# ENGED Finals Solved

#### Q. Two uses of true and false? (Topic 71)

For measuring such relatively simple learning outcomes, a single declarative statement is used with anyone of several methods of responding. One of the most useful functions of true and false items is in measuring the students' ability to distinguish fact from opinion. Another aspect of understanding that can be measured by true and false item is ability to recognize cause and effect relationship. This type of item usually contains true propositions in one statement, and the student is to judge whether the relationship between them is true or false.

#### **Q.** Advantages of Alternative Form (True-False) (Topic 73)

- 1. True-false questions are well suited for testing lower level learning outcomes, like a student's ability to; i. Identify the correctness of factual statements, e.g. Earth is a planet.
- 2. ii. Definition of terms e.g. Photosynthesis is the process by which leaves make food for plants.
- 3. iii. Statement of principles, e.g. Earth is revolving around the sun.
- 4. iv. Distinguish facts from opinion, e.g. Islam is the official religion of Pakistan.
- 5. v. Recognize cause-and-effect relationship

# **Q. 3 limitations of true false (Topic 73)**

Most commonly observed limitations are:

- All learning outcomes cannot be measured through alternative form questions. They are generally limited to lower level Ease of guessing correct answers when the answer is not known. With only two choices\ (true or false) the student could expect to guess correctly on half of the items for which correct answers There is sometimes a tendency to take quotations from the text with a minor change in wording.
- There may also be a tendency to include trivial material from iv. the text.
- True-false items are prone to high guessing and can only be V. used for measuring lower level learning outcomes

# **Q.** Suggestions for true false (Topic 75)

learning outcomes.

are not known.

i.

ii.

iii.

Most important task in formulating statements is free from ambiguity and irrelevant clues. There are list of things to avoid when phrasing the statement

- Avoid trivial statements
- Avoid the use of negative especially double negative statements.
- Avoid long and complex sentences.
- Avoid including two ideas in one statement unless cause and effect relationship are being measured.

# Q. short note on matching column? (Topic 82)

The matching type exercises consist of two parallel columns, first column premises and the second one is responses and the directions for matching the two columns. Matching test items are also selection items specially used to measure a student's ability to identify the relationship

between a set of similar items, each of which has two components. Such as words and their definitions, symbols and their meanings, dates and events, people and their accomplishments, etc. Matching exercise is economical methods when used with content which has the sufficient homogeneous factual information. In developing matching items, there are two columns of material. Matching exercise is used when measuring a student's ability to identify the relationship between a set of similar items, each of which has two components.

#### **Q.** Uses of matching exercise (Topic 82)

The typical matching exercise is limited to measuring factual information, based on simple associations. It is a compact and efficient method of measuring such simple knowledge outcomes. It is also being used with pictorial materials in relating pictures and words to identify positions on maps, charts and diagrams. Regardless of the dorm of presentation, the student's task is essentially to relate two things that have logical association. This restricts the use of matching exercise to small area of student's achievement.

# Q. Advantages of matching exercises (Topic 83)

- The major objective of matching exercise is its compact form, which makes it possible to measure a large amount of related factual material in a relatively short time.
- Another advantage is ease of construction. Poor matching items can be rapidly constructed, but good matching item requires a high degree of skills.

# **Q. 3 limitations of matching exercises (Topic 83)**

It is restricted to the measurement of factual information, based on rote learning.

It is highly susceptible to the presence of irrelevant clues.
Difficulty of findings homogenous material that is significant from the viewpoint of our objectives and learning outcomes

#### **Q. Define short questions (Topic 88)**

There are two types of item formats which are included in the category of supply type: short answers and completion and fill in the blanks, under the range of objective test items. Both the short answers and completion items are forms of supply item that can be answered by a word, phrase, number or symbol. They only differ in form of presentation. Short answers are presented in the form of direct questions while completion items are incomplete statements. Both of them can be answered with a word, phrase, number, or symbol. Such items are frequently used for measuring knowledge of terminology, specific facts, principles and procedures etc.

#### **Q.** Uses of short answer (Topic 90)

The short answer test item is suitable for measuring a wide variety of relatively simple learning outcomes. The following outcomes and test items some of its common uses.

Simple interpretation of data.

- i. How many syllables are there in word Argentina? (4)
- ii. In the number 612, what value does the 6 represent? (600)
- iii. If an airplane flying northwest made a 180 degree turn, what direction would it be heading? (Southeast)

More complex interpretations can be made when the short answers item is used to measure the ability to interpret diagrams, charts graphs and pictorial data. More notable exceptions to the general rule that short answer items are limited to measuring simple learning outcomes are found in the areas of mathematics and science.

#### **Q.** Limitations of short question (Topic 91)

- A potential problem with both short-answer and completion items is that difficult to frame questions for one specific answer unless the items are well written.
- Not usable to measure complex learning outcomes.

#### Q. 3 suggestions for good short answer question (Topic 92)

Word the item so that the required answer is both brief and specific. Do not take statements directly from textbooks to use as a basis for short answer items. A direct question is generally more desirable than an incomplete statement. If the answer is to be expressed in numerical units, indicate the type of answer. When completion items are used, do not include too many blanks or start with a blank space. Also avoid asking trivial information in blank space.

#### **Q.** Suggest how to write good short Questions ? (Lesson 26)

- 1. Word the item so that the required answer is both brief and specific.
- 2. Do not take statements directly from textbooks to use as a basis for short answer items.
- 3. A direct question is generally more desirable than an incomplete statement.
- 4. If the answer is to be expressed in numerical units, indicate the type of answer.
- 5. When completion items are used, do not include too many blanks or start with a blank space. Also avoid asking trivial information in blank space.

# Q. Types of essay question (Topic 97)

Essay type questions are divided into two types

#### 1. Restricted Response Items

- **4** Statements should not be quoted directly from the text.
- **4** Evaluate essay responses anonymously.
- **4** Frame questions so that the examinee's task is explicitly defined.

# 2. Extended Response Items

It allows the students to determine the length and complexity of the response. This type of questions is most suitable for measuring higher level mental process skills like synthesis and evaluation.

# **Q.** Learning outcomes in essay type Question (Topic 97)

- 1. Analysis of relationship.
- 2. Compare and contrast positions.
- 3. Explain cause-effect relationship.
- 4. Organize data and support a viewpoint.
- 5. Formulate hypotheses.

# Q. Guideline for writing essay type (Topic 98)

Following guidelines are for writing essay type items when developing a test.

- i. Evaluate essay responses anonymously.
- ii. Frame questions so that the examinee's task is explicitly defined.
- iii. Specify the value and an approximate time limit for each question
- iv. Do not employ optional questions.

- v. Employ a larger number of questions that require relatively shorter answers rather than only a few questions that require long answers.
- vi. Verify a question's quality by writing a trial response to the question.
- vii. Prepare a tentative scoring key in advance of considering examinee responses.
- viii. Score all answers to one question before scoring the next question.
- ix. Make prior decisions regarding treatment of such factors as spelling and punctuation.

#### Q. Advantages of essay type -5 (Topic 99)

Extended response questions have following advantages over other types of question formats: Effective for assessing higher order abilities: analyze, synthesize and evaluate. It is comparatively less time consuming to develop such items.

Emphasizes essential communications skills

Guessing is eliminated.

# Q. limitations of essay test items (Topic 99)

- 1. The scoring is unreliable and time consuming.
- 2. Limited sampling of the content is possible.

# **Q.** Approaches to holistic scoring (Topic 103)

One way to implement holistic rubric is to decide beforehand on the number of quality categories into which you will sort the student's answers. A second better way of using the holistic method is to craft a holistic rubric, which defines the qualities of paper that belong in each

category. For example, defining what an -A paper is a -B paper is and so on. A third refinement is to select specimen papers, which are good examples of each scoring category. Then you can compare the student's paper with the pre-specified specimens that define each category level.

A fourth way of implementing holistic rubric is to read the answer completely and one with another to decide which are the best. The next best and so on. This will result in the rough ranking of all the papers this approach of holistic rubric cannot be applicable to a large number of papers.

Among these four approaches first three are consistent with a grading philosophy of criterion referenced or absolute quality standards

While the fourth one is consistent with the norm reference or relative standard grading philosophy

# **Q. Test Theories in Item Analysis (Topic 107)**

**Classical Test Theory (CTT) and Item Analysis** Classical Test Theory (CTT) has relatively weak theoretical assumptions, which make it easy to apply in many testing situations Relatively weak theoretical assumptions not only characterize CTT but also its extensions (e.g., generalizability theory). CTT's major focus is on test-level information, item statistics (i.e., item difficulty and item discrimination) are also an important part of the CTT model.

Item Response Theory (IRT) and Item Analysis —Item Response Theory (IRT) presents a model for expressing the association between an individual's response to an item and the underlying latent variable (often called "ability" or "trait") The latent variable, expressed as theta  $(\theta)$ , is a continuous one-dimensional construct that explains the covariance among item responses People at higher levels of latent trait have a higher probability of responding correctly or endorsing an item.

#### **Q. Define Item difficulty (Topic 108)**

CTT does not raise a complex theoretical model to relate an examinee's ability to the probability of success on a particular item. CTT collectively considers a pool of examinees and empirically examines their success rate on an item. This success rate of a particular pool of examinees on an item, well known as the p value of the item, is used as the index for the item difficulty In CTT, the item difficulty index p (p value), is the proportion of examinees correct on an item, expresses item difficulty on an Item. Item difficulty in CTT is simply calculated by the percentage of students that correctly answered the item as refers to the p value which range from .00 to 1.00. The values closer to 1 more easy will be the item. The values lie somewhere in the middle i.e. 0.4 to 0.6 will refer to moderate item difficulty index.

#### Q. ICC slope curve.....???? (Topic 110)

To analyze items using IRT, the main thing need to consider is item characteristic curve (ICC). The item characteristic curve is considered as the basic building block of item response theory

# **Q. Methodologies properties of ICC (Topic 110)**

- 1. The difficulty which under item response theory describes the item functions along the ability scale. For example an easy item functions among the low-ability examinees and a hard item functions among the high-ability examinees
- 2. The second property is discrimination, which describes how well an item can differentiate between examinees having

abilities below the item location and those having abilities above the item location

3. An item characteristic curve is the graphical representation of the probability of answering an item correctly with the level of ability on the construct being measured.

# **Q.** What is difficulty in IRT (Topic 111)

The application of Item difficulty in IRT is defined as the ability at which the probability of success on the item is .5 on a logit scale, which is also known as threshold difficulty. An item that has a high level of difficulty will be less likely to be answered correctly by an examinee with low ability than an item that has a low level of difficulty (i.e., an easy item).

# Q. A typical item characteristic curve (ICC) (Topic 111)

Three item characteristic curves are presented on the same graph. All have the same level of discrimination but differ with respect to difficulty.

**The left-hand curve** represents an easy item because the probability of correct response is high for low-ability examinees and approaches 1 for high-ability examinees. The center curve represents an item of medium difficulty because the probability of correct response is low at the lowest ability levels, around 0.5 in the middle of the ability scale and near 1 at the highest ability levels.

**The right-hand curve** represents a hard item. The probability of correct response is low for most of the ability scale and increases only when the higher ability levels are reached. Even at the highest ability level shown (+3), the probability of correct response is only 0.8 for the most difficult item

# **Q.** Probability of Guessing in Item Response Theory (IRT) (Topic 113)

Guessing means giving an answer or making a judgment about something without being sure of all the facts. Guessing is a standard testtaking strategy presented to examinees taking a multiple choice assessment. If test scores are based simply on the number of questions answered correctly, then a random guess increases the chance of a higher score. In IRT this parameter of an item is also known as G (guessing) parameter which allow to detect the potential possibility of guessing in an item

There are two types of guessing

- 1. **Blind guessing**: Where an examinee chooses an answer at random from among the alternatives offered.
- 2. **Informed guessing**: Where the examinee draws upon all his knowledge and abilities to choose the answer most likely to be correct.

Item writers should be conscious of guessing and not write item that could be prone to guessing. IRT method of item analysis should be employed to eliminate those items prone to guessing

#### **Q.** Issues in test administration (Topic 114)

- 1. Cheating
- 2. Poor testing conditions
- 3. Test anxiety
- 4. Errors in test scoring procedure.

# Q. 3 strategies to solve issue in test administration. (Topic 114)

It is equally important to control all the factors other than test itself, to collect trustable evidence of student learning by addressing test administration issues. The way in which the test is administered is very important to meet the goal of producing highly valid, reliable results. Once a test is ready then next step is to administer it. Teacher has to help the students psychologically by maintaining a positive test-taking attitude, clarifying the rules; penalties for cheating, reminding them to check their copies, minimizing distractions and giving time warnings. Cheating, poor testing conditions, and test anxiety, as well as errors in test scoring procedures contribute to invalid test results. Accurate achievement data are very important for planning curriculum and instruction. Test scores that overestimate or underestimate students' actual knowledge and skills cannot serve these important purposes. So it is worth a little more time to properly assemble and administer a test.

#### **Q.** Recording test items (Topic 115)

The card contain information concerning the instructional objectives, specific objective, difficulty index, discrimination index and the content measured by the item should be prepared for each item to maintain its record.

# **Q.** How can a teacher maximize achievement motivation (Topic 121)

- 1. Encourage to do best, mitigate the fear
- 2. Highlight value of giving best
- 3. Reduce panic
- 4. Encourage serious thinking

# **Q. Monitor students test invigilation? (Topic 124)**

- 1) Penalties of cheating
- 2) Disturbing others

- 3) Seating position/posture
- 4) Protecting test from others
- 5) Cheating material handing
- 6) Jurisdiction of invigilation staff

#### Q. Scoring rubric and scoring criteria definition. (Topic 125)

Scoring Criteria: Planning how responses will be scored leads to rethinking and clarifying the questions so that students have a clearer idea of what is expected. Clear specification of scoring criteria in advance of administering essay questions can contribute to improved reliability and validity of the assessment. Scoring Rubric: A rubric is an explicit set of criteria used for assessing a particular type of work or performance and provides more details than a single grade or mark. Scores levels identified in a scoring rubric must be descriptive, not merely judgmental in nature. Example: Define the level of rubric as —Writing is clear and thoughts are completel as compared to —excellent.

#### **Q. Basic Steps to design Rubric? (Topic 126)**

- 1. Identify a learning goal.
- 2. Choose outcomes that may be measured.
- 3. Develop or adapt existing rubric.
- 4. Share it with students.

# Q. Score definition. (Topic 127)

A system of number or values assigned to a work often combines with a level of performance. High numbers are for best performance like 4, 5 or 6 whereas down to 1 or 0 are the lowest score in a performance assessment.

# Q. Define achievement test (Topic 132)

A standardized achievement test a fixed set if items to measure defined achievement domain, specific direction for administrating and scoring test, and norms based on representative groups of individuals. Most publishes achievement test are called standardized achievement tests. These typically are norm referenced tests. Quite a few criterion referenced achievement tests are also been published. Achievement tests are used as part if broader assessment system or alone. They provide relatively inexpensive means of measuring broad achievement goals. Standardized achievement tests are often customized to include characteristics of both norm and criterion referenced test. Standard content and procedure makes it possible to give an identical test to individuals in different places at different times. Equivalent forms are included in many standardized tests, which make it possible to repeat the test without fear that the test takers will remember the answers from first testing.

#### **Q.** Characteristics of Standardized Achievement Test (Topic 133)

- 4. The test items are of highly technical quality. They have been developed by educational and test specialists, pretested and selected on the basis of difficulty discriminating power, and relationship to a clearly defined and rigid set of specifications.
- 5. Directions for administering and scoring are so precisely stated that the procedures are standard for different users of test.
- 6. Norms based on national samples of students in the grade where the test is intended for use are provided as aids in interpreting the test scores.

- 7. Equivalent and comparable forms of the test are usually provided, information concerning the degree to which the forms are comparable.
- 8. A test manual is used as guides for administering the test, evaluating its technical qualities, and interpreting and using the results.

#### **Q.** Difference between standardized tests and class test (Topic 134)

- Quality of test items
- Reliability of the tests
- Procedure for administering and scoring
- Interpretation of scores
- The nature of the learning outcomes and the content measured

#### Q. What are the things that we measure in reading test (Topic 136)

- U Vocabulary
- Reading comprehension
- Rate of reading

# **Q.** Criterion referenced and norm referenced interpretation (Topic 139 +141)

**Criterion-referenced Interpretation**: In case of standardized test, interpretation can only be made with reference to the constructions on which test was based by the developer. This is primarily useful in mastery testing where a clearly defined and delimited domain of learning tasks can be most readily obtained. Such interpretations must be made with caution because these tests were typically designed to discriminate among individuals rather than describe the specific tasks they can perform. Criterion-referenced interpretations of test results are

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most meaningful when the test has been specifically designed for this purpose e.g. designing a test that measures a set of clearly stated learning tasks

**Norm-referenced Interpretation**: This interpretation tells us how an individual compares with other persons who have taken the same test e.g. ranking of scores from highest to lowest and to note where an individual's score falls. Standardized tests typically have been designed for norm-referenced interpretations which involves converting the raw scores to derived scores by means of table of norms.

# **Q.** Test construction in High Stake testing (Topic 143)

- 1. The format of items are same as used in CRT in classroom
- 2. Item of developed by professional employed in dedicated organization
- 3. Item banks are developed
- 4. Psychometric properties of item are tested
- 5. The process goes on round the year

# **Q. Recommendation for effective HST** (Topic 144)

- Protection against high stake decisions based on single test
- Adequate resources and opportunity to learn
- **Validation for each intended separate use**
- **Full** disclosure of likely consequences
- Alignment between test and curriculum
- **Validity of passing scores and achievement levels**
- Appropriate attention towards language difference between examinees
- Appropriate attention towards examinees with disabilities

# Q. 3 types of exam body in pk (Topic 146)

- 1. Examination commission conduct examination at grade 5 and 8 level
- 2. BISEs hold SSC and HSSC annual examinations
- 3. Boards of Technical Education conduct examination of various diplomas and certificates etc.

# Q. Define NEAS and Objectives of NEAS (Topic 148)

The National Education Assessment System has been institutionalized in Pakistan at national level with the cooperation of provincial and area Assessment Centers. NEAS was established as five years development project with the financial assistance of the World Bank and Development for International Development (DfID) in year 2003. NEAS is subordinate office under the ministry of Federal Education & Professional Training.

# **Objectives of NEAS**

- 5. Informing policy: the extent to which geography and gender are linked to inequality in student performance.
- 6. Monitoring standards: How well the curricula are translated into knowledge and kills
- 7. Identifying correlation of achievement: the principal determinants of student performance
- 8. Directing teachers' efforts and raising students' achievement: assisting teachers to use data to improve student performance.

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