



NCERT solutions for class-9 maths Statistics Ex 14.3

**Q1.** A survey conducted by an organization for the cause of illness and death among the women between the ages 15 – 44 (in years) worldwide, found the following figures (in %):

S.NO	Causes	Female Fatality rate (%)
1	Reproductive health conditions	31.8
2	Neuropsychiatric conditions	25.4
3	Injuries	12.4
4	Cardiovascular conditions	4.3
5	Respiratory conditions	4.1
6	Other causes	22.0

- (i) Represent the information given above graphically.
- (ii) Which condition is the major cause of women's ill health and death worldwide?
- (iii) Try to find out, with the help of your teacher, any two factors which play a major role in the cause in (ii) above being the major cause.

**Ans: (i)** We represent the given information in the form of a bar-graph. We construct the bar diagram through the following steps:

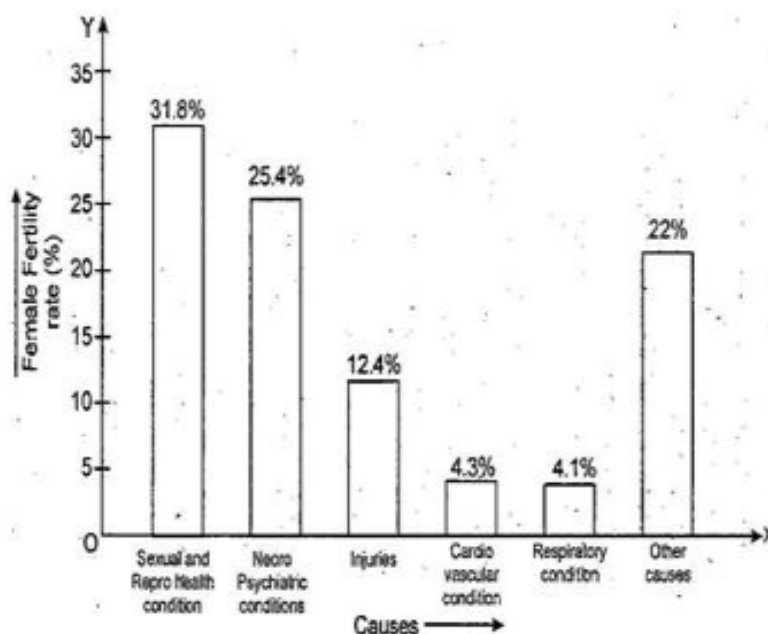
**Step 1.** Draw two perpendicular axes OX and OY on a plain paper.

**Step 2.** Along OX mark "Causes" and along OY "Female Fertility rate (%)".

**Step 3.** Along OX, choose suitable width for each bar.

**Step 4.** Along OY, choose an appropriate scale and mark the Female Fertility rate (%).

Scale chosen: On y-axis: 1 large division, i.e. 1 cm = 5%



**(ii)** From the bar graph we observe that sexual and reproductive health condition is the major cause of woman ill health and mortality worldwide.

**(iii)** Two major factors for poor sexual & reproductive health conditions are as follows:

**(a)** Lack of awareness among women.

**(b)** Lack of medical facilities.

**Q2.** The following data on the number of girls (to the nearest ten) per thousand boys in different sections of Indian Society is given below:

Section	Number of girls per thousand boys
Scheduled Caste (SC)	940
Scheduled Tribe (ST)	970
Non SC/ST	920
Backward districts	950
Non- backward districts	920
Rural	930
Urban	910

**(i)** Represent the information above by a bar graph.

**(ii)** In the classroom discuss what conclusions can be arrived at from the graph.

**Ans: (i)** We represent the given information in the form of a bar graph. We construct the bar diagram through the following steps:

Step 1. Draw two perpendicular axes OX and OY on a plane paper.

Step 2. Along OX mark “Section” and along OY mark “Number of girls per thousand boys”.

Step 3. Along OX choose suitable width for each bar.

Step 4. Along OY choose an appropriate scale. Here choose 1 large division = 100 girls

Step 5. Calculate the heights of the various bars as follows:

(a) Height of bar for Scheduled caste =  $\frac{1}{100} \times 940$   
= 9.4 large divisions

(b) Height of bar for Scheduled tribe =  $\frac{1}{100} \times 970$   
= 9.7 large divisions

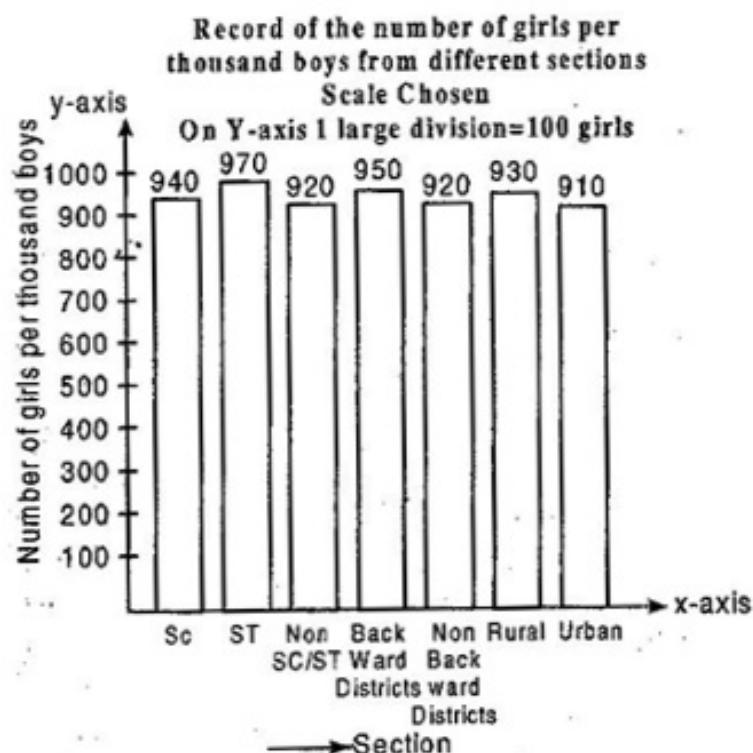
(c) Height of bar for Non SC / ST =  $\frac{1}{100} \times 920 =$   
9.2 large divisions

(d) Height of bar for Backward districts =  
 $\frac{1}{100} \times 950 = 9.5$  large divisions

(e) Height of bar for Non-Backward districts =  
 $\frac{1}{100} \times 920 = 9.2$  large divisions

(f) Height of bar for Rural =  $\frac{1}{100} \times 930 = 9.3$   
large divisions

(g) Height of bar for Urban =  $\frac{1}{100} \times 910 = 9.1$   
large divisions



(ii) From the graph we observe that in each section the number of girls are nearly same. We also observe that the number of girls in each section are less than the boys.

**Q3.** Given below are the seats won by different political parties in the polling outcome of a state assembly elections:

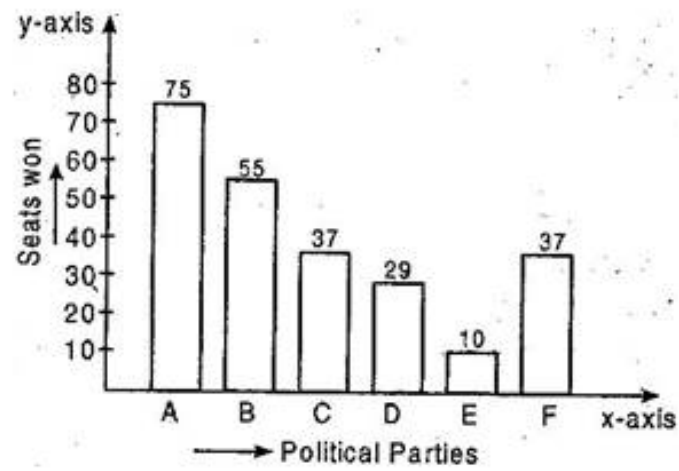
Political Party	A	B	C	D	E	F
Seats Won	75	55	37	29	10	37

(i) Draw a bar graph to represent the polling results.

(ii) Which political party won the maximum number of seats?

**Ans: (i)** The given information in the form of a bar graph which is drawn as follows:

Scale chosen: On y-axis – 1 large division, i.e. 1 cm = 10 seats



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