

2007

ANTHROPOLOGY

PAPER-VI

Full Marks : 100

Time : 4 hours

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Write the **answers** Questions of each **Half in separate books**

FIRST HALF

(Marks : 50)

Answer Q. No. 1 and any two from the rest

1. Answer any *six* of the following : 3 x 6
- (i) Distinguish between 'biological ecology' and 'cultural ecology'.
 - (ii) What is the fundamental proposition of system ecology ?
 - (iii) Name three cultural ecologists and state their major contributions in the field of ecological anthropology.

(Turn Over)

(iv) What do you mean by homeostatic condition of an environment?

(v) What do you **mean** by transhumance?

(vi) What do you mean by acclimatization ?

(vii) Distinguish between generalized and specialized ecosystem.

(viii) State the importance of social forestry.

(ix) State three characteristic features of shifting hill cultivation.

2. Discuss in brief the concept of 'environmental determinism'. How would you distinguish between environmental determinism and environmental possibilism. 10+6

3. Discuss briefly the different life support systems and strategies adopted by human groups. 16

4. How would you define stress and strain ? State the different **environmental stresses encountered by human populations**. 4+12

S. What are the different adaptive processes that help human beings for their survival? 16

6. Discuss in brief the **contribution** of A. Vayda **in the field** of ecological anthropology. 16

Or

Compare and contrast the sociocultural adaptive pattern between the pastoralists and the agriculturists **with appropriate examples.**

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SECOND HALF

(Marks : 50)

Answer Q. No. 1 and any two from the rest

1. Answer any *six* of the following: 3x6

- (a) **Define** Demography.
- (b) **State the distinction** between Demography and **Population Study.**
- (c) **Is migration a true demographic variable? Give reasons in support of your answer.**
- (d) **What is a vital registration ?**
- (e) **Write down the formulas for sex ratio and child-woman ratio.**
- (f). **Define statistical and empirical probability.**
- (g) What is a 'Probability scale'?
- (h) Distinguish between 'fertility' and 'fecundity'.
- (i) What is negative population growth'?

2. (a) Describe with the help of suitable examples, the fundamental features of : 6
- (i) Census
- (v) Sample survey.
- (b) Draw a schematic diagram to show how you can find a probability value that corresponds to a specific score in a distribution.
- (c) A distribution of adult heights is normal with $M = 68$ inches and a $\sigma = 6$ inches. Find out the probability of randomly selecting an individual who is taller than 6 feet ? 8
3. (a) State the utilities of studying the age-sex composition in a human population.
- (b) Why crude birth rate (CBR) and crude death rate (CDR) are called 'crude'?
- (c) Draw the diagram of a Unit Normal Table showing its different columns.
- (d) (i) Find the proportion of a normal **distribution that is located in the tail beyond each z-score listed below :**
- {a) $z = +1.00$
- (b) $z = -0.33$.

(ii) Find the proportion of a normal distribution that is located between the mean and each z-score listed below

(a) $z = -0.50$

(b) $z = +2.00$.

(iii) Find the proportion of a normal distribution that is located between the z-score boundaries listed below :

(a) Between $z = -1.00$ and $z = +1.00$

(b) Between $z = -1.96$ and $z = +1.96$

Draw the normal distributions in each case and show the respective areas. 16

(a) Mention the different **measures** of fertility with their respective **formulas**. Give the meanings of the **notations used in the formulas**. 10

(b) Draw a flowchart of John C. Coldwell's 'theory of fertility decline'.

(c) For a normal distribution with a mean of 80 and a standard deviation of 10 find the following probability value. $P(75 < X < 100)$ _ ? 3

5. (a) **Enumerate** the various **demand factors** of children in human societies. 5
- (b) **Mention** the reason behind considering infant mortality rate as one of the vital indicators of social development in human society. 3
- (c) The scores on a civil service examination form a normal distribution with $M= 100$ and $a= 20$. Only those individuals scoring in the top 20% on this examination are interviewed for jobs.
- (i) What is **the minimum** score needed to qualify for an **interview**?
- (ii) **Because** there was an **unusually** high demand for **new employees in this particular year**, the civil service board offered, job interviews to everyone **scoring above $X=108$** . **What percentage of the individuals taking the examination** were offered interviews ?
- a) **Mention** the three basic arithmetical operations used in demographic **measurements** and also point out the differences among them. 6
- b) Is 'literacy rate' a 'rate'? Give **reason in** support of your answer. 2

(c) It takes Vivek an average of $M = 30$ minutes to drive to work. The distribution of driving times is nearly normal with $\sigma = 10$ minutes. If Vivek leaves home at 9:05 A.M., what is the probability that he will be late for a 9 : 30 A.M. meeting at work?

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