



9. Discuss how interplay of Nature and Nurture influences intelligence.

Or

All persons do not have the same intellectual capacity. How do individuals vary in their intellectual ability? Explain. (CBSE 2014)

Ans: All persons do not have the same intellectual capacity. They vary in their intellectual ability. Some are exceptionally bright and some are below average. Some possess high IQ range while others have average or below average.

All the scores gradually and symmetrically decline towards both the sides but never touch the X-axis.

(i) The frequency distribution for the IQ scores tends to approximate a bell-shaped curve, called the normal curve. This type of distribution is symmetrical around the central value, called the mean.

(ii) On the basis of IQ, people are classified in different groups. It is clear that only 2.2 percent people who possess above 130 IQ range are very intelligent or very superior, their IQ score is more than 130.

(iii) People falling between 90-109 IQ range are considered as average. The mean IQ score in a population is 100. People with IQ scores in the range of 90-110 have normal intelligence.

(iv) Those with IQ below 70 are suspected to have 'mental retardation'. Mental retardation refers to sub-average intellectual functioning. The behaviour is maladaptive and manifest in four forms i.e., mild, moderate, severe and profound mental retardation. The extreme right also lie to 2.2 percent population which are known as gifted i.e., they enjoy exceptional intelligence, exceptional talent and exceptional creativity.

Classification on basis of IQ

IQ Range	Descriptive Label	Percent in Population
Above 130	Very Superiour	2.2
120 - 130	Superiour	6.7
110 - 119	High Average	16.1
90 - 119	Average	50.0
80 - 89	Low Average	16.1
70 - 79	Borderline	6.7

Below 70	Mentally challenged/retarded	2.2
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10. Which of the two IQ or EQ, do you think would be more related to success in life and Why?

Ans:

(i) IQ is a good predictor of potential.

(ii) EQ is a good predictor of success.

- Researchers had proved that—EQ helps in dealing with students who are stressed and face challenges of the outside world.
- It improves the academic performance.
- It is very useful in preparing students to face the challenges of life outside the classroom.
- They are less anti-social and more co-operative.

11. How is 'Aptitude' different from 'interest' and intelligence?

Ans:

Aptitude:

(i) Aptitude refers to combination of characteristics indicative of an individual's potential to acquire some specific skills with training.

(ii) It is specific mental ability or teach ability of an individual to learn a particular skill.

(iii) It is the potentiality to perform a particular activity.

(iv) Aptitude is a determiner to learn a particular skill.

Interest:

(i) Interest refers to preference for a particular activity or what one enjoys doing.

(ii) Interest are acquired/learnt.

(iii) Interest is a facilitator.

An individual with high scientific aptitude having strong interest in mechanical activities is more likely to be successful mechanical engineer.

(i) Intelligence is a global and aggregate capacity of an individual to think rationally, act purposefully and to deal effectively with her/his environment.

(ii) Intelligence is a general mental ability.

(iii) It is product of heredity and environment.

(iv) It does not require training for the growth.

12. How is creativity related to intelligence? (Delhi Board 2010)

Or

How creativity and creativity tests are related but different from each other?

Ans: Creativity and intelligence are positively correlated because high ability is component of creativity. A highly intelligent person may not be creative but all the creative persons are definitely high in intelligence.

(i) Creativity is the ability to produce ideas, objects, or problem solutions that are novel, appropriate and useful.

(ii) Intelligence is subset of creativity.

(iii) Terman found that persons with high IQ were not necessarily creative. The same time, creative ideas could come from persons who did not even one of those identified as gifted, followed up through out their adult life, had become well known for creativity in some field.

(iv) Researchers have found that both high and low level of creativity can be found in highly intelligent children and also children of average intelligence. The same person can be creative as well as intelligent but it is not necessary that intelligent once must be creative.

Creative tests are different from intelligence tests:

(i) Creative tests measure creative thinking ability whereas

intelligence tests measure general mental ability.

(ii) Creative tests measure convergent and divergent thinking whereas intelligence test measure convergent thinking only.

(iii) Creative tests measure imagination and spontaneous expression to produce new ideas, to see new relationship, to guess causes and consequences and ability to put things in a new context. Intelligence tests measure potential.

(iv) In creative tests questions are open-ended that have no specified answers whereas intelligence tests mostly use close-ended questions.

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