

## MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATION, MUMBAI

## Examination—April, 2018 (Two Year Diploma Courses)

## Group—All Groups

[TIME ALLOWED — 3 HOURS]

(MARKS — 30)

## ELECTIVE-II-BUSINESS MATHEMATICS (PRACTICAL)

Marks

Note.— (1) All questions are compulsory.

(2) Figures at right indicate full marks.

1. Attempt any one of the following :— 10

(a) Using the log table find the value of the expression.

$$(i) \frac{0.663^2 \times 540.78}{219.28 \times \sqrt{1.807}} \quad (ii) \frac{66.56 \times \sqrt{7.34}}{8.45^2 \times 0.6048}$$

- (b) Let X denote the amount of money spent per week on advertising by advertising a small fast food shop and Y the total sale per week. These observation are obtained :—

X	10	20	30	40	50	10	20	30	40	50
Y	824	976	180	239	467	218	329	836	991	323

Draw the regression line. Find the equations of regression lines of Y on X.

2. Attempt any one of the following :— 10

(a) Given the following life table which relates to parrots at age x, complete the life table of parrots.—

x	0	1	2	3	4	5
x	1000	940	780	590	25	0

- (b) Using log table find value of the expression.—

$$(i) \frac{0.447^3 \times 207.78}{\sqrt{13.87}} \quad (ii) \frac{\sqrt{435.34}}{33.45^2 \times 0.0628}$$

3. Using any spreadsheet application prepare stastical table to calculate mean, median and standard deviation of data :— 5

Height (in cm)	145-150	150-155	155-160	160-165	165-170	170-175	175-180	180-185
No. of Persons	6	9	28	65	69	34	7	6

4. Oral 5