UNIT- 4: BASICS OF GEODESY AND SPATIAL REFERENCING SYSTEMS

UNIT STRUCTURE

4.1 Learning Objectives

4.2 Introduction

4.3 Shape and Size of the Earth

4.4 Ellipsoids and Datum

4.5 Co-ordinate Systems

4.6 Let us Sum up

4.7 Further Readings

4.8 Answers to Check Your Progress

4.9 Model Questions

4.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- explain about the complexities pertaining to the shape and size of the earth
- explain about the different measurement frameworks and principles adopted for making horizontal and vertical measurements on the earth
- explain about the different earth models used for map-making
- explain about coordinate systems used in GIS.

4.2 INTRODUCTION

In the previous unit, you have learnt about the map projection in GIS. In this unit you are going to learn about the different Earth models and coordinate systems used for map- making. This unit focuses on the shape