

2009 Competitive Examination for Statistics Assistants Sample Questions

1. The following answers to a survey were received from four offices. Present the information received, in the form of a statistical table.

Answer from Office A:

- We have 900 staff members of whom, 42% are female. $\frac{3}{5}$ of the females have a graduate degree, and 65% of the males have a graduate degree.

Answer from Office B:

- Our office has 44 staff members, 30 of which are male. None of the women have a graduate degree, but 25% of the men do.

Answer from Office C:

- Our office consists of 55 males and 80 females. $\frac{1}{3}$ of the staff members of each gender have a graduate degree.

Answer from Office D:

- All male (14) and female (15) staff members have a graduate degree, with the exception of 1 male.

2. Four mines are involved in producing iron ore in a country. The table below shows characteristics of the production from each mine in a week

Mine number	Weekly production of iron ore	% impurities
1	1100 tons	82
2	1600 tons	75
3	2200 tons	65
4	3100 tons	51

What is the total production of iron ore in a week if all the impurities are removed?

3. If, in a country during a time period:
- (1) production of copper ore was 4500 tons
 - (2) 2750 tons of copper ore were exported
 - (3) 1400 tons of copper ore were imported
 - (4) 2400 tons of copper ore were used up locally
 - (5) stocks (inventories) of copper ore at the beginning of the period were 8270 tons,

what stocks (inventories) of copper ore would be left on hand at the end of the period?

4. The index number of a commodity in 2003 was 125, taking 2000 as a base year. If the 2003 price was \$99.72, calculate the price in 2000.

5. Present the following data as a line chart.

Line1	Line 2	Line 3
50	120	80
60	110	95
70	100	110
80	90	120
90	80	115
100	70	100

6. Compute the following:
- (a) $346.2 + 4/5 - 0.0304 + 4 * (2/3)$
 - (b) $0.00409 * 10^5$
 - (c) $3.1 * 10^{-2}$

7. Two summary tables have been prepared showing the exports of two countries, Finland and Fiji, one for 2001 and one for 2002, in millions of US dollars.

Table 1: 2001

	Total	Minerals	Fish Products	Coconuts	Other products
Finland	562	212	296	117	27
Fiji	242	87	73	40	42
Total	871	299	369	134	69

Table 2: 2002

	Total	Minerals	Fish Products	Coconuts	Other products
Finland	13127	248	12721	128	30
Fiji	231	93	75	43	20
Total	13358	341	12,796	171	50

- (a) What are the computational errors in Table 1?
- (b) Would you advise investigating further any suspicious number(s) in Table 1? If yes, why?
- (c) Would you advise investigating further any suspicious number(s) in Table 2? If yes, why?