NCERT SOLUTIONS

CLASS - 12th

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Subject : Geography

Chapter : 4

Chapter Name : Use of computer in data processing and mapping

Q1 Choose the correct option for the alternatives given below :

(i) What type of graph would you use to represent the following data?

States   Share of Production of Iron-Ore (in %)

Madhya Pradesh 23.44

Goa 21.82

Karnataka 20.95

Bihar 16.98

Odisha 16.30

Andhra Pradesh 0.45

Maharashtra 0.04

(a) Line

(b) Multiple bar graph

(c) Pie-diagram

(d) None of the above

(ii) Districts within a state would be represented in which type of spatial data?

(a) Points

(b) Lines

(c) Polygons

(d) None of the above

(iii) Which is the operator that is calculated first in a formula given in a cell of a worksheet?

(a) +

(b) –

(c) /

(d) ×

(iv) Function Wizard in Excel enables you to:

(a) Construct graphs

(b) Carry out mathematical/ statistical operations

(c) Draw maps

(d) None of the above

Answer.

(i) (c) Pie-diagram

(ii) (c) Polygons

(iii) (c) /

(iv) (b) Carry out mathematical/ statistical operations

Page : 70 , Block Name : Multiple Choice Questions

Q2 Answer the following questions in about 30 words :

(i) What are the functions of different parts of a computer?

(ii) What are the advantages of using of computer over manual methods of data processing and representation ?
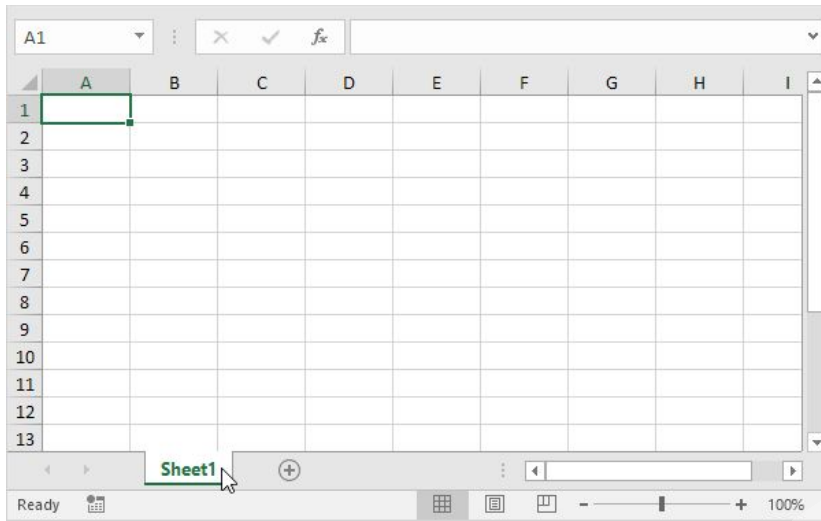
(iii) What is a worksheet?

Answer.

(i) A computer possesses both hardware and software parts.Hardware comprises storage, display,input and output, and software comprises programs made of codes.

The hardware components of a computer include : (a) A Central Processing Unit (CPU) and Storage System (b) A Graphic Display Sub-system (c) Input Devices (Mouse,Scanners etc.) (d) Output Devices (Printers, Fax etc).

The software components of a computer include: Data entry modules, Data display modules etc.

(ii) Computer is a device that performs accurate and quick operations, functions and tasks. The main advantages of using a computer over manual methods include 1) Speed of operations performed is faster than manual method and thereby saves time and energy 2) More efficient and effective working is possible 3) Operations performed are more accurate and reliable

(iii) A worksheet or excel file consists of electronic rows and columns making a collection of cells wherein data is stored and manipulated according to need.

Page : 70 , Block Name : Short Answer

Q3 Answer the following questions in about 125 words :

(i) What is the difference between spatial and non-spatial data? Explain with examples.

(ii) What are the three forms of geographical data in a computer ?

Answer.

(i) Spatial Data

Spatial data use points, lines or polygons to represent a geographical space or features. Road map is the most appropriate example for this type of data representation. It uses numerical values in a coordinate system. Geographic Information System (GIS) is based on Spatial Data.Complex structures in 3D can also be developed like in Google Maps.

Non-spatial Data

Non-spatial data describes attributes of a locational data. For example,for a school details like the name of the school, schedule of examinations, playground, games, library, labs facilities etc. provided are non-spatial information. The attributes of the spatial data are described using non-spatial data.

(ii) The mapping software provides various functions for spatial and attribute data input through on-screen digitisation of scanned maps, corrections of the errors in the map, transformation of the scales in the map, map designing, etc.

The digitised map consists of three files. The extension of these files are shp. , shx and dbf. The dbf files can be edited in MS Excel.

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