**Template for Essay Type Item**

**Subject: Mathematics**

**Domain: A-Numbers and operations**

**Grade: 7**

**Unit: 3. Ratio, Rate and Proportion**

**Type of Assessment: Formative**

**SLO: (M -07 -A – 14)** Calculate rate and average rate of quantities.

**Type of Task:** Constructed response

**Level of SLO:** Comprehension

**Task:** Ali Brought one dozen oranges for Rs 144. What is the cost of 1 orange? **(05) Marks**

**Level of Item:** Comprehension

|  |  |  |
| --- | --- | --- |
| **Expected Response** | **Skill observed** | **Score** |
| In this statement Price Orange per dozen = Rs. 144  As 1 doze= 12 orange  Price 1 orange Rs 144 ÷ 12  Rs= 12 | Data Collection Knowledge  Calculation of Division  Answer | (2) Marks  (2) Marks  (1) Mark |

**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: 3. Ratio, Rate and Proportion**

**Type of Assessment: Summative**

**SLO: (M -07 -A – 14)** Calculate rate and average rate of quantities.

**Type of Task:** Constructed response

**Level of SLO:** Comprehension

**Task:** Ayesha read 100 words of his textbook in 5 minutes. Find the rate. **(05) Marks**

**Level of Item:** Comprehension

|  |  |  |
| --- | --- | --- |
| **Expected Response** | **Skill observed** | **Score** |
| Formula of rate =  =  = 20 | Formula  Calculation  Answer | (2) Marks  (2) Marks  (1) Mark |

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**Template for Essay Type Item**

**Subject: Mathematics**

**Domain: A-Numbers and operations**

**Grade: 7**

**Unit: 3. Ratio, Rate and Proportion**

**Type of Assessment: Formative**

**SLO: (M -07 -A – 14)** Calculate rate and average rate of quantities.

**Type of Task:** Constructed response

**Level of SLO:** Comprehension

**Task:** Ali went to office from home at 7:50am, and reach office at 9:30. How many does he reach office? **(05) Marks**

**Level of Item:** Comprehension

|  |  |  |
| --- | --- | --- |
| **Expected Response** | **Skill observed** | **Score** |
| Journey time = Arrival time- departure time  = 9.30 – 7.50  = 1.80 hours | Formula for finding  Journey  Calculation  Answer | (02) Marks  (02) Marks  (01) Mark |

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**Subject: Mathematics**

**Domain: A-Numbers and operations**

**Grade: 7**

**Unit: 3. Ratio, Rate and Proportion**

**Type of Assessment: Formative**

**SLO: (M -07 -A – 14)** Calculate rate and average rate of quantities.

**Type of Task:** Constructed response

**Level of SLO:** Comprehension

**Task:** Ali Travel 80KM from Islamabad to Lahore in hour. What was his speed for the journey? **(03) Marks**

**Level of Item:** Comprehension

|  |  |  |
| --- | --- | --- |
| **Expected Response** | **Skill observed** | **Score** |
| Speed =      =  = 32 km/h | Formula of Speed  Calculation  Answer | (01) Mark  (01) Mark  (01) Mark |

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**Grade: 7**

**Unit: 3. Ratio, Rate and Proportion**

**Type of Assessment: Formative**

**SLO: (M -07 - A – 15)** Calculate increase and decrease in a ratio based on change in quantities.

**Type of Task:** Constructed response

**Level of SLO:** Comprehension

**Task:** Ali can read 8 pages of a book in 10 minutes. How many pages of the book can the ali read in 30 minutes. **(05) Marks**

**Level of Item:** Comprehension

|  |  |  |
| --- | --- | --- |
| **Expected Response** | **Skill observed** | **Score** |
| Pages : Time (mints)  8 : 10  x : 30  = | Relation between two quantities  Comparison of two quantities  (Direct proportion)  Calculation | (02) Marks   1. Mark   (02) Marks) |

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**Type of Assessment: Formative**

**SLO: (M -07- A – 16)** Explain and calculate direct and inverse proportion and solve real -world word problems related to direct and inverse proportion.

**Type of Task:** Constructed response

**Level of SLO:** Comprehension

**Task:** 12 Workers can do a work in 20 days. After 5 days, 6 workers left how many days would the reaming workers take to complete the work? **(05) Marks**

**Level of Item:** Comprehension

|  |  |  |
| --- | --- | --- |
| **Expected Response** | **Skill observed** | **Score** |
| 12 workers can do the work in 20 days. After 6 days.  Remaining workers= 12-6=6. The number of workers is inversely Proportional to the number of days workers= days  12 : 15  6 : x | Inverse Proportion  Finding remaining quantities  Calculation | (02) Marks  (02) Mark  (01) Marks |

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