Q1. Prepare the frequency distribution using tally method as well entries method using following data. → (5 marks) ←
20, 6, 23, 19, 9, 14, 15, 3, 1, 12, 10, 20, 13, 3, 17, 10, 11, 6, 21, 9, 6, 10, 9, 4, 5, 1, 5, 11, 7, 24

i. Find Mid-Point
ii. Find Class Boundary
iii. Find Cumulative Frequency

Q2. Prepare the frequency distribution using direct method. And Construct Histogram and Frequency polygon from data given below. → (10 marks) ←
71, 26, 56, 61, 58, 79, 83, 72, 64, 39, 75, 39, 37, 59, 57, 37, 53, 38, 49, 45, 70, 82, 44, 37, 79, 76

Q3. Prepare Simple Bar Diagram from the number of students in 7 different classes is given below. → (5marks) ←

Class	**6th**	**7th**	**8th**	**9th**	**10th**	**11th**	**12th**
N. of Students	130	120	135	130	150	80	75

Q4. Prepare a Multiple Bar Diagram to show the population growth (in million) of the countries listed in the table below. → (5 marks) ←

Country	**1980**	**1990**	**2000**
France	55	56	65
United Kingdom	50	53	63
Mexico	65	78	80
Nigeria	60	82	85
Pakistan	57	65	74

Q5. Prepare a Pie Chart to show different fruits kept in hamper. → (5 marks) ←

Type of Fruit	**Mangoes**	**Apples**	**Oranges**	**Coconuts**	**Pomegranates**
Number	26	30	21	5	6

Q6. Find the mean, median, mode for following ungrouped data. → (10 marks) ←
16, 18, 19, 21, 23, 23, 27, 29, 29, 35

Q7. Find the mean (direct method), median, mode for following grouped data. → (10 marks) ←

Daily wages (in $)	100 - 150	150 - 200	200 - 250	250 - 300
Number of Workers	12	13	17	8

Q8. Find mean with (shortcut method) and (coding method) → (h=10) for following grouped data. → (10 marks) ←

Age (C-I)	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50
No. of Persons	5	7	15	28	8

Q9. Calculate Arithmetic mean from the following information. → (10 marks) ←

i. $D = x - 140$, $\sum D = 600$, and $n = 10$
ii. $u = (x - 130) / 6$, $\sum u = -150$, and $n = 25$
iii. $D = x - 20$, $\sum fD = 300$, and $\sum f = 20$
iv. $u = (x - 120) / 5$, $\sum fu = 60$, and $\sum f = 200$

Q10. Find the range of the following data. → (5 marks) ←
26, 113, 120, 95, 60, 42, 21, 14, 5, 4

Q11. Find the range of the following data.

Weight (Kg)	60–62	63–65	66–68	69–71	72–74
Number of Students	5	18	42	27	8

Q12. Calculate Variance with Direct Method, Shortcut Method, and Deviation Method for following. → (15 marks) ←
24, 53, 53, 36, 21, 84, 64, 34, 77, 54

Q13. Calculate Standard Deviation for following data. → (5 marks) ←
21, 42, 37, 16, 31, 28, 33, 41, 12

Q14. Find the two numbers if: → (5 marks) ←

i. Their mean is 23 and S.D is 5
ii. Their variance is 4 and mean is 7
iii. Their variance is 2 and mean is 7
iv. Their range is 2 and mean is 7

Q15. Find the variance and standard deviation from the following information. → (5 marks) ←
$\bar{x}=19.5$, $n=10$, $\sum x^2=5555$

Q16. The heights (in cms) of 16 children are given below:
64, 67, 62, 66, 63, 64, 63, 69, 63, 65, 67, 71, 65, 64, 72, 66
Calculate the mean and standard deviation. Find the percentage of observations lying within the limits:
$(\bar{x} \pm 1s)$, $(\bar{x} \pm 2s)$, $(\bar{x} \pm 3s)$

→ MCQS (10 makrs) ←

1. In a class interval (121-130) the upper class limit is. a) 130 b) 121 c) 129 d) 120	2. The sum of 5 observations is 125 its mean is a) 25 b) 50 c) 75 d) -15
3. Arithmetic mean is represented by the symbol a) v b) μ c) $\bar{x}$ d) σ	4. The mean of 20 observations is 100, its sum is. a) 500 b) 2000 c) 1000 d) 900
5. In a series 5, 5, 5, 5, 5 the dispersion is. a) 0 b) 1 c) 5 d) None of these	6. The most frequent value of the series is called a) Median b) Mean c) Mode d) None
7. The standard deviation is represented by a) θ b) φ c) σ d) μ	8. The information regarding a particular thing is called a) Frequency b) Data c) Expression d) Fundamental
9. Variance is ___ of standard deviation a) Square b) Cube c) Square Root d) None	10. The group which contains maximum frequency is called a) Median b) Modal c) Cumulative d) None