D.El.Ed. Examination
JULY, 2023
First Year (2016 Revised Syllabus)
MATHEMATICS PEDAGOGY
(English Medium)
Time : 11.00 to 1.00 Hrs.
Date : 27/07/2023   (3 Pages)   Max. Marks : 40

1. (A) Fill in the blanks with proper words and rewrite : 4

   (1) Generalisation of Arithmetic means ....

   (2) The smallest natural number is ....

   (3) Creativity means .... competency.

   (4) The scope of units goes on increasing according to the standards in .... approach of curriculum development. (पाठ्यक्रम रचनापद्धती)

   (B) Find the odd one from the following statements : 4

   (1) Sensory motor stage, pre-operational stage, concrete operational stage, infancy.

   (2) Rectangle, square, triangle, circle.

   (3) Inductive method, deductive method, supervised study, experimental method.

   (4) 4, 9, 15, 25, 36.

P.T.O.

2. Answer the following questions in *60* to *80* words each : **8**

   (1)   Define 'structure' of subject and write *two* characteristics of structure of a subject.

   (2)   Which activities of Mathematics Association will you arrange as a mathematics teacher for the development of your students ?

   (3)   Prepare *two* objective questions (वस्तुनिष्ठ) on any one unit of Geometry.

   (4)   Define 'Evaluation'.

3. Answer the following questions in *120* to *160* words each : **12**

   (1)   Explain with *three* examples how you will make use of Mathematics for planning school game on playground as a teacher.

Or

Describe the importance of mathematics knowledge in daily life.

   (2)   Explain the correlation between the branches of mathematics with suitable examples.

   (3)   Write the 'Geometrical Thinking Levels' (भूमितीय विचारांचे स्तर) put forth by Van Hieles and explain any *two* of the levels.

Or

A square garden with side length of 20 m needs five rounds of fencing wire. If the cost of wire is 4.85 Rs/m, then calculate the total cost.

   (4)   How is a mathematics text-book useful to a teacher in daily teaching ? Explain.

4. Answer the following questions in 200 to 250 words each : 12

(1) Define 'Angle'. Draw the diagrams of three types of angles with the help of a protractor.

(2) Differentiate between Analytic and Synthetic method. (any *four* points).

Or

What is Annual Plan ? Prepare only the outline of annual plan.

(3) Which creative mathematical activities will you conduct for standard IV ?