

M.A/M.Sc. Examination 2025
Semester IV
Paper XIX (Group A)
(Human Genetics)

Questions are of value as indicated in the margin.

Answer question No. 7 and any three of the following

Time: Three Hours

Full marks: 40

1. What is karyotyping? Discuss about four commonly used banding techniques and their importance in human genetics. 2+8=10
2. Explain the molecular structure of human chromosome. 10
3. What is 'central dogma'? Describe protein synthesis in eukaryotic cell. 3+7=10
4. Discuss on the existing molecular techniques often used in molecular anthropology. 10
5. What do you understand by chromosomal aberration? Illustrate one autosomal numerical and one sex chromosomal structural anomalies in human. 2+4+4=10
6. What is Hardy-Weinberg equilibrium principal? You sampled 2,000 individuals from a large population for the MN blood group, which can easily be determined since co-dominance is involved (i.e., you can detect the heterozygotes). They are typed below accordingly:

Blood Type	Genotype	Number of Individuals	Resulting Frequency
M	MM	980	0.49
MN	MN	840	0.42
N	NN	180	0.09

Using the data provided above, calculate the following:

- a) The frequency of each allele in the population.
 - b) Supporting the matings are random, the frequencies of the mating.
 - c) The probability of each genotype resulting from each potential cross. 4+6=10
7. Write short note on any two of the followings: 5+5=10
- a) Meiosis
 - b) Genetic counseling
 - c) Translocation
 - d) Genetic drift
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M.A/M.Sc. Examination 2025
Semester IV
Anthropology
Paper XX (Group A)
(Biochemical Genetics)

Questions are of value as indicated in the margin.

Answer question No. 7 and any three of the following

Time: Three Hours

Full marks: 40

1. Describe inborn error of metabolism. What are the characteristic features of inborn error of metabolism? Briefly discuss the major categories of inborn error of metabolism. 2+3+5=10
 2. Briefly discuss the importance of pedigree method in human genetics, mentioning its advantages and limitations. 10
 3. What is ABO blood group? What are the molecular bases of ABO blood group? Discuss briefly the clinical significance of ABO blood group system. 2+4+4=10
 4. What is immune system? Discuss briefly about adaptive immune system in human. 2+8=10
 5. Write a note on kinetic classes of eukaryotic DNA. 10
 6. Define mutation. What are the causes of mutation? Briefly discuss the effects of mutation. 2+3+5=10
 7. Write short notes on any two of the following: 5+5=10
 - a) MNS
 - b) Fitness
 - c) VNTR
 - d) G6PD
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M.A/M.Sc. Examination 2025
Semester IV
Paper XXI (Group A)
(Human Biology)

Questions are of value as indicated in the margin.

Answer question No. 7 and any three of the following

Time: Three Hours

Full marks: 40

1. Discuss any two methods to study normal growth and development in man? What do you understand by adolescence growth spurt? 6+4=10
 2. Illustrate the physiology of postnatal growth and development in man. 10
 3. What do you understand by regional distribution of body fat? Demonstrate four major factors responsible for normal growth and development in human. 2+8=10
 4. What is body composition? Discuss any two available methods to study body composition in human. 4+6=10
 5. What do you comprehend by senescence? Discuss the existing theories related to normal senescence in eukaryotes. 2+8=10
 6. Illustrate with diagram the female reproductive system in man. 10
 7. Write short note on any two of the followings: 5+5=10
 - a) Scammon's growth curves
 - b) Secular trend
 - c) Menopause
 - d) Principal fat depots in human
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M.A/M.Sc. Examination 2025
Semester IV
Paper XXII (Group A)
(Biostatistics & Applications)

Questions are of value as indicated in the margin.

Answer question No. 7 and any three of the following

Time: Three Hours

Full marks: 40

1. What is data distribution? Calculate central tendency and standard deviation of a hypothetical distribution. 4+6=10
2. What do you understand by ANOVA? The attack rates of brain stroke among hypertensive and normotensive individuals are given in the table below. Is the Hypertension predisposed individuals to brain stroke?

Group	Attacked	Not attacked
Hypertensive	50	55
Normotensive	35	60

3. What is the difference between ANOVA and ANCOVA? To study the efficacy of anti-diabetic drug Z, the fasting glucose level of twelve individuals was recorded after four hours of administering the drug Z:

Without using Z (mg%)	120, 125, 116, 115, 112, 110, 108, 106, 100, 128, 126, 130
Four hours of using Z (mg%)	110, 105, 112, 100, 110, 107, 113, 102, 120, 115, 120, 125
Is the anti-diabetic drug Z effective in nature? Explain	3+7=10

4. The birth weight (BW) and maternal weight gain among ten subjects are given below:

BW:	3.0	3.5	4.0	2.8	2.0	2.4	2.0	4.0	2.5	2.5
(kg)										
Maternal:	2.5	3.5	2.0	4.5	3.5	4.0	2.0	3.0	2.5	4.0
Weight gain (kg)										

Is BW associated with maternal weight gain? Plot the association with a scatter diagram.

8+2=10

5. What is multiple regression? Consider the data given below where the mass y (in grams) of a chemical is related to the time x (in seconds) for which the chemical reaction has been taking place:

Time x (in seconds) 55 77 12 16 20

Mass y (in grams) 40 120 180 210 240

Find the equation of the straight line that fits the data best.

$$3+7=10$$

6. What is sampling? Briefly discuss any four procedures of sampling in a survey research.

$$2+8=10$$

7. Write short notes on any two of the following:

$$5+5=10$$

- a) Relative risk and odds ratio
- b) MANOVA
- c) Factor analysis
- d) Software in data analysis

M.A./M.Sc. Examination, 2024
Semester – IV
Anthropology
Paper – XXIII
(Forensic Anthropology)

Time: 3 Hours

Full Marks: 40

Questions are of value as indicated in the margin.
Answer Question No. 7 and **any three** from the rest.

1. Define forensic science and forensic anthropology. Briefly discuss the forensic legal procedures in India. What are the different types of evidences? 2+2+4+2= 10
 2. Discuss in brief the importance of skull in determination of age and sex. 10
 3. Discuss the role of hair in forensic anthropology. 10
 4. What is SNP and STR? Briefly compare the properties of SNPs and STRs. What is RFLP? 2+2+4+2+10
 5. Define odontology. What do you mean by bitemark? Briefly discuss the use of bitemark in forensic anthropology. 2+2+6=10
 6. What do you mean by lineage markers, discuss with suitable example. 10
 7. Write short notes on **any two** of the following: 5+5=10
 - a. Latent fingerprints
 - b. Blood as forensic evidence
 - c. Urine as forensic evidence
 - d. Human dentition
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MA/M.Sc. Examination, 2024

Semester- IV

Anthropology

Paper XXIX

(Theories and Methods in Social-cultural Anthropology)

Time: 3 hours

Full Marks: 40

Questions are of value as indicated in the margin

*Answer Question No. 7 and **any three** from the rest.*

1. Write about Diffusionism. Explain which school of diffusionism is called hyper-diffusionism? 5+5=10
2. Write in detail about Mallinowski's functionalism. 10
3. Write in nutshell on the theory of post-modernism with special emphasis on contributions of the theory to the discipline of anthropology. 10
4. Write a brief account on the contributions of Ruth Benedict for the School of Culture and Personality. 10
5. Write briefly on the theory of structuralism. 10
6. Give an account of the theory of anthropology of Feminism and how it brought change in the discipline of anthropology. 10
7. Answer **any two** of the following: 5+5=10
 - a. Cultural Survival
 - b. Culture Area
 - c. New Ethnography
 - d. Psychic Unity of Mankind

M.A. /M.Sc. Examination, 2024
Semester- IV
Anthropology
Paper- XXXII (Group B)
(Tribal and Minorities Studies in India)

Time: 3 Hours

Full Marks: 40

Questions are of values as indicated in the margin
Answer Question No.7 and any three from the rest.

1. Briefly discuss on identification and problem of identification of the Scheduled tribes? 5+5 = 10
2. Critically examine the colonial policy towards the tribes in India? 10
3. What is meant by Schedule area? Describe what you know about the sixth schedule of Indian constitution. 3+7 = 10
4. Who is Scheduled caste (SC)? Discuss in brief the constitutional provisions for the Scheduled castes. 3+7 = 10
5. Examine the relationship between forest policies and tribes of India. 10
6. What are the impacts of environmental degradation on society?
7. Write short notes on any two of the following: 5+5 = 10
 - a. The environment (Protection) Act.
 - b. Welfare programs of Scheduled tribes.
 - c. Watershed management.
 - d. Pre-Independence development initiatives in India.

MA/M.Sc. Examination, 2024

Semester- IV

Anthropology

Paper XXXV

(Anthropology of Gender)

Time: 3 hours

Full Marks: 40

Questions are of value as indicated in the margin

*Answer Question No. 7 and **any three** from the rest.*

1. Write about misconceptions and stereotypes of Feminism **10**
2. Write your understanding of Gender and Sex. Discuss briefly the role of popular culture in inculcating Gender roles and responsibilities as a socialization process **4+6=10**
3. "The women and gender studies prioritize social change"-discuss the feminist praxis in detail. **10**
4. 'Gender has been socially constructed'- write about how family structures and socialization facilitate the process of social constructionism of Gender in Indian Society? **10**
5. Women have been caught up with the intersectionality of 'work and family' write an essay explaining the intersectionality. **10**
6. What are the main ways of feminist praxis work? Elaborate. **10**
7. Answer **any two** of the following: **5+5=10**
 - a. Equal pay for equal work
 - b. Religious Taboos on Women
 - c. Crimes against women in India
 - d. Me too Movement

M.A. /M.Sc. Examination, 2024
Semester- IV
Anthropology
Paper- XXXVI (Group B)
(Psychological Anthropology)

Time: 3 Hours

Full Marks: 40

Questions are of values as indicated in the margin
Answer Question No.7 and any three from the rest.

1. Discuss Albert Bandura's Social Learning theory? 10
2. Discuss Freud's Psychoanalytic approach to Therapy? 10
3. Critically analyze the concept of Totemism? 10
4. Discuss the stigma, prejudice and discrimination against people with mental illness? 10
5. What are the suicide warning signs and how to help them? 10
6. What are the symptoms of burnout? Discuss the tips for dealing with burnout? 5 + 5 = 10
7. Write short notes on any two of the following: 5+5 = 10
 - a. Psychology of cultural change.
 - b. Building self-esteem as an adult.
 - c. "7 Baby B's" or "Attachment Tools".
 - d. Factors affecting the perception.

M.A. / M.Sc. Examination, 2022

Semester – IV

Anthropology

Paper- XXXIII (Group – B)

(Communication Anthropology)

Time: 3 Hours

Full Marks: 40

Questions are of value as indicated in the margin

Answer Question No.7 and any three from the rest.

1. Explain the importance of Communication studies in Anthropology? 10
2. Discuss the scope and focus of 'Ethnography of Communication'? 10
3. What is Interpersonal Communication? Discuss its theories? 3+7= 10
4. Critically discuss on advertising and public relations? 10
5. Write critical notes on Mass media and Family planning? 10
6. How mass communication led to changes in the people's various cultures? 10
7. Write short notes on **any two** of the following: 5+5 =10
 - a. Popular culture and Folk culture
 - b. E-commerce, E-Banking and E-Governance
 - c. Satellite Communication
 - d. Communication process

M.A./M.Sc. Examination, 2021 Semester IV Anthropology
Paper XXXIV
(Ecological Anthropology)

Time: Three Hours

Full marks: 40

Questions are of value as indicated in the margin.
*Answer Question No. 7 and **any three** from the rest*

1. Define Deep Ecology. Discuss Arne Naess' concept of 'individualism leads to selfishness'.5+5=10
2. Compare and contrast Ecological Anthropology with New Ecological Anthropology.5+5=10
3. How does Marxian Cultural Ecology differ from that of Julian Steward?5+5=10
4. Explain Bronfenbrenner's Ecological model and 'fix the child' method.5+5=10
5. What is Ecological Overshoot? Highlight some of the measures of mankind to ward off the 'global collapse'.5+5=10
6. Discuss 'Oceanix floating Cities' and 'SpaceX's making life multi-species' in response to technological & climatic adaptation.5+5=10
7. Write short notes on **any two** of the following:5+5=10
 - a. *Ecophenes vs ecotype*
 - b. *Eco-nationalism vs Ecofeminism,*
 - c. *Allen's Rule vs Bergman's rule of adaptation*
 - d. *Green politics vs Political Ecology*