



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2009/2010

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF
SCIENCE

HFN 502: COMPUTER APPLICATIONS IN NUTRITION

DATE: Tuesday 24th November, 2009

TIME: 9.00 a.m – 12.00 Noon

INSTRUCTIONS: Answer Question ONE (1) and either Question TWO (2) or
Question THREE (3)

Q1. Using the dataset provided in your computer labeled DATASET 3; answer the following questions

- a) Compute Mean waist circumference for females aged >50. [1 mark]
- b) Compute Mean age of female and males. [2 marks]
- c) Compute number of males and females aged 40-60. [2 marks]
- d) Compute Mean Systolic Pressure for Males and Females in the age category 40-49. [1mark]
- e) Compute % of population that is hypertensive. [2 marks]
- f) Compute percentage of population that is obese. [2 marks]
- g) Draw a bar graph depicting mean SBP and BMI of the following age Categories for each gender 18-29, 30-30 , 40-49, 50-59, 60-69, 70+.[6marks]
- h) In power point draw tables to represent the answers in Q 7. [4 marks]

Q2. The following table is a summary of 20 children whose anthropometric measurements were taken at a medical camp in Eldoret:

No	Survey Date	Cluster	TEAM	ID	HH	SEX	MONTHS	WEIGHT (Kg)	HEIGHT (cm)	EDEMA
1.	31/05/09	15	1	168	144	f	14	6.2	66.7	n
2.	31/05/09	15	1	165	142	m	6	6.5	64.2	n
3.	31/05/09	15	1	169	145	m	26	10.2	79.6	n
4.	31/05/09	15	1	173	149	m	49	13.9	99.5	n
5.	31/05/09	15	1	174	150	f	25	9.4	81.8	n
6.	31/05/09	15	1	172	148	f	37	17.8	93.1	n
7.	31/05/09	15	1	181	156	f	22	8.8	81.1	n
8.	31/05/09	15	1	183	158	m	36	10.1	84.5	n
9.	31/05/09	16	2	178	153	f	37	9	81.2	n
10.	31/05/09	16	2	176	151	f	57	10.9	93.3	n
11.	31/05/09	16	2	179	154	f	6	7.5	65.4	n
12.	31/05/09	16	2	186	161	m	36	11.3	85.5	n
13.	31/05/09	16	2	177	152	m	8	6.6	63.8	Y
14.	31/05/09	16	2	184	159	m	39	12.8	92.2	N
15.	31/05/09	16	2	185	160	m	30	10	82.5	y
16.	31/05/09	17	3	180	155	m	30	11	87.1	n
17.	31/05/09	17	3	175	151	m	6	7.9	67.7	n
18.	31/05/09	17	3	182	157	m	38	14.9	97.7	n
19.	31/05/09	17	3	187	162	m	40	14.8	97	n
20.	31/05/09	17	3	198	172	f	17	7.8	74.6	n

Q2 a) Type in the data into the appropriate computer software and save correctly with your surname and registration number e.g: Mwangi H87-1234-2009.

[10 marks]

b) Run the plausibility check report using two standards provided and save appropriately.

[10 marks]

c) Give the GAM, MAM, SAM and Edema prevalence using the two standards.

[10 marks]

d) Present using PowerPoint the 6 most appropriate graphs to explain your data.

[6 marks]

- e) Transfer the data to Excel then to SPSS and calculate the descriptive statistics for WAM, HAM and WHM. [4 marks]

Q3

Name	Age	Sex	Tea	Brown Bread	Cornflakes	Rice	Beans	Banana	Chapati	Ugali	Milk	Liver	Vegetables
Child 1	F	10	187	124	-	186	93	39	-	165	130	23	45
Child 2	M	12	234	148	109	187	90	-	34	187	120	43	56
Child 3	M	11	257	136	98	190	100	-	54	100	120	23	76
Child 4	M	12	332	-	87	189	108	34	34	176	120	27	46
Child 5	F	13	243	145	97	153	96	-	23	158	120	34	57
Child 6	F	15	265	134	80	155	109	32	54	197	120	23	53
Child 7	M	15	224	154	78	178	103	32	54	134	120	45	89
Child 8	F	14	239	165	120	165	120	12	57	187	120	26	76
Child 9	M	14	300	157	45	198	123	-	58	198	120	23	98
Child 10	F	13	319	168	90	178	114	-	76	190	120	34	108
Child 11	M	16	400	175	65	199	129	-	34	191	120	29	53
Child 12	M	13	250	164	47	143	127	-	65	196	120	61	66
Child 13	F	12	289	178	74	174	134	19	45	107	120	23	56
Child 14	F	11	309	165	78	167	106	-	87	109	120	24	71
Child 15	M	12	145	143	76	156	149	-	54	141	120	20	81

- a) Using the table provided, fill in the data into the appropriate program and save the files as per child number. [15 marks]
- b) Generate the report for each child and comment on the adequacy of the main nutrients. [15 marks]
- c) Showing each meal evaluation, analyse the food intake of all the children and save them in an excel, and in SPSS. [10 marks]