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D.El.Ed. Examination
JUNE, 2019

First Year (2016 Revised Syllabus)

MATHEMATICS PEDAGOGY

(English Medium)

Time : 11.00 to 1.00 Hrs.

Date : 14/6/2019

(4 Pages)

Max. Marks : 40

1. (a) Answer the following questions in *one* sentence
each : 4

- (1) What is the role of a teacher in constructivism ? 1
A teacher should change his/her outlook about traditional + etc.
- (2) What is meant by obtuse angle ? 1
An angle whose measure is greater than 90°
- (3) Who is the pioneer of experimental method ? 1
Charles Sanders Peirce
- (4) Define "concept". 1
p 93.4

(b) State whether the following statements are *right* or
wrong : 4

- (1) Mathematics subject is a man-made science. 1
T
- (2) Unit plan is the first step of planning. 1
F
- (3) Formative evaluation is a continuous process. 1
T
- (4) Sociometry technique is a quantitative tool of
evaluation. 1
F

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1 of 4

P.T.O.

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

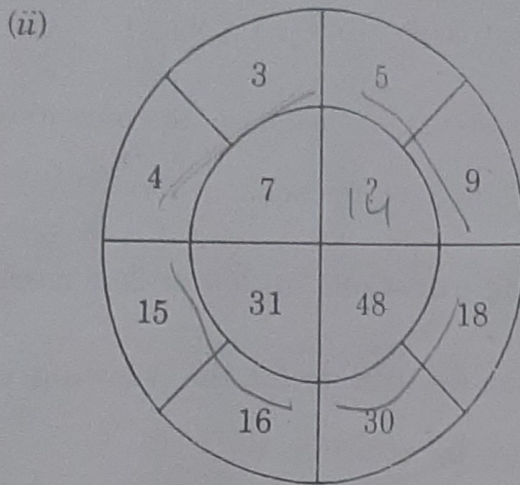
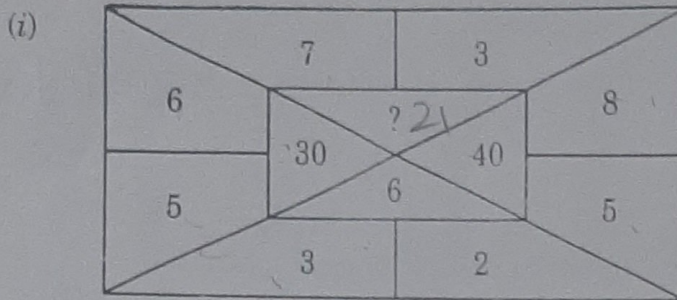
(1) Explain the correlation between Mathematics and Drawing subject giving *two* examples. pg 1-31 2

(2) Explain giving *two* examples of how Mathematics is useful in bank transactions ? 2

(3) If the cost of 5 notebooks is Rs. 40, find the cost of 12 notebooks. 2

$$\begin{array}{r} 40 \\ \times 12 \\ \hline 80 \\ 400 \\ \hline 480 \end{array}$$

(4) Solve the following puzzle and rewrite : 2



$$\begin{array}{r} 15 \\ + 16 \\ \hline 31 \end{array}$$

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

(1) State Van Hiele's levels to learn geometry and explain any *two* levels. pg 2.4, 2.5, 2.6 & 2.7 3

Or

Define the following :

- (i) Radius
- (ii) Circumference
- (iii) Area.



- (2) Write *three* merits of self-search method. pg 3.52 3

Or

Write *three* merits of project method.

- (3) Analyse the external characteristics of Standard 3rd Mathematics text-book. (Give *six* points.) 3
- (4) Prepare *six* questions to diagnose the mistakes that occur while doing addition of fractions. *regulation of denominator plus and* 3
4. Answer the following questions in 200 to 250 words each : 12

- (1) Prepare a separate structure for the following units and also show their place in structure : 4

- (i) Acute angle triangle *Geo → construction*
- (ii) Length. *Geo → measurement.*

Or

Prepare a tree like (branched) structure of Standard 5th syllabus of Mathematics.

(2) A student's marks out of 100 are given below :

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Subject	Marks
Marathi	60
Hindi	75
English	65
Maths	85
Science	90
Social Sciences	80

Answer the following questions from the above information :

- (i) The student has scored more than 70 marks in which subjects ?
- (ii) What is the difference between the highest and lowest score ?
- (iii) What is the average score ?
- (iv) How many subjects show marks less than 50% (half) ?

(3) Prepare *four* slides of PowerPoint presentation to teach any unit from Standard 1st to 5th Mathematics text-book with the help of computer.

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