JOURNAL OF ENGINEERING AND APPLIED SCIENCE, Vol. 38, PP. 893-904 FACULTY OF ENGINEERING, CAIRO UNIVERSITY.

## ON THE FAYOUM WEIRS WITH ORIFICES

## N, A. Abdel Halim M. M. Sherif and A. S. El-Zaher

ABSTRACT: Recent problems with Fayoum weirs rating curves have been recognized. Orifices with large diameters in the weir wail are open to pass discharge without calibration. Experimental study is carried out to calibrate the combined structure (weir and orifice). A mean value for the coefficient of discharge for the combined structure is found to be 0.623 which is very close to the theoretical values for each separate structure. The experimental data has been utilized through power law equation to fit rating equation, hence could be used practically. Results are very encouraging, therefore further studies based on field measurements will be beneficial for practical purposes.