APEX INSTITUTE PRACTICE TEST

Construct a frequency table for the following ages (in years) of 30 students using equal class intervals, one of them being 9-12, where 12 is not included. 18, 12, 7, 6, 11, 15, 21, 9, 13, 8, 15, 17, 19, 22, 14, 21, 8, 23, 12, 17, 6, 18, 15, 23, 16, 22, 9, 21, 16, 11

- 2. For the following data of weekly wages (in Rs.) received by 30 workers in a factory, construct a grouped frequency 258, 215, 320, 300, 290, 311, 242, 272, 268, 210, 242, 258, 268, 220, 210, 240, 280, 316, 306, distribution table. 215, 236, 319, 304, 278, 254, 292, 306, 332, 318, 300
- 3. Given below are two cumulative frequency distribution tables. Form a frequency distribution table for each of these.

<i>(i)</i>	
Ages (in years)	No. of persons
Below 10	15
Below 20	28
Below 30	39
Below 40	60
Below 50	73
Below 60	80

(ii)	
Marks obtained	No. of Students
More than 10	0
More than 20	17
More than 30	27
More than 40	39
More than 50	52
More than 60	60

On a certain day, the temperature in a city was recorded as under:

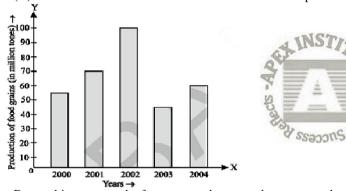
TimeTemperature in ⁰C 5 a.m. 8 a.m. 11a.m. 3 p.m. 22

20

24 26 18

Draw a bar graph to represent the above data.

- 5. Read the bar graph given below and answer the questions given below :
 - (i) What information is given by the bar graph?
 - (ii) In which year was the production maximum?
 - (iii) After which year was there a sudden fall in the production?
 - (iv) Find the ratio between the maximum and minimum production during the given period.



Draw a histogram and a frequency polygon on the same graph to represent the following data:

Height (in cm)	No. of Persons
40 -50	30
50 – 60	25
60 - 70	40
70 -80	30
80 -90	10
Total	135

Find the mean for the following sets of numbers:

25, 12, 37, 19, 43, 40, 11

8. Calculate the mean (x) for each of the following distribution:

5 2 6 2 10 6

- The average of six numbers is 30. If the average of first four is 25 and that of last three is 35, find the fourth number.
- 10. The mean of 100 observations was calculated as 40. It was found later on that one of the observations was misread as 83 instead of 53. Find the corrected mean.
- 11. The numbers 5, 7, 10, 12, 2x 8, 2x + 10, 35, 41, 42, 50 are arranged in ascending order. If their median is 25, find the value
- 12. Find the median of the following observations: 46, 64, 58, 87, 41, 77, 35, 55, 90, 92, and 33. If 92 is replaced by 99 and 41 by 43 in the above data, find the new median.
- 13. Given below is the number of pairs of shoes of different sizes sold in a day by the owner of the shop.

Size of shoe 1 2 3 4 5 6 5 No. of pairs sold 2 2 3 5 6 9 1 What is the modal shoe size?

