

## GEOGRAPHY

Time Allowed: 3 hr.

Max. Marks: 250

### Instructions to Candidate

- There are EIGHT question divided in Two Sections.
- Candidate has to attempt FIVE questions in all
- Question No. 1 and 5 are compulsory and out of the remaining, three are to be attempted choosing at least one question from each section.
- The number of marks carried by a question/part is indicated against it.
- Answers must be written in the medium authorized in the Admission Certificate which must be stated clearly on the cover of this Question-cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one.
- Word limit in questions, wherever specified, should be adhered to.
- Attempts of questions shall be counted in chronological order. Unless struck off, attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the Question-Cum-Answer booklet must be clearly struck off.

80/2

*Dear Ram*  
*You need to bring specificity in your answers by giving more spatial examples and adding maps*

1. Invigilator's Signature \_\_\_\_\_

2. Invigilator's Signature \_\_\_\_\_

*Rohit Lodha*

Name RAVI KUMAR

Mobile No. \_\_\_\_\_

Date \_\_\_\_\_

Signature Ravi

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## SECTION-A

Attempt all questions:

1. Answer the following questions in about 150 words each:

(10 × 5 = 50)

- Write a short note on Neo Malthusian theory of population
- Write a short note on Core Periphery Model of John R. Friedman regarding regional imbalance.
- Write a short note on Principles of Regionalization
- Write a short note on Arousseau's attempt at classification of towns.
- Write a short note on optimum population

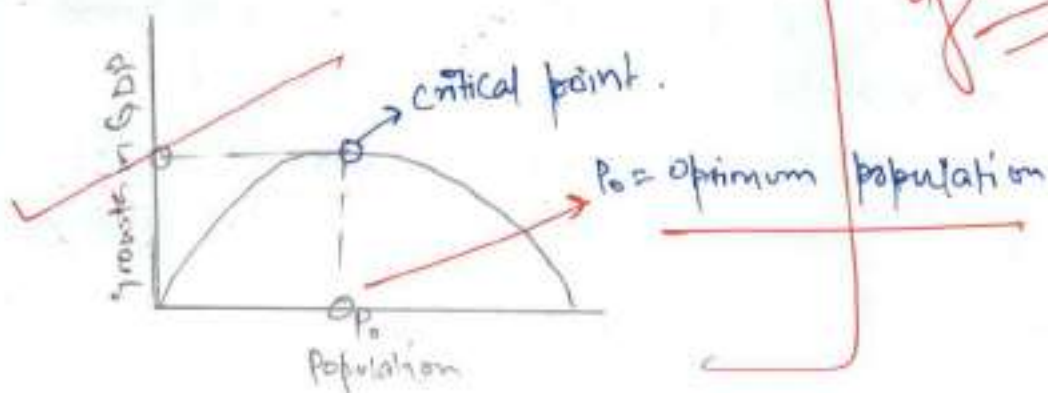
c) Optimum population →

The resource - population equilibrium is an important concept for two reasons -

- Maximizing economic growth
- well-fare & well being of human population.

According to Zimmerman & Zelinsky, there exist a certain number of population for which resources are sufficient & significant for a particular region.

Such population is called optimum population.



Remarks

on either side of the critical population lies.

→ Under population (eg: Brazil)

→ Overpopulation (eg: India, Bangladesh)

#### 4 Importance of Optimum population

→ Proper utilization of resources.

→ Sustainable development as envisaged by 'Limit to Growth' theory by the Club of Rome.

→ Welfare approach and building of social capital

→ Caring to people and reducing Hunger, food scarcity, poverty, demographic problems etc..

Conclude??

d) Henri M. Aunousseau was perhaps the first geographer who attempted to classify towns.

Main features of classification

→ Based on dominant function

→ Total 6 types of towns were classified.

→ following are the classification of towns given by Aunousseau:-

① Defence town → where major function to store and mobilize the defence instrument to protect territory.

Some examples → Ambala, Roorkee

→ Continent- Areas.

generic points

add spatial examples

good

Remarks



② Administrative towns → Usually the capital from where the administration and control is taken care of.  
 Eg: Jaipur, Gandhinagar, Chandigarh.

③ Culture Town → This shows the religious or cultural place having historical beliefs etc...  
 Eg: Varanasi, Taxashilla, Bhopal.

④ Transportation Town → These usually form the node for different modes of transportation and which support their economy.

Eg: Agra (bus transportation), Vizag (port) etc...

⑤ Collection Town → It can be one of the follows:-

- Mining
- Fisheries + Aquaculture

Eg: Bolcano, Durgapur etc in Chotanagpur plateau

⑥ Educational Town → famous for education for national as well international students.

Eg: Roorkee, Tanashilla, Vallanda, Gijain etc.

→ Shortcoming → He ignored multiple functions of cities  
 → He it was more subjective than objective

This paved the way future classification like P.F Misra's.

b) Core Periphery Model

→ This model was proposed by John R. Friedman

→ Aim → To show the disparity in development which leads to regional imbalance.

*work of a better intro.*

According to the model, ~~the 2 nucleus~~ the core ~~is~~ the

① Urban centre grows rapidly in terms of functional diversity and speciality around the core area.

② This development is sustained by the surrounding area known as peripheral area.

③ The exploitation of peripheral area resources form the input for the growth of nucleus area.

④ Core acts as economic suction pump as proposed by ~~the~~ cumulative causative theory by Myrdal Gunnar and lead to the degradation and low development of periphery region.

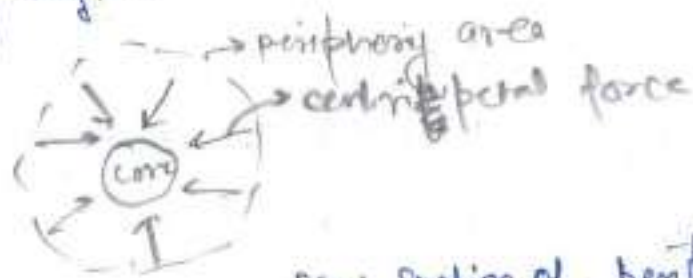


Fig: Suction of periphery resources by core.



eg:- The establishment of iron & steel plant in Bokaro and Bhilai has not benefitted the surrounding tribal region and has further led to the island of development with poor peripheral area.

good use of example

Shortcoming

→ Development of Delhi and consequent growth in Gurgaon, Saritapark and Panipat shows that edge area is also benefitted.

→ Only the economic factor was considered and not human factors such as health, education, poverty, hunger etc.

o) Neo-Malthusian theory

→ Robert Malthus was an economist who turned into demographer and gave famous Neo-Malthusian theory in population.

Features of theory

Remarks



Principles of Regionalization

→ Region terms an integral part in the study of Regional Geography and Real differentiation of Richard Hartshorn.

You can also define Regionalization

→ A Region is a segment of earth surface that has some level of homogeneity either in terms of physical aspects or humanistic/cultural aspect.

3

→ Features of Region are:-

① Spatial location which facilitates spatial analysis

② A geographical phenomenon.

③ Interrelation between man - environment and causal relationships as given by Wernher principle of Humboldt and Ritter.

④ A flow component that establishes relationships

⑤ Space for such interaction to take place

Bring specific examples

The demarcation of region to study the descriptive phenomenon is difficult and requires regionalization.

Regionalization delineates various regions and help in understanding the relationship between different region or within the region itself.

Remarks



2. Answer the following questions:

- (a) In spite of its merits, quantitative revolution could not enable the geographers to formulate universal laws and paradigms. Elaborate. (250 Words) (20)
- (b) Establish the relationship between economic development pattern and human development in the world with suitable examples. (200 Words) (15)
- (c) On the basis of Demographic Transition Model discuss the pattern of crude birth rate in various parts of the world. (200 Words) (15)

~~a) Quantitative revolution (QR) had its origin in 1930s due to introduction of more scientific and mathematical in the field of geography post world war II.~~

~~The major objective of QR was to make generalised laws and ~~was~~ nomothetic laws to explain the patterns of geographical phenomena.~~

~~The use of the mathematical tool of information collection, analysis and model making ~~is~~ is termed as QR.~~

~~Many ~~scientific~~ geographers rejected the regional approach or areal differentiation by Richard Hartshorn :-~~

~~① Schaefer was against the exceptionalism of <sup>Immanent Kant</sup> ~~Kant~~ and wanted to build geography in scientific line.~~

~~② Whittlesey also tried to use logical science and formulated sequent occupance concept.~~

~~③ Locational triads ~~was~~ tried to make use of spatial concept -~~

- a) von thunen's - Agricultural location theory
- b) weber's least cost theory
- c) Christaller's Central Place Theory.

prepare a better intro

Remarks



QR rejected the ideographic and chronological approach of descriptive regional geography and wanted to make a generalized law.

### Merits of QR

- Talks about pattern of phenomenon and not phenomenon itself.
- Man is reduced to mechanical machine.
- Man is considered as economic, rational being which removed subjectivity.

which give specific examples

How it is?   
 meritt??   
 → Great geographers such as Schaefer

However despite above merits, QR could not formulate universal laws and paradigms.

→ According to Koestler, Berhard Uexkull, Human's behavior is not amenable to generalization

→ Ellen Semple was also believed the human character and its behaviour is difficult to predict yet. Some outcomes/probabilities are more probable than other (a class called probabilism)

→ Human's perception and his attitude about an environment changes with the evolution of technological advancement.

This is best explained by time-space geography where same group of people perceive an environment differently due to time evolution shown in space-time prism.

Remarks

Can we flow that to give further evolution of geo-thoughts

→ Due to Non-mechanical nature of man, it is hard to predict man's behaviour & related impact of man on nature and natural phenomenon.

Hence OR found it difficult to formulate universal laws and paradigms.

6h

Some other reasons:-

① man's Resources and their meaning changes with evolution of technology.  
eg Copper became resource only after its utilization was found.

② Man's adjustment and environmental impact large varies from region to region making it difficult to draw pattern of phenomenon. Conclusion??

③ Demographic Transition Model shows how the population of a region undergo change (demographic change) in terms of absolute number due to variable factors including crude birth rate, death rate, migration.

Thompson and Notstein showed various economies of

Europe and categorized them into 3 -

① Stabilized country → eg Scandinavian, & Germany

② Declining country

③ Potential country → eg: Spain



Stanitz also confirmed the above classification as various phase of demographic transition.

→ Pattern of Crude Birth Rate in various parts of world -

① Africa



→ High Birth Rate

→ Accompanied by high death rate due to conflict (tribal issues), low health intervention.

→ Potential of fastest growing population continent of further.

Draw the diagram related to DT and show countries in relative stage of D.T. transit.

② South Asia

→ Including ~~but~~ India, Bangladesh, Pakistan etc..

→ High Birth rate with sign of slow down

↳ Largely due to government policies and literacy rate.

③ Central Asia and Russia (including China, Mongolia etc..)

Birth Rate has been stabilized due

Reasons → Government policies to control population  
 → Russian communist philosophy of equitable resource distribution.

④ Europe → Notstein & Thompson identified 3 regions/countries

a) stabilized population → controlled birth rate (Germany, Norway, Sweden)

b) High growth rate → High CBR

c) Declining CBR such as Germany and other eastern European countries

Remarks



④ ~~West / Middle East~~ East Region (Arab peninsula)

variable CBR rates → eg → Syria, Afghanistan → ~~high~~ CBR

⑤ Middle East Region (Arab peninsula) → overall high CBR and has ~~potential~~ is largely growing population region.

However regions such as Afghanistan, Syria shows fluctuation due to war and internal conflict.

⑥ Americas →

a) North America → stable CBR and consequently growth of population is stabilized.

eg: USA allows selective migration.

b) South America → Relatively higher CBR than north America however more crude death rate balances the population growth.

⑦ Australia → It has largely stable CBR with signs of gradual rising.

It is largely population deficit and hence ~~also~~ requires optimum population/reserve ratio.

Work on presentation of your answers.

b) ~~Economic development~~ refers in nominal manner refers to the growth and stabilization of following factor

- High GDP growth
- High Per Capita income
- Stable Inflation.

Human development has multi dimensions which include

- Health
- Education
- Intellectual development
- Poverty, Hunger.

Economic development can be closely related to the human development :-

① The Industrial revolution in 1750s and other economic policies has gave Europe (especially Britain) the inertia of human development which can now be seen in its Human Development Index

② The Scandinavian countries are classical examples of how economic development can lead to better human development. So

eg. Sweden, Norway, Finland provides free education, health to its citizens in return of the economic well-beingness ensured by citizens.

③ The 'stop-and-go' determinism ~~also~~ also envisages the nature's plan and direction which if man follows in terms of sustainable development can lead

Bringing  
Spatial  
aspects.

Remarks



to high level of human development.

① Bhutan is the only carbon-negative country which envisages the environmental preservation through economic sustainable exploitation of forest.

The country also runs various social welfare program.

Bhutan measures its economy through GHI (Global Happiness Index) to see human development.

Avoid negativity

GS

however economic development need not always depict human development.

Answer

① It creates regional disparities by facilitating the growth of Growth Pole at the expense of peripheral area.

The Causative Cumulative theory of Gunnar Myrdal also confirms the economic exploitation of vicinity region by Growth Centre.

Eg.: Steel plant in Bokaro and Bailai had not improved nearby tribal area much.

good linkages

② Migration due to economic opportunity can have significant consequences at both Source and destination regions such as

- Social exclusion
- physical pressure of wife at home
- Infrastructure pressure
- slums and poor living amenities.



③ The perception of human development through economic development might not present the true picture. as envisaged by various indices such as → Human development index

education  
health  
income } parameters

SW

→ Multi dimensional poverty index  
→ Gender development index.

④ Today's economic development does not ensure  
→ equitable distribution of profit (Many blamed capitalist system)  
→ Upward ~~and~~ social mobility.

Hence the relationship between economic development and human development is not fixed rather variable one.

3. Answer the following questions:

- (a) Discuss various causes of energy crisis in the world. Also discuss possible solutions. (250 Words) (20)
- (b) Summarize the impact of Darwin on the development of geographical concepts. (200 Words) (15)
- (c) 'The ratio between effort and return can be looked upon as the price nature extracts from man for the particular choice he makes.' In the light of above statement, explain the relevance of Neo Determinism in Indian context. (200 Words) (15)

→ Energy Crisis refers to situation of bottlenecks in the supply of energy resource from the energy surplus region to energy deficit region.

various reasons for energy crisis are:-

① Political Reasons! → wars and conflicts can hamper the supply of energy resource.

eg: Gulf war of 1990 hiked to prices of petrol and other petroleum products.

good use of examples

② Strained International Relations → the geopolitical scenario changes dynamically and can change the friendship equation in bilateral / Multilateral ties.

eg:- India's ~~supply~~ supply from Iran is hampered due to USA sanctions threat.

③ less domestic / regional resource → India's production of petroleum is not fully exploited and high deficit due to limited supply region. eg: Bombay High, Digboi (Assam).

Remarks



④ Inefficient utilization due to outdated machine and inefficient infrastructure can increase fuel intake

⑤ Natural Calamities such as earthquake, Tsunami can also hamper the supply. These days terrorism in Arab peninsula is posing grave threat.

### Solutions

① Sustainable exploitation of pet energy resource such as coal, petrol in the line of Neo-Determinism (Griffith Taylor).

② Strategic Energy Reserves such as petroleum reserves can serve at the time of energy crisis.

Eg: India has 3 strategic petroleum reserves at

Ag: sites of SPR.



③ Innovation and technology :-

eg: use of Multi-fuel port engine

:- Abiding by Bharat Stage VI norms. etc

Remarks

+

② Exploration of alternative resources

eg: shale gas, coal bed methane etc...

③ Increasing international ties at global forum to ensure constant supply of energy.

eg- India- Australia- Canada for uranium.

- India- Central Asia (Kazakhstan, Uzbekistan) for uranium.

6

④ Darwin gave the famous book of 'origin of species' in 1859 and inspired various scholars in different disciplines.

Influence of Darwin on Geographical concept :-

① Darwin's theory of evolution and adaptation largely inspired Friedrich Ratzel who gave the concept of New-Determinism.

② Ratzel used the theory of succession and evolution in his book called Antropogeographie published in 1892 and 1892.

good



③ Just like organisms in Darwin's theory, some scientist believe states and nations also need 'Lebensraum' (Living space).

Be Specific

④ Darwin also influenced various theories such as formation of coral reef (he himself gave subsidence theory).

⑤ Deterministic view of geography talks about human settlement and adaptation which is largely inspired by the 'adaptation of species' for survival of Darwin.

it was given by Herbert Spencer

⑥ Survival of the fittest inspired many geographers

to show ~~the~~ human dominance

Eg: Jean Brunhes talked about human

rule over plants and animals through domestication of animals and agriculture

The concept of Darwin paved the way for various theories and concepts that shaped the modern day geography and geographical thoughts.

Remarks

→ The 'Neo-Determinism' class was propounded and by Griffith Taylor in

→ It was in response to determinist and possibilist approach - which were polarizing the geographical thought.

→ According to Neo-Determinism :-

- ① The man does not have infinite possibilities.
- ② The nature provides a range of possibility and a blue print of Nature's plan.

③ According to Griffith, it is vice versa human does not change the direction of this nature plan.

It is also known as 'Stop and go' determinism.

The man acts like a traffic police/controller. He can stop the traffic, alter the speed, yet he cannot and should not change the direction of flow of traffic.

for each choice, nature extracts a price and based upon man's capability of, man should take decision.

provide some examples



It can be very well related to Sustainable development.

The current ecological footprint of over 1 earth is exceeding the nature's capability.

Hence man is exploiting the nature and its resources more than it should.

The finite resources cannot feed infinite aspiration of man as envisaged by 'Limit to Growth' by 'Club of Rome'.

Hence Man should choose wisely about how much it can pay.

*Remarks*



Remarks

4. Answer the following questions:

- (a) Global inequality is on the rise but at vastly different rates across the world. Discuss the trends of economic inequality of the world in the present decade.  
(250 Words) (20)
- (b) Discuss the Malthusian theory of population and its relevance in Indian context.  
(200 Words) (15)
- (c) "Adopting "climate-smart" agricultural practices would be key to eradicate hunger from the world", in the light of the above statement explain the meaning and the role of climate smart agriculture in future food sufficiency and environmental sanctity.  
(200 Words) (15)

b) Robert Malthus was an economist turned demographer who gave Malthusian concept of population.

Remarks



*Remarks*

*Remarks*



Remarks

*Remarks*

+



Remarks

*Remarks*

*Remarks*



## SECTION-B

Attempt all questions:

5. Comment on the following into 150 words:

(10 × 5 = 50)

- Write a short note on Habitat-III conference and its analysis with respect to India.
- Healthy ecosystems are essential to increase resilience and agricultural production in the face of looming food crisis. Elaborate.
- Radicalism in geography
- What do you understand by a modeling? Discuss the need of modeling in geography.
- Write a short note on Vance's Urban Realms Model

Radicalism in geography:

→ The growth of political unrest and instability in Anglo-American region (US-Canada-Britain) due to various socio-economic problems such as

Poverty  
Migration  
Health + education

fair intro

led to the shift of geography as "problem solving discipline" in 20th century

The focus of radicals were two fold:-

- Identify the socio-economic problem
- Address or find way to eliminate problems.

There Radicalism is also known as Social-relevance geography

Two classes emerged under radicalism:-

- Geographers agreeing with Marxism principles

Features of this class → ① capitalist class in society is bad

② violent overthrow of existing system

Remarks

However some geographers such as Lewis also considered the concept of structuralism to under deeper understanding

3 levels

level of appearance

level of thought compulsion.

level of process

② liberals / social democrats

Add the thinkers and their works in this school

They believe in gradual change.

→ Against violent overthrow of capitalist system

→ Social and political reform from within

→ This class inspired welfare Geography branch

which focused more on the gradual upliftment of poor and social society.

d) Modelling

→ It is a mathematical means of understanding, and analysing a phenomenon (either physical or humanistic).

→ It is more scientific and eliminates speculation.

→ Modelling enables generalisation and law making (nomothetic).

Remarks



various stages of modelling study:-

- ① Collection of data (using GPS, ground survey)
- ② Sorting data (removing redundant entry)
- ③ Analysing using mathematical tools (eg. ~~AutoCAD~~ software)
- ④ Constructing Model based on observation
- ⑤ Testing hypothetical data
- ⑥ Verifying model credibility by real world observation.

good

→ In geography, modelling was introduced with the advent of quantitative revolution in 1950s-1960s.

→ Geographers such as Schaefer and Wrightsey focused more on forming models by assuming man as mechanical model.

→ ~~however~~ modelling has seen various proposals overtime

- such as → Christaller's Central Place theory
- Weber's Industrial Location Theory
- Von Thunen's Agricultural Location theory

} locational triad.

can give some arguments apart from list

- Morphological models and settlement models
- Demographic transition model.

however Many geographers have questioned the modelling in geography based on following reason!:-



- ① Reduced man to mechanical point.
- ② Ignored mass decision making
- ③ Ignored environmental impact by human culture and technology.
- ④ Normative model does not give practical picture.
- ⑤ Human behaviour is unpredictable.

Try to relate it with the theme

However some geographers like Ellen Semple has inspired by probabilism which envisages that certain outcomes are more probable than others.

b) ecosystem refers to the physical environment and species interdependence over one-another. It has two components: -

- ① Abiotic (soil, sunlight etc.)
- ② Biotic (plants, animals, microbes etc.)

Work on intro

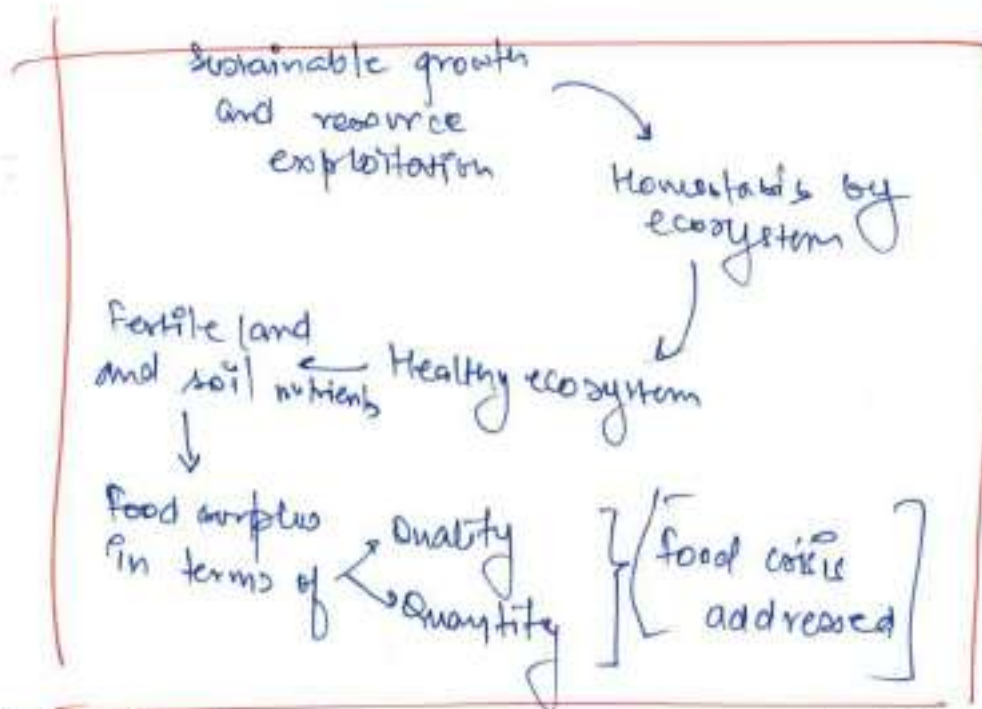
Healthy ecosystem are essential to increase resilience and agricultural production :-

- ① Inter-relationship between environment and man (also called Zwischenziehung by Humboldt and Ritter) is essential to human adjustment.
- ② Natural phenomenon creates fertile and conducive environment for agriculture by providing enough humus, biotic resource, nutrient cycle.

Remarks

③ Healthy ecosystem can be achieved by understanding the finite resources and sustainable development as envisaged by Neo-determinism by Griffith Taylor's 'Stop and Go' and limits to growth as well.

This will lead to address the problem of food crisis.



4

Hence, the sustainable development goal of 2 of hunger and related malnutrition, ill nutrition can be addressed by respecting and enabling ~~between~~ healthy ecosystem.

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Remarks



Remarks

*Remarks*

6. Answer the following questions:

- (a) Discuss the concept of Rank Size Rule. Also mention its applicability in India. (250 Words) (20)
- (b) Discuss the role of women in agro-economic practices. Also discuss why they are treated as second fiddle in agro-economic decisions? (200 Words) (15)
- (c) Discuss the Concentric Zone Model of E.W. Burgess. Also discuss the theories of Axial Development and Bid Rent Theory which are considered as continuation of Concentric zone model. (200 Words) (15)

a) Rank Size Rule was given by Zipf to explain the urban hierarchy system.

It added few dimensions in the

learning from the primate city concept of Marie Zeterson, Zipf tried to establish the relationship between the population of various towns/cities at different hierarchical stages

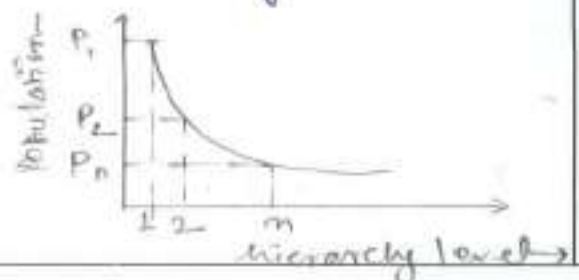
→ According to Zipf,

If  $P_0$  is the population of largest or primate city, then the populations of cities further down in the hierarchy ( $P_2, P_3, P_n, \dots$ ) can be estimated as

$$P_n = \frac{P_0}{n}$$

where  $n$  is any arbitrary level in hierarchy.

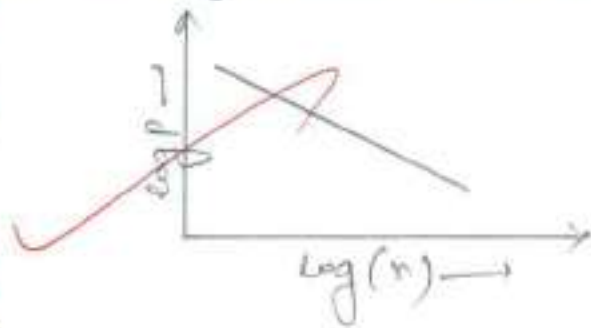
This distribution of population shows a reverse J-curve



Remarks

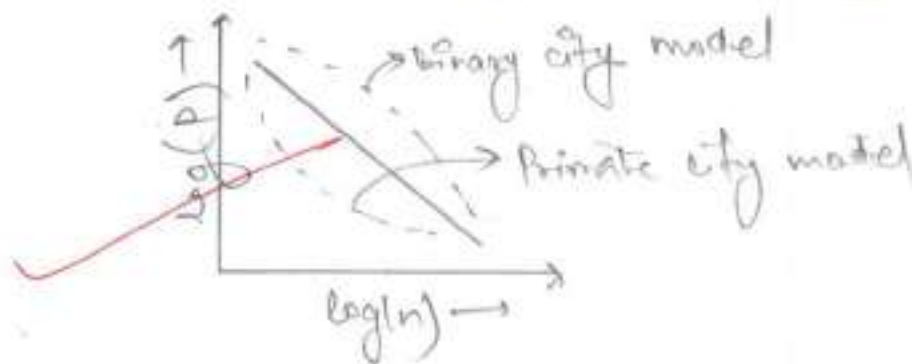


However the log-normal curve shows linear behaviour.



Clarity is good

The log. curve diagram of rank-size rule can also be used to infer the tendency of hierarchy to move towards primate hierarchy or binary city model



Limitation :-

→ The modern hierarchy do not show convergence with Rank size rule.

Eg: most European countries, African countries etc.

→ Growth of big cities in vicinity of other major city hampers city size rule. Eg: San Francisco and South San Francisco.

Applicability of Rank size Rule in India :-

→ India at national level, such rule do not exist.

Eg:- 4 megacities of comparable size and economy - Delhi, Mumbai, Chennai, Kolkata.

Remarks

→ Earlier, at state level some convergence could be seen since largest administrative ~~and~~ cities and other towns showed features of RSR.

→ According to Ramchandran, 1981 census showed maximum convergence with RSR. 7.4%

→ Later, the growth of other centres at states has hamped RSR.

Eg:- Growth of Allahbad, Kanpur, Varanasi has not eliminated Delhi as primate city and are of comparable size & economy.

→ These days, the construction of Tier II and Tier III cities show some convergence with respect to large urban centre (primate city). Conclude

Women are an important demographic component of any region and plays significant role in various walks of life including politics, economy, agriculture etc...

Role of women in Agro-economic practices

① Women represents a large section of agricultural labourer and provide workforce to the agri sector.

} agriculture  
generic intro



② large scale rural to urban and rural to rural migration of women in search of better economic ~~prospect~~ opportunity drives economy of the destination

③ large employment of women as ASHA workers, anganwadi workers & not only provide additional income source but also facilitates the welfare Geography concept which enables the gradual upliftment of socio-economic status of poor & vulnerable section.

④ Women plays important role in demographic transition by participating in Birth rate, migration and ~~and hence play~~

decisive role in various fronts including

→ Resource utilization by population

→ Labour surplus/deficit determined by population

⑤ Horticulture and market gardening as well as mixed farming including livestock rearing is successful in various regions such as Indo-Gangetic plain, European nation due to active participation of women

Reasons to why they are considered second fiddle in agro-economic decisions:-

① traditional patriarchal society such as the Indian Hindu society, Islamic society shows dominance of male over female through various aspects.

Remarks

Make it a geographical trend by adding some spatial examples and other aspects



② Superstitions related to women including some biological phenomena as well creates the gulf in women sovereignty.  
 Eg: Menstruation cycle, Sati, dowry, Pandan system.

✓ Pandan system is still prevalent in Rajasthan, MP and Islamic states regions.

③ Man superiority on the basis of masculinity and stronger body built.

④ less women intellectuals especially in geography 'against' numerous male geographers.

Eg: male → Varenicus, Aristotle, Herodotus, Ritter, Humboldt  
 female → Ellen Semple

6

⑤ Idea of man's quicker adaptability to environment (deterministic thought) by many geographers ~~but~~ put women behind man in terms of physical strength.

All the above reasons result in the degrading status of women and ultimately lead to 'second'.

Not asked

→ 'fiddle' treatment in agro-economic theory.

↓  
 You can provide some actionable way ahead.

generic conclusion

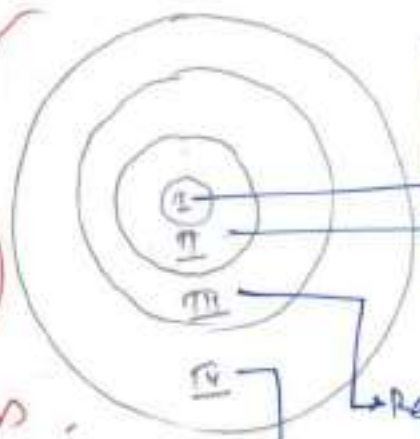
1) Ernest Burgess in 1925 postulated Concentric Zone Model to explain urban morphology.

He was a Canadian and studied various American places especially Chicago CBD.

fair intro

Aim -> to arrive at an arrangement of ~~space~~ Central Business District to maximize the profit and explain the settlement around economic

-> there are concentric zones of variable land use around CBD which depicts variable function.



CBD -> Multiple land use  
Intensive land use  
High variety of function and specialization

Zone of transition -> Usually for expansion of CBD

Residence for lower class labour  
-> Sites for slums  
-> less Civic Amenities

Middle class labour homes  
-> better space, better Civic amenities

Rich class Residential  
-> Including entrepreneurs, industrialists etc -  
-> They can afford commutation cost from far  
-> Better quality and standard of life  
-> High cost of space

good presentation



→ Burgess also talked ~~about~~ about the displacement of rich class from near CBD region to outer areas ~~due to~~ immigration of lower-class labour since labour tried to minimize the cost of transportation from far way.

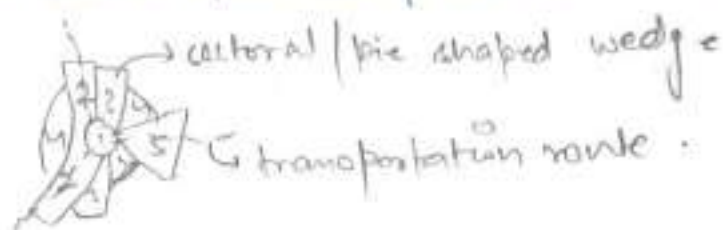
shortcoming → It considered the isotropic surface and uniform availability of resources  
 → Do not show real world practices as New York - Time Square, London - Oxford Street, Dahi-Chandani Chowk are rectangular and not circular

good

Modification to CDM ~~by~~ was done by Axial Development Theory:-

According to Homer-Hoyt, the concentric zones do not exist. However, the zone of different land use can follow the sectoral or wedge shaped distribution around the CBD.

→ The transportation route plays decisive role.  
 → Regions of low cost extend from core/CBD also.





Further modification was added by Bid Rent theory or Multi nuclei theory.

It has three domains → direction  
→ distance  
→ Agglomeration.

This theory states that CBD grows eventually as the city grows and new CBDs emerges having different specializations in various functions.

Positives → It is more scientific  
→ Present's day scenario depiction

Axial Development  
↳ Bid Rent Theory

7. Answer the following questions:

- (a) Discuss the role of Urban Horticulture in the economic growth, nutritional security and social order. Also discuss the prerequisite conditions for the development of the urban horticulture. (250 Words) (20)
- (b) Discuss the principle of activity & principle of interaction put forward by Jean Brunhes. (200 Words) (15)
- (c) In the event of global population increase it is said that agriculture has to produce more food in the future with less land. Discuss the challenges and suggest some measures. (200 Words) (15)

Remarks

Remarks



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8. Answer the following questions:

- (a) 'Rostov illustrates faith in a capitalist system and is highly biased towards a western model of development'. In the light of above statement discuss the Non Communist Manifesto presented by Rostov and its criticism. (250 Words) (20)
- (b) Give the detailed note of Von Thunen's model of agricultural location and present its usefulness in the contemporary world. (200 Words) (15)
- (c) What do you understand by environmentalism? Why even after putting lot of efforts and expenditure environmentalism is not a success? Suggest some of the measures to make it a success. (200 Words) (15)

Remarks

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