CLASS XII

NCERT Prescribed Textbook

- 1. Fundamentals of Human Geography
- 2. India- People and Economy
- 3. Practical work in Geography- Part II

Links for Rationalised 2024-25 NCERT textbooks:

- 1. https://ncert.nic.in/textbook.php?leav1=0-8
- 2. https://ncert.nic.in/textbook.php?legv2=0-9
- 3. https://ncert.nic.in/textbook.php?legy3=0-

Note:

- 1. The above textbooks are also available in Hindi medium.
- 2. Kindly refer to the latest editions of all NCERT Textbooks.

CLASS XII COURSE STRUCTURE

Book- Fundamental of Human Geography

Chapter No.	Chapter Name	No. of periods	Weightage				
	Unit I						
1	Human Geography	7	3				
	Unit II						
2	The World Population Density Distribution and Growth	9	0				
3	Human Development	7	8				
	Unit III						
4	Primary Activities	12					
5	Secondary Activities	10	19				
6	Tertiary and Quaternary Activities	10					
7	Transport, Communication and Trade	15					

8	International Trade	10	
Map Work (Ba	sed on identification of features on World Political Map)	10	5
Total		90	35

Book-India People and Economy

Chapter No.	Chapter Name	No. of Periods	Weightage				
	Unit I						
1	Population Distribution Density Growth and Composition	10	5				
	Unit II						
2	Human Settlements	8	3				
	Unit III						
3	Land Resources and Agriculture	9					
4	Water Resources	9					
5	Mineral And Energy Resources	9	10				
6	Planning and Sustainable Development in Indian Context	7					
	Unit IV						

9 Man Work (F	Geographical Perspective on selected issues and problems Based on Marking and labelling on a political Map of India)	8 10	5
0	Congressiant Derenactive on colored incurs and problems		
8	International Trade	9	
7	Transport and Communication	11	7

Geography Practical-II

Chapter No.	Chapter Name	Period	Weightage
1	Data-its source and Compilation	5	
2	Data Processing	8	18
3	Graphical representation of Data	15	
4	Spatial Information Technology	12	7
Practical Rec	ord Book and Viva Voce		5
Total		40	30

CLASS XII COURSE CONTENT

Book- Fundamental of Human Geography

Chapter No. and Name	Specific Learning Objectives	Suggested Teaching Learning Process	Learning Outcomes
1 Human Geography	To define Human Geography and describe the nature and scope of Human Geography as a discipline.	 Case Study on determinism and possibilism given in NCERT to be used to explain the concept. Prepare a concept map of the chapter explaining the following: Definition of Human Geography, nature, scope, schools of thought, branches of Human Geography. 	
2 The World Population-	To familiarize learners with some basic concepts of Population Geography.	On a world map mark and label ten most populous countries of the world.	At the completion of this unit students will be able to:

distribution, density and growth	To understand the patterns of population distribution in the world and correlate the factors influencing population distribution.	• L n c c c v p v n n e s c c t l c c c	Class discussion on how science and technology helped in population growth. List the reasons for human migration. On the world map identify the countries of Europe and Asia with negative growth rate of copulation and African countries with growth rate of population more than three percent. Students can be asked to find out the density of population of their respective state/ district/city.	•	Calculate density of population, birth rate and death rate. Name and define the components responsible for population change. Understand the stages of population growth in the world using Demographic Transition Theory. Suggest measures to control population growth. Define the following terms:
		(Case Study on Thomas Malthus (optional) Prepare a glossary.		Growth of population, Natural growth of population, Positive growth of population, Negative growth of population
3 Human development	To understand the concept human development introduced by Dr. Mehbub UI Haq and Prof. Amartya Sen.	v a	The lesson can be introduced by asking students to discuss with their peer group: What is a meaningful life? Discuss: How BetiBachao and Beti Padhao		t the completion of this unit tudents will be able to: Differentiate between growth and development Explain the three basic indicators of human

		programme introduced by the Government of India can address the issue of declining sex ratio and make life more meaningful for girls. • Enact a play to show how choices get limited due to lack of capability in areas of income, health care and education. • Interview a lady vegetable vendor, cobbler and a sweeper in the community and note how their opportunities were limited because of gender, caste and income.	 development and measure the level of Human Development. Describe Human Development Index published by UNDP. Compare HDI with Human Poverty Index. Explain the key pillars of human development with examples. Compare Income approach, Welfare approach, Basic Needs approach and Capability approach to understand the concept Human Development. Categories countries on the basis of their HDI and explain their characteristics.
4 Primary Activities	 To understand various categories of economic activities. To describe Primary activities and relate the physical and social factors that affect the type of primary activities practised in different regions of the world. 	 Class discussion: Why are people in coastal areas and plains engaged in fishing and agriculture? Describe the life of a nomadic herder. (Gaddi and Bakarwal tribe) Mark and label the following on an outline world map: 	 At the completion of this unit students will be able to: Define the following terms: Economic activity, Primary activities, Red Collar Worker, Pastoral Nomadism Explain food gathering as an economic activity. Distinguish between pastoral nomadism and commercial livestock rearing.

- To explain main features of different types of agricultural system practised in the world.
- **a.** Major areas of subsistence gathering
- **b.** Major areas of nomadic herding of the world
- **c.** Major areas of commercial livestock rearing
- **d.** Major areas of extensive commercial grain faming
- Major areas of mixed farming of the World

- Differentiate between primitive subsistence and intensive subsistence farming.
- Describe the characteristic features of plantation agriculture as a type of commercial farming.
- Analyse why is there low yield per acre but high yield per person in areas of extensive grain cultivation.
- Compare and contrast the farming practices in the developed urban areas of the world.
- Analyse how the model of Kolkhoz introduced in the erstwhile USSR boost agricultural production.
- Examine the reasons for success of cooperative farming in the European countries.
- Differentiate between open cast mining and shaft mining.
- Discuss how mining can have impact on humans and environment.

5 Secondary Activities

- To develop understanding of secondary activities with emphasis on manufacturing industries.
- To give an overview of manufacturing processes, types, its significance and recent changes.
- The students can be asked to prepare a list of factory-made goods they use in their daily life and categorize them as biodegradable and nonbiodegradable.
- List out ten global brands, their logos and products.
- The students can be taken out for a visit to local industry and asked to prepare a report on their observations regarding raw material used, finished product, production process, labour inputs, environmental impact and social responsibility.
- The students can be asked to prepare a sketch, poster, poem or write-up about the environmental conditions surrounding an industry.

At the completion of this unit students will be able to:

- Explain key concepts such as, large-scale manufacturing, high technology industry, organizational set up, foot-loose industries, Agri business etc.
- Identify and explain the factors affecting the location of an industry.
- Differentiate between different types of industries on the basis of size, raw material, ownership and output.
- Differentiate between cottage industry and small-scale industry.
- Explain the importance of hightech industries and reason for them being attracted to the peripheral areas of major metropolitan cities.
- Compare large scale industry and modern high-tech industry with examples.
- Understand and analyses the interrelationship between

			industrial development and standard of living.
Tertiary and Quaternary Activities	To understand different types of tertiary activity and its importance in the economy.	 Make a list of economic activities under different categories. Make a list of departmental stores and chain stores that you visit regularly. Class discussion on: How convenient and beneficial the fast-growing service sector in the world. 	 At the completion of this unit students will be able to: Compare and contrast traditional and modern economic activities. Students correlate tertiary activities and their role in the economic development of a country. Describe different types of tertiary activities. Discuss different types of trading centres found in rural and urban areas and role played by them in local economy. Describe quinary activities and its role in advanced economies. Discuss how tertiary, quaternary and quinary activities have replaced jobs in primary and secondary sectors. Define the following terms: BPO, Outsourcing, KPO, Departmental Store, ChainStore, Wholesale trading

7 Transport and Communication

- To acquire knowledge about various modes of transport in different continents.
- To compare and synthesize the information about major transport routes around the globe.
- To understand the development of communication networks and their impact on the modern world.
- Students can be asked to do a survey of their class about the means of transport being used by students to reach school.
 Prepare a Bar diagram with the help of the data collected.
- Analyze the connection between physical landscape and development of various modes of transport.
- Mark and label the terminal stations of Trans-Siberian Railway, Trans Canadian Railway and Trans Australia Railway on an outline world map.
- Draw a sketch map of Suez Canal, Panama Canal, St Lawrence Sea ways and Rhine waterways, and mark them on an outline map of the world.
- On an outline map of the world mark and label the following major airports of each continent:
- **a. Asia:** Tokyo, Beijing, Mumbai, Jeddah, Aden
- **b.** Africa: Johannesburg & Nairobi
- **c. Europe:** Moscow, London, Paris, Berlin and Rome

At the completion of this unit students will be able to:

- Compare and contrast various modes of transport.
- Explain the relationship of transport and communication networks to economic development of a region.
- Describe the major highways and major rail networks of different continents.
- Discuss the location and economic significance of Trans-Siberian Railway, Trans Canadian Railway, The Union and Pacific Railway and Trans Australian Railway.
- Describe the location and the economic importance of the major sea routes of the world.
- Discuss how Suez Canal and Panama Canal serve as major gateways of commerce for both the eastern and the western world.
- Discuss how the modern communication systems have made the concept of global village a reality.

8	Familiarize the students with	 d. North America: Chicago, New Orleans, Mexico City e. South America: BuenosAires, Santiago f. Australia: Darwin and Wellington Discuss: How International 	At the completion of this unit
International Trade	the basic concepts and principles of international trade. To understand the basis of international trade, Balance of trade and types of international trade. Gain knowledge about the concept of Dumping. To outline the historical perspective of globalization and role of WTO, its functions and its implications on the world trade. Examine the importance of sea ports as gateways of international trade	trade was carried out in the past vis-a-vis present times. Study the data given on table 9.1 and compare world import and export to calculate balance of trade and analyse its implication. Read the case study on dumping and discuss how dumping is becoming a serious concern among trading nations. Prepare a concept map of the chapter. Mark and label the headquarter of WTO on an outline world map. Mark and label the following major sea ports of the world: a. Europe: North Cape, London, Hamburg North America: Vancouver, San Francisco, New Orleans b. South America: Rio De Janeiro,	

Colon, Valparaiso Africa: Suez and Cape Town c. Asia: Yokohama, Shanghai, Hong Kong, Aden, Karachi,
Kolkata d. Australia : Perth, Sydney, Melbourne

India People and Economy

Chapter No. and Name	Specific Learning Objectives	Suggested Teaching Learning Process	Learning Outcomes
Population: Distribution Density, Growth and Composition	 To correlate population distribution and density with the physiography of India. To familiarize students with the demographic attributes of India 	 Learner may be asked to refer to an Atlas to correlate relief map of India and map of population distribution and density and write their observation and share with their classmates. Prepare a choropleth map showing the state wise density of population of India. Represent the data on decadal growth rate (given on page 5 NCERT) in India using suitable statistical diagram. Refer to Census of India website to collect data on population of India. Prepare a dot map showing the 	 At the completion of this unit students will be able to: Differentiate between distribution of population and density of population. Define: Physiological Density, Agricultural Density, Population doubling time, Working Population, Participation Rate, Main Worker, Marginal Worker, Rural Population, Urban Population, Adolescent Population. Discuss the factors responsible for uneven distribution of population in India. Explain trends of population

		distribution of India's Population. Compare the growth rate of population of different states between 1991-2001 and 2001-2011.	growth in India since 1901. Describe rural-urban population composition, religious composition linguistic composition and sectoral composition of work force in India. Discuss the occupational structure of India's population.
Human Settlements	To understand how the form and size of settlement of any particular region reflects human relationship with the environment.		the completion of this unit udents will be able to: Differentiate between rural and urban settlement. Describe the factors that govern the types of rural settlement in India. Compare and contrast clustered, semi clustered, Hamleted and dispersed settlement with examples. Describe the evolution of towns in India since prehistoric times. Classify towns on the basis of their functions.

3 Land Resources and Agriculture

- To familiarise students with the land-use categories as maintained in the land revenue records.
- To analyse the changes in landuse pattern registered in India due to change in shares of primary, secondary and tertiary sectors in GDP.
- The students will study and document the land use around their school and speak to their elders to find out changes registered in land use.
- The students will read and interpret the bar graph (fig 5.1) comparing the changes in land use in India between 1950-51 and 1914-15.
- Using the data given in the appendix (vi) the students will Work out the actual increase and rate of increases for all the land use categories between 1950–51 and 2014–15.
- The students will prepare pie graphs to show the land use categories in 1950-51 and 1914-15.
- Prepare a pie chart showing the composition of total cultivable land in the country.
- The students will calculate cropping intensity using datafrom table 5.1
- The students will represent the geographical conditions required

At the completion of this unit students will be able to:

- Name and define the land use categories.
- Compare the Changes in shares of Land-use Categories in India between 1950 and 2014.
- Discuss the importance of common property resources for the community.
- Compare dryland and Wetland farming and evaluate its importance.
- Compare the geographical conditions required for the growth of the following crops and their distribution/ growing areas.
- Rice, Wheat, Jowar, Pulses,
 Oilseeds, Cotton, Jute,
 Sugarcane, Tea, Coffee
- Evaluate technological developments that have taken place in Indian agriculture since Independence.
- Discuss the challenges faced bythe Indian farmers and suggest measures to overcome them.

		for the growth of different crops in a tabular form and compare them. On political map of India the students will mark and label threelargest producing states of Rice, Wheat, Jowar, Pulses, Oilseeds, Cotton, Jute, Sugarcane, Tea and Coffee.	
4 Water Resources	To familiarise students about the water resources available in India and the factors that determine spatial distribution of the available water resources in the country and its utilization.	 List out the major sources of water. Discuss the interrelationship between physical and human environment and their impact from local to global. Ralegan Siddhi case study to be discussed to understand the holistic impact of Watershed development in any place. Students can also be encouragedto read about Haryali, Neeru-Meeru (Water and You) programme in Andhra Pradesh and Arvary Pani Sansad in Alwar, Rajasthan 	 At the completion of this unit students will be able to: Describe the available water resources in India. Evaluate the water demand and supply in India. Discuss the reasons for water scarcity in the country. Discuss water resources in India, its geographical distribution, sectoral utilization, and methods of its conservation and management. Recognize various emerging water problems and analyse the causes for deterioration of quality of water. Evaluate the scope to use rainwater harvesting techniques to conserve precious water

			resources.
Mineral and energy resources	 To know about distribution of various minerals in the world. To understand and realize the importance of minerals in human life. To create an awareness about nature of different minerals and how to sustain them for the future. 	 The students should be encouraged to read newspaper regularly and discuss environmental impact of mining. The students should create awareness in school through posters and role play about the use of renewable resources and conservation of energy resources. Prepare a table to present the spatial pattern of the following minerals under the given headings: (Properties, Total Reserves, Distribution, Mines) Iron Ore, Manganese, Bauxite, Copper, Mica, Coal, Petroleumand natural Gas. 	 At the completion of this unit students will be able to: Classify minerals on the basis of chemical and physical properties. Describe the major mineral belts of India and mark them on an outline map of India. Describe different types of nonconventional mineral resources. Analyse why the renewable energy resources will be the future source of resources. Suggest measures to conserve our non-renewable resources. On an outline Political Map of India mark and label the following: g. Iron-ore mines: Mayurbhanj, Bailadila, Ratnagiri, Bellary h. Manganese mines: Balaghat, Shimoga i. Copper mines: Hazaribagh, Singhbhum, Khetari j. Bauxite mines: Katni, Bilaspur and Koraput k. Coal mines: Jharia, Bokaro, Raniganj, Neyveli l. Oil Refineries: Mathura, Jamnager, Barauni

Planning and sustainable development in Indian Context	To understand the need for centralised planning (sectoral planning and regional planning) to accelerate uniform economic development over space as well the role of NITI Aayog.	 Case Study – Integrated Tribal Development Project in Bharmaur Region. Case Study- Indira Gandhi Canal (Nahar) Command Area. Critically evaluate the need for, aims of, and impacts of irrigation on Indira Gandhi Canal (Nahar) Command Area. 	 At the completion of this unit students will be able to: Develop an understanding about various types of planning. Justify the need for target areas and target groups planning by the Planning Commission with examples. Explain the aims and approaches of the Hill Area Development Programme, Drought prone area Programme, Critically evaluate the aims and social benefits of ITDP in the Bharmaur tribal region. Evaluate the measures that can be taken to promote sustainable development in Indira Gandhi Canal Command Area.
7 Transport and communication	To compare and correlate various modes of transport to the physical regions of India.	 Draw a flow chart to show the means of transportation. Collect information on Metro rail of India and discuss in the classroom. Prepare a concept map showing different means of transportation, 	 At the completion of this unit students will be able to: Develops an understanding about various means of transport being used in different parts of India. Analyse the impact of the physical environment on development of various modes in different regions.

	transport and communication networks on the development of our nation.	 its advantages and disadvantages. Collect information on Bharatmala and Setubharatam Pariyojana and share it with your peer group. 	 Describe different types of highways found in different parts of our country. Discuss the role of Indian Railways in the growth of India's economy with focus on recent technological advancements.
			 Describe the five National Waterways of our country. Discuss the role of OIL and Gail in development of gas pipelines in India.
			 Discuss reasons for the state wise variation in road density in India. Elucidate the impact of modern communication networks in our life.
			 Mark and label the following on an outline political map of India: Terminal stations of north south corridor, East west corridor & golden quadrilateral
8 International Trade	To familiarise students about the changes that have taken place in India's international trade in terms of volume, composition	Study the graph (11.1) showing India's import and export and comment on India's balance of trade.	At the completion of this unit students will be able to: • Give reasons for changing pattern of the composition of

	and direction.	Make a list of items that are in	India's import and export.
	and direction.	 Make a list of Items that are in India's import and export basket. Make a list of India's major trading partners and identify these countries on a world map. Name the nearest domestic and international airports from your school. Study fig 11.5 and identify four cities from where maximum number of air routes converge. Discuss the reasons for the samewith your classmates. 	 Discuss the strategies adopted by India to double its share in the international trade. Evaluate the role of seaports as gateways of international trade with examples. Mark and label the major seaports and airports on an outline map of India. Major Sea Ports: Kandla, Mumbai, Marmagao, Kochi, Mangalore, Tuticorin, Chennai, Vishakhapatnam, Paradwip, Haldia International Airports: Ahmedabad, Mumbai, Bengaluru, Chennai, Kolkata, Guwahati, Delhi, Amritsar, Thiruvananthapuram & Hyderabad.
9 Geographical Perspective on selected issues	To explain the causes and consequences of different types of pollution in India and suggest the measures to control it.	 List the major sources of water pollution, air pollution, noise pollution and land pollution. Identify the most polluted stretch of river Ganga and river Yamuna 	 At the completion of this topic the students will be able to: Classify types of pollution based on the medium through which pollutants are transported and
		on an outline map.Look into the dustbin in your	diffused.Explain various sources of

waste generated by students. state of water, air, land and noise pollution in India. • Prepare a poster to create awareness about Namami Gange • Analyse the rural-urban migration Programme. and its role in pollution. Describe the health and social • Speak to a rag picker and try to problems of slum dwellers with find out what he/she does with reference to Dharavi. the waste. Describe the natural and human · Read the case study of a causes of land degradation and migrantlabourer (Given in suggest measures to control land NCERT) and enact his/her life

in your classroom.

degradation in India.

Suggest measures to control different types of pollutions and evaluate the effectiveness of the

Discuss the problems related to urban waste disposal and suggest measures to convert waste into

Swachh Bharat Mission.

wealth.

Practical Work in Geography Part II

Chapter No. and Name	Learning Objectives	Suggested Teaching Learning Process	Learning Outcomes
1 Data its source and compilation	To understand the importance of data and its uses in Geography	Collect Primary and Secondary Sources of data from different sources and exhibit in practical file	 Define data. Differentiate between primary and secondary sources of data. List several sources of data.
2 Data Processing	 To calculate Measures of Central tendency To Compare Mean, Median and Mode 	Calculate Mean, Median and Mode using direct and indirect method	 Calculate the mean rainfall of your city. List ten Himalayan peaks with their heights and calculate the median height using the data.
3 Representation of data	To represent data graphically using different techniques	 Construction of Line Graph Bar Graph Poly Graph Line and Bar Graph Multiple Bar Diagram Compound Bar Diagram Pie Diagram Thematic Maps Dot Map Choropleth Map Isopleth Map 	 Construct a line graph to represent the growth rate of Population in India 1901-2011. Construct a polygraph to compare the growth of sex ratio in different states. Construct a line and bar graph to represent the average monthly rainfall and temperature of Delhi. Construct a multiple bar diagram to represent decadal literacy rate, male literacy and female literacy. Draw a pie diagram to show

		 India's export to major regions of the world 2010-2011. Construct a dot map to show India's Population 2011. Construct a choropleth map to show state wise variation in population density.
4 Spatial Information Technology	To understand the need to capture data from different sources and integrate them using a computer that is supported by geo-processing tools.	 Explain Spatial Information Technology or GIS. Describe the advantages of GIS over manual methods. Components of GIS Spatial Data formats
	To learn basic principles of the Spatial Information Technology and its extension to the Spatial Information System, which is more commonly known as Geographical Information System.	 Raster data format Vector data format Spatial Analysis Overlay and Buffer Analysis.

Map Items for identification only on outline political map of the World Fundamentals of Human Geography

Chapter No. and Name	Map Items
1-Human Geography	Nil
2-The World Population Density Distribution and Growth	Nil
3-Human Development	Nil
4-Primary Activities	Areas of subsistence gathering (Fig 4.2)
	Major areas of nomadic herding of the world (4.4)
	Major areas of commercial livestock rearing (4.6)
	Major areas of extensive commercial grain faming (4.12)
	Major areas of mixed farming of the World (4.14)
5-Secondary Activities	Nil
6-Tertiary and Quaternary Activities	Nil
7-Transport, Communication and Trade	Terminal Stations of Transcontinental Railways Trans-Siberian, Trans Canadian, Trans-Australian Railways
	Major Sea Ports
	Europe: North Cape, London, Hamburg
	North America: Vancouver, San Francisco, New Orleans
	South America: Rio De Janeiro, Colon, Valparaiso
	Africa: Suez and Cape Town
	Asia: Yokohama, Shanghai, Hong Kong, Aden, Karachi, Kolkata

	Australia: Perth, Sydney, Melbourne	
	Major Airports:	
	Asia: Tokyo, Beijing, Mumbai, Jeddah, Aden	
	Africa: Johannesburg & Nairobi	
	Europe: Moscow, London, Paris, Berlin and Rome	
	North America: Chicago, New Orleans, Mexico City	
	South America: Buenos Aires, Santiago	
	Australia: Darwin and Wellington	
	Inland Waterways	
	Suez Canal, Panama Canal, Rhine waterways and St. Lawrence Seaways	
8-International Trade	Nil	

Map Items for locating and labelling on political outline map of India India - People and Economy

Chapter No. and Name	Map Items
1-Population Distribution Density Growth and Composition	State with highest population density & state with lowest population density (2011)
2-Human Settlement	Nil
3-Land Resources and Agriculture	Leading producing states of the following crops: (a) Rice (b) Wheat (c) Cotton (d) Jute (e) Sugarcane (f) Tea and (g) Coffee
4-Water Resources	Nil
5-Mineral And Energy Resources	Mines:
	Iron-ore mines: Mayurbhanj, Bailadila, Ratnagiri, Bellary
	Manganese mines: Balaghat, Shimoga
	Copper mines: Hazaribagh, Singhbhum, Khetari
	Bauxite mines: Katni, Bilaspur and Koraput
	Coal mines: Jharia, Bokaro, Raniganj, Neyveli
	Oil Refineries: Mathura, Jamnager, Barauni
6-Planning and Sustainable Development in Indian Context	Nil
7-Transport and Communication	Nil
8-International Trade	Mark and label the major seaports and airports on an outline map of India.
	Major Sea Ports: Kandla, Mumbai, Marmagao, Kochi, Mangalore, Tuticorin, Chennai, Vishakhapatnam, Paradwip, Haldia

	International Airports: Ahmedabad, Mumbai, Bengaluru, Chennai, Kolkata, Guwahati, Delhi, Amritsar, Thiruvananthapuram & Hyderabad.
9-Geographical Perspective on selected issues and problems	Nil



Guidelines for Internal Assessment/ Geography Practical

- A practical file must be prepared by students covering all the topics prescribed in the practical syllabus.
- The file should be completely handwritten with a cover page, index page and acknowledgment.
- All statistical diagrams and maps should be drawn neatly with appropriate headings, scale, index etc. Data to draw statistical diagrams can be taken from the NCERT textbook or Census.
- The practical file will be assessed both by the internal and external examiners at the time of CBSE practical examinations.
- A written exam of 25 marks will be conducted based on the above given practical syllabus on the day of the practical exam.
- Viva will be conducted based on practical syllabus only.
- Written Exam 25 Marks
- Practical file- 02 Marks
- Viva- 03 Marks