

Senescence (Ageing)

Preface:-

Although birth marks the end of foetal development, it is not end of growth and change. People continues to cross a series of more gradual threshold as they move from infancy through childhood, Puberty, adulthood and old age.

Growth is faster in the head and body centre and lowest towards the periphery. At birth brain is the most developed organ and it is 25% of its final adult weight. The child's trunk grows faster than its arms & legs and it gains co-ordination over gross limb movement before finger and toe movement.

Science of senescence is called Gerontology. The scientist studying the science of senescence are called Gerontologist.

What is Senescence?

Senescence may be defined as multidimensional process of physical, cytological and social changes.

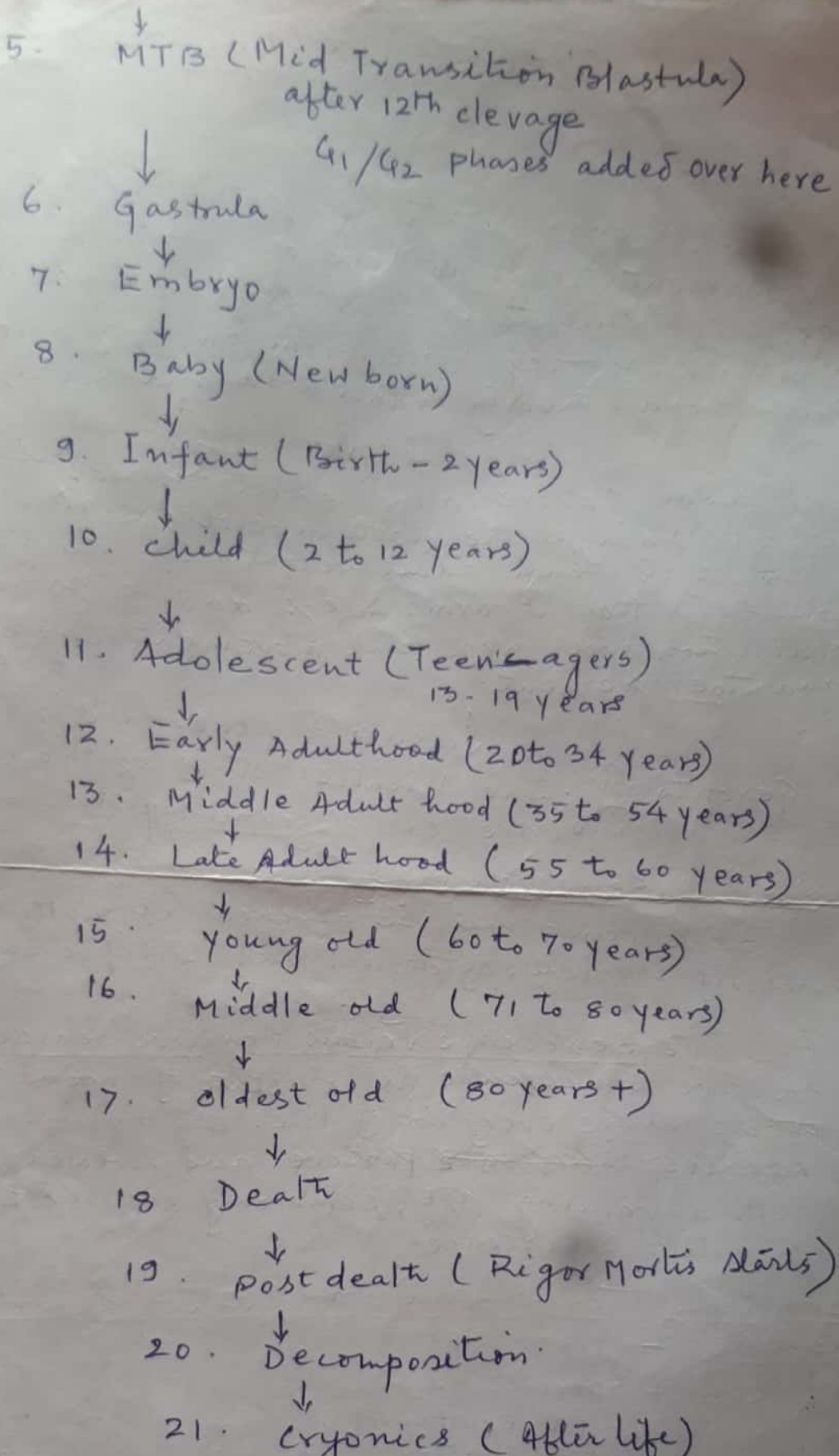
Positive Senescence Versus negative senescence:-

Positive Senescence is a state of mind in which people utilize every bit of life as against a ~~passive and isolated~~ passive and isolated life style with advancing age, commonly referred to as negative senescence.

Dividing the life span from pre-conception to cryonics:-

1. Ovum + Spermatozoon
(Pre-existence)
↓
Fertilization
2. - Zygote (conception)
- ↓
3. Morula
- ↓
4. Blastula
- ↓

3



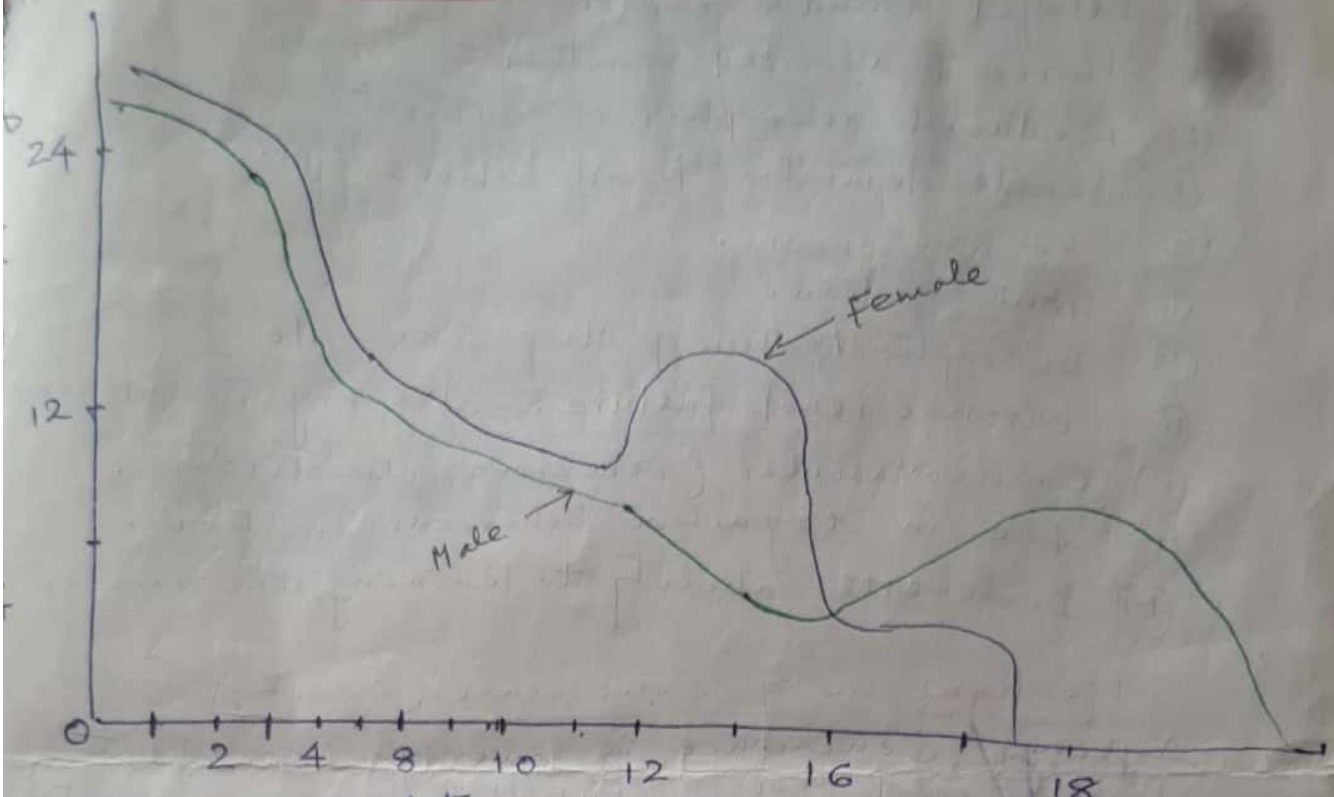
Ages can be divided by decades:-

1. Denarian - some one between 10 to 19 years of age.
2. Vicenarian:- 20 to 29 yrs
3. Tricenarian - 30 to 39 yrs
4. Quadragenarian - 40 to 49 yrs
5. Quinquagenarian - 50 to 59 yrs
6. Sexagenarian - 60 to 69 yrs
7. Septuagenarian - 70 to 79 yrs

8. octogenarian - 80 to 89 yrs
 9. Nonagenarian - 90 to 99 yrs
 10. Centenarian - 100 to 109 yrs
 11. Super-centenarian - 110 yrs onwards.

(3)

Rate of Growth -



This graph plots the rate of growth in cm against age in years & graph shows the puberty in male & female.

As to Helminton (1954) following definition may made in the field of Senescence.

1. Universal Senescence - Age changes / common to all people.
 2. Probabilistic ~~age~~ Senescence - Age changes may happen to some & not to all.
 3. Chronological ~~age~~ Senescence - Age changes in terms of years.
 4. Social Senescence - Society expectation of how old people should act.
 5. Biological Senescence - physical state according to age.
 6. Population ~~age~~ Senescence - That is increases of number & proportion of the older people in the society.
- * Primary Senescence - Normal ageing process called as Senescence
- * Secondary ageing (Senescence) - Ageing with disease.