

**CERTIFICATE IN ELEMENTARY
TEACHER EDUCATION (CETE)**

Term-End Examination

June, 2011

MESE-013 : TEACHING OF MATHEMATICS

Time : 3 hours

Maximum Weightage : 100%

Note : All questions are compulsory. All questions carry equal marks. Answer the question No. 1 and 2 in 600 words each :

1. Discuss the steps involved in planning a unit test.

OR

Discuss the importance of evaluation in improving the quality of teaching learning process.

2. Explain three different techniques of teaching Maths up to class VIII. Which technique in your opinion is best and why ?

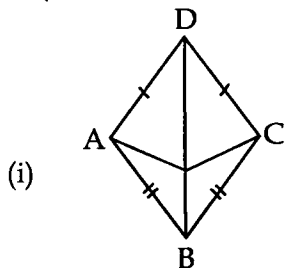
OR

Discuss the principles of formulating mathematics curriculum at elementary school level.

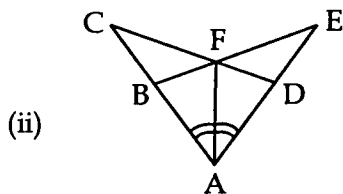
3. Answer *any four* of the following :

(a) A fruit vendor buys oranges at the rate of 8 oranges for Rs. 7 and sells them at the rate of 7 oranges for Rs. 8. Find his profit or loss percent.

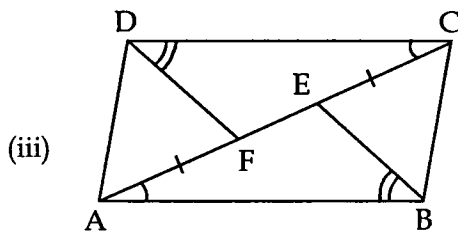
- (b) State whether the triangles within below the figure are congruent or not. If yes write the reason i.e. (A A S) etc. Equal parts are shown by similar markings.



$\triangle ABD, \triangle CBD$

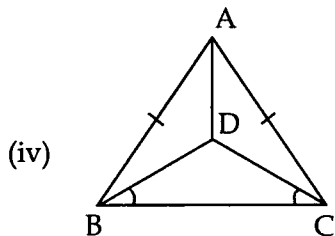


$\triangle ABF, \triangle ADF$



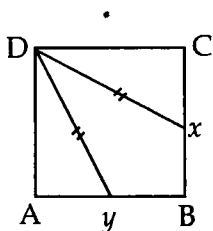
Here $AF = CE$

$\triangle ABE, \triangle CDF$



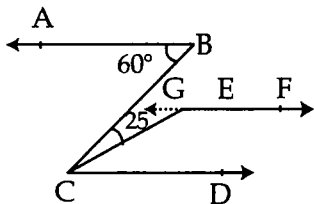
$\triangle ABD, \triangle ACD$

(v) ABCD is a square



$\triangle ADY, \triangle CDX$

(c) In figure $AB \parallel CD \parallel EF$
find $\angle ECD, \angle FEC$



(d) Find the mean of the following data :

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No. of students	15	25	40	30	20	10

- (e) Mohan purchased a cow for Rs. 9500 on May 15, 2009 but paid the amount including interest at the rate of 12% per annum on Oct 8, 2009. Find the total amount paid by him.
- (f) Prove that $\sqrt{3}$ is irrational
- (g) The minute hand of a clock is $\sqrt{21}$ cm long. Find the area described by minute hand on the face of clock between 7.00 A.M and 7.05 A.M.
4. Solve the following giving all necessary steps
A right-circular cylinder 3.6 cm in height and radius of its base is 1.6 cm. It is melted and recast into a right-circular cone with radius of its base as 1.2 cm. Find the height of cone.
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