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What this file is. A sample synopsis for the IGNOU MSCGG Project (course MGGP-001, also written MGGP 001 or MGGP 1). It shows how one topic can be written up against the eight parts that section 7 of the *MGGP-001 Project Work Handbook* (Discipline of Geography, School of Sciences, IGNOU, January 2025) asks every synopsis to carry.

How it was made. Prepared by the ignouproject.com editorial desk of Shri Chakradhar Publication Pvt. Ltd. with AI assistance, built part by part on the Handbook read in November 2026, with every reference checked against its publisher's record. It is study reference only. It is not an IGNOU document and carries no IGNOU logo.

What you must not do. Do not submit this text, or a reworded copy of it, as your own synopsis. Your topic, place, period, sample, tools and wording must come from your own work with your supervisor. Every item in [square brackets] is a fact only you can supply.

What travels with a real MGGP-001 synopsis

Section 8 of the Handbook lists the papers in this order, and says a synopsis without them will not be evaluated:

Order	Paper	Note from the Handbook
a	Proforma for Approval of Project Synopsis (Annexure-I)	To be filled up completely (Annexure-I, note 4); it carries signature and date lines for you and your supervisor.
b	Format for Synopsis Evaluation (Annexure-II)	The synopsis evaluator writes comments under its eight heads: Introduction, Review of Literature, Rationale of the Study, Objectives and Hypotheses, Sample, Tools, Data Analyses, References.
c	Consent Letter of the Supervisor	Printed as Annexure-III, although sections 8 and IX(13) of the Handbook call it Annexure-IV.
d	Bio-data of the supervisor, if required	Annexure IX, point 13: required in case of the supervisor being other than an Academic Counsellor or from the approved list provided by the Discipline of Geography.
e	Synopsis	The eight parts shown in this sample.

The Handbook gives two synopsis date ranges at the Regional Centre: 1 to 31 October (July session) and 1 to 30 April (January session). A synopsis received after its range is taken up in the next range. Sections 7 and 8 of the Handbook set no word limit, page count or font for the synopsis; check with your supervisor and Regional Centre before you print.

SAMPLE SYNOPSIS

Land Surface Temperature, Green Cover and Household Heat Coping across the Wards of [City]: A Geospatial and Field Study, [Year] to [Year]

Item	Entry
Programme and course	M.Sc. (Geography), MSCGG; Project, MGGP-001
Learner	[Name], Enrolment No. [ ]
Study Centre and Regional Centre	[Study Centre code and name]; [Regional Centre]
Supervisor	[Name, designation, institution]
Kind of study (Handbook section 6)	Field study (empirical), with a geospatial component

(i) Introduction

Indian cities record some of their highest daytime temperatures in the pre-monsoon months, and the heat is not spread evenly inside a city. Built-up wards with little vegetation can be warmer at the surface than wards with parks, trees or water bodies. This study proposes to map that difference for [City] using land surface temperature (LST) derived from Landsat 8 and 9 thermal data and a vegetation index, and then to ask households in a sample of wards how they cope with summer heat. [City] has [population, from the latest Census or municipal source] and is divided into [number] wards. [Add two or three sentences on the city's site, climate and recent growth, with sources.]

(ii) Literature Review

The urban heat island was explained in energy-balance terms by Oke (1982), who showed why built surfaces store and release heat differently from rural surroundings. Satellite studies have since measured the surface form of this effect: Weng, Lu and Schubring (2004) found that land surface temperature in Indianapolis was negatively correlated with vegetation abundance across land cover types, using Landsat thermal data. The normalized difference vegetation index used in such work goes back to Tucker (1979). In India, the National Disaster Management Authority's guidelines on heat wave action plans (NDMA, 2019) ask

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cities to identify heat-vulnerable areas and groups, which gives local mapping a planning use. [Add studies on Indian cities, and at least one on [City] or its state, arranged from general to particular as the Handbook advises: country, then state, then study area. End with the gap your study fills.]

(iii) Rationale

Heat action planning needs ward-level evidence, while most published LST work reports city-wide averages. Pairing a ward map with what households actually do in hot weather links the physical pattern to its human side, which is the human-environment relationship the MSCGG programme is built on. [Explain why [City] and these years, and why the study is feasible for you within the time, travel and cost limits the Handbook asks you to weigh.]

(iv) Objectives and Research Questions

Objectives are stated neutrally, without assuming what the findings will be, as section 7 of the Handbook requires:

- O1. To map the distribution of land surface temperature across the wards of [City] for [season, year].
- O2. To examine the relationship between ward-level green cover (NDVI) and ward-level land surface temperature.
- O3. To study the heat-coping practices reported by households in wards with low, medium and high green cover.
- O4. To identify wards where high surface temperature and limited coping options coincide.

Research questions: How does surface temperature vary between wards? Is ward-level surface temperature related to green cover, and how strongly? Do reported coping practices differ between wards with different green cover?

(v) Research Methodology

Research design

A descriptive and correlational field study with a geospatial component. The satellite analysis covers all wards; the household survey covers a stratified sample of wards.

Nature and source of data

- Primary data: a household schedule administered in the sample wards [month, year]. The Handbook treats field data as the main database.

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- Secondary spatial data: Landsat 8 and 9 OLI/TIRS Collection 2 Level-2 surface temperature and surface reflectance products (USGS EROS, 2020), [number] cloud-free scenes for [months, years], downloaded from EarthExplorer.
- Ward boundaries from [municipal corporation or other named source]; population from [Census of India or municipal source].

Sample and sampling technique, with rationale

Wards will be grouped into three strata by mean NDVI (low, medium, high). [k] wards will be drawn at random from each stratum, and [n] households will be selected by systematic sampling within each sample ward, giving [total] households. Stratifying by green cover ensures that all three conditions in O3 are represented. [State how you will list households and why the numbers are feasible for you.]

Tools and techniques for data collection, and their relevance to the objectives

Obj.	Tool or technique	Output
O1	LST from the Level-2 surface temperature band, averaged by ward in [QGIS or other GIS]	Ward LST map and table
O2	NDVI from red and near-infrared reflectance; ward means; Pearson correlation of NDVI and LST	Scatter plot, coefficient, map pair
O3	Household schedule: housing material, roof type, fans or coolers, tree shade, outdoor work hours, water access	Frequency and percentage tables by stratum
O4	Overlay of the LST map with a composite index of coping items	Composite index map of wards

Method of data collection

The schedule will be pre-tested in [number] households outside the sample and revised. Field visits will be made in [months], with a field diary and GPS-tagged locations of sample households. A reference letter from the supervisor or Study Centre, which section 4 of the Handbook allows, will be carried for any office visited.

Relevance of statistical tools; data handling and analysis

Descriptive statistics (frequency, percentage, mean, standard deviation, coefficient of variation) summarise the schedule. Pearson correlation and a simple regression test the NDVI and LST relationship in O2. A composite index of coping items serves O4. Data will be entered in [software], checked for errors, and joined to ward polygons for mapping.

Interpretation and synthesis; cartographic and geospatial outputs

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The Handbook asks every MGGP-001 student to use cartographic and geospatial techniques. This study will produce a location map, ward maps of LST and NDVI, a map of sample wards and households, and a composite index map. Findings from the maps and the schedule will be read together for each stratum. Respondents will be told the purpose of the study, will take part voluntarily, and will not be named in the report.

(vi) Limitations of the proposed research

Satellite LST measures the surface, not the air people breathe, and a 30 m pixel mixes roofs, roads and trees. Cloud cover limits usable scenes. The household sample covers [total] households in [k x 3] wards and cannot speak for the whole city. [Add any limit of access, time or cost specific to you.]

(vii) Organisation of the work

The report will follow the structure in section 11 of the Handbook: Introduction (with the statement of the problem); Literature Review; Objectives and Research Questions; Database and Methodology (with a sub-section on the study area); Results and Discussion; Summary and Conclusions; Bibliography; and Annexures carrying the schedule, field sketches and photographs. Item IX of section 11 notes that sections and sub-sections may be used where full chapters are not possible at this level.

(viii) References (APA)

Indira Gandhi National Open University. (2025). *MGGP-001 project work handbook: Students' handbook for project of MSc Geography*. Discipline of Geography, School of Sciences.

National Disaster Management Authority. (2019). *National guidelines for preparation of action plan: Prevention and management of heat wave*. Government of India.

Oke, T. R. (1982). The energetic basis of the urban heat island. *Quarterly Journal of the Royal Meteorological Society, 108*(455), 1-24.

Tucker, C. J. (1979). Red and photographic infrared linear combinations for monitoring vegetation. *Remote Sensing of Environment, 8*(2), 127-150.

U.S. Geological Survey, Earth Resources Observation and Science Center. (2020). *Landsat 8-9 Operational Land Imager / Thermal Infrared Sensor Level-2, Collection 2* [Data set]. https://doi.org/10.5066/P9OGBGM6

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Weng, Q., Lu, D., & Schubring, J. (2004). Estimation of land surface temperature-vegetation abundance relationship for urban heat island studies. *Remote Sensing of Environment, 89*(4), 467-483. https://doi.org/10.1016/j.rse.2003.11.005

[Add the Indian and local studies you actually read, with date of access for online sources.]

Reminder: this sample is for study reference. Write your own synopsis on your own topic with your supervisor, fill Annexure-I completely, and keep a copy of everything you hand in at the Regional Centre.

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