

## Book Exercise

1. Fill in the blanks

1: The equator is  $0^{\circ}$  latitude, and is a great circle.

2: The Antarctic ~~circle~~ circle is found in



the Southern Hemisphere.

3. The temperature zone falling between  $23\frac{1}{2}^{\circ}$  N and  $23\frac{1}{2}^{\circ}$  S is called the

~~the~~ Torrid Zone.

4. The distance between lines of longitude decrease towards the poles.

5. The standard meridian of India is  $82^{\circ}30' E$ .

II. True / False

1. True

2. False

3. False

4. True

5. True

III. 1. A globe is a three-dimensional model of the Earth in miniature. It is a true representation of the Earth.

~~2.~~ 3. The torrid zone is the hottest among the temperature zones because it receives the direct sunrays.

4. Bangladesh standard time (BST) ~~is~~ is technically UTC (+6:00). Indian standard time (IST) is usually UTC (+5:30).



So there is a 30 minute difference there. India nor Bangladesh observes DST (Day Light saving) and therefore always have a 30 min gap.

5. At each place, whenever the Sun was directly overhead, it was considered to be noon. This was called solar time or local time, and it was defined by the position of the Sun.
6. Standard meridian is useful for a country because it shows ~~how~~ and fixes a particular time for the country. A country may have many longitudes in between and there is a time gap of 4 minutes between each longitude. Therefore standard meridian should be there in each country for the ~~as~~ equal time.
7. The earth has 360 imaginary lines called longitudes or meridians running ~~to~~ vertically between the poles. Each of these longitudes is called a degree. The 0 degree longitude passing through Greenwich, near London, is considered as standard and the time of all other



Time zones are calculated accordingly. The time difference between each longitude (each degree) is 4 minutes. So if it is noon ~~in~~ at Greenwich (0 degree), it would be 12:04 pm at 1 degree meridian and so on. In India, the standard meridian is 82 and a half degree. So the time difference between Greenwich and India is  $82.5 \times 4$ , which is 330 minutes (5 hours 30 minutes).

### MCQ

1. (a)                      24. (b)
2. (c)
3. (b)
4. (a)
5. (c)
6. (c)
7. (a)
8. ~~(a)~~ (b)
9. (a)
10. ~~(a)~~ (d)
11. (d)
12. (a)
13. (b)



111.8.

As lines of latitudes and longitudes ~~to~~ cross each other, they form a grid. Any position on earth can be located if the ~~to~~ latitude and longitude are known. The grids on the maps help us find a particular location. Longitudes also help us to ~~cal~~ calculate the time of a particular place.

3.

