

STATISTICS (31)

Scheme of valuation

IPUC.

SECTION-A

I

1. b) R.A. Fisher.
2. a) A-E
3. c) 0.5
4. d) Ogives.
5. b) $AM > GM > HM$

II
6

- e) Attributes.
- a) primary data
- b) Contain numerical data
- a) Cumulative frequency curve
- (e) Peakedness

III

7. aggregates 9) cumulative
8. Schedules 10) Continuous
- 11) Series.

IV

12. One example 1M
13. Definition 1M
14. Definition 1M
15. One merit 1M
16. $\Sigma(x - \bar{x}) = 0$ 1M

↓

SECTION-B

17. Any two fields. 2M
18. Definition of biased & unbiased error 2M
19. Formula + 0.12 (Ans) 2M
20. Ogives & Histogram 2M
21. The sum of squared deviations of items taken from mean is minimum when compared to that of sum of squared deviation of item taken from assumed mean
 $\therefore \Sigma(x - \bar{x})^2 < \Sigma(x - A)^2$ 2M
22. Coefficient of range = $\frac{H - S}{H + S}$ 1M
- = 0.5555 1M

23. $QD = 7$ $Q_1 = 21$

$$QD = \frac{Q_3 - Q_1}{2}$$

$$Q_3 = 35$$

24.

	A	L	T
B	30*	20*	50
β	70	130*	200*
T	100	150*	250

II

SECTION-C.

25. Definition and Explanation

26. 5 points

27. 5. guidelines.

28. Definition + Explanation

29. Title & Table Number.

Body of the table

Headnote & footnote

30. Title

Diagram

31. Midpoint(x) - 25, 35, 45, 55, 65
 $\log x$
 $\Sigma f \log x = 65.0312$

VII GM formula + 42.24 (Ans) 1+1M

32 Title + Scale 1M

Histogram + frequency polygon 2+2M

33. $\Sigma f = N = 98 + f$ 1M

Median formula 1M

Substitution + Ans (28) 3M

34. $\bar{X}_2$ Formula + 49 (Ans) 2M

σ_2 formula + substitution + Ans (11.89)

1M+1M+1M

35. Yule's formula and substitution } 3M
 1+1M

Ans Q = 0.2612 + conclusion

SECTION-D

36 a) Range = H - L = 540 - 200 = 340 1M

Table heading and values 4M

$f \rightarrow 8, 11, 10, 7 / N = 36$ 1M

b)

	M	K1	T		
TD	18	4	22	Title	3M
NTD	40	38	78	Table	
T	58	42	100	Headnote, footnote	2M

37	$\Sigma X = 183$	$\Sigma Y = 124$	$\Sigma X^2 = 7719$
	$\bar{X} = 36.6$	$\bar{Y} = 24.8$	$\Sigma Y^2 = 4022$
	$\sigma_x = 14.29$	$\sigma_y = 13.76$	
	$CV = 39\%$	$CV = 55\%$	

4+4m

Conclusion. 1 Virat is better scorer
2 patidar is consistent batsman

2M

38 LCF $\rightarrow$ 1 6 14 18 20

1M

2M

2M

2M

2M

$$Q_1 = 5^{th} \text{ item} = 18$$

$$Q_2 = 10^{th} \text{ " } = 25$$

$$Q_3 = 15^{th} \text{ " } = 32.5$$

$$SK = \frac{Q_3 + Q_1 - 2Q_2}{Q_3 - Q_1} = 0.034$$

1M

conclusion $\rightarrow$ positive skewness.