

ASSIGNMENT BOOKLET

AMT-01

**Bachelor Degree Programme
&
Certificate Programme in Teaching of Primary School Mathematics**

Teaching of Primary School Mathematics

(Valid from 1st July, 2023 to 30th June, 2024)

It is compulsory to submit the assignment before filling in the exam form.



**School of Sciences
Indira Gandhi National Open University
Maidan Garhi, New Delhi-110068
(For July, 2023-2024 Session)**

Dear Student,

Please read the section on assignments in the Programme Guide for Elective Courses that we sent you after your enrolment. A weightage of 30 per cent, as you are aware, has been earmarked for continuous evaluation, **which would consist of one tutor-marked assignment** for this course. The assignment is in this booklet.

Instructions for Formatting Your Assignments

Before attempting the assignment please read the following instructions carefully:

- 1) On top of the first page of your answer sheet, please write the details exactly in the following format:

ROLL NO.:

NAME:

ADDRESS:

.....

.....

COURSE CODE:

COURSE TITLE:

STUDY CENTRE: **DATE:**

PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.

- 2) Use only foolscap size writing paper (but not of very thin variety) for writing your answers.
- 3) Leave 4 cm margin on the left, top and bottom of your answer sheet.
- 4) Your answers should be precise.
- 5) While solving problems, clearly indicate which part of which question is being solved.
- 6) This assignment is valid only upto 30th June, 2024. If you have failed in this assignment or fail to submit it by 30th June, 2024, then you need to get the assignment for the next cycle (For July 2024) and submit it as per the instructions given in that assignment.
- 7) It is compulsory to submit the assignment before filling in the exam form.

We strongly suggest that you retain a copy of your answer sheets.

We wish you good luck.

ASSIGNMENT

Course Code: AMT-01
Assignment Code: AMT-01/TMA/2022-24
Maximum Marks: 100

Note:

- 1) In any question, whenever we ask you to suggest an activity, we expect you to give one other than those covered in the units.
 - 2) For any question worth 5 marks, the word limit is about 200 words, for a 10 mark question it is 350 words, and for a 15 mark question it is 500 words.
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1. Which of the following statements are true? Give reasons for your answers. (10)
 - a) Usually the first experience of subtraction that a child has is in Class I.
 - b) Primary school children of any age continue to feel the need to use concrete aids for learning.
 - c) Learning algebra helps the child to develop mathematical thinking.
 - d) Children don't get an opportunity to apply their knowledge of negative numbers till they reach class 10.
 - e) The language of mathematics is made up of the terminology and symbols used in mathematics.
2.
 - a) List at least 5 ways in which a farmer uses mathematics while farming, clearly mentioning what are areas of mathematics involved are. (5)
 - b) What are the advantages of using algorithms? What are the dangers that we must watch out for while illustrates them in the context of multiplication algorithm for multiplying two decimal fractions. (5)
3. In the block you have read that cognitive development is continuous and there are phases within each stage. Give two examples, one from the unit and one new example, to explain what this means. You should justify and explain both your examples in about 150 words each. (15)
4.
 - a) What is the difference between repetition and rote-learning? Illustrate your answer by giving an example from addition of natural numbers. (5)
 - b) Give an example each (apart from the ones in the blocks) to show (5)
 - i) the difference in the meaning of 'angles' in English and in mathematics,
 - ii) how the language of algebra helps us to express statements briefly and concisely.
5. Write down an activity each, different from those given in the blocks, to help children realise that (10)

- i) $-(-n) = n$, for any number n ?
- ii) division by zero is not meaningless?
6. When a child was asked to solve $\frac{5}{3} \times 10$, she wrote
- $$\frac{5}{3} \times 10 = \frac{5 \times 10}{3 \times 10} = \frac{50}{30} = \frac{5}{3}.$$
- i) Why do you think she made this error?
- ii) How would you help her to apply the operation correctly? (5)
7. a) Suggest one game in which the children are simultaneously asked to estimate the measure the size of an object and an angle. Justify your choice of the game. (5)
- b) “Children learn by experiencing things”. Justify this statement by giving two examples, one pertaining to learning fractions and the other pertaining to learning about shapes. (5)
8. a) Do you think that the number-line is a useful tool in teaching the operation of addition and subtraction of fractions? Justify your answer. (5)
- b) Suggest a teaching method or an activity to bring out the difference between volume and capacity? (5)
9. Write down a details plan (See Unit 4) for teaching children of class 6 the concept of variable. (10)
10. a) Write “11” in base 2. Show the steps you used for doing this. (2)
- b) Explain E-L-P-S sequence of learning. Illustrate it in the context of learning the concept of “Time”. (5)
- c) Give two distinct that are equivalent to $\frac{3}{7}$. Pictorially explain how they are different. (3)