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**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF EDUCATION**

**UNIVERSITY EXAMINATION FOR DEGREE OF MASTER OF EDUCATION DEGREE IN PLANNING AND ECONOMICS OF EDUCATION**

**1STYEAR 2NDSEMESTER 2016/2017 ACADEMIC YEAR**

**MAIN CAMPUS**

**COURSE CODE: EMA 853**

**COURSE TITLE: COST-BENEFIT ANALYSIS IN EDUCATION**

**EXAM VENUE: STREAM: M.ED**

DATE: EXAM SESSION: DECEMBER 2016

TIME: 3.00 HOURS

**Instructions:**

1. **Answer ANY 3 questions**
2. **Candidates are advised not to write on the question paper.**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room.**

**QUESTION ONE**

* 1. Suppose that the cost of a project is C and the expected yield/benefits is B over a given period/ number of years ( n) and that the rate of return of the project is r. show that : The rate of interest, r, at which the difference between discounted benefits and discounted cost is Zero, is given as: (10Mks)

$$\sum\_{t=0}^{t=n}\frac{Bt-Ct}{(1+r)}=0$$

* 1. MrOluoch is considering investing ksh.500,000 in starting an academy. The expected future cash in-flows( benefits) in the next six years are as follows:

|  |  |
| --- | --- |
|  year | Cash inflows/benefits |
| 1 | 80,000 |
| 2 | 100,000 |
| 3 | 140,000 |
| 4 | 150,000 |
| 5 | 190,000 |
| 6 | 240,000 |

If the discounting factor is 10%, determine:

i)NPV

ii)IRR assuming 16% and 17% as discounting factors

iii)On the basis of the NPV, calculated in i) above, determine whether the project is viable and the rate at which the future value of expected benefits equals to present value costs ( 20mks)

**QUESTION TWO**

Assume that mr.Oluoch injects more funds into the academy as follows:

Year 2 sh. 150,000

Year 3 sh. 90,000

Advice mrOluoch whether the project is viable with the projected future cash inflows(Benefits) (15mks)

**QUESTION THREE**

Examine the various reasons why the society invests in education (15mks)

**QUESTION FOUR**

What strengths and criticisms have been leveled against the cost –benefit approach of educational planning (15mks)

**QUESTION FIVE**

1. Discuss the age earning profiles in the light of cost-benefit analysis approach (10mks)
2. What are the pros and cons of using the age-earning profiles in educational planning (5mks)