



STAMFORD COLLEGE
SCHOOL OF BUSINESS, MARKETING AND ACCOUNTING

DIPLOMA IN BUSINESS ADMINISTRATION
(SEMESTER 1)

DBA 102: BASIC BUSINESS STATISTICS

Date : 27 July 2007

Time : 9.30am – 11.30am

Duration: 2 hours

Instructions to Candidates

Answer ALL questions.

Please ensure that this examination paper contains FIVE questions on THREE printed pages before you start the examination.

Books, papers and other written materials are not allowed to be brought into the examination hall. A candidate who violates the examination rules of Stamford College or commits a malpractice will be disqualified from the examination.

Write your Examination Index Number on each page of your answer booklet.

Note: Formula sheet attached.

Answer ALL questions.

Question 1

a) Calculate the following using a calculator:

i)
$$\frac{\sqrt{6^2 - 7.5}}{6 - (-\frac{4}{7})}$$
 (3 marks)

ii)
$$\frac{\left(4 - \frac{1}{2}\right)^2}{1 - \frac{7}{\sqrt{6}}}$$
 (3 marks)

b) Solve the following:

i) $(x + 1)(x - 2) = 28$ (4 marks)

ii) $\frac{x}{(x - 3)} = x - 4$ (5 marks)

c) Evaluate $\sqrt[3]{x} - 2x^{-3}$ for :

i) $x = 1$ (3 marks)

ii) $x = 8$ (3 marks)

iii) $x = -27$ (4 marks)

(Total = 25 marks)

Question 2

A set of data is given as below:

$$6, 12, -4, 7, 0, -1\frac{1}{2}, 4.7, 8, \sqrt{8}, 16^{\frac{1}{3}}, 9.7.$$

Find the

a) range, (4 marks)

b) mean absolute deviation, (6 marks)

c) standard deviation, and (6 marks)

d) variance. (4 marks)

(Total = 20 marks)

Question 3

The following is a record of the percentage marks scored by candidates in an examination. Tabulate the marks in the form of a frequency distribution, grouped by suitable intervals.

65	57	55	67	19
89	68	76	90	32
39	28	45	77	51
77	44	82	32	48
16	76	38	50	35
39	72	41	42	56
48	34	34	25	69
47	27	72	91	72
81	68	47	89	71
69	32	55	70	60
23	69	41	62	70

(8 marks)

- Draw a histogram of the above data. (4 marks)
- Find the mode by using histogram. (2 marks)
- Plot a “less than” Ogive and hence estimate the median. (8 marks)
- If a grade B is given to those who scored from 70-80, how many candidates scored B? (3 marks)

(Total = 25 marks)

Question 4

- A fair dice is thrown two times. Calculate the probability
 - of getting a ‘4’ in the 1st throw and a ‘6’ in the 2nd throw. (3 marks)
 - of getting an even number in the 1st throw and an odd number in the 2nd throw. (3 marks)
 - that the sum of the numbers in two throws is less than 4. (4 marks)

- In a class of a total of 40 students, 15 of the students are joining the singing club,

20 of them are joining the dancing club while 4 of them are joining both the singing and the dancing club.

i) Draw a Venn diagram to represent the above case. (5 marks)

ii) Calculate the probability of a chosen student joining the dancing club but not the singing club.

(5 marks)

(Total = 20 marks)

Question 5

The following data show the value of Malaysian imports from 3 countries in RM (millions).

	YEARS		
Country	1980	1985	1990
UK	2400	2350	2100
USA	1800	1850	1900
Japan	1600	2700	3500

Represent the data in the form of a:

a) Component Bar Chart . (5 marks)

b) Percentage Component Bar Chart. (5 marks)

(Total = 10 marks)

- END OF PAPER -