

EUGENICS

B. Sc. SEM - II

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History

Eugenics from Greek. **eu-good** and **genic-come into being, growing** or **eugenes-well born**, the term was coined by Francis Galton, in the year 1885, is a set of beliefs and practices that aim to improve the genetic quality of a human population, typically by excluding people and groups judged to be genetically inferior, and promoting those judged to be genetically superior. The concept predates the term; Plato suggested applying the principles of selective breeding to humans around 400 BC. Early advocates of eugenics in the 19th century regarded it as a way of improving groups of people. In contemporary usage, the term **eugenics** is closely associated with scientific racism and white supremacy. Modern bioethicists who advocate new eugenics characterize it as a way of enhancing individual traits, regardless of group membership. While eugenic principles have been practiced as early as ancient Greece, the contemporary history of eugenics began in the early 20th century. Consequently, many countries adopted eugenic policies, intended to improve the quality of their populations genetic stock. Such programs included both **positive** measures, such as encouraging individuals deemed particularly **fit** to reproduce, and **negative** measures, such as marriage prohibitions and forced sterilization of people deemed unfit for

reproduction. Those deemed **unfit to reproduce** often included people with mental or physical disabilities, people who scored in the low ranges on different IQ tests, criminals and "deviants," and members of disfavored minority groups.

Basis of Eugenics

Since the 1980s and 1990s, with new assisted reproductive technology procedures available, such as gestational surrogacy available since 1985, preimplantation genetic diagnosis available since 1989, and cytoplasmic transfer performed in 1996, concern has grown about the possible revival of a more potent form of eugenics after decades. Furthermore, many scientists criticize **negative eugenics** in particular as a violation of basic human rights, seen since 1968's as it was to a loss of genetic diversity, thereby resulting in inbreeding depression due to a loss of genetic variation and also artificially disrupting millions of years of evolution, and that attempting to create genetic lines **clean of disorders** can have far-reaching ancillary downstream effects in the genetic ecology, including negative effects on immunity and on species resilience.

Need for Eugenics

The concept of positive eugenics to produce better human beings has existed at least since Plato suggested selective mating to produce a guardian class. The idea of a modern project of improving the human population through a statistical understanding of heredity used to encourage good breeding was originally developed by Francis Galton and, initially was closely linked to Darwinism and his theory of natural

selection. Galton had read his half-cousin Charles Darwin's theory of evolution, which sought to explain the development of plant and animal species, and desired to apply it to humans. Based on his biographical studies, Galton believed that desirable human qualities were hereditary traits, although Darwin strongly disagreed with this elaboration of his theory. In 1883, one year after Darwin's death, Galton gave his research a name, **eugenics**. With the introduction of genetics, eugenics became associated with genetic determinism, the belief that human character is entirely or in the majority caused by genes, unaffected by education or living conditions. Many of the early geneticists were not Darwinians. **Development of a Eugenic Philosophy** framed it as a social philosophy with implications for social order and definition is not universally accepted. Osborn advocated for higher rates of sexual reproduction among people with desired traits **positive eugenics** attempts to increase consistently better or desirable germplasm and thus to preserve best germplasm of the society, and can be increased by adopting important measures such as (a) Early marriages of those having desirable traits, (b) Education, (c) Genetic counseling and (d) promotion of genetic research, where as **negative eugenics** attempts to eliminate the defective germplasm of the society adopting important measures such as. (a) Reduced rates of sexual reproduction (b) Sterilization of people with less-desired or undesired traits by vasectomy and splenectomy (c) Sexual separation of the defectives, (d) Regulation of the marriages.

Eugenics and Human Being

Francis Galton in 1883 drawing on the recent work of his half-cousin Charles Darwin. Galton published his observations and conclusions in his book *Inquiries into Human Faculty and Its Development*. The origins of the concept began with certain interpretations of Mendelian inheritance and the theories of August Weismann. Galton intended it to replace the word **stirpiculture**, which he had used previously but which had come to be mocked due to its perceived sexual overtones. Galton defined eugenics as "the study of all agencies under human control which can improve or impair the racial quality of future generations". Historically, the term **eugenics** has referred to everything from prenatal care for mothers to forced sterilization and euthanasia. To population geneticists, the term has included the avoidance of inbreeding without altering allele frequencies; for example, J B S Haldane wrote that "the motor bus, by breaking up inbred village communities, was a powerful eugenic agent." Debate as to what exactly counts as eugenics continues today. The most disputed aspect of eugenics has been the definition of **improvement** of the human gene pool, such as what a beneficial characteristics. Historically, this aspect of eugenics was tainted with scientific racism and pseudoscience. Early eugenicists were mostly concerned with factors of perceived intelligence that often correlated strongly with social class. These included Karl Pearson and Walter Weldon, who worked on this at the University College London. Eugenics also had a place in medicine. In his lecture **Darwinism, Medical Progress and Eugenics**, Karl Pearson said that everything concerning eugenics fell into the field of medicine. He basically placed the

two words as equivalents. He was supported in part by the fact that Francis Galton, the father of eugenics, also had also knowledge of medicine. Eugenics has been conceptually divided into two categories. Positive eugenics is aimed at encouraging reproduction among the genetically advantaged; for example, the reproduction of the intelligent, the healthy, and the successful. Possible approaches include financial and political stimuli, targeted demographic analyses, *in vitro* fertilization, egg transplants, and cloning. Negative eugenics aimed to eliminate, through sterilization or segregation, those deemed physically, mentally, or morally **undesirable**. This includes abortions, sterilization, and other methods of family planning. Jon Entine claims that *eugenics* simply means **good genes** and using it as synonym for genocide.

Objective type Questions - Eugenics

1.The method of improving human race by the improvement of genes conditions is called

- A Eugenics
- B Euthenics
- C Euphenics
- D Positive Eugenics

ANSWER : A, Eugenics

2.Discourage of late marriages, delaying the birth of first child and extension of interval time for the next child are the concepts of

- A Negative eugenics
- B Positive eugenics
- C Positive euthenics
- D Negative euthenics

ANSWER : B, Positive eugenics

3. Which of the following is considered to pass the beneficial qualities to the offspring of future generation

- A Isolation of defective somatoplasm
- B Segregation of defective somatoplasm
- C Isolation of defective germplasm
- D Segregation of defective germplasm

ANSWER : D, Segregation of defective germplasm

4. One of the following is not a sterilization procedure in the population control

- A Vasectomy
- B Tubectomy
- C Hysterectomy
- D Contraceptive pills

ANSWER : D, Contraceptive pills

5. The final effect of consanguineous marriage will be the

- A Prevention of undesirable genes due to marriages between close relatives
- B Prevention of desirable genes due to marriages between close relatives
- C Prevention of undesirable genes due to marriages between distant relatives
- D Prevention of desirable genes due to marriages between distant relatives

ANSWER : A, Prevention of undesirable genes due to marriages between close relatives

6. The reduction in the birth rate to prevent the deterioration of human race is the

- A Positive eugenics
- B Negative eugenics
- C Positive euthenics
- D Negative euthenics

ANSWER : B, Negative eugenics

7. Artificial insemination is the

- A Positive eugenics
- B Positive eugenics
- C Negative eugenics
- D Negative eugenics

ANSWER : A, Positive eugenics

8. The consanguineous marriage is an another

- A Positive eugenic
- B Negative eugenic
- C Positive eugenic
- D Negative eugenic

ANSWER : D, Negative eugenic

9. Who coined the term eugenics

- A. Sir Francis Galton
- B. Weinberg
- C. Hardy
- D. Muller

ANSWER : A, Sir Francis Galton

10. German type of humanity is an example of

- A Negative eugenics
- B Negative eugenics
- C Positive eugenics
- D Positive eugenics

ANSWER : C, Positive eugenics