

VARIATIONS IN PSYCHOLOGICAL ATTRIBUTES

STUDY-NOTES

● INDIVIDUAL DIFFERENCES IN HUMAN FUNCTIONING

- ❖ Individual differences refer to distinctiveness and variations among people's characteristics and behaviour patterns.
- ❖ For example, people differ in height, weight, intelligence, interests, etc.
- ❖ Variability is a fact of nature, and individuals are no exception to this.
- ❖ They vary in terms of physical characteristics, such as height, weight, strength, hair colour, etc.

● SITUATIONISM

- ❖ Situational factors include: (i) Situation (external) and (ii) Personal traits (internal).
- ❖ Psychologists hold the view that our behaviours are influenced more by situational factors. This latter view is known as situationism.
- ❖ Situationism states that situations and circumstances in which one is placed influence one's behaviour.
- ❖ The situationist perspective views human behaviour as resulting from interaction of external and internal factors.
- ❖ For example, a person, who is generally aggressive, may behave in a submissive manner in the presence of her/his boss.

● PSYCHOLOGICAL ASSESSMENT

- ❖ **Assessment** refers to the measurement of psychological attributes of individuals and their evaluation, often using multiple methods in terms of certain standards of comparison.
- ❖ Psychological assessment uses systematic testing procedures to evaluate abilities, behaviours, and personal qualities of individuals.
- ❖ **Classification of Psychological Assessment:** Psychological assessment may be formal or informal.
 - **Formal assessment** consists of following factors:
 - Objective (clear purpose),
 - Organised (proper procedure),
 - Standardised [consistent and reliable (reliability) and valid (measures what it claims to measure)].
 - **Informal assessment** comprised of the following:
 - Not standardised/organised,
 - Varies from case to case and from one assessor to another and
 - It is open to subjective interpretations.

● PSYCHOLOGICAL ATTRIBUTES

- ❖ **Assessment** is the first step in understanding the psychological attributes. Any attribute will be said to exist in a person only if it can be measured using scientific procedures.
- ❖ **Domains of Psychological Attributes:** These attributes are categorised on the basis of varieties of tests used in psychological literature.
 - (i) **Intelligence:**
 - Intelligence is the global capacity to understand the world, think rationally, and use available resources effectively when faced with challenges.

- Intelligence is a general cognitive ability.
- Alfred Binet defined intelligence as the ability to judge well, understand well and reason well.
- For example, generally students having low intelligence are not likely to do so well in school-related examinations, but their success in life is not associated only with their intelligence test scores.

(ii) Aptitude:

- Aptitude refers to an individual's underlying potential for acquiring skills.
- It is a combination of characteristics that indicates an individual's capacity to acquire some specific knowledge/skills after training.
- It is a specific ability that predicts the behaviour of an individual after training and experience.

(iii) Interest:

- Interest is an individual's preference for engaging in one or more specific activities relative to others.
- It is a specific ability which indicates one's likes and dislikes.

(iv) Personality:

- Personality refers to relatively enduring characteristics of a person that make her or him distinct from others.
- Personality tests try to assess an individual's unique characteristics, e.g. whether one is dominant or submissive, outgoing or withdrawn, moody or emotionally stable, etc.

(v) Values:

- Values are enduring beliefs about an ideal mode of behaviour.
- A person having a value sets a standard for guiding her/his actions in life and also for judging others.

● **ASSESSMENT METHODS**

- ❖ **Psychological Test** is an objective and standardised measure of an individual's mental and/or behavioural characteristics. These tests are widely used for the purposes of clinical diagnosis, guidance, personnel selection, placement, and training.
- ❖ **Interview** involves seeking information from a person on a one-to-one basis. You may see it being used when a counsellor interacts with a client, a salesperson makes a door-to-door survey regarding the usefulness of a particular product, an employer selects employees for her/his organisation.
- ❖ **Case Study** is an in-depth study of the individual in terms of her/his psychological attributes, psychological history in the context of her/his psychosocial and physical environment. Case studies are widely used by clinical psychologists.
- ❖ **Observation** involves employing systematic, organised, and objective procedures to record behavioural phenomena occurring naturally in real time. Certain phenomena such as mother-child interactions can be easily studied through observation.
- ❖ **Self-report** is a method in which a person provides factual information about herself/himself and/or opinions beliefs, etc. that s/he holds. Such information may be obtained by using an interview schedule or a questionnaire, a psychological test, or a personal diary.

● **INTELLIGENCE**

❖ **Definitions of intelligence:**

- The Oxford Dictionary explains intelligence as the power of perceiving, learning, understanding, and knowing.
- Alfred Binet was one of the first psychologists who worked on intelligence. He defined intelligence as the ability to judge well, understand well, and reason well.
- Wechsler, whose intelligence tests are most widely used, understood intelligence in terms of its functionality, i.e., its value for adaptation to environment. He defined it as the global and aggregate capacity of an individual to think rationally, act purposefully, and to deal effectively with her/his environment.
- Gardner and Sternberg have suggested that an intelligent individual not only adapts to the environment, but also actively modifies or shapes it.

❖ **Theories of Intelligence:** The theories of intelligence are broadly classified into two groups as discussed below.

1. Psychometric Approach: The psychometric approach considers intelligence as an aggregate of abilities. It expresses the individual's performance in terms of a single index of cognitive abilities. For example, uni- or one-factor theory, two-factor theory, theory of primary mental abilities and structure-of-intellect model.

(a) **Uni or One-Factor Theory:** Alfred Binet was the first psychologist who tried to formalise the concept of intelligence in terms of mental operations. He conceptualised intelligence as consisting of one similar set of abilities which can be used for solving any or every problem in an individual's environment. His theory of intelligence is called Uni- or one-factor theory of intelligence.

(b) **Two-Factor Theory:** In 1927, Charles Spearman proposed a two-factor theory of intelligence employing a statistical method called factor analysis. He showed that intelligence consisted of a general factor (**g-factor**) and some specific factors (**s-factors**).

- The **g-factor** includes mental operations which are primary and common to all performances.
- In addition to the g-factor, he said that there are also many specific abilities. These are contained in what he called the **s-factor**.
- For example, excellent singers, architects, scientists, and athletes may be high on g-factor, but in addition to this, they have specific abilities which allow them to excel in their respective domains.

(c) **Theory of Primary Mental Abilities:** Louis Thurstone proposed the theory of primary mental abilities. It states that intelligence consists of seven primary abilities, each of which is relatively independent of the others. These primary abilities are:

- (i) **Verbal comprehension:** Grasping meaning of words, concepts, and ideas.
- (ii) **Numerical abilities:** Speed and accuracy in numerical and computational skills.
- (iii) **Spatial relations:** Visualising patterns and forms.
- (iv) **Perceptual speed:** Speed in perceiving details.
- (v) **Word fluency:** Using words fluently and flexibly.
- (vi) **Memory:** Accuracy in recalling information.
- (vii) **Inductive reasoning:** Deriving general rules from presented facts.

(d) **Levels of Intelligence:** Arthur Jensen proposed a hierarchical model of intelligence consisting of abilities operating at two levels, called Level I and Level II.

- **Level I** is the associative learning in which output is more or less similar to the input (e.g., rote learning and memory).
- **Level II**, called cognitive competence, involves higher-order skills as they transform the input to produce an effective output.

(e) **Structure of Intellect Model:** J.P. Guilford proposed the structure-of-intellect model which classifies intellectual traits among three dimensions: operations, contents, and products. The model has 180 cells.

- **Operations** are what the respondent does. These include cognition, memory, divergent production, convergent production and evaluation.
- **Contents** refer to the nature of materials or information on which intellectual operations are performed. These include visual, auditory, symbolic (e.g., letters, numbers), semantic (e.g., words), behavioural (e.g., information about people's behaviour, attitudes, needs, etc.).
- **Products** refer to the form in which information is processed by the respondent: Units (knowledge), Classes (common attributes), Relations (similar, opposite, etc.), Systems (multiple relations), Transformations (modification), Implications (inference).

2. Information Processing Approach: The information processing approach describes the processes people use in intellectual reasoning and problem solving. the major focus of this approach is on how an intelligent person acts. For example, PASS (Planning, Attention-Arousal, and Simultaneous-Successive) model of intelligence and triarchic theory of intelligence.

(a) **Triarchic Theory of Intelligence:** Robert Sternberg (1985) proposed the triarchic theory of intelligence. Sternberg views intelligence as "the ability to adapt, to shape and select environment to accomplish one's goals and those of one's society and culture".

There are three basic types of intelligence: Componential, Experiential, and Contextual.

- (i) **Componential Intelligence:**
 - Componential or analytical intelligence is the analysis of information to solve problems.
 - Persons high on this ability think analytically and critically. This intelligence has three components, each serving a different function.
 - First is the knowledge acquisition component, which is responsible for learning and acquisition of the ways of doing things.
 - The second is the meta or a higher order component, which involves planning concerning what to do and how to do.
 - The third is the performance component, which involves actually doing things.
 - (ii) **Experiential Intelligence:**
 - Experiential or creative intelligence is involved in using past experiences creatively to solve novel problems.
 - It is reflected in creative performance. Persons high on this aspect integrate different experiences in an original way to make new discoveries and inventions.
 - They quickly find out which information is crucial in a given situation (e.g. Chefs).
 - (iii) **Contextual Intelligence:**
 - Contextual or practical intelligence involves the ability to deal with environmental demands encountered on a daily basis. It may be called 'street smartness' or 'business sense'.
 - Persons high on this aspect easily adapt to their present environment or select a more favourable environment than the existing one, or modify the environment to fit their needs.
- (b) **Planning, Attention-Arousal, and Simultaneous-Successive (PASS) Model of Intelligence:** This model has been developed by J.P. Das, Jack Naglieri, and Kirby (1994). According to this model, intellectual activity involves the interdependent functioning of three neurological systems, called the functional units of brain.
- (i) **Planning:** Planning allows us to think of the possible courses of action, implement them to reach a target, and evaluate their effectiveness.
 - If a plan does not work, it is modified to suit the requirements of the task or situation.
 - For example, to take the test scheduled by your teacher, you would have to set goals, plan a time schedule of study, get clarifications in case of problems and if you are not able to tackle the chapters assigned for the test, you may have to think of other ways (e.g., give more time, study with a friend, etc.) to meet your goals.
 - Das and Naglieri have also developed a battery of tests, known as the Cognitive Assessment System (CAS).
 - (ii) **Arousal-Attention:** State of arousal is basic to any behaviour as it helps us in attending to stimuli.
 - Arousal and attention enable a person to process information.
 - An optimal level of arousal focuses our attention to the relevant aspects of a problem.
 - Too much or too little arousal would interfere with attention.
 - For instance, when you are told by your teacher about a test which s/he plans to hold, it would arouse you to attend to the specific chapters.
 - (iii) **Simultaneous and Successive Processing:** Simultaneous processing takes place when you perceive the relations among various concepts and integrate them into a meaningful pattern for comprehension.
 - For example, in Raven's Progressive Matrices (RPM) Test, a design is presented from which a part has been removed. You are required to choose one of the six options that best completes the design.
 - Simultaneous processing helps you in grasping the meaning and relationship between the given abstract figures.
 - Successive processing takes place when you remember all the information serially so that the recall of one leads to the recall of another. For example, learning of digits, alphabets, multiplication tables, etc., are examples of successive processing.

- ❖ **Theory of Multiple Intelligences:** Howard Gardner proposed the theory of multiple intelligences.
 - According to him, intelligence is not a single entity; rather distinct types of intelligences exist.
 - Each of these intelligences are independent of each other. This means that, if a person exhibits one type of intelligence, it does not necessarily indicate being high or low on other types of intelligences.
 - Different types of intelligences interact and work together to find a solution to a problem.
 - Gardner studied extremely talented persons, who had shown exceptional abilities in their respective areas, and described eight types of intelligence.

These are as follows:

1. **Linguistic:** Skills involved in the production and use of language.
 - It is the capacity to use language fluently and flexibly to express one's thinking and understand others.
 - Persons high on this intelligence are 'word-smart', i.e. they are sensitive to different shades of word meanings, are articulate, and can create linguistic images in their mind.
 - For example, poets and writers are very strong in this component of intelligence.
2. **Logical-Mathematical:** Skills in scientific thinking and problem solving.
 - Persons high on this type of intelligence can think logically and critically.
 - They engage in abstract reasoning, and can manipulate symbols to solve mathematical problems.
 - For example, scientists and Nobel Prize winners are likely to be strong in this component.
3. **Spatial:** Skills in forming visual images and patterns.
 - It refers to the abilities involved in forming, using, and transforming mental images.
 - The person high on this intelligence can easily represent the spatial world in the mind.
 - For example, pilots, sailors, sculptors, painters, architects, interior decorators, and surgeons are likely to have highly developed spatial intelligence.
4. **Musical:** Sensitivity to musical rhythms and patterns.
 - It is the capacity to produce, create and manipulate musical patterns.
 - Persons high on this intelligence are very sensitive to sounds and vibrations, and in creating new patterns of sounds.
 - For example, musicians and composers.
5. **Bodily-Kinaesthetic:** Using whole or portions of the body flexibly and creatively.
 - This consists of the use of the whole body or portions of it for display or construction of products and problem solving.
 - For example, athletes, dancers, actors, sportspersons, gymnasts, and surgeons are likely to have such kind of intelligence.
6. **Interpersonal:** Sensitivity to subtle aspects of others' behaviours.
 - This is the skill of understanding the motives, feelings and behaviours of other people so as to bond into a comfortable relationship with others.
 - For example, psychologists, counsellors, politicians, social workers, and religious leaders are likely to possess high interpersonal intelligence.
7. **Intrapersonal:** Awareness of one's own feelings, motives, and desires.
 - This refers to the knowledge of one's internal strengths and limitations and using that knowledge to effectively relate to others.
 - Persons high on this ability have finer sensibilities regarding their identity, human existence, and meaning of life.
 - For example, philosophers and spiritual leaders present examples of this type of intelligence.

8. Naturalistic: Sensitivity to the features of the natural world.

- This involves complete awareness of our relationship with the natural world.
- It is useful in recognising the beauty of different species of flora and fauna, and making subtle discriminations in the natural world.
- For example, hunters, farmers, tourists, botanists, zoologists, and bird watchers possess more of naturalistic intelligence.

● **INDIVIDUAL DIFFERENCES IN INTELLIGENCE**

❖ **Nature versus Nurture:**

- In order to see the influence of heredity and environment on intelligence, studies are done on twins (both fraternal and identical) and adopted children.
- Heredity manipulation was done by taking identical and fraternal twins and adopted children.
- Environment was manipulated by children reared together or separated at the time of birth.
- Researchers have found that when children are young, their intelligence is more similar/closer to biological rather than adoptive parents.

Studies	Correlation
Identical twins reared together	0.90
Identical twins reared apart	0.72
Fraternal twins reared together	0.60
Siblings reared together	0.50
Siblings reared apart	0.25

❖ **Role of Environment**

- As children start growing in age, their intelligence becomes closer to their adoptive parents.
- Children from disadvantaged homes adopted by families with higher socio-economic status show an increase in intelligence whereas those adopted by families with lower socio-economic status show a decrease in intelligence.
- Environmental deprivation lowers intelligence whereas rich nutrition, good family background, good schooling will increase intelligence.
- Heredity sets a range within which an individual's development is actually shaped by the support and opportunities of the environment.

❖ **Assessment of Intelligence**

- In 1905, Alfred Binet and Theodore Simon made the first successful attempt to formally measure intelligence.
- In 1908, when the scale was revised, they gave the concept of Mental Age (MA), which is a measure of a person's intellectual development relative to people of her/his age group. Chronological Age (CA) is the biological age from birth.
- In 1912, William Stern, a German psychologist, devised the concept of Intelligence Quotient (IQ).
- Intelligence Quotient refers to mental age divided by chronological age, and multiplied by 100.

$$IQ = \frac{MA}{CA} \times 100$$

- The IQ scores are distributed in the population in such a way that the scores of most people tend to fall in the middle range of the distribution. Only a few people have either very high or very low scores.
- The frequency distribution for the IQ scores tends to approximate a bell-shaped curve, called the normal curve.

❖ Variations of Intelligence

1. **Intellectual Disability/Deficiency:** The American Association on Mental Deficiency (AAMD) views mental retardation as “significantly sub-average general intellectual functioning existing concurrently with deficits in adaptive behaviour and manifested during the developmental period”.

The different levels of retardation are:

- **Mild retardation (IQs 55–69):** Although the development of people with mild retardation is typically slower than that of their peers, they can function quite independently, hold jobs and families.
- **Moderate retardation (IQs 40–54):** They can be trained in self-care skills, and simple social and communication skills. They need to have moderate degree of supervision in everyday tasks.
- **Severe retardation (IQs 25–39) and profound retardation (IQs below 25):** Individuals with profound and severe retardation are incapable of managing life and need constant care for their entire lives.

2. **Intellectual Giftedness:** Giftedness is exceptional general ability shown in superior performance in a wide variety of areas. Talent is a narrower term and refers to remarkable ability in a specific field. Intellectually gifted individuals show higher performance because of their outstanding potentialities while the highly talented are sometimes called ‘prodigies’.

● TYPES OF INTELLIGENCE TESTS

❖ Individual or Group Tests

- An individual intelligence test is one which can be administered to one person at a time.
- Individual tests require the test administrator to establish a rapport with the subject and be sensitive to her/his feelings, moods and expressions during the testing session.
- A group intelligence test can be administered to several persons simultaneously. Group tests, however, do not allow an opportunity to be familiar with the subjects’ feelings.

❖ Verbal, Non-Verbal, or Performance Tests

- Verbal tests require subjects to give verbal responses either orally or in a written form. Therefore, verbal tests can be administered only to literate people.
- The non-verbal tests use pictures or illustrations as test items. For example, Raven’s Progressive Matrices (RPM).
- Performance tests require subjects to manipulate objects and other materials to perform a task. Written language is not necessary for answering the items. For example, Kohs’ Block Design Test.

❖ Culture Fair versus Culture Biased Tests

- Many intelligence tests show a bias to the culture in which they are developed. Tests developed in America and Europe represent an urban and middle class cultural ethos. Hence, educated middle class white subjects generally perform well on those test.
- Culture-fair or culturally appropriate, i.e. one that does not discriminate against individuals belonging to different cultures. In such tests, items are constructed in a manner that they assess experiences common to all cultures or have questions in which language usage is not required.

❖ Intelligence Testing in India

- S.M. Mohsin made a pioneering attempt in constructing an intelligence test in Hindi in the 1930s.
- C.H. Rice attempted to standardise Binet’s test in Urdu and Punjabi.
- Mahalanobis attempted to standardise Binet’s test in Bengali.
- Attempts were also made by Indian researchers to develop Indian norms for some western tests including RPM, WAIS, Alexander’s Passalong, Cube Construction, and Kohs’ Block Design.
- Long and Mehta prepared a Mental Measurement Handbook listing out 103 tests of intelligence in India that were available in various languages.
- The National Library of Educational and Psychological Tests (NLEPT) at the National Council of Educational Research and Training (NCERT) has documented Indian tests. Critical reviews of Indian tests are published in the form of handbooks. NLEPT has brought out the handbooks in the area of intelligence, aptitude, personality, attitudes, and interests.

● CULTURE AND INTELLIGENCE

- ❖ **Technological Intelligence:** It is the kind of intelligence given importance in Western culture or societies. Technologically advanced societies adopt child rearing practices that foster:
 - Skills of generalisation
 - Skills of abstraction
 - Speed
 - Minimal moves
 - Mental manipulation among children
- ❖ **Integral Intelligence:** Intelligence in the Indian tradition can be termed as integral intelligence, which gives emphasis on connectivity with the social and world environment.
 - The Sanskrit word “*Buddhi*” according to J.P. Das, includes such skills as mental effort, determined action, feelings, and opinions along with cognitive competence such as knowledge, discrimination, and understanding.
 - The following competencies are identified as facets of intelligence in the Indian tradition:
 - Cognitive capacity,
 - Social competence,
 - Emotional competence,
 - Entrepreneurial competence.

● EMOTIONAL INTELLIGENCE

- ❖ Emotional intelligence is a set of skills that underlie accurate appraisal, expression, and regulation of emotions. It is the feeling side of intelligence.
- ❖ This concept was first introduced by Salovey and Mayer who considered emotional intelligence as “the ability to monitor one’s own and other’s emotions, to discriminate among them, and to use the information to guide one’s thinking and actions”.
- ❖ Emotional Quotient (EQ) is used to express emotional intelligence in the same way as IQ is used to express intelligence.

● SPECIAL ABILITIES

❖ **Aptitude: Nature and Measurement**

- Aptitude refers to special abilities in a particular field of activity. It is a combination of characteristics that indicate an individual’s capacity to acquire some specific knowledge or skill after training.
- Aptitude tests are available in two forms:
 - Independent (*specialised*) aptitude tests and
 - Multiple (*generalised*) aptitude tests.

● CREATIVITY AND INTELLIGENCE

- ❖ Terman, in the 1920s, found that persons with high IQ were not necessarily creative. At the same time, creative ideas could come from persons who did not have a very high IQ.
- ❖ Researchers have also found that both high and low level of creativity can be found in highly intelligent children and also children of average intelligence.
- ❖ Researchers have found that the relationship between creativity and intelligence is positive.
- ❖ All creative acts require some minimum ability to acquire knowledge and capacity to comprehend, retain, and retrieve.
- ❖ For example, creative writers need facility in dealing with language. The artist must understand the effect that will be produced by a particular technique of painting, a scientist must be able to reason and so on.
- ❖ Hence, a certain level of intelligence is required for creativity but beyond that intelligence does not correlate well with creativity.

QUESTION BANK

MULTIPLE CHOICE QUESTIONS

- _____ refers to variations and distinctiveness among an individual's characteristics and behaviour.
(a) Situational perspective (b) Aptitude (c) Individual differences (d) None of these
- What will be the IQ of an individual when his chronological age is higher than his mental age _____.
(a) Average (b) Below average (c) Above average (d) Intellectually deficient
- Who proposed the triarchic theory of intelligence?
(a) Robert Sternberg (b) Howard Gardner (c) Alfred Binet (d) JP Das
- The first step in understanding psychological attributes is _____.
(a) Intelligence (b) Aptitude (c) Assessment (d) Individual Differences
- Assessment can be used for _____.
(a) Prediction purposes (b) Identifying intellectual strengths and weaknesses
(c) Assessment of personality (d) All of these
- Who defines retardation as being two mental age years below the chronological age?
(a) Binet and Simon (b) Gardner and Sternberg (c) William Stern (d) JP Das and Naglerie
- Anil is an aggressive person but remains very submissive in front of his boss. This tendency in which situations and circumstances influence one's behaviour is called _____.
(a) Situationism (b) Aggression (c) Individual differences (d) Intelligence
- Global capacity of an individual to think rationally and deal effectively when facing a challenge is referred to as _____.
(a) Aptitude (b) Interest (c) Values (d) Intelligence
- General cognitive capacity including the ability to be profited by schooling is referred to as _____.
(a) Aptitude (b) Intelligence (c) Interest (d) Skill
- _____ refers to the underlying potential of an individual for acquiring skills.
(a) Aptitude (b) Intelligence (c) Interest (d) Values
- _____ tests help in predicting behaviour under proper training and environment.
(a) Intelligence tests (b) Aptitude tests (c) Interest tests (d) Personality tests
- Ramesh wants to study an individual's psychological attributes, psychological history in terms of his psychological, physical and social environment. What method will he use?
(a) Interview (b) Observation (c) Case Study (d) Survey
- When an individual provides factual data about his/her opinions, beliefs, etc., it is called _____.
(a) Projective techniques (b) Self report (c) Observation (d) Case Study
- According to _____ and _____, an intelligent person not only adapts but also shapes his environment.
(a) Binet and Simon (b) JP Das and Naglerie (c) Gardner and Sternberg (d) None of these
- The Psychometric Approach explains intelligence in terms of a single index of cognitive ability.
(a) True (b) False (c) Can't say (d) None
- Binet's theory of one similar set of abilities solving every problem is termed as _____.
(a) Two-factor theory (b) Uni- or one-factor theory
(c) Theory of primary mental abilities (d) Structure-of-intellect model
- According to _____ two-factor theory intelligence consists of _____ and _____ factors.
(a) Charles Spearman; General and Specific (b) Thurston; Verbal and Memory
(c) Gardner; Linguistic and Scientific (d) Thurston; Operation and Content

18. _____ proposed a hierarchical model of intelligence consisting of abilities operating at two levels, called Level I and Level II.
 (a) Binet (b) Simon (c) William Stern (d) Arthur Jensen
19. Skill of understanding the motives, feelings and behaviors of another person is called _____.
 (a) Interpersonal intelligence (b) Intrapersonal intelligence
 (c) Linguistic intelligence (d) Musical Intelligence
20. Ramesh can make jingles very easily, he can guess the song at the very onset of tunes. He is high on _____ Intelligence.
 (a) Musical (b) Kinaesthetic (c) Natural (d) Interpersonal
21. Interior designers, architects have higher _____ intelligence.
 (a) Linguistic (b) Mathematical (c) Spatial (d) Naturalistic
22. Anil is very fast in calculation, understands algorithms very easily. He has high _____ intelligence.
 (a) Linguistic (b) Naturalistic
 (c) Interpersonal (d) Logical mathematical
23. Componential intelligence is also called _____ intelligence.
 (a) Analytical (b) Creative (c) Contextual (d) Experiential
24. Persons high on _____ intelligence integrate different experiences in an original way to make new discoveries and inventions.
 (a) Analytical (b) Experiential (c) Contextual (d) Componential
25. Das and Naglieri have also developed a battery of tests, known as the _____.
 (a) CAS (b) DBDA (c) DAT (d) None of these
26. _____ is an exceptional general ability shown in superior performance in a wide variety of areas.
 (a) Intellectual giftedness (b) Creative (c) Above average (d) Intellectually deficient
27. _____ is a measure of a person's intellectual development relative to people of her/his age group.
 (a) Chronological age (b) Mental age (c) Intelligence (d) Emotional quotient
28. _____ refers to mental age divided by chronological age, and multiplied by 100.
 (a) EQ (b) IQ (c) SQ (d) None of these
29. _____ are enduring beliefs about an ideal mode of behaviour.
 (a) Values (b) Opinions (c) Attitudes (d) Prejudices
30. _____ proposed the structure of the intellect model.
 (a) Alfred binet (b) JP Guilford (c) Thurston (d) Charles Spearman
31. IQ scores are distributed in the population in such a way that the scores of most people tend to fall in the middle range of the distribution. Only a few people have either very high or very low scores. This is called _____ curve.
 (a) Normal (b) Skewed (c) Correlation (d) None of these
32. Who gave theory of multiple intelligences?
 (a) Howard Gardner (b) Alfred Binet (c) JP Guilford (d) Thurston
33. _____ gave the concept of seven primary mental abilities.
 (a) Louis Thurstone (b) Howard Gardner (c) Alfred Binet (d) JP Guilford
34. The ability to monitor one's own and other's emotions and use the information to guide one's thinking and actions is called _____.
 (a) Emotional intelligence (b) Aptitude (c) Interest (d) Values
35. A person with IQ of 90 is considered to have:
 (a) Average IQ (b) Borderline IQ
 (c) Mild mental retardation (d) Moderate mental retardation

36. An individual's capacity to acquire some specific knowledge or skill is called _____.
- (a) Giftedness (b) Talent (c) Intellectual superiority (d) Borderline
37. A student with high aptitude in verbal reasoning and strong interest in reading is more likely to succeed as:
- (a) Engineer (b) Journalist (c) Businessman (d) Doctor
38. The highly talented are sometimes called _____.
- (a) Prodigies (b) Smart (c) Intelligent (d) Street smartness
39. Raven's Progressive Matrices (RPM) is an example of _____ test.
- (a) Non-verbal test (b) Culture-biased test (c) Verbal (d) Performance
40. The preference for a particular activity is called _____.
- (a) Interest (b) Aptitude (c) Personality (d) Intelligence
41. Who developed an Indian adaptation of the Differential Aptitude Test?
- (a) JM Ojha (b) Uma Choudhary (c) JP Das (d) None of these
42. Intelligence does not ensure creativity.
- (a) True (b) False (c) Can't say (d) None
43. Intelligence in the Indian tradition can be termed as _____.
- (a) Integral intelligence (b) Western intelligence
(c) Technological intelligence (d) Individualistic intelligence
44. Respect for social order, commitment to elders, young and needy is called _____.
- (a) Social competence (b) Emotional competence
(c) Entrepreneurial competence (d) Cognitive competence
45. Environmental deprivation lowers intelligence.
- (a) True (b) False (c) Can't say (d) None
46. Das, Naglieri and Kirby gave the _____ model of intelligence.
- (a) Uni factor (b) Two factor (c) PASS (d) None of these
47. People with _____ intelligence may be called street smart.
- (a) Experiential (b) Creative (c) Componential (d) Contextual
48. _____ gave the concept of Intelligence Quotient.
- (a) William Stern (b) Alfred Binet (c) Howard Gardner (d) Arthur Jensen
49. _____ test requires pictures or illustrations as test items.
- (a) Non-verbal (b) Verbal (c) Culture biased (d) None of these
50. Who gave the concept of Emotional Intelligence?
- (a) Binet and Simon (b) Salovey and Mayer (c) Sternberg and Gardner (d) JP Das
51. _____ argued that culture provides a social context in which people live, grow and understand the world around them.
- (a) Vygotsky (b) JP Das (c) Weschler (d) Thurston
52. _____ is an example of associative learning.
- (a) Rote learning (b) Logical reasoning (c) Creativity (d) None of these
53. _____ attempted to standardise Binet's test in Urdu and Punjabi.
- (a) Mahalanobis (b) JP Das (c) SM Mohsin (d) CH Rice
54. _____ made a pioneering attempt in constructing an intelligence test in Hindi in the 1930s.
- (a) Mahalanobis (b) JP Das (c) SM Mohsin (d) CH Rice

55. Creative tests involve divergent thinking.
 (a) True (b) False (c) Can't say (d) None
56. Business sense' is a term used for people with high _____ according to Sternberg's model.
 (a) Contextual intelligence (b) Experiential intelligence
 (c) Analytical intelligence (d) Componential intelligence
57. _____ focuses on generalisation and abstraction, speed, minimal moves, and mental manipulation.
 (a) Integral intelligence (b) Non-cognitive intelligence
 (c) Non-western intelligence (d) Technological intelligence
58. Mr. X's IQ is 50. He works in a closely supervised setting assembling cycle parts and has some problems expressing his feelings to others. Mr. T would be classified as having _____ retardation.
 (a) Mild (b) Moderate (c) Severe (d) Profound
59. Leena learnt an answer word by word and could repeat it flawlessly. According to Arthur Jensen, she has used the _____ type of intelligence.
 (a) Associative learning (b) Cognitive competence (c) Emotional intelligence (d) None of these
60. Meena would like to take up psychology. Which assessment techniques would you recommend be used to identify her ability or potential towards the subject?
 (a) Intelligence (b) Aptitude test (c) Interest (d) Values
61. Dr. Kumar, a famous heart surgeon, would be high on _____ intelligence.
 (a) Interpersonal (b) Naturalistic (c) Linguistic (d) Bodily-kinesthetic
62. Learning alphabets and digits is an example of simultaneous processing.
 (a) True (b) False (c) Can't say (d) None
63. Cognitive Assessment System (CAS) is a battery of tests consisting of verbal items which is meant for individuals between 10-15 years of age.
 (a) True (b) False (c) Can't say (d) None
64. Rohan has just taken a test that is designed to identify his preference for studying different subjects. What kind of a test has he taken?
 (a) Aptitude test (b) Projective test (c) Interest (d) Creativity test
65. Dipa Karmakar is the first Indian gymnast to qualify for the Rio Olympics 2016. According to psychologists, Dipa would be high on _____ intelligence.
 (a) Linguistic (b) Interpersonal (c) Naturalistic (d) Bodily-kinesthetic
66. Sternberg's experiential intelligence includes:
 (a) Ability to learn from past events (b) Ability to manipulate people's opinions
 (c) Creative problem solving (d) Basic academic skills
67. Which of the following provides the best evidence of genetic influence on intelligence?
 (a) There is a higher positive correlation in IQ between identical twins reared together than between fraternal twins raised together.
 (b) There is a positive correlation between the IQ of adopted children and their biological parents.
 (c) There is a positive correlation between the IQ of biologically unrelated children raised in the same home.
 (d) There is a higher positive correlation in IQ between identical twins than between fraternal twins.
68. Howard Gardner is notable for which of the following?
 (a) Creating the Wechsler Adult Intelligence Scale (b) Revising the Stanford-Binet
 (c) Research on Multiple Intelligences (d) Writing the Bell Curve
69. A nine-year-old child with a mental age of twelve would have what IQ?
 (a) 133 (b) 75 (c) 108 (d) 120

70. _____ is the feeling side of intelligence.
 (a) Well-being (b) Emotional intelligence (c) Attitudes (d) Opinions
71. Terman, in the 1920s, found that persons with high IQ were not necessarily creative.
 (a) True (b) False (c) Can't say (d) None
72. The first formal test of general intelligence that appeared in 1905 was the:
 (a) Binet-Simon Scale (b) Wechsler Adult Intelligence Scale
 (c) Wechsler Intelligence Scale for children (d) Stanford-Binet Intelligence Scale
73. According to Sternberg's _____ intelligence correlates with school performance.
 (a) Componential (b) Creative (c) Business sense (d) Contextual
74. Gardner's theory of multiple intelligences proposes the eight intelligences _____.
 (a) are isolated from each other (b) are interdependent
 (c) interact (d) come together while solving a problem
75. Researchers have found that the relationship between creativity and intelligence is positive.
 (a) True (b) False (c) Can't say (d) None
76. Mr. Jose is reviewing a standardised testing report. He notices that his Hispanic students scored significantly lower than his Asian students. Mr. Jose should conclude that:
 (a) the Asian students are smarter than the Hispanic students
 (b) the Asian students prepared more for the IQ test
 (c) cultural differences, not intelligence, may have influenced results
 (d) test scores were most influenced by heredity
77. Which of the following persons best illustrates Sternberg's concept of practical intelligence?
 (a) Jia, a school student who quickly recognises the correct answers to multiple-choice test questions.
 (b) Nitya, a class XII student who generates many creative research ideas.
 (c) Bhav, a newspaper reporter who has a knack for making connections with very important people.
 (d) Niti, a corporate personality who qualified in the Olympic games.
78. Anil is great at math and interpersonal reasoning, but he seems to struggle with verbal skills and ability. Which theorist would support the idea that it is possible for a person to have separate or multiple intelligence?
 (a) Charles Spearman (b) Howard Gardner (c) Alfred Binet (d) Noam Chomsky
79. Mohan has an extensive vocabulary, is good at math, deals well with other people, and is excellent at solving logic puzzles. Siddharth knows a lot about nature, is a good tennis player, and plays the harp in the orchestra. According to Gardner's theory of multiple intelligences, who is more intelligent?
 (a) Mohan because she has high verbal and math ability.
 (b) Mohan, because Siddharth's abilities don't demonstrate intelligence.
 (c) Mohan, because she has more abilities than Siddharth.
 (d) Neither, they are just differently talented.
80. A _____ shows that most people are average. In the case of intelligence, most people have an IQ around _____.
 (a) normal distribution; 10 (b) normal distribution, 100
 (c) average distribution, 120 (d) medium distribution, 130
81. Peter is not only in touch with his own feelings but understands the feelings of others and gets along well with almost everyone he meets. He may be high in which kind of intelligence?
 (a) Emotional (b) Social (c) Linguistic (d) Interpersonal
82. Self-report is a form of clinical observation involving which of the following?
 (a) Clients measure their own galvanic skin responses. (b) Clients measuring their own heart rate.
 (c) Clients observing their own behavior and recording it. (d) Clients record their dreams.

83. Many studies suggest that intelligence is affected by:
 (a) primarily genetic factors (b) primarily environmental factors
 (c) both genetic and environmental factors (d) level of education
84. Generating a single correct answer to an intelligence test question illustrates which type of thinking?
 (a) Divergent (b) Convergent (c) Creative (d) Analogy
85. Anandita is well aware about her internal strengths and limitations and uses that knowledge to effectively relate to others. According to Gardner, which kind of intelligence does she possess?
 (a) Linguistic (b) Naturalistic (c) Spatial (d) Intrapersonal
86. Tina is a diligent girl, who shows commitment, persistence and patience. All her behaviour is goal directed. Such characteristics focus on _____ facet of integral intelligence:
 (a) Cognitive capacity (b) Entrepreneurial competence
 (c) Emotional competence (d) Social competence
87. Ability to use past experience creatively to solve novel problems is _____.
 (a) Componential intelligence (b) Analytical intelligence
 (c) Contextual intelligence (d) Experiential intelligence
88. Which model proposes interdependent functioning between the three neurological systems of the brain?
 (a) PASS Model (b) Uni factor
 (c) Primary mental abilities (d) Structure-of-intellect model
89. If intelligence is a normally distributed characteristic, then you would expect to find it to be:
 (a) different abilities in different people.
 (b) spread throughout the population, but with most people clustered near the middle of the range.
 (c) significant degree only in people whose IQ scores are above 100.
 (d) determined entirely by heredity factors.
90. Putting things into a new perspective can be termed as creativity.
 (a) True (b) False (c) Can't say (d) None
91. When the behaviour is influenced more by situational factors it is called as _____.
 (a) Environmental perspective (b) Situationism
 (c) Individual differences (d) None of these
92. Enduring beliefs about ideal mode of behavior is called _____.
 (a) Value (b) Opinion (c) Attitude (d) Aptitude
93. 'Selection of the environment to accomplish one's goals and those of one's society and culture is an intelligent act. It is given by:
 (a) Sternberg (b) Gardener (c) Binet (d) Thurston
94. According to JP Das _____ includes such skills as mental effort, determined action, feelings, and opinions along with cognitive competence such as knowledge.
 (a) Temperament (b) Buddhi (c) Prakriti (d) Behaviour
95. Pilot, sailors, painters, sculptors, and architects are high on _____ intelligence.
 (a) Linguistic (b) Naturalistic (c) Spatial (d) Intrapersonal
96. People with this intelligence engage in abstract reasoning and can manipulate symbols to solve mathematical problems. Name the intelligence.
 (a) Linguistic (b) Naturalistic (c) Spatial (d) Numerical
97. Swami is well aware of his internal strengths and limitations. He uses that knowledge to effectively relate with others. Name the intelligence.
 (a) Intrapersonal (b) Linguistic (c) Naturalistic (d) Spatial

98. A violent child tends to behave submissively and nicely in front of the principal. This change in his behavior is due to _____.
- (a) Environmental perspective (b) Situationism
(c) Individual differences (d) None of these
99. Guilford gave a model of _____.
- (a) 150 Cells (b) 180 Cells (c) 170 Cells (d) 120 Cells
100. Spatial Ability refers to _____.
- (a) Skills in forming visual images and patterns (b) Sensitivity to feature natural world
(c) Using the body flexibility and creatively (d) None of these
101. Simultaneous and successive processing is a part of _____.
- (a) Triarchic theory (b) PASS model theory
(c) Multiple intelligence Theory (d) Uni-factor theory
102. Binet's first successful attempt to formally measure intelligence took place in the year _____.
- (a) 1912 (b) 1920 (c) 1905 (d) 1910
103. The concept of the intelligence quotient was devised by _____.
- (a) Alfred Binet (b) Simon
(c) Williams Stern (d) Robert Sternberg
104. Bindu is a remarkable singer and has won many accolades. She is known as a child prodigy. Which of the following terms best describes Bindu's abilities?
- (a) Talent (b) Giftedness
(c) Naturalistic Intelligence (d) Interest
105. On being assessed for intelligence, Vivan scored high in aspects such as attention, observation, analysis, achievement orientation and Ajay scored high in social and emotional skills, self-reflection and collective orientation. Which of the following statements reflect these differences seen in Ajay and Vivaan?
- (a) Ajay is high in technological intelligence.
(b) Vivaan is not high in integral intelligence.
(c) Vivaan lacks technological intelligence and Ajay lacks integral intelligence.
(d) Vivaan is high in technological intelligence and Ajay is high in integral intelligence.
106. Sometimes I wonder how amazing it is to hear water flowing down the mountain, to admire the pattern formed while the birds are flying. Indicate which intelligence is referred to in these lines.
- (a) Linguistic (b) Naturalistic (c) Spatial (d) Intrapersonal
107. Ananya enjoys composing songs for her classes. Identify her intelligence as per Howard's theory of intelligence.
- (a) Musical intelligence (b) Linguistic (c) Naturalistic (d) Intrapersonal
108. Sternberg's experiential intelligence includes ability to use past events:
- (a) Creatively in new situations (b) Manipulate people's opinion
(c) Basic academic skills (d) None of these
109. Selection of the environment to accomplish one's goals and those of one's society and culture is an important act. It is given by _____.
- (a) Robert Sternberg (b) Alfred Binet
(c) Williams Stern (d) Robert Sternberg
110. _____ test requires subjects to give verbal responses either orally or in a written form., and thus can be administered only to literate people.
- (a) Verbal (b) Non-verbal
(c) Performance (d) Projective techniques

111. Divi thinks analytically and critically and is successful in school. Harshita on the other hand, even though wasn't very successful in school, turned out more successful in life and is able to deal with the environmental demands encountered on a daily basis. Which of the following statements reflect the differences seen in Divi and Harshita?
- (a) Divi lacks componential intelligence.
 (b) Divi is high on componential intelligence while Harshita is high on contextual intelligence.
 (c) Both are high on experiential intelligence.
 (d) Harshita is high on composite intelligence while Divi is high on contextual intelligence.
112. Pran is only in touch with his own feelings but also understands the feelings of others and gets along well with almost everyone he meets. He may be high in which kind of intelligence?
- (a) Interpersonal (b) Linguistic (c) Naturalistic (d) Intrapersonal
113. Which of the following persons illustrates Sternberg's concept of practical intelligence?
- (a) Rita, a school student who quickly recognizes the correct answers to multiple choice test questions.
 (b) Nitya, a class XII student who generates many creative research ideas.
 (c) Bhavana, a newspaper reporter who has a knack for making connections with very important people.
 (d) Ashima, a class X student who creates ideas but never act over it.
114. Psychological attributes are multidimensional.
- (a) True (b) False (c) Can't say (d) None
115. Excellent singers are high on G-factor in music.
- (a) True (b) False (c) Can't say (d) None
116. Nitin has scored well in his school examinations. He is high on _____ intelligence.
- (a) Contextual (b) Componential (c) Creative (d) None of these
117. Entrepreneurs show high _____.
- (a) Contextual (b) Componential (c) Creative (d) None of these
118. Joseph is extraverted and enjoys being with people. He is never anxious about being at a social event where everyone is unfamiliar and he always is able to converse with most people. According to Gardner, Joseph appears to excel in which intellectual domain?
- (a) Bodily-kinaesthetic (b) Interpersonal (c) Linguistic (d) Musical

Input-Text Based MCQs

Read the passage and answer the questions that follow (119 to 120).

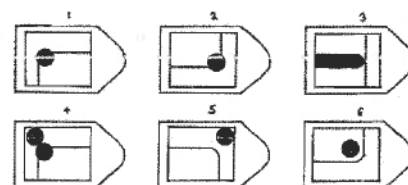
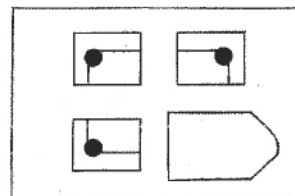
Despite being blind from birth and growing up in poverty, John Wonder managed to become a skilled musician in early childhood, learning to write music, sing, and play the piano, organ, harmonica, and drums. In 1962, at age 12, he began recording music and performing professionally under the name Little John Wonder. Although his stage name suggested a novelty child performer, he quickly established himself as a serious musician who combined creative song writing and mastery of disparate styles of music including rhythm and blues, soul, funk, rock, and jazz. By his 21st birthday he had written or co-written more than a dozen hit songs. He was inducted into the Rock and Roll Hall of Fame in 1989, when he was only 38 years old.

119. John can be described as:

- (a) Talented (b) Prodigy
 (c) Gifted (d) Creative

120. Name of the test shown in the picture.

- (a) Differential aptitude test (b) Koh's block design test
 (c) Rorschach inkblot test (d) Standard Progressive Matrices test



Read the passage and answer the questions that follow (121 to 123).

According to him, intelligence is the combination of analysis, creativity and practicality. These abilities function collectively to allow individuals to achieve success within particular socio-cultural contexts. This might involve working on improving weak areas to become better adapted to the needs of a particular environment, or choosing to work in an environment that values the individual's particular strength. Successful intelligence is adaptability — both within the individual and within the individual's socio-cultural context

121. Name the theory referred in the passage.

- (a) Theory of multiple intelligences (b) Tri-archic theory
(c) PASS model (d) Uni-factor theory

122. Name the theorist as discussed in the above passage.

- (a) Howard Gardner (b) JP Das (c) Sternberg (d) Binet

123. Which sub-type is not the part of intelligences as mentioned in the theory above?

- (a) Componential (b) Experiential (c) Contextual (d) Linguistic

Read the passage and answer the questions that follow (124 to 126).

The relationship between intelligence and creativity is that both of them are functions of the brain that process information to determine a solution or an answer to a problem. Intelligence and creativity are different abilities that contribute to the other. Intelligence can be measured by the intelligence quotient or IQ. Creativity, on the other hand, is not so easy to measure. The general belief is that people with high IQs are generally more creative, and people who are highly creative have high IQs. This isn't necessarily true. Although scientists have found a correlation between those individuals with an IQ of 120 or more having a higher level of creativity, the relationship between intelligence and creativity is more of an overlap of skills or abilities instead of a dependence on one another.

124. Name of psychologist who studied the relationship between intelligence and creativity.

- (a) Terman (b) Gardner (c) Sternberg (d) Binet

125. What is the relationship between intelligence and creativity?

- (a) Positive (b) Negative (c) Simple (d) Complex

126. Which is not a feature of creative test?

- (a) Open ended (b) Divergent thinking
(c) Out of box expression of thoughts (d) One single answer

ANSWERS

Multiple Choice Questions

- | | | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1. (c) | 2. (b) | 3. (a) | 4. (c) | 5. (d) | 6. (a) | 7. (a) | 8. (d) | 9. (b) | 10. (a) |
| 11. (b) | 12. (c) | 13. (b) | 14. (c) | 15. (a) | 16. (b) | 17. (a) | 18. (d) | 19. (a) | 20. (a) |
| 21. (c) | 22. (d) | 23. (a) | 24. (b) | 25. (a) | 26. (a) | 27. (b) | 28. (b) | 29. (a) | 30. (b) |
| 31. (a) | 32. (a) | 33. (a) | 34. (a) | 35. (a) | 36. (b) | 37. (b) | 38. (a) | 39. (a) | 40. (a) |
| 41. (a) | 42. (a) | 43. (a) | 44. (a) | 45. (a) | 46. (c) | 47. (d) | 48. (a) | 49. (a) | 50. (b) |
| 51. (a) | 52. (a) | 53. (d) | 54. (c) | 55. (a) | 56. (a) | 57. (d) | 58. (a) | 59. (a) | 60. (b) |
| 61. (d) | 62. (b) | 63. (b) | 64. (c) | 65. (d) | 66. (a) | 67. (a) | 68. (c) | 69. (b) | 70. (b) |
| 71. (a) | 72. (a) | 73. (a) | 74. (a) | 75. (a) | 76. (c) | 77. (c) | 78. (b) | 79. (d) | 80. (b) |
| 81. (d) | 82. (c) | 83. (c) | 84. (b) | 85. (d) | 86. (b) | 87. (d) | 88. (a) | 89. (b) | 90. (a) |
| 91. (b) | 92. (a) | 93. (a) | 94. (b) | 95. (c) | 96. (d) | 97. (a) | 98. (b) | 99. (b) | 100. (a) |
| 101. (a) | 102. (c) | 103. (c) | 104. (a) | 105. (d) | 106. (b) | 107. (a) | 108. (a) | 109. (a) | 110. (a) |
| 111. (b) | 112. (a) | 113. (a) | 114. (a) | 115. (b) | 116. (b) | 117. (a) | 118. (b) | | |

Input-Text Based MCQs

119. (a) 120. (d) 121. (b) 122. (c) 123. (d) 124. (a) 125. (a) 126. (d)