Review & Examples of Theoretical Exam

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OUTLINE

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- About theoretical exam
- About the final mark
- Example of theoretical exam

About Theoretical Exam

Article 78. Students are allowed to attend the examination for a specific discipline only once per each examination session.

Article 79. (1) Students are allowed to attend the examination for a specific discipline no more than three times during an academic year.

(2) The curriculum includes four examinations sessions for the linear tuition program: the winter session, the summer session and two reexamination sessions.

(3) In case of linear tuition program, students can attend the exam as follows:

- the first submission in the examination session occurring at the end of the course;
- the second submission in the next examination session: the summer session if there will be an exam in that academic subject (for subjects with examination in the winter session) or the first reexamination session.
- the third submission in the second reexamination session.

About Theoretical Exam

(6) In this regard, absence from an exam scheduled for that series, without duly justified reasons approved by the Council Board of the Faculty, results in the loss of one opportunity of taking that exam, therefore diminishing the number of possible submissions.

(8) Students who have an excuse for their absence from the examination, approved by the Council Board of the Faculty, benefit from all the possibilities to submit that examination.

About Theoretical Exam

Article 100. Students come to the exam with their student report card (or temporary certificate from the Dean's Office) and their ID (or passport). On entering the examination classroom, the examiners identify the students based on these documents.

Article 102. (1) Bags, outdoor clothes and mobile phones are stored in the locations specified by the supervising teachers and not near to the students.

(2) Cell phones must be turned off when entering the examination classroom and stay that way throughout the examination; they can only be turned on again after leaving the examination classroom.

(3) During the exam, students are not allowed to carry cell phones or other electronic devices enabling interpersonal communication and information access.

About Theoretical Exam

Article 103. (1) Students must carry a pen or pencil and other admissive stationery necessary for exam submission.
(2) Any request or question can only be addressed with a loud voice only to the supervising teachers.

Article 105. During the examination, communication between students is forbidden.

Article 108. (1) On leaving the classroom, students must hand the written papers and all their signed sheets.
(2) Upon completion of the written exam, students must sign for the delivering of their written paper.

EXAM SCHEDULING

English section S1

Monday February 9, 2015: 8.00-13.30

- 8-9.30: Group 1, 2 & 3
- 10-11.30: Group 4, 6 & 7
- 12-13.30: Group 5 & 8

Faculty of Medicine

English section S2

Friday January 23, 2015: 8.30-14.00

- 8.30-10.00: Group 9, 10 & 11
- 10.30-12.00: Group 12, 14 & 16
- 12.30-14.00: Group 13 & 15

Faculty of Dental Medicine

Thursday February 5, 2015: 9.00-11.00

9-11: group 1, 2, 3, 4, & 5

FINAL MARK

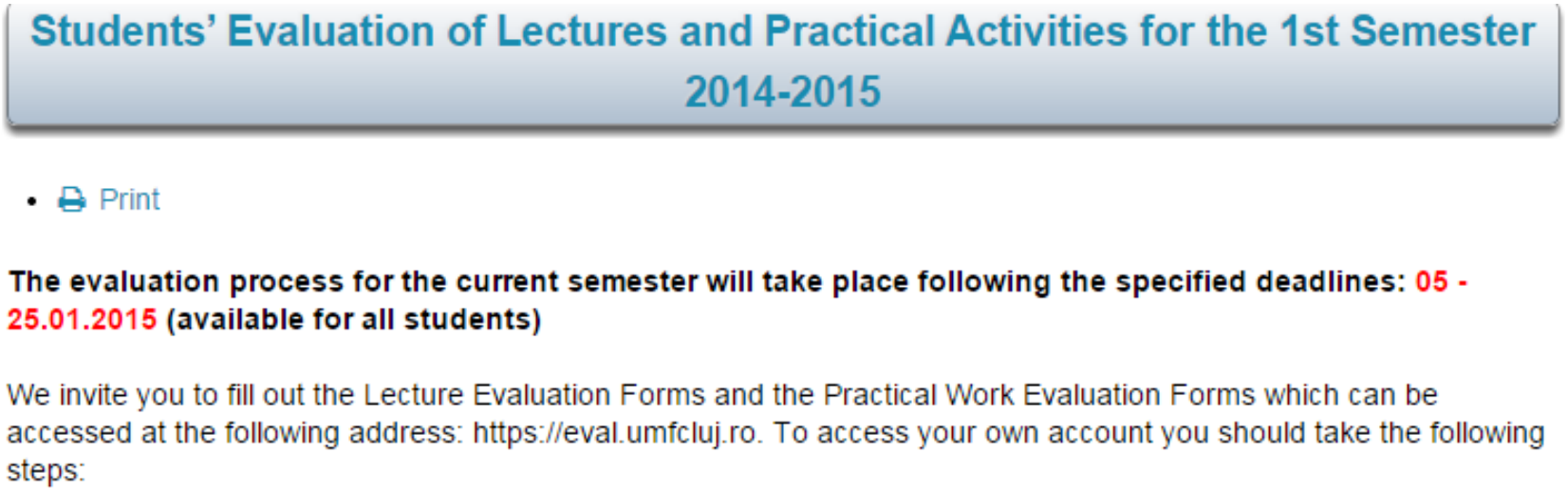
- Your course grade will be based on a weighted average of your marks as indicated bellow:
  - Practical exam (30%) & Theoretical exam (70%)

Article 116. (1) Student knowledge assessment is noted from 1-10.
(2) A discipline is promoted when the final mark, from both theoretical and practical exam, is at least 5.
(3) Marks below 5 bring about the student's reexamination in the exam task he/she did not promote, in a future session.

Practical	Written score	Written mark	Mean	Final
3.75	23.5	7.04	4	4
3.75	20.25	6.21	4	4
3.25	17.25	5.44	4	4
8.25	20.25	6.21	6.82	7

LECTURES AND PRACTICAL ACTIVITY EVALUATION

- Personal: on my webpage
  - When? After the theoretical exam
- University: https://eval.umfcluj.ro/
  - When? Until January 25, 2015



Students' Evaluation of Lectures and Practical Activities for the 1st Semester 2014-2015

- Print

The evaluation process for the current semester will take place following the specified deadlines: 05 - 25.01.2015 (available for all students)

We invite you to fill out the Lecture Evaluation Forms and the Practical Work Evaluation Forms which can be accessed at the following address: https://eval.umfcluj.ro. To access your own account you should take the following steps:

REVIEW & SUBJECTS BY EXAMPLE

Directions:

- This exam contains 35 multiple choice questions, each worth 1 point.
- Each question is followed by five possible answers. You should choose the best answer from the stated alternatives and fill it properly on the answer sheet. Please use a marker or a pencil (black or blue) to fill the answer sheet.
- You may use a non-programmable calculator if you wish. However, cell phones, iPhones, Iped, tablet, etc. are not permitted for use in any way.
- Any discussion or otherwise inappropriate communication between students, as well as the appearance of any unnecessary material or cell-phone usage, will be considered fraud (cheating). Violations may result in an exclusion from the test.
- Please print your full name in CAPITALS on both answer sheet and question booklet.
- All papers must be handed in on the completion of this examination. This includes answer sheet, question booklet, formula sheet, and all other provided sheets.

Total Time (including reading): 75 minutes

Good Luck!!!

Varianta 1

1) The cholesterol level on a sample of 600 patients was tested for normality. Chi-Square goodness of fit test was used and a p-value of 0.0004 was obtained. The following is correct:
a) The comparison of the sample mean among a population mean is proper
b) Data are not normally distributed
c) Kolmogorov-Smimov is the proper test
d) The Chi-Square goodness of fit is not the proper test to be used
e) Data are normally distributed

4) The values of systolic blood pressure measured in mmHg for a sample of 10 patients are as follows: 120, 100, 110, 120, 130, 160, 130, 120, 140, and 160. The arithmetic mean is equal to:
a) 110
b) 130
c) 129
d) 135
e) 120

REVIEW & SUBJECTS BY EXAMPLE

3) The following parameters are common measures of centrality:
a) Mode
b) Median
c) Amplitude
d) Standard error
e) Arithmetic mean

13) The standard normal distribution:
a) Is skew to the left
b) Has mean equal to 1
c) Has standard deviation equal to 0
d) Has variance equal to 1
e) Has the median equal to the mean

REVIEW & SUBJECTS BY EXAMPLE

6) * If the value of a variable are in the form of counts such as number of episodes of a disease per patient during one year, such a variable is:
a) Discrete
b) Ordinal
c) Interval
d) Nominal
e) Continuous

4) Which of the following examples are constants?
a) Number of days in August
b) The age of patients hospitalized in the Department of Traumatology
c) Number of consultations per week of a specialized ambulatory health care service
d) Maximum value of Apgar score
e) The highest value of Glasgow score

REVIEW & SUBJECTS BY EXAMPLE

11) * A sample of 99 distances has a mean of 24 feet and a median of 24.5 feet. Unfortunately, it has just been discovered that an observation which was erroneously recorded as "30" actually had a value of "35". If we make this correction to the data, then:

a) The mean remains the same, but the median is increased

b) The mean and median remain the same

c) The median remains the same, but the mean is increased

d) The mean and median are both increased

e) We do not know how the mean and median are affected without further calculations; but the variance is increased

REVIEW & SUBJECTS BY EXAMPLE

2) A child psychiatrist conducts a study to compare anxiety levels in hospitalized children whose parents participate in their routine care (e.g. bathing and feeding) and those whose parents were prohibited by hospital regulations from participating in such care. Anxiety levels were determined for five children in each of the two comparison groups, using a standardized psychiatrist rating scale. At a research conference, the psychiatrist reports that "the difference in average anxiety scores for the two groups was not statistically significant at the 5% level of significance". All of the following factors influence the probability that a statistical test will detect a difference of a specified magnitude (effect size) given that the difference actually, EXCEPT:

a) The level of significance
b) The magnitude of the population parameters being compared
c) The degree of subject-to-subject variation in the response variable
d) The false positive rate selected by the investigator
e) The sample size

4) The median is _____

a) Affected by extreme values
b) The average
c) The highest number
d) The middle point
e) The smallest value

REVIEW & SUBJECTS BY EXAMPLE

14) Which of the following two events are mutually exclusive events?
a) Blood type B and blood type 0 in a newborn baby randomly selected
b) Male or female students
c) Presence of oral cancer or absence of oral cancer when diagnosis a patient at random
d) Acidity or basicity of oral pH of a patient at random
e) Recovered or not recovered after treating a patient with tooth abscess at random

24) Let A be the event that the first child in a family with two children has hyperdontia (supernumerary teeth). Let B be the event that the second child in a family with two children to has hyperdontia. It is known that Pr(A) = 0.03, Pr(B) = 0.05 and Pr(A and B) = 0.015. The A and B events are:
a) Independent
b) Mutually exclusive
c) Could not be determined based on provided data
d) Dependent
e) None is correct

REVIEW & SUBJECTS BY EXAMPLE

24) *Suppose that the p-value in a hypothesis test is 0.08. If the significance level for the test is $\alpha = 0.05$, which of the following is the appropriate decision?

a) Fail to reject H_0

b) Reject H_0

c) There is not enough information given to know whether or not H_0 should be rejected

d) Fail to reject H_a

e) Reject H_a

33) * The aim of _____ test is to compare the arithmetic mean of a continuous variable on a representative sample extracted with a known mean (population mean) under the assumption of equality of variance.

a) Z

b) T

c) ANOVA

d) Paired t

e) Could not be determined based on provided data

REVIEW & SUBJECTS BY EXAMPLE

9) * The following data represent the age of first episode of myocardial infarction on a series of male patients: 38, 50, 23, 45, 70, 33, 25, 40, 50, 62, and 59. Let us assume that the data are normally distributed. Standard deviation is:
a) 47.56
b) 14.34
c) 15.04
d) 15.85
e) Could not be determined based on provided informartion

25) The following are days of illness in tooth abscesses since consulting a dentist: 5, 1, 2, 5, 4, 4, 2, 3, 1, 5, 3, 2, 5, 4, 0, 1, 3, and 4. The relative frequency of 0.17 corresponds to:
a) 1 day
b) 0 days
c) 4 days
d) 3 days
e) 2 days

REVIEW & SUBJECTS BY EXAMPLE

18) * The statistical series of incubation (expressed in days) for a infecto-contagious disease contains the following data: 7, 3, 5, 9, 10, 6, 8, 4, 5, 3, 7, 6, 5, 4, 8, 8, 7, 10, 10, 3, 3, 5, 6, 7, and 8. The number of patients with less than 7 incubation days is:

a) 13
b) 17
c) 10
d) 16
e) Can not be determined based on provided data

28) The following are days of illness in tooth abscesses since consulting a dentist: 1, 3, 5, 4, 5, 3, 3, 3, 3, 5, 5, 5, 2, 3, 4, 3, 2, and 4. The mode of incubation is equal to:

a) 1
b) 4
c) 3
d) 5
e) 3.5

REVIEW & SUBJECTS BY EXAMPLE

29) A sample of 15 oral cancer-cases and 12 controls, aged between 35 and 45 years old was investigated. 12 of the oral cancer-cases and 10 of the controls had at least one Capnocytophaga gingivalis infection (considered as risk factor for oral cancer). What are the values of TP-FP-FN-TN in the theoretical table:

a) 10-2-3-12
b) 10-12-3-2
c) 12-3-2-10
d) 12-10-3-2
e) 10-3-2-12

34) A study was conducted to measure the effect of smoking upon the oral cancer. The following variables were measured for each patient included in the study: smoking status (yes/no), number of white blood cells (/L), and oral cancer (present/absent). The scales of these variables are:

a) Ordinal, ratio, interval
b) Nominal, ratio, ordinal
c) Nominal, interval, ordinal
d) Nominal, ratio, ratio
e) Nominal, ratio, nominal

REVIEW & SUBJECTS BY EXAMPLE

26) * Two therapeutic schemas (A and B) are widely used to treat a certain type of bacterial disease. To compare the success rates of the two procedures, a random sample from each type of schema was obtained (A with a sample size of 160 and B with a sample size of 120), and the number of patients with no reoccurrence of the disease after 1 year was recorded (106 for A schema and 104 for schema B). The failure rate when the A therapeutic schema was used is:

a) 0.6625
b) 0.3375
c) 0.8667
d) 0.1333
e) 0.7514

REVIEW & SUBJECTS BY EXAMPLE

35) A new anesthesic has been developed and tested on 10 patients. The time from administration of the anesthetic until induction of anesthesia (expressed in minutes) was recorded (19, 30, 16, 12, 13, 25, 24, 18, 26, 24) using the effective dosage rate according to the patient (expressed in µg/kg) (1.30, 0.60, 0.80, 1.00, 0.90, 0.70, 0.60, 1.90, 1.50, and 1.60). A correlation coefficient of -0.1188 ($p > 0.05$) was obtained between induction time and dosage rate. Thus,

a) A positive relationship between induction time and dosage rate is observed

b) A negative relationship between induction time and dosage rate is observed

c) A strong relationship between induction time and dosage rate is observed

d) The relationship between induction time and dosage rate is not statistically significant

e) 1% of induction time proved to be linearly related to the dosage rare

'These things will become clear to you,' said the old man gently, 'at least,' he added with slight doubt in his voice, 'clearer than they are at the moment.'

Douglas Adams

'Today's truths become errors tomorrow.'

Ursula K. Le Guin