# ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD
## (Department of Science Education)

**WARNING**

1. **PLAGIARISM OR HIRING OF GHOST WRITER(S) FOR SOLVING THE ASSIGNMENT(S) WILL DEBAR THE STUDENT FROM AWARD OF DEGREE/CERTIFICATE, IF FOUND AT ANY STAGE.**
2. **SUBMITTING ASSIGNMENTS BORROWED OR STOLEN FROM OTHER(S) AS ONE'S OWN WILL BE PENALIZED AS DEFINED IN "AIOU PLAGIARISM POLICY".**

**Course: Teaching of Mathematics** **Course Code: 6515**
**Level: M.A (Teacher Education)** **Semester: Autumn, 2013**
**Total Marks: 100** **Pass Marks: 40**

## ASSIGNMENT No. 1
**(Units: 1-4)**

Q.1 Keeping in view Bloom's Taxonomy, construct five questions (from $10^{th}$ class Physics) for measuring each of the following aspects: (5x4)
- i. Knowledge.
- ii. Comprehension.
- iii. Application.
- iv. Analysis.

Q.2 "For teaching of mathematics in an effective manner use of teaching methods other than traditional lecture is a must". Discuss supporting your argument with concrete examples. (20)

Q.3 Why we use audio visual aids? What audio visual aids can be used for teaching mathematics at secondary level? How we can use local resources for preparing A.V. aids? Give some examples. (20)

Q.4 Explain the need and importance of lesson plan. Prepare a lesson plan for teaching the topic," drawing of the direct tangents on a circle". (20)

Q.5 Briefly discuss the purpose of assessment in physics. Describe the relationship between educational objectives and evaluation process. (20)

# ASSIGNMENT No. 2

**(Units: 5-9)**

**Total Marks: 100** **Pass Marks: 40**

Q.1 Define the following with examples. (5x4)

i. Set ii. Sub Set

iii. Power Set iv. Functions

Q.2 Why logarithm is used in mathematics? Explain three laws of logarithm with examples. (20)

Q.3 a) Explain Greatest Common Factor and least Common Multiple with two examples for each from $10^{th}$ class mathematic text books. (10)

b) Explain solution of linear equation and simultaneous equations with two examples for each from $10^{th}$ class mathematics text book. (10)

Q.4 a) Solve the right angles triangle ABC in which a=25.6cm b=20.5cm. (10)

b) Prove that $1 = 2\cos\theta \sec\theta - \tan\theta \cot\theta$ (10)

Q.5 a) Construct a triangle ABC with measure of sides 4.5cm, 5cm and 6cm. Also raw angle bisectors of A, B and C. (10)

b) A ladder makes an angle of 45 with the floor and reaches a height of 10dm on the wall. Find the length of ladder. (10)