

$$177.4; \frac{1500 + 2000 + 3000 + 1200}{4} = \frac{7700}{4} = 1925$$

$$178.3 \quad 179.3 \quad 180.2$$

181. 1; Number of valid votes polled in 2002 for other political parties = 11% of 5 crore = 55 lakh
 \therefore Average number of valid votes polled for winning one seat in 2002 for other political parties = $\frac{55}{5} = 11$ lakh

182. 2; In 1995, 67 to 121,

$$\text{ie } \frac{54}{67} \times 100 = 80.6\%$$

$$\text{In 2002, 117 to 125, ie } \frac{8}{117} \times 100 = 6.84\%$$

183. 1; No. of valid votes in 1998

$$= \frac{2.24}{44.8} \times 100 = 5 \text{ crore}$$

No. of valid votes in 1990

$$= \frac{1.228}{30.7} \times 100 = 4 \text{ crore}$$

184. 4; 68.68% [125 out of 182]

185. 4

186. 2; TOTAL NUMBER OF WORKERS

Factory	1998 out of		2000 out of	
	2000	2400	2000	2400
P	260	264		
Q	360	600		
R	300	384		
S	480	480		
T	440	432		
U	160	240		
Total	2000	2400		

187. 3; 160 to 240

188. 3; No. of increased workers in 2000

Factory	
P	4
Q	240
R	84
U	80
Total	408

189. 4; 440 to 432

190. 1; No. of workers in 2000 in top two categories Q and S = 600 + 480 = 1080

No. of workers in 1998 in the lowest two cat-

egories P and U = 260 + 160 = 420

\therefore Required maximum difference = 1080 - 420 = 660

191. 1; No. of students passed in 'RUBY'

$$= 40 + 35 + 35 = 110$$

No. of students passed in 'TOPAZ'

$$= 70 + 55 + 60 = 185$$

No. of students passed in 'PEARL'

$$= 45 + 75 + 65 = 185$$

No. of students passed in 'SAPPHIRE'

$$= 60 + 80 + 90 = 230$$

\therefore Average number of students, for each house, who have passed in the given years

$$= \frac{110 + 185 + 185 + 230}{12}$$

$$= \frac{710}{12} = 59$$

192. 4; Refer Q. 191

193. 2; 45 to 75 (from 1998 to 1999), ie 66.67%

194. 4; **Number of Students Passing The Exam in 2001**

House No. of Students Passed (1999-2000-2001)

Ruby	35	(35 - 35 - 35)
Topaz	65	(55 - 60 - 65)
Pearl	55	(75 - 65 - 55)
Sapphire	100	(80 - 90 - 100)
Total	255	

195. 1; In 1998, out of 250 students, number of students passed = 70 + 60 + 45 + 40 = 215

Percentage of students passed in

$$1998 = \frac{215}{250} \times 100 = \frac{215 \times 2}{5} = 86$$

In 1999, out of 300 students, number of stu-

dents passed = 80 + 75 + 55 + 35 = 245

Percentage of students passed in

$$1999 = \frac{245}{300} \times 100 = 82$$

In 2000, out of 350 students, number of stu-

dents passed = 90 + 65 + 60 + 35 = 250

Percentage of students passed in

$$2000 = \frac{250}{350} \times 100 = \frac{500}{7} = 71$$

196. 3 197. 2 198. 2

199. 1 200. 4