

Contents

	<i>Pages</i>
Preface	i-iii
Introduction	1-32
• What is genetic engineering ?	1
• Genetic engineering and traditional biotechnology	2
• Moral and ethical considerations	5
• Extrinsic and intrinsic concerns	11
• Extrinsic concerns about risk and safety	14
• Intrinsic concerns about unnaturalness	22
• What is meant by 'natural' and 'unnatural' ?	23
• What is good about being 'natural' ?	27
• Intrinsic concerns about disrespect	28
• The reductionist argument	28
• The holistic argument	29
Chapter-I : From Science Fiction to Ethical Predicament	33-67
• About the project	34
• Genetic Screening	36
• Ethical Dilemmas	37
• Genetic Counselling	39
• Genetic Therapy	41
• Ethical Implications	42
• The Legal and Ethical issues raised by the Human Genome Project	45
• Individual / Family Issues	47

• Societal Issues	49
• Species Issues	52
• Moratorium Bans	56
• Where do we go from here ?	60
• Public Perception of biotechnology	64
• The applications of Human Genetic Research	65
• Areas of Public Concern on HGP	66

Chapter-II : Gene Therapy in the Offing **68-121**

• What is Gene Therapy ?	69
• Ethical quandary	71
• Arguments for and against Gene Therapy	73
• The issue of eugenics	87
• Individual Therapy	99
• Societal Therapy	100
• Societal Breeding	102
• Individual Breeding	106
• Conclusion	118

Chapter-III : Cloning **122-156**

• The Birth of Dolly	123
• A history of cloning	124
• What is cloning ?	126
<i>Cloning techniques :</i>	
• Nucleas transfer	127
• The Roslin technique	127
• The Honolulu Technique	128
• How did people react to the news	129
• Law on cloning	131

• Some misconceptions about cloning	132
• Benefits of cloning	135
• Frequently asked questions	137
• Should Human be cloned ?	138
• Human cloning from religious perspectives	141
• Is Human cloning scientifically ethical ?	142
• Why cloning humans is ethically unacceptable ?	154

Chapter-IV : The Moral Status of Gene **157-189**

• What is moral status ?	158
• Criteria of Moral Status	160
• Sentience and Utilitarian Calculus	163
• Personhood View	167
• The Land Ethic	172
• Nel Noddings's Ethic of Care	173
• The Moral Status of the Gene	174
• A Pragmatic Case for the Moral Status of Genes	179
• Empirical Arguments Against Sanctification	183
• Pragmatic Arguments Against Sanctification	184
• Regulation without Sanctification	188

Conclusion **190-218**

• Human dignity	190
• Determinism	192
• Body	207
• Cultural and Religious Perspective	215
• The body as a cultural phenomenon	217

Bibliography **219-225**