailing conditions in the external environment. And mental hygiene is the science that maintains a condition of health in connection with mental functions, the art of developing, maintaining, promoting necessary behavioural, emotional and social skills to sustain good effective and efficient mental health.

5. The main strategies to achieve the stage of good mental hygiene are:-

i) **Reality contact:-** In order to maintain good and sound mental health it is important to have a realistic appraisal of one's own reactions, emotions and abilities. If you are in touch with reality you may be able to avoid a number of disappointments and frustrations in your daily life.

ii) **Impulse control:-** A person with healthy adjustment would have good control over his/ her behaviours are impulses. So in order to maintain good mental health it is necessary that you should be in complete control over your impulsive behaviours.

iii) **Self- esteem:-** The awareness about oneself is called self- concept. It includes all the statements about "I" or "me" expressed in terms of feelings, beliefs, and values. Thus self- concept is the sum total of all that a person is aware about his/her own self. Self – esteem is the evaluative component of self. The personal evaluation of self could be either positive or negative. A sense of personal adequacy or positive self- concept is essential for mental health.

iv) **Positive thoughts:-** The quality of mental health depends on whether we direct our thoughts on a positive or negative manner. Negative thoughts generate negative emotions such as anger, hate, jealousy, fear and despair. The effect of such negative emotions on our mind is unhealthy. They also harm the endocrine system.

Therefore, in order to maintain good mental health, we need to develop the power of positive thinking which generates positive emotions such as love, joy, happiness, hope, compassion, empathy and optimism in us. Such emotions strengthen our capacity to cope with various life challenges.

6. i) Mental health is the condition of having a mind that is healthy and functioning well. Whereas, mental hygiene is the treatment for mental health problems.

ii) Mental health is the ability to adjust oneself with various stressful situations of the environment, while mental hygiene is the science to help individual to make adequate adjustment in the environment.

iii) Mental hygiene is the process of working to maintain mental health it involves such things as psychotherapy, medication, and even less clinical actions such as learning to mediate or reaching out of family support.

iv) Mental health is the goal we are trying to achieve, where as mental hygiene is the means by which we seek that goal.

7. The factors for determining the mental health of a child are:-

i) **School environment:-** the school environment plays a n important role in the development of positive attitudes, promotion of positive mental health and providing a conducive environment for leaning.

ii) **Democratic administration:-** Democratic administration includes the individuals conscious discrimination of environmental forces and his/her degree of independence from social influences. It has been studied that creative people follow the following order in their process, and determination to bring social changes. The school as an institution should function on democratic lines. The students should able to take decisions according to their own confidence ad wish.

iii) **Understanding of potentialities:-** The duty of the teacher is to help the child to develop proper understanding of himself/ herself and also should be helped to minimise the negative factor as far as possible for their development.

iv) **Provision of co- curricular activities:-** The school should organise co – curricular activities in such a manner that will stimulate and encourage the child to participate.

v) **Teacher role:-** The teacher can create confidence in his or her students to face realities of life which will ultimately help him to her towards promotion of mental health.

vi) **Provision for sex and Moral Education:-** Most of the problems of adolescents are concerned with sex and moral conflicts which cause mental disturbances.

8. The school influence the mental health of a child in various elements connected with the school in the following ways:-

i) **The school Environment:-** The school environment exerts powerful influence upon the child's mind, especially if it is marked by a sense of insecurity, since it fills the child's mind with external fear and anxiety. Schools infested with caste problem or religious issues are usually battlefields for various antagonistic forces that again affect the child's mind adversely.

ii) **Behaviour of the teacher:-** The teacher has a pivotal role to play in the school. His personality constantly and profoundly influences the child's personality. A teacher who behaves prejudicially towards some children or does not express his/ her sympathy uniformly or imposes bodily punishment on the children, causes fear to take root in the children neglected or punished frequently. This constant nagging fear ruins their mental health, especially if they are unceasingly nagged for small mistakes.

iii) **Lack of opportunity for self- expression:-** In schools where children are given no opportunity for expressing their reactions, they repress the natural desire to express themselves only because of fear and this repression has a destructive impact on their minds..

iv) **Method of Examination:-** Children's mental health depends even upon the method of examination used in the school. As a result of poor system of examination, weak children are promoted to higher classes beyond their mental level at the time, with the result that they remain backward throughout their careers.

v) **Unsuitable curriculum:-** Unsuitable curriculum cannot achieve the aims set before the educational structure which results in tension being generated and subsequently transmitters even to the children.

vi) **Maladjustment in the classroom:-** The class itself may also be responsible for mental disorders. A mentally healthy child not only causes problems for the teacher, but also has a baneful influence to his/ her companions.

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## **UNIT-VII** **ATTENTION AND INTEREST.**

### **I. VSAQ**

1. According to Stout, "Attention is tendency to dwell in an object so as to understand it theoretically or practically".
2. The various levels of attention – focussed, sustained, selective, alternative and divided.
3. The thing which we want to attend, we make effort to do so, and we attend with willpower, it is known as voluntary attention. Whereas involuntary attention is forced upon due to stimuli or sensation.

### **II. SAQ**

1. The size of the stimuli that is a large building will be more readily noticeable than the small ones. Hence, larger the size of a thing, the more likely one notices.  
Location is the stimuli, if the stimulus is too far it is likely that it may not attract attention but if the location of an object or anything is too near or in the centre it always gets more attention.
2. The characteristics of interest are:-
  - i) Our interest is very much linked with our wants, motives, drives and basic needs.
  - ii) Interest is a great motivating or affective behaviour.
  - iii) Interests are innate as well as acquired disposition.
  - iv) Our interest colours our vision; all our views and opinions are influenced by our interest.
  - v) Interest helps us to set our aims and gives us satisfaction in the pursuit of aims.

3. Interests are not permanent and fixed. They get changed as a result of maturation, learning and other internal as well as environmental conditions and factors.
4. The characteristics of attention are:-
  - i) Conscious process.
  - ii) Selective.
  - iii) Shifting.
  - iv) It has cognitive, affective and conative aspects.
  - v) Attention is an act, a process, a function not any power or faculty.
  - vi) It needs motor adjustments.
  - vii) Attention has a limited range.
  - viii) Attention is basically exploratory in nature.
  - ix) Attention involves both physical and mental level.
  - x) Attention is purposive.
5. As interest is not purely inborn or inherited characteristics, they are acquired dispositions. It is one's instinctive urges that get developed and modified upon so many environment factors, as one grows older. Therefore, environmental forces are responsible for giving a particular shape to the inborn or innate urges and basic drives.
6. Consciousness is the awareness of internal and external information. Consciousness is to distinguish between material of which we are immediately aware and material that is more obscure. Process of attention divides the field of attention into focus point and margin. At any moment, the field of consciousness is centred in particular object, called the focal point of attention.
7. According to Stout, "Attention is tendency to dwell in an object so as to understand it theoretically or practically".  
Attention is a mental activity, which means the process of focussing an attention on any object or aim is performed by the mind. Our attention does not focus upon a number of objects simultaneously, but only on one specific or selective object, also the attention is unstable and shifting. Attention is purposive and intuitive.

### III. LAQ.

1. Attention involves a variety of adjustment which favours the concentration of attention on some objects or material. Munn points out four common adjustments involved in the very act of attention.
  - i) **Receptor adjustment:** the head and eyes turn toward the object to be observed and there is either a continued fixation or scanning process.
  - ii) **General postural adjustment:** during reading, for instance one sits up and directs vision towards the book which is being read.
  - iii) **Muscle tension:** a person is aware of muscle tension or related feeling of effort, particularly when attention has to be directed for a long time.
  - iv) The act of attention is characterised by increased clearness in whatever may be attended to.
2. The process of attention involves five levels.
  - i) Sensory level: it begins attention. Only information of certain form will activate system. Though, thousands of stimuli are sensed but only few are selected, according to our interest etc.
  - ii) The selected information is organised even at the earliest stage of processing, depending upon the strength of the input and bias of the processor.
  - iii) After sensory processing, the information activates elements of long term memory, the repository of knowledge and combination of these sources determine the perception.
  - iv) They are selected and chosen for further processing and enter into consciousness.
  - v) We may attend to several of these precepts at once which can be responded to overtly or stored in LTM.

3. Involuntary attention is the attention that is forced upon due to stimuli or sensation. It is different from voluntary attention as this kind of attention occurs when a person is forced to attend to something against his wishes. The individual is compelled to pay attention to some stimulus although he wishes to avoid or ignored it.
4. Novelty or newness attracts attention. We are compelled to attend to anything that new or different so, it is better to introduce change or bring novelty to break the monotony and secure attention. Objects different from type we are accustomed to see are readily noticed. We do not pay attention to household furniture because they are too familiar but a new arrangements is readily noticed.
5. Interest and attitude although have close similarity on the ground that both represent mental readiness or preparation for a particular behavioural pattern, yet there is a clear – cut distinction between the two. The individual usually likes the things in which he/ she is interested and the thing that interests is also actively sought. Attitude on the other hand, may orient and individual either favourably towards certain objects, places, ideas etc. Also they are comparatively passive. A person may possess attitudes but may do nothing about them.
6. Instinctive drive like curiosity, constructiveness, acquisitions, self- assertion etc. Are helpful because they play a great role in making children interested in one thing or the other. As one grows older, one's instinctive urges get developed and modified.  
Moreover, instinctive behaviour, as we grow older, gives birth to sentiments and complexes which in turn bring ideals and purposes in life. We begin to pay attention to things connected with our sentiments and complexes. Our attitudes, temperaments and other personality traits also begin to influence our interest patterns. We strive for ideals and achieving something in our life. Such striving and new interests are developed or acquired by us.
7. There are two types of interest:-  
**Intrinsic or Natural interests:-** There is quite a natural and spontaneous flow in the former type of interests. Here one engages in the activities and behaviour patterns of his likings or interests on account of his inner drives, inclinations and motives. There is no external source or force compelling one to engage in such type of acts or behaviours. As examples of such type on interests we may cite the interests shown by the artists in their artistic pursuits, scientists in their experiments and innovations, writers in their own creations etc.  
**Extrinsic or Artificial interests:-** extrinsic interests are governed by some o other type of external means, drives, incentives, motives and goals. Hence one become interested in a particular activity or area o account of some definite purpose served through it. As soon as the purpose is served or goal is achieved, the related interest is automatically diminished or altogether abandoned. For example, a fatty girl interested in her early marriage may be inclined to engage herself in the weight reducing physical or yogic exercises. However, as and when she gets altogether may stop taking interest in those weight reducing activities.
8. As we studied that attention and interest are inter – related, students are to be made attentive by making the teaching – learning process interesting. If the pupils can be made interested in the lessons, then the problem of inattention will not arise. This will also help making education will be attentive, the following suggestions may be considered.
  - i) The child has certain natural or innate urges, drives, and instincts. He/ she will be interested in those matters in which his/ her instincts or natural urges are satisfied. Hence, in the teaching work, the child's psychological needs and interests are give emphasis.
  - ii) The child's interests changes at various stages of development. The teacher must be acquainted with these changes and provide learning experiences according to their needs and interest.
  - iii) The methods of teaching should be adopted according to the physical conditions and natural interest of students.
  - iv) The subject matter to be taught to children should not be too difficult or too simple. It should e within the range of understanding of the students concerned. When the students find the lessons to difficult or too simple, their interests flag and the problem of inattentiveness crops up.

- v) With a view to making students interested in education, the goals and objectives should be made clear to them. The well- defined aims and objectives will motivate them and create new interest. This will help them to learn further.
- vi) In order to sustain the student's interests in the lessons, the teacher should impart new knowledge on the basis of old knowledge and experience. When the learner sees a connection between the old and the new knowledge, he/ she can be attentive to the lessons.
- vii) The teacher should have love and affection not only towards the subject, but also for the students. He/ she should work with interest, enthusiasm, and sincerity, so that his/ her student's will be attentive to the lessons.
- viii) The teacher should make the lesson interesting and appealing, introducing novelty and variety of approaches. This will enable the pupils to pay due attention to teaching.
- ix) There should be adequate use of audio – visual aids in the teaching – learning process. New media and materials like radio, television, films, slides, pictures etc. can help the teacher to make lessons attractive and interesting. This will be useful for promoting learning efficiency to the same object, for some time we attend only to some aspects of it more clearly than to others. Attention is thus selective being limited to a narrow field. Bhatia has rightly said, “Most of our achievements in life are due mainly to this selection. If we try to attend to everything without limiting our range, we will not be able to achieve anything”.

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## Unit -VIII LEARNING

### I. VSAQ.

1. According to Crow and Crow, “Learning involves the acquisition of habits, knowledge, and attitudes”.
2. An inference is the process of drawing a conclusion from supporting evidence. From example, on the basis of your performance, the teacher infers that you have learned the poem.
3. Responses which lead to the goal are known as satisfying response.
4. Classical conditioning is learning through association and was discovered by Ivan Pavlov, a Russian physiologist.
5. The neutral stimulus has become a conditioned stimulus. If the time between the conditioned stimulus (bell) and unconditioned stimulus (food) is too great then learning will not occur.
6. It refers to reinforcement which occurs for less than hundred percent of the time.

### II. SAQ.

1. Learning always involves some kinds of experience. We experience an event occurring in a certain sequence on a number of occasions. Repeated experience of satisfaction after doing something in a specified manner leads to the formation of habit.
2. Repeated exercise that is appropriate and provides motive satisfaction strengthens the bonds or connections, i e S- R bond. This law has two sub parts: the law of use and the law of disuse. The law of use refers to the strengthening of a connection with the practice and the law of disuse to the weakening of connection or forgetting when the practice is discontinued.
3. Habits are formed as a result of repetition. Bad habits can be eliminated through disuse, leading to atrophy or forgetting. The wrong habits can be replaced with a new habit.
4. Fear can be eliminated through the use of de-conditioning process. Phobias can be negatively reinforced. For example, if a person sees a dog whilst out walking, they might try to avoid the dog by crossing over the road. This avoidance reduces the person's feelings of anxiety and negatively reinforces their behaviour.
5. B.F Skinner proposed his theory on operant conditioning by conducting various experiments on animals. He used a special box known as “Skinner Box” for his experiment on rats. Operant conditioning is the learning process to make a response more probable or more frequent by reinforcement. It helps in the learning of operant behaviour, the behaviour that is not necessarily associated with known stimuli.

6. The important part of operant conditioning learning is to recognise the operant behaviour and the consequence resulted in that particular environment.
7. It has been experienced that children are having trouble learning his/ her time table even repetitive use of flashcards is not of much help. Rather, doing this proved to make the process more confusing to him/her. The numbers got jumbled, and he/ she couldn't retain any information. Understanding the best learning techniques for an individual child goes beyond the times tables, it applies for reading too, and every other area of study. Here are the different methods through which people learn. Most people learn best by using a mix of two or even three methods. Remember, there's no 'right' way to learn.  
Everyone learns differently, that's nothing new. However, over the years the different styles of leaning have usually been cut down to visual, physical (learn – by – doing), or audible.
8. According to Gates, "Learning is modification of behaviour through experience".  
The features of learning are:-
  - i) Experience.
  - ii) Behaviour.
  - iii) Habituation.
  - iv) Inference.
9. The characteristics of insight learning are:-
  - i) Learning occurs suddenly and not gradually as in trial and error learning.
  - ii) There is a feeling of understanding. The learner understands the relations among the different elements of the situations.
  - iii) Such relation is better retained. It is especially resistant to forgetting.
  - iv) It is easy to transfer to new situations.
10. E. L. Thorndike was the chief exponent of the theory of trial and error; this theory is known as trial and error as learning takes place through random repetition.  
For example imagine moving a large object such as a couch into your house. You first try to move it in through the front door and it gets stuck. You then try it through the back door and it doesn't fit. You then move it through the double door and it fit. You learn it by repetition.

### III. LAQ

1. Thorndike proposed a general theory of learning that held that the animal learned the association on the basis of the success of the act in bringing about a 'satisfying' state of affairs. He proposed that it is through the law of effect that acts that brings about a satisfying state of affairs are gradually 'stamped – in' 'the nervous system and those that lead to an annoying or discomforting state of affairs 'stamped – out'. Learning was thus the gradual association of particular situations leading to certain ends. Thorndike believed that the actual connections between nerve cells in the brain underlying situation – response (S- R) associations were strengthened by reward and weakened by punishment.
2. Thorndike theory of learning is important in the following manner:-
  - i) The teacher should see that the child is motivated to learn before he begins to learn. Motivation is the royal road to learning. Preparatory exercise that will hasten the state of readiness can be given. The teacher should introduce a lesson by relating it to the background experience of the child.
  - ii) Interest inventories and aptitude tests can be administered to know the entry behaviour or the learners, especially in admitting students for specialised course.
  - iii) After learning anything, adequate practice or drill should be undertaken to ensure that learning becomes stable and effective.
  - iv) More drills or an exercise is not enough, continuous feedback is also necessary.
  - v) Bad habits can be eliminated through disuse, leading to forgetting.
  - vi) As a reward further learning behaviour, judicious use of praise, and encouragement in the class promotes better learning.
  - vii) As, "success leads to further success", school activities can be arranged in such a way that all learners may have some degree of success and confidence in their work, i.e. all assignments should be so graded that everyone gets some success initially.

3. Conditioning refers to the behavioural process, whereby a reaction (response) becomes more frequent to a given object (stimulus) as a result of enforcement, which is a reward for the response in a given situation and conditioned relationship the new stimulus – response relationship can be explained as: The continuity of the stimuli the two stimuli bell and food, had to be presented close enough time. Just as a few seconds apart.
  - i) Motivation: the dog had to go hungrier and ‘interested’ in order to respond.
  - ii) Repetition: the primary of the stimuli to be repeated a number of times, before the association was established.
  
4. The educational implication of classical conditioning:
  - i) Classical conditioning is used in language learning by associating words with pictures or meanings.
  - ii) It can be used to develop favourable attitude towards learning, teachers, subjects and the school.
  - iii) Developing good habits in children such as cleanliness, respect for the elders, punctuality, etc through the use of classical conditioning.
  - iv) Breaking of bad habits and elimination of conditioned fear, through the use of de-conditioning process.
  
5.
  - i) A behaviour or response is dependent upon its consequences. For training a learner to a particular behaviour or response, he may be initiated to respond in such a way as to produce the reinforcement stimuli. The learner’s behaviour should get rewarded and he in turn, acts in such a way that he is rewarded again and so on. Therefore the learning process and environment must be so designed as to create the minimum frustration and the maximum satisfaction in a learner to provide him with proper reinforcement for the desired learning.
  - ii) The principle of operant conditioning may be successfully applied in behaviour modification.
  - iii) The development of human personality can be successfully manipulated through operant conditioning.
  - iv) The theory of operant conditioning does not attribute motivation to internal process within the learner. Verbal praise, positive facial expressions of the teacher, a feeling of success, high scores, good grade, prizes, medals and the opportunity to do the work one likes all go as motivators. Operant conditioning thus, provide an external approach to motivation.
  - v) Operant conditioning emphasises the importance of schedules in the process of reinforcement of behaviour. In trying to teach a particular behaviour a great care should be taken for the proper planning of the schedules of reinforcement.
  - vi) The Operant conditioning suggested appropriate alternatives to punishment, in the form of rewarding appropriate behaviour and ignoring inappropriate behaviour, for its gradual extinction.
  - vii) The theory of operant conditioning had contributed a lot to the development of teaching machine and programmed learning. The theory of operant conditioning had shown that learning proceeds most effectively if the –
    - a) Learning material is so designed that it produces fewer chances of failure and more opportunities for success.
    - b) Learner is given rapid feedback concerning the accuracy of his learning.
    - c) Learner is able to learn at his own pace. This theory has drawn the attention to the inadequacy and unsuitability of the reinforcement procedures adopted by our educational institutions.
  
6. B.F. Skinner conducted an experiment with rats. He specially designed an apparatus as Skinner’s Box. Skinner box is a darkened sound- proof box mainly consisting of a grid floor, a system of light or sound produced at the time of delivering the pellet of food in the food pan.
 

Near, the food pan a lever is introduced. It is so arranged so that when a hungry rat presses the lever, the feeder mechanism is activated, a light or a special sound is produced and a small pallet of food is released into the food pan. For recording the observation of the experiment, the lever is connected with a recording system which produces a graphical tracing or lever pressing against the length of time the rat is in the box.

B.F. Skinner placed a hungry rat in the above described box. In this experiment, pressing of the bar in a desirable way by the rat could result in the production of a click sound and presence of a food

pellet. The click sound acted as a cue or signal indicating to the rat that if it responds by going to the food pan it will be rewarded. The rat was rewarded for each of his proper attempts for pressing the lever. The lever press response having been rewarded, was repeated and when it occurred, it was again rewarded which further increases the probability of the repetition of the lever press response and so on. In this way, ultimately the rat learned the art of pressing the lever as desired by the experimenter.

Skinner identified three types of responses, or operant, that can follow behaviour:-

- i) Neutral Operant's: - responses from the environment that neither increases nor decrease the probability of behaviour being repeated.
- ii) Re-inforcers:- responses from the environment that increase the probability of a behaviour being repeated. Re-inforcers can be either positive or negative.
- iii) Punishers:- responses from the environment that decrease the likelihood of a behaviour being repeated punishment weakens behaviour.

7. Differences between operant conditioning and classical conditioning.

- i) Classical conditioning is a type of learning, which generalizes association between two stimuli, i.e. one signifies the occurrence of another. Conversely, operant conditioning states that living organisms learn to behave in a particular manner, due to the consequences that followed their past behaviour.
- ii) In operant conditioning the behaviour of the organisms will be modified as per the consequences that arise afterwards. Whereas, in the classical conditioning, the conditioning process in which two stimuli, on the basis of involuntary responses occurs before it.
- iii) Operant conditioning is one of that is based on voluntary behaviour, i.e. active responses of the organism. On the other extreme, classical conditioning relies on in-voluntary or reflexive behaviour, in essence, physiological and emotional responses of the organism such as thoughts, emotions and feelings.
- iv) In the Operant conditioning, the responses are controlled by the organism. Whereas, in classical conditioning, the response are under the control of the stimulus.
- v) Operant conditioning does not define conditioned stimulus i.e. it can only be generalised, but, classical conditioning, defines the conditioned and unconditioned stimulus.
- vi) In operant conditioning, the re-inforcers is under the control of organism and thus, the organism acts actively. Whereas, in classical conditioning, the unconditioned stimulus, it is controlled by the experimenter, and so the organism plays a passive role.

8 . Gestalt psychology lays much emphasis on organisation and dynamic patterning. The following laws help this organisation of the pattern:-

- i) **Law of similarity:-** the perception of homogeneous parts is based on this law, e.g. a group of boys, girls etc.
- ii) **Law of proximity:-** nearness of the parts helps to form groups.
- iii) **Law of closure:-** closed areas are readily perceived as forming one meaningful and complete unit.
- iv) **Law of good continuation:-** in perception one tends to continue with a series and straight lines and curves as a circle.
- v) **Law of membership character:-** according to this law a single element does not have fixed characteristics. It gets its characteristics in relation to other elements, and the context in which it appears.

9. Gestalt theory emphasises that dynamic laws of perception and learning are alike. It shows the importance of organisation, meaningfulness, and understanding in education. It has called attention to the importance of the structure of the problematic situation. Empirical facts of learning with insight are found as true as empirical facts of trial and error.

It condemns the emphasis on memorising at the expense of understanding. Practice is necessary from bringing about relationship but it should not be reduced to mechanical exercise. Problems to be solved are approached sensibly, structurally, organically rather than mechanically and stupidly. A learner can act with insight and intelligence if the problem is too difficult for his/ her age and experience and when the essential elements of the problem are open to inspection.

Insightful learning has the following educational implications:

- i) Children feel comfortable to solve problems using insight when provided with concrete materials they can handle and manipulate. Their perceptual ability remains concrete.
- ii) Grown – ups are freed from dependence on concrete materials. Their thinking is abstract and they use insight.
- iii) At the highest level thinking becomes quite symbolic and they could conceptualise in terms of equations and formulas.
- iv) Wherever feasible, teachers must provide opportunities for students to exhibit and exercise insightful learning. This would pave the way for ‘discovery learning’.
- v) It is un-psychological to promote Trial and Error learning wherein insightful learning is more viable.
- vi) Transfer effect is more to the case of insightful learning.
- vii) Less fatigue and more exhilaration would accompany learning by insight.

10. Gestalt learning explains that learning takes place without overt trial and error testing. In insight learning occurs in human learning when people recognize relationships (or make novel associations between objects or actions) that can help them solve problems. Insightful learning has the following characteristics:

- i) Learning occurs suddenly and not gradually as in trial and error learning.
- ii) There is a feeling of understanding. The learner understands the relations among the different elements of the situations.
- iii) Such relation is better retained. It is especially resistant to forgetting.
- iv) It is easy to transfer to new situations.

11. Once a response as desired by the experimenter occurs, it is reinforced through a suitable reinforce (primary or secondary and positive or negative). In course of time, this response gets conditioned by being constantly reinforced. In skinner’s experiment a pellet of food acted as a positive primary reinforcement for the hungry rat who got the reinforcement after it emitted a certain response (pressing the lever as desired by the experimenter). The secondary reinforcement may also produce the same result as brought about by the primary reinforcement. It is a sort of neutral stimulus which acquired the reinforcement properties (rewarding value) after getting paired or associated with a primary reinforce (food pellet). The clicking sound and the lighting of bulb in skinner’s experiment may act as secondary reinforcement if they are coupled with the appearance of a pellet of food.

The important thing in the mechanism, of operant conditioning is the emitting of a desired response and its proper management through suitable reinforcement. Here the organism responds in a certain way so as to produce then reinforcement stimulus. The subsequent reinforcement gradually conditions the organism to emit the desired response and thus learns the desired act.

12. Gestalt theory emphasises that dynamic laws of perception and learning are alike. It shows the importance of organisation, meaningfulness, and understanding in education. It has called attention to the importance of the structure of the problematic situation. Empirical facts of learning with insight are found as true as empirical facts of trial and error.

Insightful solution depends upon the basic intelligence of the learner. The more intelligent the individual, the greater will be his/ her insight. Insight learning involves the maximum use of intelligence. Therefore, learning by insight is helpful in developing and improving higher mental process like thinking, imagination, reasoning, analytical ability, problem solving, creativity, etc. The theory specially encourages creative activity of the child.

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## Unit-ix FORGETTING

### I. VSAQ

1. a) LMT – Long Term Memory.  
b) STM- Short Term memory.
2. The presentation of any past experience in the form of an image or language in the conscious level of the mind is called recall.
3. I) Sensory memory.  
ii) Short – term memory.  
iii) Long term memory.
4. Memory is the ability to retain information from learnt materials and reproduce those in future to achieve a purpose.
5. Faulty memory and interference are the two causes of memory.
6. Aristotle – “Forgetting is fading of original experience with passage of time. It arises due to disuse”.

### II. SAQ

1. Forgetting can be minimized by intend to remember. Remembering well requires that you want t remember. If you have made a decision what you are reading /studying, you will forget almost immediately.
2. **I) Immediate Memory:-** This is known as short term memory. This memory is when the individual has to reproduce immediately after he has learnt something, thus the time span is very less for the matter to be registered in the consciousness. Hence the learnt matter is forgotten rapidly, e.g. we may first look at the seat number of our ticket and once we sit down we forgot about it.  
**ii) Short term memory:-** This type of memory is also called as temporary memory. It is not short lived as the immediate memory. The information temporarily stored in short – term memory may last as long as thirty seconds even if the material is not being rehearsed. However, some people are able to retain much more information in short- term memories by a process called chunking, which groups information by coding it e.g. the number 143254376 can be remembered by listing under three heads:143,254,376 for better remembering.  
**iii) Long term memory:-** This is also known as permanent memory. Here the individual learns and retains the information for a very long period of time. There is an interval of time between learning and recall or reproduction. Thus permanent memory is involved, e.g. Knowing our account number of the bank or the phone number.
3. The three components of memory:-
  - i) **Sensory Memory:-** Hold any object about 12 inches in front of you. Look at it steadily for a while. Close your eyes and notice how long the clear mage of that object lasts. A clear visual image if any object will last in sensory memory for about half a second after the stimulus is removed. Sensory memory holds representations of sensory input for very brief periods of time, depending upon the modality involved. There are different sensory registers for each of the senses.
  - ii) **Short- Term Memory (STM):-** Look up for a moment and note what attracts your visual attention. Try to identify the sounds and sensations that you are experiencing now. What have you identified is the content of short term memory or STM. It holds relatively small amounts of information for brief periods of time, usually 30seconds or less.
  - iii) **Long -Term Memory (LTM):-** It refers to the memory system for the retention of large amounts of information for long periods of time. It is the memory system that permits us to remember events that happened many years ago, yesterday, last year, and so on. It is the long – term memory that allows us to remember factual information making it possible for us to learn different subjects, appear for examinations, and communicate with others. It brings continuity and meaning to our life.

4. The following are the different ways in the process of memorising:--
- i) **Rote memorising:-** This is learning without understanding. Yet meaningful material is easily learnt than nonsense material. It is easy to learn poetry than prose; prose is easy to ear than disconnected words. Disconnected words are easy to learn than nonsense words. Thus logical sequence is important, along with the systematic arrangements of ideas. However, mechanical learning must be avoided as it is less effective.
  - ii) **Spaced v/s Mass Learning:-** In spaced learning, the learner has been allowed some rest in memorisation. The subject is not required to memories the assignment in one continuous time period. Intervals are provided. Spaced learning benefits pupils of lower classes, when motivation level is low or material is complex and difficult to understand. Mass learning is effective when the pupils are very intelligent or are highly motivated. Although, both methods of learning are found to be useful and effective in one situation of the other.
  - iii) **Whole v/s part Method of Learning:-** Let's take the example of a poem, when the poem is read again and again from the start to finish; this is the whole method of learning. This method can be adopted when the material is not very lengthy and when the material is logically arranged. Less time is used compared to part method. Here again the poem for example is broken down to parts or stanzas and then learnt, thus slow learners and average students are benefitted. The learner is motivated each time he masters the parts, thus the whole content is slowly mastered. Even when the material is large and is not well organised, this method can be used.
  - iv) **Recitation:-** The best method of learning where the students reads the lesson few times and then reviews the lesson without the book, i.e. he/ she recites the material learnt to him/her. Studies have shown that self- recitation is better and tie saving than just reading and rereading because permanent retention is achieved. The learner is able to detect his/ her weakness and is able to rectify them.
  - v) **Mnemonic devices:-** Grouping always helps to memorise easily, thus we learn poetry easily compared to prose, but many material come without such natural grouping. Artificial associations are made to associate the ideas or the material. Memory which is improved by the use of artificial associates is called Mnemonics. Thus things are learnt verbatim without understanding it.
5. Short term memory is a rapidly decaying system. Psychologists believe that short term memory does not involve permanent changes in the brain. However, some temporary changes occur in this case. The physiological nature of the traces is such that they fade quickly. The long term memory appears to be permanent. A permanent change occurs in our brain when we remember things for a long time. Long- term memory has a more or less enduring impression on the brain.
- Short term memory is an active system involving rehearsal. We need to keep the items actively in STM relearning them constantly. On the other hand, the long term memory is rather passive in nature; it is not easily distributed by interruption, unlike short term memory.
6. Forgetting is a process opposite to preservation; its main task is to remove unsolicited information from memory in order to preserve the flexibility of the nervous system.
7. The causes of forgetting are:-
- i) Faulty Memory process.
  - ii) Interference.
  - iii) Retrieval problems.
  - iv) Motivated forgetting.
  - v) Amnesia.

### III. LAQ.

1. Recall and recognition are the two ways to retrieve information from your memory. The difference is that recognition involves a cue, while recall does not. Recognition is a response to a sensory cue. When you see something, you compare it to information stored in your memory, and if you find a match, you 'recognise it'. Recall is the retrieval of memory without a cue. There is a question, ad you must search your memory for the answer. Because it is cued, recognition is easier than recall. A simple illustration of this is recognising a familiar face almost instantly, but struggling to come up with the person's name.

2. The four factors responsible for influencing one's memory.
  - i) **Registration or learning:-** this is the first factor of the process of memory. Learning is the acquisition of new information of experiences which leads to the established of association of ideas in mind. This factor is the way to register the first impression of an object or idea without which memorisation cannot take place. Before remembering it must be registered or learnt.
  - ii) **Retention:-**The process of learning involves the stage of retention thus learning becomes permanent. Retention is the inactive state of learnt activity. The learning activity leaves a mark on the brain structure. This mark is called a "memory Trace" which is imprinted on the cerebral cortex. This preservation is the memory trace in the brain is retaining of the learning activity. This can be compared to the traces o marks in the sand, e.g. our footprints made on the sand. The deeper the trace, the longer the retention, while the weak traces slowly fades away.
  - iii) **Recall:-** the third factor of memory is recall. It means the presentation of any past experience in the form of an image or language in the conscious level of the mind. It involves the association of idea. For example, seeing a car on the roadside, a person may remember the name of its owner. The reason for this if that the car owner is known to the person sometimes. An individual can remember two things at the same time if they are learnt side by side. Recall depends on the mental condition and the memory trace formed.
  - iv) **Recognition:-** Recognition is the fourth factor of memory. Recognition is the capacity to be aware of the previous experience. If a person can identify an 'object or idea' at present of which he has a past experience, it is called 'recognition'.

3. Improvement in any one or more of the constituents is likely to improve the memory as a whole. Out of these four, learning and recall can be improved by training. Actually improvements in memory demands the necessary improvements in the -

- i) Technique and methods of learning.
- ii) Learning situation and environment.
- iii) Learners state of mind.

Here are some tips to enhance one's memory. These are a few memory improvement techniques useful for the learners.

- i) Intention to learn
- ii) Deep processing.
- iii) Interest and intention.
- iv) Minimise interference.
- v) Distributed practice.
- vi) Using memory aids.
- vii) Shorthand codes.
- viii) Meaningfulness.
- ix) Grouping and rhythm
- x) Repetition and recitation.
- xi) Internal factors within the learner.
- xii) Making use of SQ4R Techniques.

4. The different ways to reduce forgetting are:-

- i) **Intention to learn:-** Firm determination or strong will to learn is required to achieve success.
- ii) **Deep Processing:-** If you want to learn something and wish to enter information in long – term memory, you have to think about it. You need to consider its meaning and examine its relationship to information you already have.
- iii) **Interest and attention:-**Interest and attention are essential for useful learning and memorisation. A person who has no interest in what he learns will not give due attention to it and consequently will not be able to learn it.
- iv) **Minimise interference:-** Interference is a major cause of forgetting and you should try to reduce it as much as possible.
- v) **Distributed practice:-** While learning some material it is beneficial to learn it using distributed practice in which there a gap between trials. Do not try to cram all the information you want to memorise at once.

vi) **Using memory aids:-** you can use visual imagery to remember objects and places. This often facilitates remembering.

vii) **Shorthand codes:-**Using shorthand codes to memorise helps. E.g. Using the first letter of each word or item and construct a unique 'Word'.

viii) **Meaningfulness:-** If the subject matter taught to students is meaningful and it has been presented to them in an organised manner, it will be retained for longer period of time.

ix) **Grouping and rhythm:-**grouping and rhythm also help and facilitate learning and help in remembering.

x) **Repetition and recitation:-** Repetition and continuous practice add to the effectiveness of memorization.

xi) **Making us of SAQ4R techniques:-** Thomas Robinson developed this strategy for effective learning and memorisation- Survey, Question, Read, Reflect, Recite and recall and review.

5. The causes related to stage failure for forgetfulness are:-

1) **Faulty Memory Process:-** sometimes we listen to many details but we encode only portion of the information in the form of gist- and not the actual words or details, and the same will be stored. Constructive process at work during the process of encoding distorts what is stored in memory and we remember the distortions. At that time we think we forget, because what we remember is not an accurate representation of what has really happened. Here our memory does not match events as they actually occurred.

2) **Interference:** An important cause of forgetting in everyday life is interference of learnt material. There are two kinds of interference:

a) **Proactive inhibition:** If the earlier learning interferes with later learning and inhibits recall of new material, it is known as proactive inhibition. This usually happens when the previous learning is better than the present one.

b) **Retroactive inhibition:** Inhibition of the earlier learning and recall by later learning is known as retroactive inhibition. The interpolated activity between original learning and its recall causes forgetting. It is called retroactive because the interference is with the memory of events that came before the interfering activity.

3) **Retrieval problems:-** Retrieval is necessary for recall. Some retrieval cues and reconstructive processes help in this process. These retrieval cues or remainders, direct the memory search to the appropriate part of the LTM section. Without appropriate retrieval cues, the sought – for items stored in LTM may not be found. This leads to forgetting.

4) **Motivated Forgetting:-** This is a kind of forgetting in which the individual intentionally forgets. However, the information stored can be retrieved and brought back to memory, but the individual does not want those memories. So he will repress them. It may be observed that generally people remember pleasant experiences than unpleasant ones.

5) **Amnesia:-** The term 'Amnesia' refers to loss of memory. It is a kind of memory disorder which occurs from a loss of what has already been stored. There are different kinds of amnesia.

i) **Psychological Amnesia:-** This kind of amnesia takes place as a result of major disturbances in the process of encoding, storage, and retrieval. There are different kinds of psychological amnesia.

a) **Childhood Amnesia:-** This may be caused due to the inability to retrieve childhood memories which are unpleasant. These memories may cause feelings of guilt, hence they are repressed. Another reason may be due to differences in the ways of encoding.

b) **Dream Amnesia:-** Every individual experiences dreams. But he will be unable to recall the contents of all dreams, because many of them are in disguised form, so there will be no cues to bring to memory.

c) **Defensive Amnesia:-** Developed to defend the self- respect and to overcome anxiety. The person suffering from this amnesia may forget his name, occupation, names of relative and all other things except basic habits like eating, drinking, talking etc.

ii) **Biological Amnesia:-** This Amnesia is caused due to abnormal functioning of the brain. Such abnormality may be due to causes such as, blow on the head, temporary disturbances in blood supply to the brain, certain drugs, like marijuana, alcohol, brain diseases and some other damages to the brain. These problems may result in amnesia called transient global amnesia which is a profound memory loss.

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## Unit-x HABITS

### I. VSAQ

1. Habits are the products of experience and practice.
2. According to Garrett, "Habit is the name given to behaviour so often repeated as to be automatic."
3. A bad habit is negative behaviour pattern.
4. The 3R's of habit formation are: Reminder, Routine and Reward.

### II. SAQ

1. The two main advantages of habit formation are:-
  - i) Habits help us for smooth functioning.
  - ii) Habitual actions cost us little effort and less strain.
2. Habits develop through instrumental learning and build on the fundamental principle that rewarded responses are repeated (Thorndike 1898). When repeated pursuing a goal such as making coffee, people experience co-variations between context cues, (e.g. coffee filter) and actions (e.g. measure grounds) that lead to goal attainment.
3. The characteristics of Habits are:-
  - i) Uniformity.
  - ii) Ease and Facility.
  - iii) Interest.
  - iv) Reducing the need of paying attention.
  - v) Diminishing Fatigue.
  - vi) Resistance of Modification.
  - vii) Habits are useful as well as Harmful.
4. Assignment.
5.
  - i) Firm determination and strong will power.
  - ii) Strong initiative with Quick Actions.
  - iii) Use of voluntary practices.
  - iv) Substitution of bad habits.
  - v) To hit on the Root cause of the bad habit.

### III. LAQ

1. Habit formation is the process by which new behaviours become automatic. Given that everyday habits develop as people go about pursuing life's goal, habit formation is closely intertwined with the goal pursuit. Nonetheless an implication of the basic context response mechanism underlying habits is that behaviour becomes less responsive to current goals and planning as habit associations strengthen. Habits develop through instrumental learning and build on the fundamental principle that rewarded responses are repeated (Thorndike 1898). When repeated pursuing a goal such as making coffee, people experience co-variations between context cues, (e.g. coffee filter) and actions (e.g. measure grounds) that lead to goal attainment.

The 3R's of habit formation are-

- i) Reminder:- Reminder is the cue trigger that starts the habit.
- ii) Routine:- The action you take on routine pattern, which is a habit itself.
- iii) Reward:- The benefit you gain from doing the habitual activity, that activity will become your habit.

2. **Advantages:-** Good habits are essential for effective and smooth living. Such actions need little efforts and conscious thinking. Some important advantages are listed below:

- i) Habits help us for smooth functioning.
- ii) Habitual actions cost us little effort and less strain.
- iii) Habits do not require our conscious attention.
- iv) Habitual actions save our time.
- v) Habits make our movements simpler, quicker, and more accurate.
- vi) Our activities do not become automatic; we do not need our higher mental process like thinking, reasoning, creativity, etc. For these activities and such abilities can be used for other better activities.
- vii) Good habits provide feelings of stableness and security.

**Disadvantages:-** Habits are so strong that they control one's life when one becomes a slave of his habits, he loses the power to adopt to new situations. Some points which reflects disadvantages of habit formation are:-

- i) There is danger of becoming slaves of our habits.
- ii) There will not be any scope for thinking or creativity.
- iii) We cannot learn new things or to adapt new situations.
- iv) Our actions becomes mechanical
- v) Habits interfere in our other activities.
- vi) We feel highly disturbed when we have to make any adjustment r change in our routine like eating, sleeping etc.
- vii) There may be negative effects both physical and psychological. For example, if there is any change in the timing of sleep, food etc. We fee highly disturbed both physically and mentally such as sleeplessness, indigestion, nausea, mood upset etc.

3. The nature of habit on the basis of its characteristics:-

- i) **Uniformity:-** habit brings uniformity in the activities if an individual. They are performed every time in the same way. There is specific habit in our mood of talking, sleeping, walking, and other activities.
- ii) **Ease and facility:-** There is a facility in the performance of an activity if it us due to some habit. In the beginning, one may feel difficulty in performing some task but after the formation of habit, it becomes quite easy.
- iii) **Interest:-** The basis of habit is interest. At the beginning of schooling, the child runs away from the school, but after the formation of habit, going to school becomes interesting to him/her.
- iv) **Reducing the need of paying attention:-** Habitual acts are performed with least or no attention. Women do knitting almost paying no attention to the work. Similarly a person playing a harmonium or violin places his fingers on the required string with no careful attention on his part.
- v) **Diminishing fatigue:-** Habit diminishes fatigue due to habit formation. The work that is too difficult and tiresome in the beginning becomes simple and spontaneous engagement for hours. The fact cab easily verified when we observe a bus driver driving on a long route for hours.
- vi) **Resistance to modification:-** Habitual actions posses a strong tendency of resisting any modification or change. Once a habit, good or bad is formed, it is difficult to give up or bring changes in its functions. A habitual smoker or gambler found it difficult to give up his habit of smoking or gambling. On the other hand, a man who is not accustomed to accepting bribe cannot accept bribe ad thus change his habit.
- vii) **Habits are useful as well a Harmful:-** Habits are divided into two- good and bad habits. Good habits are like by truth and punctuality, proper habits of works etc are considered useful for the welfare of the individual as well as of the society whereas bad habits like smoking, gambling, telling lies etc. Are considered harmful to both the individual and the society.

4. The five bad habits which is time consuming for students are listed under:-
  - i) Spending hours on video games or online games.
  - ii) Face-booking addiction.
  - iii) Walking around to kill the time, without a specific purpose.
  - iv) Watching endless stream of You Tube videos.
  - v) Spending time worrying about spam comments, negative reviews and internet trolls.
  
5. Bad habit for school students:-
  - i) Staying home sick when you are not ill.
  - ii) Phone play during classes and study time.
  - iii) Giving lame excuses.
  - iv) Doodling instead of taking notes.
  - v) Paying more attention to your friends than your instructors.
  - vi) Being the class clown.
  - vii) Not bothering to study for tests.
  - viii) Expecting teachers to remind you about missed homework and assignments.
  
6. Four point for breaking bad habits:-
  - i) **Firm determination and strong will power:-** one should realise the necessity of setting oneself free the clutches of a bad habit. Moreover, one should have firm determination to break it. Thus, there is a need for strong willpower so that the temptation are never allowed as even a single act of the repetition of a bad habit may throw the individual back on the starting point.
  - ii) **Strong initiative with quick Actions:-** Bad habits are like powerful and dangerous enemy. Therefore, the initial attack should be well planned. One should leave nothing to chance public declarations and pledge helps much in this direction as they give sufficient emotional strength to an individual.
  - iii) **Use of voluntary practice:-** Many improper habitual actions can be rectified by the use of voluntary practices. Incorrect spellings, mispronunciation, improper way of performing certain skill work etc, can be corrected and improved by correcting and practicing the right way of performing these acts etc.
  - iv) **To hit the root cause of the bad habits:-** The root causes of bad habits should be discovered and attempts should be made to remove these causes. If we try to analyse the genesis of bad habits, we can find that many habits are developed due to many a varying reasons.

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## Unit-xi INTELLIGENCE

### I. VSAQ

1. Intelligence is a mental trait which expresses itself in various forms. It is an inborn natural power. It helps a man in learning things and to solve complicated and comprehended problems and situations.
2. The English Psychologist, Charles Spearman proposed the theory of intelligence.
3. The two factor theory.
4.  $IQ = \frac{\text{Mental Age}}{\text{Chronological Age}} \times 100$ .
5. Girls excel in the language field.
6. IQ represents the degree of brightness possessed by an individual.
7. According to Buckingham, "Intelligence is the learning ability". According to Spearman, "Intelligence may be thought of in terms of two abilities i.e. "g" or general and "s" or specific".
8. According to Alfred Binet, "Intelligence is the ability of an individual to direct his behaviour towards a goal".

## II. SAQ.

1. According to Thurstone 'S' means Space factor.
2. The general belief about inheritance of intelligence is that the growth of intelligence stops and it reaches its limit at the age of sixteen.
3. The theory gives a better insight to the teacher about the nature of intelligence. The general ability differs from individual to individual. The specific abilities also differ from individual to individual. 'S' factor varies in degrees. Therefore, it can be modified by learning or habitual training. A child requires different amounts of 'G' and 'S' factors for achieving success in different subjects. We require a high quality of 'G' factor for our success in life. Both 'G' and 'S' factors have a high correlation. This theory could be used to guide and construct of a set of ability test.
4. As the home plays a significance role in the early development years of a child, it can be expected that family conditions can influence on behaviour and attitudes. Financial status of parents and of other adults in the neighbourhood environment may provide for child's poor, relatively meagre or an extremely rich series of experiences.
5. The characteristic of 'G' factor:-
  - i) It is universal.
  - ii) It is general mental energy.
  - iii) It is constant.
  - iv) The amount of 'G' differs from individual to individual.
  - v) It is used in every activity of life.
  - vi) Greater the 'G' in an individual, greater is his success in life.
6. The four basic attributes of Anarchic Theory:-
  - i) **Level:-** The level of intelligence is proportional to the level of difficulty of a problem solved. It cannot be measured in perfect isolation.
  - ii) **Range:-** It refers to the number of problems of a given degree that one can solve. An individual having a certain level of intelligence should be able to solve the whole range of problems at that level.
  - iii) **Area:-** Area counts the total number of situations at each level through which the individual is able to respond.
  - iv) **Speed:-** This means the quickness on speed with which a problem is solved.
7. Performance test are design to test problem solving ability using certain objects such as pictures and blocks, instead of words. These tests are especially useful with young children, illiterates, persons with speech defects and persons who do not have proficiency in language. Two examples of performance test are kohl's Block design test and the pass along tests.
8. Assignment.
9. Intelligence is a mental trait which expresses itself in various forms. It is an inborn natural power. It helps a man in learning things and to solve complicated and comprehended problems and situations.  
Nature of intelligence:-
  - i) Intelligence is inherited.
  - ii) Intelligence is influenced by environment factors.
  - iii) Intelligence helps in adjustment and inventions.
  - iv) Intelligence has no sex differences.
  - v) Intelligence has no racial or cultural differences.
  - vi) Intelligence is very much related to social and economic conditions.

10. The types of intelligence tests are:-
  - i) **Individual test:-** The individual intelligence test is administered only one individual at a time. The examples of this test are the Binet Simon tests, revised tests by Terman.
  - ii) **Group Test:-** The group intelligence tests are meant for assessing the intelligence of a large number of individuals in one sitting. For examples of this test are, Army Alpha and Beta test, Terman's group tests.
11. The characteristics of 'S' factor are as follows:-
  - i) It is learned and acquired in the environment.
  - ii) It varies from activity in the same individual.
  - iii) Individuals differ in the amount of 'S' ability.
12. The group intelligence tests are meant for assessing the intelligence of a large number of individuals in one sitting. Group test had their birth in America when the intelligence of the recruits who joined the army in the First World War was to be calculated. These are ;
  - i) The Army Alpha and Beta test.
  - ii) Terman's group tests.
  - iii) Otis self-administrative tests.
13. When the mental age is divided by the chronological age and the quotient is multiplied by 100, the result is the intelligence quotient of a person.
14. Intelligence as a general mental power or ability by virtue of which man can act, behave in a situation. It is through the mental ability that one can acquire knowledge from the environment and adjust himself effectively. Intelligence can be measured by different types of intelligence tests like individual, group, verbal, non- verbal and performance tests of intelligence.

### III. LAQ.

1. The description of the uses of these tests are given below:-
  - A) **Uses of intelligence tests:**
    - i) For classification of the students.
    - ii) For guidance purpose.
    - iii) For selection purpose.
    - iv) To know the individual.
    - v) To establish aspiration level.
    - vi) For promotion.
    - vii) For research purpose.
  - B) **Intelligent quotient:-** Intelligent quotient represents the degree of brightness possessed by an individual. It is a measure of a person's intellectual development relative to people of his/her age group. It is computed by dividing the person's mental age by chronological age, and multiplying with 100.
  - C) **Performance test:-** performance test are design to test problem solving ability using certain objects such as pictures and blocks, instead of words. These tests are especially useful with young children, illiterates, persons with speech defects and persons who do not have proficiency in language. Some of the famous tests are, Kohl's Block design test, the cube construction tests, and the Pass Along tests.
2. The types of intelligence as described by Gardner are:-
  - i) **Linguistic:-** it is the capacity to use language fluently and flexibly to express one's thinking and understands others.
  - ii) **Logical – Mathematical:-** it is the ability think logically and critically.
  - iii) **Spatial:-** it refers to the abilities involved in forming, using, and transforming mental images.
  - iv) **Musical:-** it is the capacity to produce, create, and manipulate musical patterns.
  - v) **Naturalistic:-** this involves complete awareness of our relationship with the natural world.
  - vi) **Interpersonal:-** this is the skill of understanding the motives, feelings, and behaviours of other people so as to bond into a comfortable relationship with others.
  - vii) **Intrapersonal:-** this refers to the knowledge of one's internal strengths and limitations and using that knowledge to effectively relate to others.

3. The verbal group test requires an individual to read out certain problems and write out solutions of these problems.  
The non- verbal group tests present similar problems as the verbal test but in a different way. The problems are presented in the form of pictures, diagrams, puzzles, and mazes. Of does not require the individual to read or write, but only to be able to make a mark with a pencil.
4. Non- verbal test or performance tests are used to measure intelligence and specific abilities. These tests are presented in the form f pictures, diagrams, and puzzles and mazes instead of language. Performance test are designed to test problem solving ability using certain objects. These tests are especially useful with young children, illiterates, persons with speech defects and persons who do not have proficiency in language.  
Individual non- verbal test of intelligence is administered to only one individual. The individual's response depends on what he/she does or performs.
5. In order to measure intelligence, it first needs to be defined. It has been proven to be especially challenging because intelligence is rather a vague concept as it refers to unseen mental abilities. Intelligence can be measured through different methods like verbal test, performance test and IQ test. Intelligence is measured by either a group or individually administered test.
6. In categorising children abilities Binet developed a scale of units he called Mental Age. Mental age is the mental ability or capacity of an individual, usually determined by an intelligence test, in relation to the chronological age of the average individual at this level.  
A 12 years old child who was able to do all the tests meant for 12 years old children was said to be normal or average.  
If a child could do the test meant for a higher age level his mental age was said to be more than his chronological age and he was describes as a bright child.  
If a child was unable to do the tests meant for his own age level, the child's mental age was said to be lower than his chronological age and he was described as slow or retarded.

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## Unit-XII PERSONALITY

### **I. VSAQ**

1. The word persona is derived from a Latin word 'Persona' means the mask wear by an actor on a stage.
2. Persona it means the mask which the ancient Greek actors commonly used to wear on their faces before coming to the stage for acting.
3. "Personality is the sum of activities that can be discovered by actual observation over a long enough period of time to give reliable information".
4. If a child comes to school in time, does his/her homework regularly, never asks a question, sits in the last bench in the class, does not speak much with other children, and hardly seen particularly in games, dramatic or other cultural activities, can be called a withdrawn child.
5. (d) All of these.
6. (c) Role of the individual plays in life.
7. (d) Interaction methods.

## II. SAQ

1. The factors that affect the personality are:-

- i) **Heredity:-** Heredity is something that passes from generation to generation. It is due to the genetic transfer from parents to children. That is the skills and traits that pass from parents to children as it is.
- ii) **Environment:-** Environment to which we are exposed plays a substantial role in shaping our personalities. The Environmental factors that pressures on our personality formation are culture in which we are raised. Our early conditioning, the norms among our family, friends, social groups, social interaction etc that we experience.
- iii) **Situation:-** An Individual's personality, although generally stable and consistent, does change in different situations. Situations seems to differ substantially in the constraints they impose o behaviours.

2. A child is not born with a personality but develops one as a result of continuous interaction with his environment. In other words, every personality is the product of heredity and environment. Not only heredity, which is inborn but also learning, constitutional makeup, social and cultural influences, experiences in life etc, have their say in the influence of personality formation.

3. Heredity is considered as an important factor that affects personality because the physical structure, facial attractiveness, gender, temperament, muscle composition and reflexes, energy level, and biological rhythms are characteristics that are generally considered to be either completely or substantially influenced by your parents or heredity.

4. The role of Adrenal glands is produce hormones to help body function.

5. The cultural environment of the child posses a vital role for shaping and determining his/ her personality. This environment is characterised by the mode of living the people of the society, caste and social group to which the child belongs, cast a strong influence on the behaviour of the developing children and their personality is almost fashioned and tailored according to the pattern of cultural environment.

6. Its proximity to the child and his/her family makes it a potent factor for casting its influence on the behaviour pattern and personality of the developing child. Whatever a child observes in his/her neighbourhood he/she tries to imitate. The playmates chose from his/her neighbourhood not only provide him/her company but also affect his/her behaviour and set the direction of his/her personality development.

7. This type of observation is carried out under controlled, arranged conditions, in a play room, in a child guidance clinic, where it can observe the child behaviour, and traits. The advantage of under controlled condition is that the observer can directly assessed the personality of a child more accurate and more reliable. It is also easier to replicate.

8. The term 'personality' is derived from the Latin word 'persona' which means a mask. According to G.W. Allport, "personality is the dynamic organisation within then an individual of those psychological systems that determine his unique adjustment to the environment".

The natures of personality are:-

- i) **Personality is dynamic:-** Personality goes in changing and evolving, due to interaction with the environment.
- ii) **Personality is organised:-** Personality is made up of very great number of traits put in an organized way. Each trait has a relationship with the whole system of personality. The distinction between the normal and abnormal personality is to be found in the degree of organization that exists. A normal healthy personality is organized.
- iii) **Personality is within the individual:-** Personality consists of both psychological and physical elements. These two systems do not run counter to each other; they act in a coordinated way. The psychological system includes the habits, attitudes, values, emotional

status, motives etc. Whereas the physical system includes neutral, glandular and general body states.

- iv) **Personality is unique and specific:-** each human is unique, no two individuals, not even identical twins behave in precisely the same manner over a period of time. Every one of us has specific characteristics for making adjustment.
- v) **Personality is the product of heredity and environment:-** every personality is the product of heredity and environment. Both contribute significantly towards the development of the child's personality.

9. The determinants of personality can consist of four types, these are discussed under:-

- i) **Biological determinants:-** Biological determinants of personality include, heredity influences, nervous system, ductless glands, physique or somatic structure, body chemistry. Biological factors of personality are very important for the formation of human personality.
- ii) **Psychological determinants:-** It includes intellectual, emotional, self – disclosure and aspiration and achievements.
- iii) **Social and cultural determinants:-** The development of one's personality is largely carried out by the social and cultural determinants. It includes family/ home, parents, size of the family, economic and social status, school, neighbourhood, religion institutions. Cultural and social factors are usually considered to make a more significant contribution to personality than biological factors.
- iv) **Physical environments:-** Physical environment also determines the personality of an individual. Environmental factors include land, river, mountains, hills, forests, plain area, atmosphere etc which affect the personality to be good or bad, healthy or weak.

10. The psychological determinants like, intellectual and emotional are responsible in the development of personality.

Intellectual development of an individual affects his capacity to adjust in society. Intellectually bright people have the capacity to make better personal and social adjustments. Such people are intelligent enough to understand the requirements of a situation; they are creative and adventurous, so they can understand the demands of a situation very well. People with average intelligence are very often found to be better at forming relationships; they are simple and down to earth.

Emotions many a times become the predominant factor in influencing a person's personality. Emotional deprivation, emotional stress and emotional Catharsis directly and indirectly affect personality development. Some people are naturally happy people, some have predominance of the emotion of jealousy, some get angry very soon, some are loving by nature, and their inherent emotions tend to influence their behaviour.

11. The extreme form of negligence is parental rejection. Some prominent studies reveal the adverse effects of parental rejection on a child's personality are as follows:-

- i) **Levy's studies:-** Levy reveals that some children are apt to react to parental rejection by adopting attitudes of extreme indifference or apathy. They might even develop diminished ability to respond to any affection whatsoever.
- ii) **Bender's Research:-** Bender highlights case of rejected children who have developed compulsive dependency and clinging attitudes.
- iii) **Symond's Investigations:-** Symond points out the possibility of the rejected child's becoming and over – aggressive and hostile person who might occasionally, resort to truancy, lying and stealing.

12. The family, in India society is an institution by itself and a typical symbol of the collectivist culture of India right from the ancient times. The joint family system or an extended family has been an important feature of Indian culture, till a blend of urbanisation and western influence, began to affect in home and health.

The joint family system is the strong bonding it creates among siblings and other members of the family even while providing a sense of security to the children grow up in extended family.

Family values play an important role in shaping the outlook of people. Respect and care for elders are among the central principles in Indian family system.

13. Introverts:-

- i) Like to be alone.
- ii) Think things through before they speak.
- iii) Get energized by being alone.
- iv) Like advance notice of changes.
- v) Like to get feedback in private.
- vi) Work better alone.

Extroverts:-

- i) Like to talk.
- ii) Like to dive in immediately.
- iii) Get energised by being with others.
- iv) Like surprise.
- v) Like public acknowledgement.
- vi) Team work.

### III. LAQ.

1. The family called as the “primary Agency” of development of personality of an individual because it is in the family that the child is initiated into the social setup. From the very birth of the child, the parents and the home and family atmosphere provide the foundation for the normal growth and development of his personality, if the child finds a healthy atmosphere at home he/she has all the chances to develop his/her personality in the direction. On the other hand, poor and uncongenial atmosphere develops him/her into a maladjusted personality.

The child’s first world is that of his family. It is a world in itself, in which the child learns to live, to move and to have his being. Within it, not only the biological tasks of birth, protection and feeding take place, but also develop those first and intimate associations with persons of different ages and sexes which form the basis of the child’s personality development. The family is the primary agency of development of personality. It is here that the child develops an initial sense of self and habit- training- eating, sleeping etc. To a very large extent, the indoctrination of the child, whether in primitive or modern complex society, occurs within the circle of the primary family group. The child’s first human relationships are with the immediate members of his family – mother or nurse, siblings, father and other close relatives. Here he/she experiences love, cooperation, authority, direction and protection. Language is also learnt from family in childhood. People’s perceptions of their sex are the result of socialisation and major part of this is learnt in the family/

As the primary agents of personality development, parents play a critical role in guiding children into their gender roles deemed appropriate in a society. They continue to teach gender role behaviour either consciously or unconsciously, throughout life. They frequently adopt their parent’s attitudes and not only about work but also about the importance of education, patriotism and religion which directly or indirectly affects individual personality.

2. **Character education inquiry:** This character educational inquiry was conducted by Hartshorne and Mark May in 1928 as part of a broad study in situational tests. In one of their investigations, the students were allowed to mark their own examinations, which unknown to them, had already been scored by the investigators. Differences in these two sets of scores were used as evidence of cheating.

In another study by the same investigators money was placed in boxes and distributed to children who believed that their box would not be identified. These studies were carried out in different classrooms, at home, in Sunday schools to determine the extent of cheating, lying, falsifying, stealing, and self – aggrandizement that takes place when the opportunity presents itself.

**Office of strategic services examination:** another classic use of situational tests was by the United States office of strategic services in 1948. In one test, potential candidates for military intelligence work were to construct a large cube from poles, pegs, and blocks within ten minutes. Because of the complexity of the job, each candidate was given two ‘helpers’ who, unknown to the candidate, were psychologists trained to persuade, interfere, ridicule, and generally make the task impossible to complete. The leadership ability of each candidate was observed and rated.

3. Yes, every individual is a unique being. Every human being living on earth has a particular personality, no two individuals, not even identical twins behave in precisely the same manner over a period of time. Every one of us has specific characteristics for making adjustment. However, it does not mean that an individual has nothing in common with others in terms of traits and temperaments; he may share some of his characteristics with others but at in which become part and parcel of his identity the same time as many thing unique to his identity.
4. The questionnaire Method is, however, objectionable on the ground that it demands answers either in the affirmative or in the negative, while the vast majority of individuals would prefer an intermediate answer.  
 Firstly, the replies to various questions can be easily faked. Secondly, pupils may lack sufficient insight into themselves to be able to give objectively true responses, even if they want to be frank and honest. Finally, the terms often frequently, sometimes etc, do not mean the same things t different individuals. Such limitations, as a result, lower the validity of the inventory.

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### Unit-XIII

## INDIVIDUAL DIFFERENCES

#### **I. VSAQ.**

1. Psychological test refers to the use of specific procedures for evaluating personal qualities, behaviour and abilities of individual.
2. According to Osborne, “Individual differences as dissimilarity between persons that distinguish them from one another”.
3. Race and nationality is one cause of individual difference. Indians are very peace loving Chinese are cruel; Americans are very frank due to race and nationality. Every race has its specific features ad habits.
4. Mental differences are noticed in the form of perception, concept formation, and imagination, formation of imagining, memory and attention.
5. Individual differs from others due to his achievements in various fields of life related to academic, social, mental, emotional, moral, spiritual, ad intellectual.
6. Defective speech includes stammering, speaking at low pitch or at a high pitch or no speech. Fumbling is also included in defective speech.

#### **II. SAQ.**

1. Physical defects in a child are:-
  - i) The crippled child.
  - ii) The blind and near blind.
  - iii) The deaf and hard of hearing.
  - iv) The defective in speech.
  - iv) The delicate children.
3. In the classroom the physical handicapped children face sitting problems. There should be a special type of furniture for such children so that they may not face inconvenience while working in the class.
4. self- esteem is always a concern for students with special needs. While it is important that students with abled child should rather be focus on the talents, encourage their efforts. Students’ gain self-esteem when they do something well. Be patient with what they cannot do and rejoice over what they can do. Help them look beyond school. Enrol them in some kind of adventures which they can explore or collecting samples outside. This builds self- esteem by giving them a sense of connection and accompaniment.

5. The significance of individual differences in education has long been recognized. The extensive experimental work that has been undertaken, began by Galton and carried on up to the present time, has so increased the knowledge concerning individual differences and has so enhanced their significance to education that their existence and importance are now a matter of general acceptance. Now knowledge of these differences, their amount, interrelations and causes is very important and necessary in planning the education of a particular child.
6. According to Carter B. Good, "The variation or deviations among individuals in regard to single characteristics or a number of characteristics". Broadly individual differences may be classified into two categories such as inherited traits and acquired traits. Inherited traits include physical, mental, and temperamental. Acquired traits include social, cultural, educational and emotional.
7. It is important to assess the individual differences because the psychological assessment and psychological test procedures described people by specifying how they are different from or similar to other individuals. Psychologists have developed 'test' to assess these characteristics.
8. The teacher must be familiar with many approaches to adjusting the learning situation to the individual needs of the pupil. Any programme of instruction must take into consideration the important facts about differences in individuals and traits.
9. Special children are those who are mentally, physically, or emotionally normal yet defective as compared to simple or normal children.
10. Special care is the general requirement for special children.
10. The mental level of the handicapped children is like those of normal children. So they should be provided the opportunities along with normal children to achieve education and mental development.  
 There should be arrangement of furniture according to their physical requirements.  
 The crippled children should be sent to the doctors of artificial limbs, so that they may get benefit of operations. For this purpose, the parents of the handicapped children should also be educated.  
 The crippled children should be educated to change their attitude towards their defects and they should be encouraged to expand their contacts with other normal persons.

### III. LAQ

1. If an individual's behaviour is characterised by frequent or prolonged display of aggressive acts or of extreme shyness or withdrawal, the possible cause of the deviation needs to be discovered and perhaps therapeutic treatment should be given and teachers are held responsible for the well being and adjustment of such children. For this, the teacher should take note of the following:-
  - i) Appreciation of variations in growth and development.
  - ii) Understanding of the relations of significant influences on an individual of his culture and social background.
  - iii) Knowledge of the relationship between learning difficulties and emotional maladjustment.
  - iv) Alertness of symptoms of emotional disturbances.
  - v) Recognition of the underlying causes of abnormal behaviour.
  - vi) Insight on the part of school counsellor considering his own limitation in dealing with seriously disturbed pupils.
  - vii) Knowledge of appropriate community agencies to which reference can be made for diagnosis and therapy of the emotional or social deviate.
  - viii) Co-operation with home, school staff and agency personnel.
2. It is the policy in most school systems to provide for the education of the physically handicapped in regular class rooms, in so far as the procedure is advisable. In addition to proper professional care provided by the parents, by the school, teacher or by community agencies, various appropriate privileges are granted to them. Some of the most common of these are listed:-

- i) Pupils having somewhat impaired eyesight, even though they are wearing eyeglasses, are permitted to move about the classroom freely to read what is on the blackboard, maps or bulletin board.
  - ii) Partially sighted pupils are provided the services of selected classmates as readers.
  - iii) A hard of hearing pupil is seated in the front row of the classroom and is permitted to change seats to hear what is said by the teacher or the other members of the class.
  - iv) Lame pupils those confined to a wheel chair are transported to and from school by special buses, are assigned to rooms on the first floors, if possible to be permitted to attend a school having elevators, even though it is outside the pupils' school district.
  - v) Physically handicapped secondary school students are usually permitted to leave their classes before the regular time for dismissal, to avoid passing through crowded corridors.
3. The handicap may be slight or serious. The handicapped individual faces many problems in his adequate adjustment on account of his physical deformity. The handicapped is unable to participate in desirable normal activities and hence require satisfying substitute interest. Also, his incapability develops in him emotional problems like resentment and discouragement. These require social attention in his adjustment. The handicapped develops a feeling that the others have a low opinion about him due to his defect and an undue exaggeration of this feeling in his mind results in the development of an attitude of self pity in him.
- Sometimes, specially abled child happens to be the result of unfavourable home environmental conditions or of delayed or neglected treatment of pre- disposing condition. Such specially abled child may attain proper adjustment if they are provided with improved environmental conditions. The physically handicapped is not necessarily mentally deficient. In a majority of cases, he possesses normal intelligence. Thus, his mental powers are to be exploited fully to compensate for his physical disability.
4. There are various causes which are responsible in bringing individual differences. These are further explained below.
- i) **Heredity (Nature):-** Some heretical traits bring a change from one individual to other. An individual's height, size, shape, and colour of hair, shape of face, nose, hands and legs so to say the entire structure of the body is determined by his heretical qualities. Intellectual differences are also to a great extent influenced by heredity factors.
  - ii) **Environment (Nurture):-** Environment brings individual differences in behaviour, activities, attitude and style of life characteristics, personality etc. Environment does not refer to only physical surroundings but also refers to the different types of people, society, their culture, customs, traditions, social heritage, ideas and ideals.
  - iii) **Race and nationality:-** Race and nationality is one cause of individual differences. Indians are very peace loving, Chinese are cruel, Americans are very frank due to race and nationality. Every race has its specific features and habits.
  - iv) **Sex:-** Men are strong in physical endurance and power; on the other hand women on the average show small superiority over men in memory, language and aesthetic sense. Women excel the men in shouldering social responsibilities and have a better control over their emotions.
  - v) **Age:-** learning ability ad adjustment capacity naturally grow with age. When one grows in age he/she can acquire better control over their emotions and better social responsibilities. When a child grows then this maturity and development goes side by side.
  - vi) **Education:-** education brings individual differences. There is wide gap in the behaviour of educated and uneducated persons. All traits of human beings like social, emotional, and intellectual are controlled and modified through proper education.
5. The educational implications of individual differences are as follows:-
- i) Aims of education, curriculum, method of teaching etc should be linked with individual differences considering the different abilities and traits of an individual.
  - ii) Curriculum should be designed as per the interest, abilities and needs of different students.
  - iii) The teacher has to adopt different types of methods of teaching considering individual differences related to interest, need etc.

- iv) Some co-curricular activities such as drama, music, literary activities should be assigned to children according to their interest.
- v) The teacher uses certain specific teaching aids which will attract the children towards teaching considering their interest and need.
- vi) Various methods such as playing method, project method, lecture method, display methods are to be used considering/discovering how different children respond to a task or a problem.
- vii) The division of pupils into classes should not be based only on the mental age or chronological age of children but the physical, social and emotional maturity should be given due consideration.
- viii) In case of vocational guidance the counsellor is to plan the guidance technique keeping in view the needs and requirements of the students.

6. No two persons are alike. All the individuals differ from each other in many a respect. Children born of the same parents and even the twin are not alike. This change is seen in physical forms like in height, weight, colour, complexion and strength etc. Difference in intelligence, achievement, interest, attitudes, aptitude, learning habits, motor abilities, and skill. Each man has an intellectual capacity through which he gains experience and learning.

Every person has the emotions of love, anger, fear and feelings of pleasure and pain. Every person has the need of independence, success and need for acceptance.

The causes which are responsible in bringing individual differences are:-

**i) Heredity (Nature):-** Some heretical traits bring a change from one individual to other. An individual's height, size, shape, and colour of hair, shape of face, nose, hands and legs so to say the entire structure of the body is determined by his heretical qualities. Intellectual differences are also to a great extent influenced by heredity factors.

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**vi) Education:-** Education brings individual differences. There is wide gap in the behaviour of educated and uneducated persons. All traits of human beings like social, emotional, and intellectual are controlled and modified through proper education.

Thus education brings a change in our attitude, behaviour, appreciations, personality etc. It is seen that uneducated persons are guided by their instinct and emotions whereas the educated persons are guided by their reasoning power.

## 7. **Provisions for blind students:-**

- I) If their teaching can be improved with a pair of spectacles, such arrangements should be made.
- II) Completely blind children cannot get along with normal teaching methods. They require special treatment. Hence, they should be sent to school for the blinds. In those schools special teaching methods are used for them.
- III) For them books with bold type and Braille should be used.
- IV) There should be proper arrangements of air and light for such children.
- V) The reading and writing habits of these children should be improved.
- VI) Blackboards should be such that words written on them could easily be read. Also, the blackboards should be placed at such a distance that these children may read the matter

written on the blackboard conveniently without putting any strain on their eyes. The blinds or partially blinds should be given training in handicrafts instead of bookish knowledge.

**Provision for deaf students:-**

- i) There should be provision for deaf children in normal schools. In these schools there should be training with special techniques.
  - ii) There should be no separate provisions for the children who are hard of hearing because such children can learn and know a lot from the lip movements of the teachers and the classmates.
  - iii) Various devices can also aid them in listening.
  - iv) A rapport should be established between such children and teachers so that the teacher's may pay individual attention for their adjustment.
8. The following measures should be taken to educate the visually impaired children.
- I. If their teaching can be improved with a pair of spectacles, such arrangements should be made.
  - II. Completely blind children cannot get along with normal teaching methods. They require special treatment. Hence, they should be sent to school for the blinds. In those schools special teaching methods are used for them.
  - III. For them books with bold type and Braille should be used.
  - IV. There should be proper arrangements of air and light for such children.
  - V. The reading and writing habits of these children should be improved.
  - VI. Blackboards should be such that words written on them could easily be read. Also, the blackboards should be placed at such a distance that these children may read the matter written on the blackboard conveniently without putting any strain on their eyes. The blinds or partially blinds should be given training in handicrafts instead of bookish knowledge.
9. Deaf children are those who are unable to hear any sound. They are deaf either by birth or become so due to some illness. Some children hear but they are hard of hearing. Such children too, do not learn like normal children. The following should be the provisions for the education of such children:
- I. There should be provision for deaf children in normal schools. In these schools there should be training with special techniques.
  - II. There should be no separate provisions for the children who are hard of hearing because such children can learn and know a lot from the lip movements of the teachers and the classmates.
  - III. Various devices can also aid them in listening.
  - IV. A rapport should be established between such children and teachers so that the teacher's may pay individual attention for their adjustment.
10. Children with immunity do not have any disease or physical defect but their health is not so sound. They have to be cared for their health. This delicacy is due to defective bringing up, imbalanced diets or contagious diseases. For educating of such children there should be provisions for medical checkups and psychological based teaching methods. For such children, balanced diets and sound bringing up are essential.

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