**Keywords:**  
Lot of money  
Good looks  
getting success in examinations  
taking decisions  
getting job and money  
unique and the highest attribute  
gift of intelligence  
nature of intelligence  
capacity to understand the world  
think rationally  
use available resources effectively  
ability to think on an abstract level  
aggregate or global capacity

**Questions:**  
Q: What are the three options mentioned in the introduction?  
A: Lot of money, Good looks and Intelligence.

Q: Which option would probably be chosen by the majority?  
A: Intelligence.

Q: Why is intelligence considered essential?  
A: It is essential for getting success in examinations, participating in various competitions, taking decisions, getting job and money.

Q: What is described as a unique and the highest attribute of human species?  
A: Intelligence.

Q: What have humans achieved by using intelligence?  
A: Humans have achieved new horizons of progress.

Q: What does intelligence mean according to the passage?  
A: A capacity to understand the world, think rationally, and use available resources effectively when faced with challenges.

Q: How did Lewis Terman define intelligence?  
A: An ability to think on an abstract level.

Q: How did David Wechsler define intelligence?  
A: Intelligence is the aggregate or global capacity of an individual to act purposefully, to think rationally, and to deal effectively with his environment.

**Keywords:**  
single, global ability  
several different abilities  
unitary notion of intelligence  
single entity  
multiple abilities are involved  
three independent abilities  
Abstract intelligence  
Social intelligence  
Concrete intelligence  
seven primary abilities  
Verbal comprehension  
Word fluency  
Number facility  
Spatial visualization  
Associative memory  
Perceptual speed  
Reasoning  
General factor (g)  
Specific factor (s)  
Fluid intelligence  
Crystallized intelligence  
neurological development  
educational attainment  
stock of knowledge  
theory of multiple intelligence  
nine independent types of intelligence  
Linguistic intelligence  
Logical-mathematical intelligence  
Spatial intelligence  
Musical intelligence  
Bodily-kinaesthetic intelligence  
Interpersonal intelligence  
Intra-personal intelligence  
Naturalistic intelligence  
Existential intelligence

**Questions:**  
Q: What are the two main perspectives on intelligence?  
A: Intelligence as a single, general ability and intelligence as a set of multiple abilities.

Q: Which psychologists believed that intelligence is a single entity?  
A: Alfred Binet, Lewis Terman, David Wechsler.

Q: Who came up with the notion that multiple abilities are involved in intelligence?  
A: E. L. Thorndike, Louis Thurstone, Charles Spearman.

Q: What three independent abilities did E. L. Thorndike propose?  
A: Abstract intelligence, Social intelligence and Concrete intelligence.

Q: How many primary abilities did Louis Thurstone propose?  
A: Seven primary abilities.

Q: What are the seven primary abilities according to Louis Thurstone?  
A: Verbal comprehension, Word fluency, Number facility, Spatial visualization, Associative memory, Perceptual speed and Reasoning.

Q: What statistical method did Charles Spearman use in 1927?  
A: Factor analysis.

Q: What two factors of intelligence did Charles Spearman identify?  
A: General factor (g) and Specific factor (s).

Q: What does the general factor represent according to Charles Spearman?  
A: The minimum competence required to carry out daily work.

Q: What does the specific factor include according to Charles Spearman?  
A: Abilities which are required to solve problems in specific areas.

Q: Who proposed fluid and crystallized intelligence?  
A: Raymond Cattell and John Horn.

Q: What is fluid intelligence dependent on?  
A: Neurological development.

Q: What is crystallized intelligence dependent on?  
A: Educational attainment, acquired experiences and stock of knowledge.

Q: Who asserted the theory of multiple intelligence?  
A: Howard Gardner.

Q: How many independent types of intelligence did Howard Gardner propose?  
A: Nine.

Q: Name any three types of intelligence proposed by Howard Gardner.  
A: Linguistic intelligence, Logical-mathematical intelligence, Spatial intelligence.

Q: What are the last three types of intelligence in Gardner’s list?  
A: Intra-personal intelligence, Naturalistic intelligence and Existential intelligence.

**Keywords:**  
measuring variables such as head size  
He thought he could determine intelligence  
test did not prove very useful  
used the term ‘mental test’  
test administration must be standardized  
the Binet- Simon Intelligence Scale  
Father of Intelligence Test  
logical reasoning, finding rhyming words  
Stanford Binet Test  
Army Alpha and Army Beta intelligence tests  
Army General Classification Test  
Wechsler- Bellevue Intelligence Scale  
Wechsler Adult Intelligence Scale (WAIS)  
Wechsler Intelligence Scale for Children (WISC)  
increasing day by day  
Mental Age  
mental development need not correspond  
measured mental age of various people  
Intelligence Quotient (I.Q.)  
refined the formula of I.Q.

**Questions:**  
Q: Who were among the first scientists to think about measuring intelligence?  
A: Paul Broca and Sir Francis Galton.

Q: What variables did Sir Francis Galton measure in the mid 1880s?  
A: Head size, reaction time, visual accuracy, auditory threshold, breathing capacity.

Q: What assumption did Galton make about skull size?  
A: The larger the skull, the smarter the person.

Q: Who first used the term ‘mental test’ in psychological literature?  
A: Raymond Cattell.

Q: What did Raymond Cattell emphasize about test administration?  
A: It must be standardized so results are comparable.

Q: Why were Paris school authorities interested in intelligence testing in the 20th century?  
A: To know reasons for repeated failure of certain students in examinations.

Q: What was the result of the Paris school authorities’ interest?  
A: The Binet-Simon Intelligence Scale.

Q: Who is considered the ‘Father of Intelligence Test’?  
A: Alfred Binet.

Q: What were some components of the Binet-Simon Intelligence Scale?  
A: Logical reasoning, finding rhyming words and naming objects.

Q: Who revised the Binet-Simon Scale in 1916?  
A: Lewis Terman from Stanford University.

Q: What was the revised version of the Binet-Simon Scale called?  
A: Stanford Binet Test.

Q: Who prepared Army Alpha and Army Beta intelligence tests in 1917?  
A: Robert Yerks with the help of his colleagues.

Q: For what purpose were Army Alpha and Army Beta tests used?  
A: While recruiting soldiers in the army.

Q: What intelligence test was used during the Second World War in 1939?  
A: Army General Classification Test.

Q: Which intelligence scale did David Wechsler publish in 1939?  
A: The Wechsler-Bellevue Intelligence Scale.

Q: What was the Wechsler-Bellevue Intelligence Scale renamed as in 1955?  
A: Wechsler Adult Intelligence Scale (WAIS).

Q: Who released the fourth edition of WAIS in 2008?  
A: Karl Pearson.

Q: What intelligence test did David Wechsler develop for children?  
A: Wechsler Intelligence Scale for Children (WISC).

Q: Who introduced the concept of Mental Age?  
A: Alfred Binet.

Q: How can mental age be defined according to the passage?  
A: The age at which individual performs successfully on all items on the test prepared for that age.

Q: Who introduced the concept of Intelligence Quotient (I.Q.)?  
A: German psychologist William Stern in 1912.

Q: How did William Stern compute I.Q.?  
A: As a ratio of Mental Age (M.A.) to Chronological Age (C.A.).

Q: Who refined Stern’s formula of I.Q.?  
A: Lewis Terman.

Q: What is the refined formula of I.Q.?  
A: Intelligence Quotient (I.Q.) = ((Mental Age (M.A.) / (Chronological Age (C.A.)) X 100.

**Keywords:**  
Individual tests of intelligence  
Binet’s Scale of Intelligence  
Wechsler Scale of Intelligence  
Dr. Bhatia’s Performance Test of Intelligence  
Arthur Point Scale  
Koh’s Block Design  
time consuming and costly  
trained and skillful examiner  
Group tests of intelligence  
Army Alpha Test  
Army General Classification Test  
Raven’s Standard Progressive Matrices  
less time consuming and economical  
role of the examiner is minimal  
establish rapport, obtain cooperation  
Verbal tests of intelligence  
respond verbally to test items  
Wechsler’s Adult Intelligence Scale (WAIS)  
higher mental abilities  
different linguistic background  
culture bound  
Non-verbal tests of intelligence  
language is not used  
Performance tests  
Paper-pencil tests  
Alexander’s Pass-along test  
Merril Palmer Block Building test  
Raven’s Coloured Progressive Matrices  
different linguistic background, illiterate people and small children  
culture free  
measure higher and subtle mental abilities

**Questions:**  
Q: What are intelligence tests that can be administered to a single individual at a time called?  
A: Individual tests of intelligence.

Q: Name any two examples of individual tests of intelligence.  
A: Binet’s Scale of Intelligence and Koh’s Block Design.

Q: What is one advantage of individual tests of intelligence?  
A: The test administrator can establish a rapport with a client.

Q: What is one disadvantage of individual tests of intelligence?  
A: Individual tests are time consuming and costly to administer.

Q: What are intelligence tests that can be administered to more than one person at a time called?  
A: Group tests of intelligence.

Q: Why were group tests of intelligence devised during the First World War?  
A: To recruit large number of soldiers in the army.

Q: Name any two examples of group tests of intelligence.  
A: Army Alpha Test and Raven’s Standard Progressive Matrices.

Q: What is one advantage of group tests of intelligence?  
A: Group tests are less time consuming and economical.

Q: What is one disadvantage of group tests of intelligence?  
A: The test administrator has much less opportunity to establish rapport.

Q: What are intelligence tests that use language for measuring intelligence called?  
A: Verbal tests of intelligence.

Q: Name any two examples of verbal tests of intelligence.  
A: Army Alpha Test and Wechsler’s Adult Intelligence Scale (WAIS).

Q: What is one advantage of verbal tests of intelligence?  
A: Verbal tests of intelligence are useful to measure higher mental abilities.

Q: What is one disadvantage of verbal tests of intelligence?  
A: These tests cannot be given to people having different linguistic background, illiterate people and small children.

Q: What are intelligence tests that use pictures, designs, and material objects called?  
A: Non-verbal tests of intelligence.

Q: What are the two types of non-verbal tests?  
A: Performance tests and Paper-pencil tests.

Q: Name any two examples of performance tests of non-verbal intelligence.  
A: Koh’s Block Design Test and Alexander’s Pass-along test.

Q: Name any two examples of paper-pencil non-verbal intelligence tests.  
A: Raven’s Standard Progressive Matrices and Raven’s Coloured Progressive Matrices.

Q: What is one advantage of non-verbal tests of intelligence?  
A: Non-verbal tests can be given to people having different linguistic background, illiterate people and small children.

Q: What is one disadvantage of non-verbal tests of intelligence?  
A: Non-verbal tests of intelligence are less suitable to measure higher and subtle mental abilities.

**Keywords:**  
Measurement of intelligence began  
applications in diverse fields  
educational institutes  
child guidance centres  
diagnostic clinics  
Effective schooling  
educationally backward students  
special instructional programs  
Mental health aiding  
diagnostic purposes  
therapeutic or rehabilitative programs  
Effective parenting  
intellectual capacities of their children  
realistic expectations  
Career counselling  
select the right educational course  
reducing the problems of failure  
Vocational counselling  
suitable vocation  
job dissatisfaction

**Questions:**  
Q: Where did the measurement of intelligence begin?  
A: Measurement of intelligence began with the need of knowing individual differences.

Q: Name two fields where intelligence testing is applied today.  
A: Educational institutes and child guidance centres.

Q: What do intelligence tests enable teachers to identify in effective schooling?  
A: The educationally backward students.

Q: How can teachers help pupils using periodic test scores?  
A: By classifying pupils into different intellectual categories and devising special instructional programs.

Q: What do intelligence tests enable clinicians to measure?  
A: The intellectual levels of their clients.

Q: For what purposes are intelligence tests helpful to clinicians?  
A: For diagnostic purposes, prognosis and deciding the therapeutic or rehabilitative programs.

Q: How do intelligence tests help parents?  
A: By helping parents to know the intellectual capacities of their children.

Q: What do IQ scores help parents provide?  
A: Relevant educational facilities and realistic expectations.

Q: How do intelligence tests help in career counselling?  
A: They help students select the right educational course suitable to their intellectual capacities.

Q: What problems can intelligence tests reduce in career counselling?  
A: The problems of failure, waste of time and money.

Q: What do intelligence tests help people choose in vocational counselling?  
A: The suitable vocation for themselves.

Q: What problem can vocational counselling reduce?  
A: Job dissatisfaction.

**Keywords**:  
fails to cope up  
relations with parents, wife and colleagues  
good relations with others  
talks rudely to his subordinates  
excellent communication skills  
ability to maintain friendly relations  
successful, happy and popular  
cognitive abilities  
term social intelligence  
multiple intelligence theory  
ability to get along well with others  
spectrum between toxic behaviour and nourishing behaviour  
toxic behaviors  
nourishing behavior  
high level of social intelligence  
good at understanding and interacting  
monitor their verbal and non-verbal expressions  
skilled at assessing the emotions  
resolve conflicts in social contexts  
successful negotiators

**Questions**:  
Q: Who was the first psychologist to propose the term social intelligence?  
A: E.L. Thorndike.

Q: In which year was the term social intelligence proposed?  
A: 1920.

Q: Who included ‘inter personal intelligence’ in the multiple intelligence theory?  
A: Howard Gardner.

Q: According to Karl Albrecht, what is social intelligence?  
A: The ability to get along well with others, and to get them to cooperate with oneself.

Q: What does a continued pattern of toxic behavior indicate?  
A: A low level of social intelligence.

Q: What does a continued pattern of nourishing behavior indicate?  
A: A high level of social intelligence.

Q: Name two examples of toxic behaviors.  
A: Devaluing others and negative talking.

Q: Name two examples of nourishing behavior.  
A: Respecting others and encouraging others.

Q: What are people with high social intelligence good at?  
A: Understanding and interacting with other people.

Q: What ability do people with high social intelligence have while communicating?  
A: They can monitor their verbal and non-verbal expressions.

Q: What are people with high social intelligence skilled at assessing?  
A: The emotions, motivations, desires, and intentions of those around them.

Q: What can people with high social intelligence resolve in social contexts?  
A: Conflicts.

Q: What do people with high social intelligence enhance?  
A: Personal and professional relationships with others.

2.6.2: Emotional intelligence: Read the following examples: (1) Megha is always afraid of getting less marks in examinations.

Therefore, she always becomes restless and avoids going to college.

(2) Shailesh, an ordinary worker in a textile mill earns 10,000 salary per month.

Though having some financial problems, he never feels anxious, he understands the problems of others, helps needy people and lives his life happily.

By reading the examples given in the above box, you must have started thinking about the nature of emotional intelligence.

In our pursuits to be successful in a competitive world, all of us face socially, economically, occupationally or academically challenging situations.

To cope up with these challenging situations effectively, it is very important to be aware of and to manage our emotional reactions in such challenging situations.

John Mayer and Peter Salovey used the term emotional intelligence for the first time.

Daniel Goleman (1995) popularized the concept of emotional intelligence on a large scale.

Researchers like John Mayer and Peter Salovey defined Emotional Intelligence as the ‘ability to perceive and monitor one’s own and others emotions, to discriminate among them and to use this information to guide one’s thinking and action.’ They presented an ability based model of emotional intelligence and defined emotional intelligence as a set of following cognitive abilities:

1. Perceiving emotions: The ability to identify and interpret emotions of self and others.

2. Using emotions: The ability to use emotions to facilitate various cognitive activities such as thinking and problem solving, etc.

3. Understanding emotions: The ability to understand emotional language and comprehending relationships among various emotions.

4. Managing emotions: The ability to regulate emotions of self and others.

**Keywords**:

Artificial Intelligence is enabling machines  
Think and learn through experience  
A field of study that combines  
Computer science, algorithms, languages, philosophy and psychology  
An innovation created by human intelligence  
Certain limitations to Artificial Intelligence  
Human intelligence can take comparatively more relevant decisions  
Artificial Intelligence can take decisions only on the basis of stored information  
Human intelligence is superior in nature  
Artificial Intelligence cannot be an option to human intelligence  
Used on a large scale  
Speech recognition  
Natural language processing  
Spam filtering from emails  
Medical diagnosing  
Detecting frauds in economic transactions  
Weather forecasting

**Questions**:  
Q: What is Artificial Intelligence enabling machines to do?  
A: To think and learn through experience.

Q: Which sciences does Artificial Intelligence combine?  
A: Computer science, algorithms, languages, philosophy and psychology.

Q: What is Artificial Intelligence created by?  
A: Human intelligence.

Q: What has comparatively no limitations?  
A: Human intelligence.

Q: What can Artificial Intelligence take decisions on the basis of?  
A: Stored information.

Q: In comparison to Artificial Intelligence, what is superior in nature?  
A: Human intelligence.

Q: Why cannot Artificial Intelligence be an option to human intelligence?  
A: Because human intelligence is superior in nature.

Q: Where is Artificial Intelligence used today?  
A: On a large scale to perform daily routine tasks and solve critical problems.

Q: Name one example of Artificial Intelligence application.  
A: Speech recognition.

Q: Which Artificial Intelligence application is used in emails?  
A: Spam filtering from emails.

Q: Which Artificial Intelligence application helps in health-related issues?  
A: Medical diagnosing.

Q: Which Artificial Intelligence application detects frauds?  
A: Detecting frauds in economic transactions.

Q: Which Artificial Intelligence application predicts weather?  
A: Weather forecasting.