**Template for Essay Type Item**

**Subject: Mathematics**

**Domain: A-Numbers and operations**

**Grade: 7**

**Unit: 2. Square and Square Roots**

**Type of Assessment: Formative**

**SLO: (M -07 -A – 21)** Find the square roots of perfect squares of (up to 3-digit) natural numbers, fractions and decimals.

**Type of Task:** Constructed response

**Level of SLO:** Comprehension

**Task:** Find the Square root of $\sqrt{12100} $ **(05) Marks**

**Level of Item:** Comprehension

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Expected Response**

|  |  |
| --- | --- |
| 11 | 12100 |
| 11 | 1100 |
| 10 | 100 |
| 10 | 10 |
|  | 1 |

 |

|  |  |
| --- | --- |
| **Skill observed**Taking square root by factorization method.Simplification of question.Answer |  **Score** 02 Marks 02 Marks 01 Mark |

 |



**Name and Signature of Developer**

**Asma Riaz**

**Reviewer Comments: ………………………………………………………………………………………………………………………………………………………………………………………………**

**Name and Signature of Reviewer**

**Template for Multiple Choice Item**

**Subject: Mathematics**

**Domain: A-Numbers and operations**

**Grade: 7**

**Unit: 2. Square and Square Roots**

**Type of Assessment: Formative**

**SLO:**  **(M -07 -A -20)** Recognize and calculate squares of numbers up to 3-digits.

**Type of Task:** Multiple Choice Item

**Level of SLO:** Knowledge

**Task:** Identify the composite number.  **01 Mark**

**Stem:** Give a reasonable estimate and then choose the correct answer A) 33 B) 47 C) 50

|  |  |
| --- | --- |
| **Options** | **Reason for choosing Distracter** |
| 1. 33
 | Distracters are A) 33 B) 47 |
| 1. 47
 | We select these Distracters because these are prime numbers which have only two factors. |
| 1. 50
 | Correct answer 50 is a composite number. |

**Answer: The correct quotient is C. 50. So the answer is reasonable.**

**Name and Signature of Developer**

**Asma Riaz**

**Reviewer Comments: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Name and Signature of Reviewer**

**Template for Essay Type Item**

**Subject: Mathematics**

**Domain: A-Numbers and operations**

**Grade: 7**

**Unit: 2. Square and Square Roots**

**Type of Assessment: Formative**

**SLO: (M -07 - A -22)** Solve real -world word problems involving squares and square roots.

**Type of Task:** Constructed response

**Level of SLO:** Comprehension

**Task:** Complete $\sqrt{\frac{196}{225}}$ **(05) Marks**

**Level of Item:** Comprehension

|  |  |  |
| --- | --- | --- |
| **Expected Response** | **Skill observed** | **Score** |
|  | 1. Find Square root of numerator and denominator separately 2. Grouping into Pairs of equal factors.3. Simplification and find answer  | (02) Marks(02) Marks(01) Mark |

**Name and Signature of Developer**

**Asma Riaz**

**Reviewer Comments: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Name and Signature of Reviewer**