

Evaluation Indicators

Language:

Structure:

Presentation:

Hand Writing :

Content:

Attempt:

Remarks: Overall my analysis is, please read evolution part once again.

Part 1 (Attempt all questions 8*20=160marks, 250Words each)

1. Discuss different factors affecting growth and development in human beings? How does covid 19 impact the Growth and development of marginalized sections?

(A) Growth and Development both refers to physical and mental increase in the capability of humans. While growth focuses on the Quantitative aspect, development focuses on the Qualitative aspect of increase in functional capability.

→ Factors affecting growth and Development.

◦ Genes - Genes and heredity impact the growth and development.

- height, body type, facial features e.t.c.

- any functional disability like chromosomal aberrations, hormonal issues e.t.c.

◦ Environment - the climate surrounding us also impact growth.

(Ex) Bergmann's, Allen's rule, Glogger's rule.

The difference in growth and development between these races i.e. Mongoloid, Negroes, Caucasoid e.t.c.

- Nutrition - Nutrition affects the intra uterine conditions too. Poor diets, ~~habits~~ habits like smoking, alcohol consumption affect growth and development.
(Ex) low Body mass Index, Kwashiorkor, marasmus e.t.c.
- Educational attainment - Higher education means access to information and increased awareness.
(Ex) An educated mother can learn what is good for her child and what is not e.t.c.
- Economic status - Children in developed countries have better health and nutritional status and vice versa.
- Culture - Religion impacts health too. For example certain religions prohibit use of contraception thus leading to more children and poor health.
Tribes - (Ex) Todas tribes consider consumption of milk as a taboo.

◦ Political Situation - Peaceful conditions ensure proper availability of resources and growth.

(Ex) War ridden countries are in dire need of resources and it ~~to~~ thus affects growth and development.

◦ Other reasons

- Intra uterine conditions inside the womb.
- Government policies e.t.c.

→ Impact of COVID 19 on growth and development of marginalized sections.

◦ Access to hospitals was reduced thus affecting growth and development of pregnant mothers, infants e.t.c.

◦ Nutrition

- No schools thus no mid day meals.
- Break in certain policies like meals for pregnant and lactating women e.t.c.

◦ Neglect of family members - Neglect of vaccines for kids during COVID.

o Poor and vulnerable sections of society lost employment and were living on the mercy of the government.

(Ex) Hunger deaths reported during COVID.

o Orphan children were ignored and several children lost parents which led to deprivation at multiple levels.

Growth and development is not just physical but also mental. COVID pandemic led to not just physical pressure but also impacted mental health which led to growth and development being impacted in a large way.

12 ✓
 Covered all points ✓

| | | | |
|-----------|---|---------------------------|---|
| Structure | ✓ | Introduction & Conclusion | ✓ |
| Content | ✓ | Total : | |

2. What do you mean by Anthropometric somatotype? Describe in detail Heath & Carter's method of somatotype with present relevance and significance.

(A) Somatotype refers to Body Type. Anthropometric Somatotype makes use of morphometric measurements like height, weight, supra orbit orbit skin fold, calf fold e.t.c to study the somatotypes.

→ Heath and Carter's method of Somatotype
Barbara Heath and her assistant Carter learning from the shortcomings of Sheldon's method of Somatotyping invented a new and better method in 1967.

- Method - It gives the somatotype on the basis of three numbers. (0-0-0)
The first number indicates ectomorphy (7-1-1); the second number mesomorphy (1-7-1); and third number endomorph (1-1-7).
- Measurements used - It uses height,

weight, calf skin fold, supra orbit fold e.t.c.

o Endomorphy (7-1-1) -

- General roundness
- Fat around the abdomen and trunk.
- Generally not seen in sports.

o Mesomorphy (1-7-1) -

- muscular and athletic body.
- less fat and more muscle.
- broad shoulders.

(ex) Swimmers, Basketball players e.t.c.

o Ectomorphy - (1-1-7) -

- Thin and lean body.
- less amount of fat.
- High agility and durability.

(ex) Fast runners in sports e.t.c.

Generally, a human is around (4-4-4) with slight variations around the number.

Criticisms

- Does not indicate exact method of measurement.
- Very few metrics taken into consideration.
- There can be a change in somatotypes mid life.

→ Present day Relevance and Significance

- Extremely helpful in the area of Sports.

(Ex) Endomorphs - not generally taken for Sports.

mesomorphs - swimmers, weight lifters e.t.c.

Ectomorphs - skating e.t.c.

- Helps in the customization of training according to somatotypes.

- Recruitment in armed forces and other forces.

- Customized diets and patterns based on somatotype is seen.

- Sheldon had gone to mention that personality can be associated with

Somatotypes but that is yet to be proven.

- Designing of costumes, equipments, cockpits e-t-c is possible.
- Ensuring comfort, efficiency and Safety in designing. (shukla et al).
- Kinanthropometry makes use of this too.

Thus, Heath and Carter's Somatotype methods acted as a breakthrough in customized designing of equipments, uniforms, costumes e-t-c and continues to hold relevance even today, in diverse sectors.

Covered
all points

12

3. Write the meaning and scope of forensic anthropology? And give insight on how it can help in Criminal Investigation and write its present challenges and limitations in finding the culprits involved in the crimes.

(A) Forensic anthropology uses anthropology in the detection of crime and solving of crimes. It is a branch of applied anthropology.

→ Scope of Forensic anthropology -

- o Paternal disputes
 - In case of property disputes.
 - Rape cases.
 - Disputed paternity e.t.c.
- o Crimes department
 - Recognition of bodies.
 - Reconstruction of face.
- o To know blood relations.
- o DNA fingerprinting.
- o Dermatoglyphics e.t.c.

→ How it can help in Criminal Investigation -

- o Facial Reconstruction in case of

burnt bodies, destruction of face
e.t.c.

o To know relation between two
people.

(Ex) Disputed Parentage.

o Use of dermatoglyphics to find
evidence e.t.c.

o Blood Samples, Semen Samples,
DNA Samples e.t.c in case of
identification.

→ Present Challenges and Limitations
In finding the culprits -

Challenges

- ↳ Forensic anthropology not so well
developed in India.
- ↳ less knowledge of forensic
anthropology to officials.
- ↳ Sample procurement often a long
procedure amidst court orders
e.t.c.
- ↳ Dilution or pollution of samples

possible.

- o Ethical Issues.
- o No data protection laws in India.
- e.t.c.

Limitations

- o - Expensive - Infrastructure and training of individuals.
- o - Paternal Diagnosis can only tell who is not the father.
- o (Ex) DNA fingerprinting - the whole tool proof method.
- o chances of human error are very high.
- o Not many takers for forensic anthropology field in India.
- o Changing nature of crimes around the world.
~~Thus, forensic and~~
- o (Ex) cyber warfare, Bio warfare
e.t.c.

Thus, Forensic Anthropology does have a lot of shortcomings and needs further development. However, it is a very useful method in the crime detection and officials must be trained in the field of Forensic anthropology in order to ensure that efficient use of these methods can be done.

10

4. What do you mean by Kinanthropometry? Critically evaluate the role of anthropology in selecting and monitoring Sports persons and highlight the different methods they used.

(A) Kinanthropometry is a branch of Physical anthropology. It is nothing but Sports anthropology. It studies body type, shape, composition etc to study body apply in various fields.

→ Role of anthropology in selecting and monitoring sports persons -

↳ Ectomorphs and Mesomorphs are considered good sports persons.

↳ Designing of equipments.

(Ex) Nayyan redesigned hockey sticks for Sauria Paharia people as per their height.

• Selection of sports persons

- their diet according to Somatotype.

- designing of sports equipment for them etc.

- Understanding the maturity levels based on bone ossification levels.
- Monitoring training, injuries of sports persons e.t.c.

→ Critical evaluation -

- The stereotyping may discourage a few to take up sports.
- (Ex) Endomorphs
- Endomorphs can take up sports after right type of training and educating.
- Limiting of opportunities to people.
- Sports is not just about somatotype but also about mental strength, will power and many other elements.

→ Different methods used -

- Voila's method where the somatotypes were divided based on abdomen, thoracic and limb measurements.

- o Kreitshmer's method - where body types were divided as
 - Pycnic - round and fat.
 - leptoscopic - thin and lean.
 - athletic - muscular.
- o Shelden's method - Body Somatotypes
 - Into
 - a) Extreme endomorphs - round, more fat, less muscle, not good for sports.
 - b) Extreme mesomorphs - tall, muscular, broad, durable etc.
 - (Ex) Basketball players.
 - c) Extreme Ectomorphs - Thin, lean
 - (Ex) Skating, Swimming etc.
- o Heath Carter method - Same as Shelden (Endomorphs, mesomorphs, Ectomorphs) but used several other measurements like calf skin fold, supra orbit fold, weight etc. They also gave a possibility of

Somatotypes where a mix of different types is possible.

| Height | Weight | Sports |
|--------|--------|----------------|
| Tall | Heavy | wrestling |
| | medium | Swimming |
| | light | Basketball |
| Medium | Heavy | Short shot put |
| | medium | Boxing |
| | light | Football |
| Short | Heavy | Weight lifting |
| | medium | Hockey |
| | light | Skating |

Thus, anthropologists used Somatotype in sports. However, any person can take up any sport based on training and necessary nutrition.

12
Covered all points

| | | | |
|-----------|---|---------------------------|---|
| Structure | 4 | Introduction & Conclusion | 4 |
| Content | 4 | Total : | |

5. Describe the cultural evolution of India with special reference to the characteristic features of the Mesolithic culture in India with the tool culture found in the different archaeological sites?

(A) The cultural evolution in India is divided into several stages P.e
 Paleolithic
 / Upper
 / Middle
 \ Lower

 Mesolithic ; Neolithic ; Chalcolithic
 Iron age e.t.c.

→ Mesolithic culture in India

- Time period - (10,000 BC - 4,000 BC).
- Climate - warmer Holocene period.
- man - Neanderthal man.
- Tool type - Cleavers, Chopper
 Chopping tools, hand axes e.t.c.



cleavers
(microoliths)



chopper
chopping
tools



Hand
axes.

- Tool material - lithic and non
 lithic tools (bone e.t.c).

◦ Tool technique - blade technology.

◦ Contributors -

H.D. Shankalia - Langhnaj, Gujarat.

Mishra and Joshi

Krishnaswamy, Pappu.

Robert Bruce Foote.

◦ Characteristic features -

- Microlithic tools found

(muchelala chindamani Gavi,
Andhra Pradesh).

- Nagayuna Konda - Bone tools.

- Rhino Shoulder blade used as a
tool in Langhnaj found by
Shankalia.

- Bhimbetka - Mesolithic cave
paintings.

- a round lithic slingy ball which
hand hangs outside caves found.

- a rock placed as wind break
outside caves in Bhimbetka.

- Microlithic tools - Small tools found in mesolithic period.
- Hunting and gathering lifestyle.
- Agriculture not yet developed.
- Different types of burials show some form of religion existed during this period.
- Cave paintings show social organisation, some form of group activity etc.

Thus, mesolithic period was a period of transition between Paleolithic and Neolithic period. It laid the foundations for the establishment of agriculture later during the Neolithic phase. Therefore, the mesolithic phase holds a lot of significance in India though it is less developed than in Europe.

mesolithic cultures
of India, you
have to write in
detail.

9

6. Write the meaning and scope of Paleoanthropology? Elaborate on the paleo anthropological fossils finds from Siwalik Hills and critically evaluate the contribution of Siwalik fossils to the Paleoanthropological knowledge.

(A) Paleoanthropology studies the primate fossils found from archaeological sites and how they are related to Homo sapiens and their evolutionary significance.

→ Scope of Paleoanthropology -

- To understand the primate history.
- To establish the relations between Homo Sapiens and primates.
- Understand the evolutionary significance.
- How the functional anatomy of humans developed e.t.c.

→ Paleo anthropological fossils in Siwalik Hills -

- Siwalik Hills were at one point of time considered to be the centre of human evolution.

o Ramapithecus, Shivapithecus, Sugrivapithecus and Naumada man are some of the fossils found in Siwalik hills.

o Ramapithecus

- 12-14 MYA ; River Tinau, Nepal

- 1934 by Edward lewis.

- a skull, an upper portion of jaw.

- blunt canines and blunt molars, jaw depicts human.

o Shivapithecus

- 16-14 MYA

- The specimen depicted the fossil of an orangutan.

Later, Beidelman and others, clubbed Ramapithecus and Shivapithecus and brought them under the Dryopithecus line of evolution which later evolved into Orangutan.

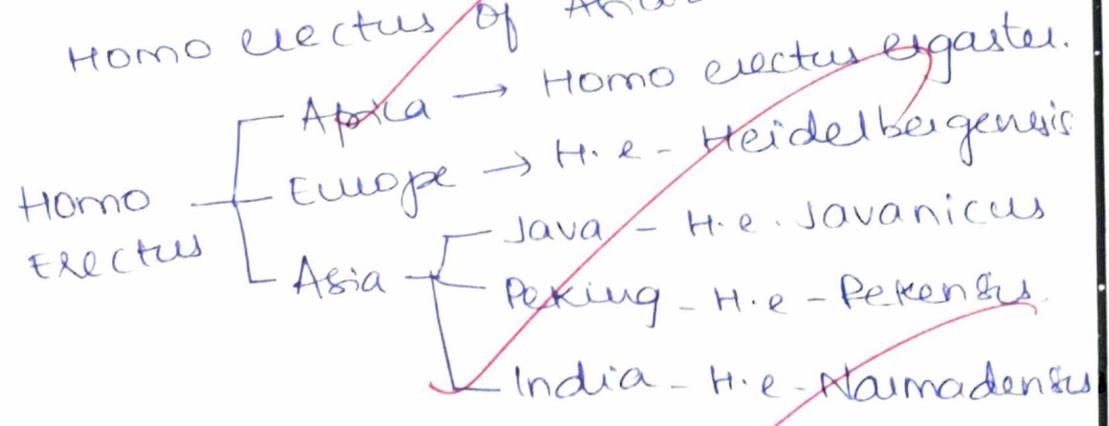
o Naumada man

- found in Hathnora.

- Assigned as Homo erectus and given the name of Homo erectus Naumadensis
- The specimen belonged to a 30 year old lady.

→ Contribution of Siwalik fossils to paleoanthropological knowledge -

- o At one point in human history, it was assumed that Ramapithecus and Sivapithecus were the oldest specimens of Homo Sapiens.
- o However, this thought was debunked.
- o Narmada Man, however represents Homo erectus of Asian line.



o No other specimens continuing this line have been found till date.

◦ No clarity on Indian line of human evolution.

However, Shivalik hills fossils places India on the global map of paleoanthropological finds of the world. This finding can help us in understanding the phylogenetic status of many other species around the world.

✓
 please, draw the diagrams
 for any question in evolution.

Structure

✓

Introduction & Conclusion

✓

Content

✓

Total :

7. Discuss the Biological & Socio-Ecological factors influencing fertility, fecundity, and mortality in the present generation and measures followed by the medical professional in resolving the issues

(A) Fecundity is the ability to participate in the process of reproduction i.e. the ability to produce.

Fertility is the actual reproductive performance of an individual.

Mortality means the death or end of human functionality.

→ Biological and Socio cultural factors

Fertility

◦ Biological — Age at menarche and menopause.

- Reproductive health of people.

- Presence of any disorders.

(Ex) PCOD, PCOS in women.

Prostate cancer in men.

- Use of contraception — sterilization etc.

- Frequency of coitus.

- Habits like smoking, alcohol, stress etc.

◦ Socio cultural

- Religion - many ban use of contraceptive
- Emphasis on male child.
- Emphasis on marriage and procreation.
- Family - joint or Nuclear.
- Education of parents.
- Economic conditions e.t.c.

Fecundity

◦ Biological

- Sterilization - vasectomy, tubectomy.
- Frequency of coitus.
- Post partum depression, lactation infertility e.t.c.
- Age as a factor - the fecundity at higher ages is less.

◦ Socio cultural

- widowhood, separation e.t.c.
- Age at marriage.
- Pre marital sex taboos.
- celibacy e.t.c.

Mortality

o Biological

- Health and nutrition.
- Diseases (cancers e.t.c).
- Absence of proper treatment.
- Genetically derived illness.
- Heredity (cancer in family e.t.c).
- Environment (pollution e.t.c).
- Habits like smoking, alcohol, drugs consumption e.t.c.
- Sex (Females - higher life expectancy)

o Socio cultural

- Development status of country. (Developed - high standard of living - low mortality e.t.c).
- Educational status (high awareness).
- Economic conditions (high costs for treatment) e.t.c.

→ Measures solved by medical professional in resolving the issues.

- o Genetic counselling and genetic screening to detect any genetic issues.

- Fertility ~~too~~ treatments like IVF, surrogacy etc.
- Treatment for PCOD, PCOS now available.
- Mortality - Treatment available for many diseases now.
 Recommending diet, exercise etc.

Thus, fertility and mortality have a large role to play in deciding the growth of population in a country. Population has a large impact on growth and development of a nation thus the relevance of Demographic studies increases.

12

| | | | |
|-----------|---|---------------------------|---|
| Structure | ✓ | Introduction & Conclusion | ✓ |
| Content | ✓ | Total : | |

8. What do you mean by Applied Anthropology? And Discuss The applications and limitations of anthropometry in designing Défense and other types of equipment in the present technological advancement generations.

(A)

Applied Anthropology is a sub branch that deals with application of anthropological knowledge to study ~~real~~ life conditions and issues.

(Ex) Kinanthropometry, Forensic Anthropology etc.

→ Anthropometry in designing Défense and other types of equipment -

◦ Customized designing of costumes.

(Ex) Women have been joining armed forces and thus customized designing of costumes has been of help.

◦ cockpit and weapon designing.

(Ex) Earlier weapons and aircrafts were designed as per European

Somatotypes. However, there has been a change now.

- o Airforce designing
 - the ~~envi~~ atmosphere pressure has an effect on Swelling of body, thus the uniforms need to be designed approximately.
 - o Designing of Sports equipment.
 - o A mix of Safety, comfort and efficiency in designing (shukla et al).
 - o Designing of bullet proof jackets, comfort etc vehicles e.t.c has an effect on security.
 - o variations in Somatotypes.
 - (Ex) a same type of equipment cannot be used by Negritos, mongoloids, caucosoids etc.
- There is a need for customization.
- o Kinanthropometry is another branch of applied anthropology.

*NEGrito only in Indian context
In world context it is NEGroid*

◦ Forensic anthropology

- Identification of body.
- Paternity diagnosis.
- Evidence collection (blood, semen e.t.c).
- Dermatoglyphics, DNA fingerprinting e.t.c.

◦ Parentage Diagnosis

- In rape cases.
- Property disputes
- Pregnancy out of wedlock, live in relations e.t.c.

→ Applied Anthropology in technology advancement generation -

- Use of Artificial Intelligence, machine learning, 3D printing e.t.c.
- Designing of equipment
- change in warfare
 - Biowarfare
 - cyber warfare e.t.c.

Thus, Applied anthropology focusses on individual differences and thus helping in custom designing of equipment in defense, sports e.t.c. With this, we can see a considerable improvement in efficiency, speed and performance which is the need of the hour in this fast paced world of technology.

Don't leave the GAP, please

| | | | |
|-----------|---|---------------------------|---|
| Structure | 4 | Introduction & Conclusion | 3 |
| Content | 4 | Total : | |

Part 2 (Attempt all questions 6*15=90marks, 200Words each)

1. Critically Elaborate the significance of the ethnoarchaeological approach to the study of indigenous craft in India with suitable examples.

(A) Ethnoarchaeology ~~used~~ uses a combination of ethnographic studies to understand archaeological specimens or conditions.

It studies 'what' of things and tools rather than 'why' of things.

Contribution - Richard Lee, Richard Gould, Lewis Binford.

→ Significance of ethnoarchaeology in study of indigenous craft in India -

◦ It explains the functional significance of ~~eth~~ indigenous craft.

(Ex) Significance of cooking in mud utensils even today.

◦ Understanding art.

(Ex) worli art - stick figures.

archaeological studies show absence of other tools for paintings, thus used sticks.

- (Eg) Ikat or tie and die paintings.
Absence of machines in older days.
- Explains ritual practices.
(Ex) Juang tribes of Orissa - fire a wooden log while ~~looking~~ considering it to be pious whereas the truth is people used to be dependent on wood and fire was thus inevitable.
- Explains the existence of Survivals and parallels in culture.
(Ex) Mock capture of brides in certain tribal weddings.
- Understand the evolution of different cultures.
- Though, Malinowski believes that no culture survives unless there is no ~~culture~~ functional significance.

→ Critical evaluation -

- we can study ethnoarchaeological significance if cultures are alive.
However, several tribal cultures

good examples

- are getting endangered.
- Thus, the functional significance of a culture dies with them.
 - Cultures are not static and keep changing thus their functional significance may also change.
 - Intermixing of indigenous arts and cultures these days.

Thus, ethnoarchaeology along with cultural parallels and survivals might be a great way to study functional significance and relevance of traditions and practices of the past.

9

| | | | |
|-----------|---|---------------------------|---|
| Structure | 3 | Introduction & Conclusion | 3 |
| Content | 3 | Total : | |

2. Write the meaning of paternity diagnosis and examine how it will help in solving medico-legal cases of blood relations? Illustrate

(A) Paternity Diagnosis is the branch of Applied Anthropology which helps us to know if two people are related to each other or not.

→ Applications

- In case of property disputes.
- In crimes - rape cases.
- Pregnancy out of wed lock, live in relationships e.t.c.

→ How it helps in solving medico legal cases of blood relations

- o Parental Diagnosis makes use of several methods like Dermaloglyphics, Serogenetics e.t.c.
- o However, the full proof method is DNA fingerprinting.
- o DNA fingerprinting makes use of VNTRs (Variable Number Tandem Repeats)

which are unique in people and pass on to offsprings.

o Property disputes

- Property passes on to offsprings.
- Paternity diagnosis can be used here.
- However, in case of adopted children, one cannot use this technique.

o Forensic anthropology.

- Rape cases and thus pregnancy.
- Death of rape victim - Semen samples can be collected and a test can be done.

o Other cases of custody of children, live in relationship children etc.

- Relation can be established.
- To decide on the alimony & or maintenance of children etc.

Different morphological methods like height, weight, face form and other non metric methods like

Sexogenetics, cytology can also be used for paternity diagnosis.

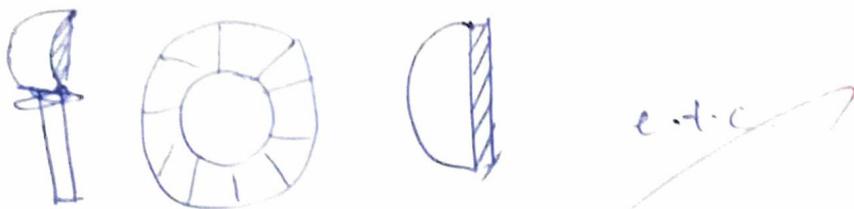
However, all these methods are not full proof. All this can tell, who is not the father or parent of a child whereas DNA fingerprinting can help us know exactly whose child one is.

6

Explain Post Harappan Civilization and explain their sites with special reference to the tool culture found in the sites with present relevance and significance.

A) Post Harappan Civilization can be called as Chalcolithic age and ~~still~~ steel age which developed after 1300 BC i.e. after the death of the or during the fall of the Harappan civilization.

- Time period - 1300 BC - 800 BC.
- climate - warm and dry climate.
- Tool material - Steel, Copper etc.
- Tool technology - metallurgy.
- Tool types - axes, Chert etc.



- Characteristics
 - copper was used on a large scale.
 - Ahai, Banas, Gulind - Rajasthan.

Jorwe, Nevasa - Maharashtra.
e.t.c.

o Agriculture based economy.

(EX) Damb Shaddad

Kili Ghul Muhammad e.t.c.

o Industries also developed

(EX) Bead Industry

metal industry e.t.c.

o ~~Settled life.~~ Settled life.

o Sex based division of labour.

o Rise of institutions like marriage, family, religion e.t.c.

o In South India

- we see megalithic cultures.

- large stones were placed around graves and in graveyards.

- Hungs in Karnataka, Tekkalakota.

- Unique to South India in India.

- Different types of graves of stones like Dolmen, Cist,

Sarcophagi etc.

◦ Group Cooperation was seen.

Thus, not many instances of post Harappan cultures are found in India. ~~Most~~ of them are concentrated in Pakistan and Baluchistan region.

However, this ~~phase~~ constitutes an important phase in India's history of cultural evolution.

For this, you ~~have~~ to read more.

&

| | | | |
|-----------|---|---------------------------|---|
| Structure | 3 | Introduction & Conclusion | 2 |
| Content | 3 | Total : | |

4. What are the methods of personal identification? Critically examine how personal identification helps in criminal investigations

(A) Personal Identification is a branch of Applied Anthropology which works on reconstruction of physical specimens of people for identification.

→ Methods of personal identification

o Skull clay modelling

Clay is modelled on the entire fossil thus giving us an idea of form of human.

o 3D Technological mapping

makes use of technology and helps us know a person based on his/her specimens.

o Sketching

- Sketching of the portrait of a man based on description given by someone.

- Comparison with living twin, parents etc.

→ Personal Identification in Criminal Investigation -

- ↳ To make a sketch of accused people.
- ↳ In case of missing people complain.
- ↳ In case of heinous crimes involving disfigurement of face.
- ↳ Fire accident and burnt bodies.
- ↳ In case of decomposed bodies.
e.t.c.

→ Critical evaluation

- Clay model irrelevant after coming in of technology.
- Chances of slight human errors may lead to wrong accusations.
- Not useful in case of plastic surgeries, twins e.t.c.

- Technology has brought new methods of personal identification.
- Record of criminals and all other individuals available these days.

Despite the above criticisms, there is no doubt that personal identification is extremely useful tool in criminal investigations all over the world. With the changing nature of crimes, there is a need for constant updation of technologies too.



5. Write the meaning of the Ageing and Senescence and discuss the Issues related to the Elderly and Senescence in Developing and Developed Countries

(A) Ageing means increase in years or chronological number of life span.

(Ex) All of us are ageing, even a new born is ageing.

Senescence on the other hand is the deterioration of the functional capacity of man.

(Ex) old age - menopause e.t.c.

One person's chronological age (age in numbers) and biological age (age in fitness) might not always be the same.

→ Issues related to Elderly and Senescence and in Developing and Developed countries -

o Gerontology - Branch of study of old people or old age.

o World wide, the age of old pe

proportion of old people is increasing.

(Ex) Japan, South Korea etc.

o Thus, the proportion of dependent population is more than working population.

o Issues

- Abandonment of old people by children.

- Need for old age homes.

- Need for medical care and high infrastructure cost.

- Old age Supportive policies.

- proper pension policies.

- Infrastructure - wheel chair friendly etc.

- Grey economy - Increasing the retirement age and using the services of old people on the economy.

- Empty Nest Syndrome - when young kids leave their parents

for education or jobs, the old suffer from anxiety and depression.

Need to invest in mental health issues of people at old age.

legal issues

- cases of Euthanasia have been increasing.

- Children not agreeing to pay even basic maintenance etc.

Thus, the old people form a treasure of knowledge and experience. Their caretaking is our responsibility.

Thus, every country must make laws so that our old population can live with love, respect and dignity.

8

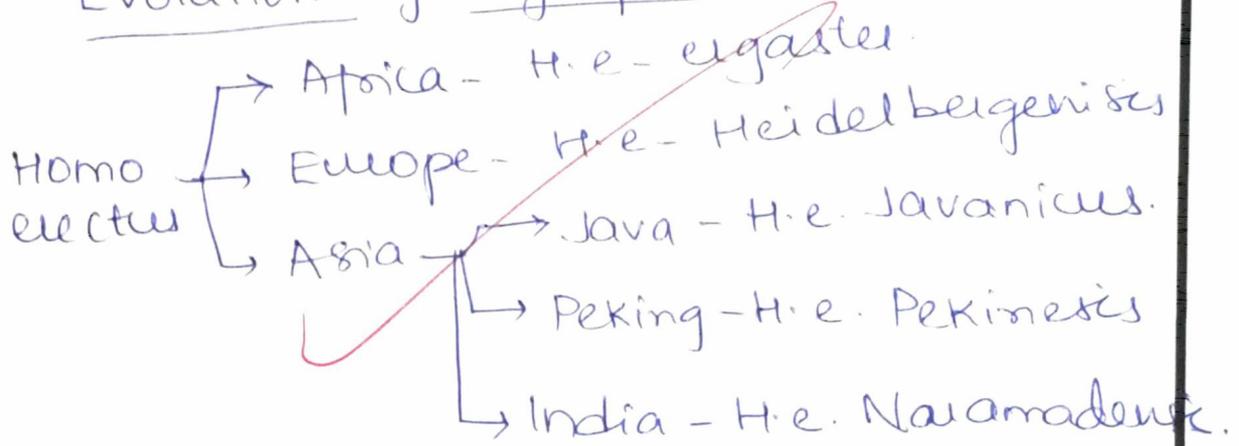
| | | | |
|-----------|---|---------------------------|---|
| Structure | 3 | Introduction & Conclusion | 2 |
| | 3 | Total : | |

6. Critically Evaluate the debate related to the evolutionary significance of the fossil found in the Narmada basin?

(A) Narmada Man was found from Hathnora in the Narmada basin.

◦ It is said to be a specimen of a 30 year old woman belonging to Homo erectus.

◦ Evolutionary significance



- Features of Narmada man

- Brain capacity - 1200 cc.
- Round and high occiput
- Clanium shows nearance to modern homo sapiens.
- Erect posture and Bipedal locomotion.



→ Draw the better diagram

◦ This has led to explaining that one branch of Homo erectus evolution is in India.

→ Critical evaluation -

- Many say that Neanderthal man was just one specimen who must have reached India by mistake.
- No other further Homo sapiens specimens found later.
- No specimen of Neanderthal man in India.
- It has been proved that Africa is the cradle of human evolution.
- Thus, after lot of discussion and comparison, it was decided that Neanderthal man belonged to Homo and is an Asian specimen of Homo erectus.

This Invention placed India on the global ~~man~~ world map of paleology and human cultural evolution. Paleontology is a continuous process. Thus, it is possible that we may come across specimens ~~that come~~ in India in future that completely change the debates surrounding Neanderthal man.

8

| | | | |
|-----------|---|---------------------------|---|
| Structure | } | Introduction & Conclusion | 2 |
| Content | } | Total : | |