

Cairo University

**The Best Thesis
Awards**

**Academic Years
2009- 2010**

Issue IV

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Best Theses Awards

The strategy of the university aims to enhance its capabilities and potentialities through developing its human and financial resources, as well as to improve the academic abilities of its staff members and their assistants, in order to prepare them for the age of science and technological revolution. In this respect, the university has adopted unconventional methods to develop the system of academic research in order to meet the needs of society and research and to encourage its scholars and researchers. Among these means of encouragement are:

- Allocating an award for the best thesis (MSc – PhD) in each faculty or institute.

- Allocating an award for academic publishing in international periodicals, according to certain criteria.

- Financing academic proposals in different academic specializations within the framework of international research conferences held annually by the university.

This publication comprises the best theses (MScs – PhDs) for the academic year 2009-2010. The university will continue to periodically support its distinguished researchers, on both financial and moral levels.

Prof. Hussein Khaled

Prof. Hossam Kamel

**Vice - President for Post-graduate
Studies and Research
Cairo University**

**President
Cairo University**

Table of contents

Faculty	Page
Statistics	vii
Medical Sciences Sector	1
Medicine	3
Pharmacy	9
Oral and Dental Medicine	11
Nursing	15
National Cancer Institute	19
Physiotherapy	22
Engineering Sciences Sector	25
Engineering	27
Computers and Information	32
Urban Planning	35
Basic Sciences Sector	37
Agriculture	39
Science	45
Veterinary Medicine	48
Inter and Multi Disciplinary & Future Sciences Sector	51
National Laser Institute	53
African Studies Institute	55

Faculty	Page
Institute of Statistical Studies and Research	57
Humanity Educational Sector	59
Arts	61
Archaeology	65
Dar El-Ulum	68
Kindergarten Education	70
Specific Education	72
Institute of Educational Studies	73
Social Sciences Sector	77
Law	79
Commerce	85
Mass Communications	87
Economics and Political Science	91
Appendix	95

Statistics

Faculty in Year 2010	Ph. D.	M. Sc.
Medical Sciences Sector	10	9
Medicine	3	3
Oral and Dental Medicine	2	2
Pharmacy	1	1
National Cancer Institute	1	1
Physiotherapy	1	1
Nursing	2	1
Engineering Sciences Sector	4	4
Engineering	2	2
Computers and Information	1	1
Urban Planning	1	1
Basic Sciences Sector	6	4
Science	2	1
Agriculture	2	2
Veterinary Medicine	2	1
Inter and Multi Disciplinary & Future Sciences Sector	2	3
African Studies Institute	1	1
National Laser Institute	1	1
Institute of Statistical Studies and Research	-	1
Social Sciences Sector	6	5
Economics and Political Science	2	1
Commerce	1	1
Mass Communications	1	1
Law	2	2
Humanity Educational Sector	7	6

Faculty in Year 2010	Ph. D.	M. Sc.
Arts	2	2
Archaeology	1	1
Dar El-Ulum	1	1
Educational Studies Institute	1	1
Kindergarten Education	1	1
Specific Education	1	-
Total	35	31

	2006-2007		2007-2008		2009-2010	
Faculty	M. Sc.	Ph. D.	M. Sc.	Ph. D.	M. Sc.	Ph.D.
Medical Sciences Sector	5	7	10	12	9	10
Engineering Sciences Sector	4	3	4	2	4	4
Basic Sciences Sector	4	4	6	7	4	6
Inter and Multi-Disciplinary & Future Sciences Sector	3	2	4	1	3	2
Social Sciences Sector	3	4	2	4	5	6
Humanity Educational Sector	7	8	7	9	6	7
Total	26	28	33	35	31	35



Medical Sector

- * Medicine
- * Oral and Dental Medicine
- * Pharmacy
- * National Cancer Institute
- * Physiotherapy
- * Nursing



Name : Noha Mohamed El Husseiny

Faculty : Medicine

Dept. : Internal Medicine

Degree : Ph.D.



Title of Thesis: Serum Prohepcidin in Myelodysplasia

Supervisors : Dr. Mervat Mohamed Mattar, Dr. Randa Mohamed Sabry and Dr. Ihab Samih Amin

Abstract :

This study highlights the iron profile of myelodysplastic patients in the era of hepcidin and its pro-hormone, pro-hepcidin. Previous studies have focused on the anemia of chronic renal failure, thalassemia, and hemochromatosis. We determined if pro-hepcidin played a role in iron overload in patients with myelodysplasia (MDS). Thirty adult patients with MDS and 20 healthy adults (controls) were selected. Our results revealed a statistically significant difference in pro-hepcidin levels between the two tested groups ($Z = 2.9$, $p = 0.003$). There was a weak positive correlation between pro-hepcidin and hematocrit (HCT; $r = 0.49$, $p = 0.02$) in the healthy group only. Neither age, subtypes of MDS, gender, soluble transferrin receptor (sTFR) or ferritin affected the pro-hepcidin level in patients with MDS. The role of ineffective erythropoiesis in the regulation of pro-hepcidin is superior to the role of chronic blood transfusion therapy.

Keywords :

Myelodysplasia; Prohepcidin; Iron overload.

Name : Dina Ahmed Mehaney Osman

Faculty : Medicine

Dept. : Clinical and Chemical Pathology

Degree : Ph.D.



Title of Thesis: Molecular Diagnosis Of Mitochondrial And Nuclear Dna Mutations Among Egyption Children With Mitochondrial Encephalomyopathies

Supervisors : Dr. Fayza Abd El Hamid Hassan, Dr. Sawsn Abd Elhady Hassan, Dr. Randa Sabry and Dr. Reham Assem Zeyada

Abstract :

Background : Mitochondrial dysfunction is one of the most common causes of pediatric Encephalomyopathies. Mitochondrial (mt) and Nuclear (n) Deoxyribonucleic acid (DNA) mutations are important causes of Encephalomyopathies. **Objectives:** This study aimed at assessment of the frequency of these mutations among 15 Egyptian children clinically diagnosed as mitochondrial Encephalomyopathies. **Subjects and methods:** Histochemical staining for Complex IV,II was done in muscle biopsies in 2 patients. Biochemical analysis of the activities of the respiratory chain enzymes was determined in muscle biopsy homogenate in 4 patients .Molecular diagnosis was done by Polymerase chain reaction/Restriction Fragment Length Polymorphism (PCR/RFLP). Southern Blot and Sequence analysis of the coding genes of the nDNA and mtDNA. **Results:** Histochemical analysis results revealed negative staining for Complex IV and positive staining for Complex II in 2 patients. Biochemical analysis results revealed combined Complex I and IV deficiency in 2 cases and Isolated complex I deficiency in 1 patient. The mt/n DNA ratio was 40% reduced in one patient confirming the diagnosis of Mitochondrial Depletion Syndrome (MDS).Direct sequencing of the candidate genes didn't reveal any mutations. **Conclusions:** The molecular testing for the most common point mutations as a preliminary diagnostic guidance in well defined mitochondrial syndromes is the least invasive and least expensive way. Also, targeted molecular diagnosis based on biochemical analysis of respiratory chain enzymes makes the molecular evaluation of pediatric mitochondrial disorders more easier. Negative results of molecular diagnosis for mtDNA genes does not exclude mitochondrial disorder and involvement of nuclear genes should be always considered.

Keywords :

Mitochondrial Encephalomyopathy; Mitochondrial DNA-Nuclear DNA; Sequencing.

Name : Aisha Mahmoud Abd El-Aziz

Faculty : Medicine

Dept. : Tropical Medicine

Degree : Ph.D.



Title of Thesis: Evaluation of Ultrasonic Transient Elastography (Fibroscan) in Egyptian Chronic HCV Patients

Supervisors : Dr. Samch Saad Labib, Dr. Gramal Eldin Esmat Mohamed and Dr. Hani Mahmoud Khattab

Abstract :

Diagnosis of stage of liver fibrosis is essential for deciding antiviral therapy. The efficacy of fibroscan in diagnosis of hepatic fibrosis was studied among 197 chronic HCV patients, for them ultrasound guided liver biopsy and fibroscan were done.

Results :

- Inter observer variability between pathologists is less in fibrosis staging.
- Fibroscan is sensitive in detection of significant fibrosis $F \geq 2$ and cirrhosis.
- Schistosomal infection decrease sensitivity of fibroscan in detection of significant fibrosis (F_2 - F_3).

Keywords :

Liver fibrosis; Fibroscan (transient elastography).

Name : Eman Abas Farag

Faculty : Medicine

Dept. : Histology

Degree : M.Sc.



Title of Thesis: Evaluation of Two Medium-Depth Peels: Glycolic Acid 70% Versus Trichloroacetic Acid 35%. A Histological and Immunohistochemical Study on Rat Skin

Supervisors : Dr. Soheir Assaad Filobbos, Dr. Naglaa Mohamed Salama and Dr. Rahma Kamal El-din Abo-Elnour

Abstract :

The effects of TCA (35%) & GA (70 %) on rat skin were evaluated & compared using light microscopy & immunohistochemical technique. Skin biopsies were taken from the dorsal side of rats (n=40, 5 groups) at the end of the first and third week. Sections were stained with hematoxylin and eosin; Masson's trichrome, orcein and immunohistochemical stain for CD34. The epidermal thicknesses, dermal thickness, mean area percent of collagen & elastic fibers and mean area percent of immunopositive cells were done. There were increases in epidermal & dermal thickness, reorganization of the dermal structural elements, collagen, and elastic fibres and increase in CD34 immunopositive cells at the end of the third week with statistically non significant difference between the two peeling agents.

Keywords :

Chemical peel; Glycolic acid; Trichloroacetic acid; Hair follicles; CD34; Skin.

Name : Mayada Mohamad Mohamad

Faculty : Medicine

Dept. : Tropical

Degree : M.Sc.



Title of Thesis: Impact of the New Definition of Normal ALT on Virological Response to Combined Peg Interferon in HCV Patients

Supervisors : Dr. Gamal Eldin Esmat Mohamad, Dr. Ahmad Fouad Soliman and Dr. Wafaa Ahmad Alakel

Abstract :

Hepatitis C virus (HCV) is a major public health problem and is considered the most common etiology of chronic liver disease in Egypt. Serum alanine aminotransferase (ALT) activity is most commonly measured to assess hepatic disease of patients with chronic HCV have persistently normal ALT levels (approximately 30%) were historically excluded from treatment. So, revision of the definition of normal limits for ALT level is advisable as the current standards for "normal" ALT level fails to identify many patients with hepatic injury.

Results: No significant correlation between the base line ALT and the degree of inflammation or the stage of fibrosis in the liver biopsy either by the new or the old cut off, while there was significant correlation between the base line AST and both the degree of inflammation and the stage of fibrosis. Using multivariate logistic regression analysis, factors associated with failure of response were fibrosis (F3-4), age >50, elevated baseline AST (based on the old cutoff was more significant than the new cutoff) and activity (A3-4).

Keywords :

Chronic HCV; Predictors of response; Cut off of serum ALT; Cut off of serum AST.

Name : Khaled Ahmed Attia Taha

Faculty : Medicine

Dept. : Internal Medicine

Degree : M.Sc.



Title of Thesis: Role of Ultrasound Elastography in Prediction of Malignancy in Thyroid Nodules

Supervisors : Dr. Mona Mansour Abd El-Rahman, Dr. Hussein Hassan Okasha and Dr. Hossam El-Din Hussein Ahmed

Abstract :

Elastography is a newly developed dynamic technique that uses US to provide an estimation of tissue stiffness by measuring the degree of distortion under the application of an external force. US elastography has been applied to differentiate malignant from benign lesions in the thyroid gland. 46 nodules were studied, all malignant nodules had the score 3 or 4. For the score 4, sensitivity was 75.0 % & specificity was 100 %, for the score 3 and 4 sensitivity was 100% and specificity was 85.37% compared to FNAC which have sensitivity of 95%, specificity of 97%. US elastography seems to have great potential as a new tool for the diagnosis of thyroid cancer.

Keywords :

Thyroid nodules; Ultrasound; Elastography; Malignant thyroid nodules; Fine needle aspiration cytology.

Name : Marwa Galal El-Din El- Gazzar

Faculty : Pharmacy

Dept. : Pharmaceutical Chemistry

Degree : Ph.D.



Title of Thesis: Synthesis of New Pyrrole, Pyrazole, Pyrimidine and Pyrrolopyrimidine Derivatives Carrying A Sulfonamide Moiety of Expected Antitumor Activity With Studying the Synergistic Effect of γ -irradiation.

Supervisors : Dr. Fatma Abdel Fattah Ragab, Dr. Mostafa Mohamed Soliman Ghorab, Dr. Helmi Ismail Heiba and Dr. Hanan Al-Sayed Abou Youssef

Abstract :

In a search for new cytotoxic agents with improved antitumor activity, some new pyrrole, pyrazole, pyrimidine, and pyrrolo[2,3-d]pyrimidine derivatives bearing a sulfonamide moiety were synthesized. All the newly synthesized compounds were subjected to in-vitro cytotoxic screening. Also, synergism of the synthesized compounds with γ -irradiation was studied. The new compounds were docked in the active site of carbonic anhydrase enzyme.

Keywords :

Pyrrole; Pyrazole; Pyrrolopyrimidine; Antitumor; γ -irradiation; Carbonic anhydrase.

Name : Mai Nabil Mohamed

Faculty : Pharmacy

Dept. : Biochemistry

Degree : M.Sc.

Title of Thesis: Endothelial Nitric Oxide Synthase and Angiotensinogen Gene Polymorphism in Coronary Artery Diseases in Egypt

Supervisors : Dr. Tarek Mohamed K. Motawi, Dr. Olfat Shaker and Dr. Mohamed Taha Abdel-Reheem



Abstract :

Genetic factors contribute to the pathogenesis of coronary artery disease (CAD). We studied 100 patients with CAD and 50 healthy individuals to assess the association of endothelial nitric oxide (eNOS) polymorphism (Glu298Asp) and angiotensinogen polymorphisms (M235T) and CAD in an Egyptian population. Serum nitric oxide (NO) and angiotensin I levels were also measured. The frequency of Glu298Asp and M235T polymorphisms were higher in the CAD group compared with controls. The mean level of NO was significantly lower ($P < .05$) while angiotensin I was significantly higher ($P < .05$) in patients with CAD than in controls. The frequency of eNOS TT allele of M235T variant was significantly higher in patients with CAD (20% vs 6%). The frequency of angiotensinogen (AGT) TT and T allele in patients with CAD was significantly higher ($P < .05$) than in controls (22% vs 6% and 47% vs 23%, respectively). Homozygosity for Glu298Asp and M235T polymorphisms may predispose to CAD.

Keywords :

Coronary artery disease; Endothelial nitric oxide synthase; Angiotensinogen; Polymorphism.

Name : Dina Mohamed Lotfi El-Bwshlawy

Faculty : Oral and Dental Medicine

Dept. : Oral Radiology

Degree : Ph.D.

Title of Thesis: Relationship Between Mandibular and Lumbar Bone Mineral Density in Osteoporotic Patients With Quantitative Computerized Tomography (QCT)

Supervisors : Dr. Mushira M. Abd El Lattif Dahaba, Dr. Mohamed Abd El Fattah and Dr. Hala Ahmad R. Youssef

Abstract :

Osteoporosis is a skeletal disease characterized by low bone mass that was thought to affect the jaw bones. In the current study, twenty females aged between 40 and 70 years were selected and screened by DXA scan of spine, femur and forearm. According to the resultant T-scores, they were categorized into normal group (five patients), osteopenic group (seven patients) and osteoporotic group (eight patients). The patients were further subjected to QCT examinations of both spine and mandible. Our results showed that on comparing the three groups concerning the mandibular BMD measurements by QCT, no statistically significant difference was found between the normal, osteopenic and osteoporotic groups regarding the buccal cortex, the lingual cortex or the trabecular bone. We concluded that systemic osteoporosis is not necessarily associated with mandibular osteoporosis and that the disease is not an absolute contraindication for dental implants placement.

Keywords :

Osteoporosis; DXA; T-scores, QCT; Buccal cortex; Lingual cortex; Trabecular bone; Dental implants.

Name : Shaymaa Ibrahim Mohamed Habib

Faculty : Oral and Dental Medicine

Dept. : Dental Material

Degree : Ph.D.

Title of Thesis: A Study of Composite Formulations Containing Calcium Phosphate

Supervisors : Dr. Taheya Ahmed Moussa, Dr. Sayed Hussein senior and Dr. Yasser El-Hanafy Greish

Abstract :

The aim of the present study was to prepare different calcium phosphate-polymer composite formulations in a trial to be used as dental/bone cement. Standard calcium phosphate powders were first prepared: hydroxyapatite (HAp) and dicalcium phosphate anhydrate(DCPA) powders, subjected to heat treatment and then mixed with polyacrylic acid(PAA) with different P/L weight ratios and Ca/P ratios forming different calcium phosphate-polymer composite . These composites were dry HAp/ PAA, calcined HAp/PAA, DCPA /PAA and pyrophosphate/PAA. Commercial bone cement G-BONE was used as control group. Formulated composites were characterized by the aid of X-ray diffraction analysis and Fourier transform infrared spectroscopy. Physical and mechanical evaluation of composite specimens was carried out as regard working and setting time, film thickness, compressive strength, solubility%, dimensional change, porosity and pH changes. Then, biocompatibility and chemical response of the investigated composites were assessed regarding cytotoxicity, cell viability, proliferation and attachment of osteoblast cells, differentiated from mesenchymal stem cells, on the surface of the different composite specimens.

Results revealed cellular attachment and trabecular bone formation in DCPA /PAAcomposite at Ca/P molar ratio 1.67 with setting time of 38min \pm 3.50, compressive strength of 19.7 \pm 0.886MPa and 39.7% porosity. Moreover, statistical analysis showed that this composite had the highest pH values (6.4) which favour the osteoblast viability and proliferation. These features made DCPA /PAAcomposite excellent candidate as scaffolds for bone tissue engineering.

Keywords:

Bone cement; Tissue engineering; Calcium phosphate; Hydroxyapatite; Dicalcium phosphate anhydrate.

Name : Reham Salah Hamed

Faculty : Oral and Dental Medicine

Dept. : Oral Pathology

Degree : M.Sc.

Title of Thesis: Immunohistochemical Expression of Matrix Metalloproteinase (MMP-2) and its Tissue Inhibitor (TIMP) in Solid and Unicystic Types of Ameloblastoma

Supervisors : Dr. Merfat Moussa and Dr. Hend Wageh

Abstract :

This study was done to evaluate the role of MMP-2 and TIMP-2 expression in solid and unicystic ameloblastoma. Methods Immuno-histochemistry was carried out to detect MMP-2 and TIMP-2 in formalin fixed paraffin-embedded samples of 33 specimens of different histological variant types of solid and unicystic ameloblastoma. Results MMP-2 immuno-expression was positively expressed in all variants of ameloblastoma the expression of TIMP-2 was also evaluated and showed a statistically significant highest level of unicystic ameloblastoma and the lowest on follicular ameloblastoma.

Name : Nehal Nabil Abd Elaziz Roshdy

Faculty : Oral and Dental Medicine

Dept. : Endodontics

Degree : M.Sc.

Title of Thesis: An Assessment of the Cytotoxicity, Genotoxicity and Surface Topographic Changes of Root Canal Dentin Walls Following the use of Different Irrigating Solutions

Supervisors : Dr. Jealan Mohammed El shafei and Dr. Samia Abd-Elsamaie Shouman

Abstract :

The aim of that in-vitro study was to evaluate and compare different irrigating solutions namely; BioPure MTAD, NaOCl and 17% EDTA regarding: Their cytotoxic behaviour using the MTT tetrazolium assay. Their genotoxicity utilizing the Ames test and the surface changes at different areas of the root canal by SEM. The following conclusions were drawn: BioPure MTAD exerted a less cytotoxic effect compared with 17% EDTA and various concentrations of NaOCl. The protocol of using NaOCl/ MTAD showed its efficiency in complete removal of the smear layer from different areas of the root canal system.

Keywords:

MTAD; Irrigating solutions; Cytotoxicity; MTT tetrazolium assay; Genotoxicity; Ames test; SEM.

Name : Naglaa Fathy Mahmoud Ibrahim

Faculty : Nursing

Dept. : Pediatric Nursing

Degree : Ph.D.



Title of Thesis: Impact of Play Therapy Program on Attention and Activity of School Age Children with Attention Deficit Hyperactivity Disorder (ADHD)

Supervisors : Dr. Mirret M. Darwish, Dr. Azza A. El-Bakry and Dr. Gehan El-Samman

Abstract :

Attention deficit hyperactivity disorder is the most commonly diagnosed behavioral disorder of childhood and the most common neurobehavioral disorder among school age children. play therapy as the systematic use of a theoretical model to establish an interpersonal process where in play therapists use the therapeutic powers of play to help clients prevent or resolve psychosocial challenges and achieve optimal growth and development. The power of play is to communicate with and to help people, especially children, to engender optimal integration and individuation. So the aim of the current study is to evaluate the impact of play therapy program on attention and activity of school age children with attention deficit hyperactivity disorder (ADHD) in outpatient psychiatric clinic in Cairo University Specialized Pediatric Hospital. A sample of 60 children with ADHD (30 children for study group and 30 for control). Data were collected by using structured interview schedule, Children Behavior Checklist, Conner's scale for parents and teacher and Self-Esteem inventory of children and ADHD Symptoms Observational. The findings of this study revealed that more than two thirds of children were male. There was a statically significant difference in hyperactivity and attention between pre and post assessment of study group in Conner's scale for parents and teacher. Most of children before intervention showing low self esteem in both groups, while after intervention the majority of children in the study group showed medium level of self esteem, there was a highly statistically significant difference between pre and post scores of Self-esteem Inventory in the study group. It can be concluded that children who received the play therapy program showed increasing in attention and decreasing in hyperactivity and improvement in self esteem. This study recommended that early detection of children have ADHD symptoms in nursery school, early school years, design special program as group therapy or play therapy for children diagnosed as ADHD, follow up study play therapy for long period in children with ADHD, and replication of the study on larger number patient.

Keywords :

ADHD; School age children; Play therapy.

Name : Yousria Abd El Salam S. Abd El Ghani

Faculty : Nursing

Dept. : Medical –Surgical Nursing

Degree : Ph.D.



Title of Thesis: Impact of A Designed Nursing Clinical Pathway
Guidelines on the Cardiac Pacing Patients' Outcome at the
Critical Care Units of El-Manial University Hospital

Supervisors : Dr. Warda Youssif, Dr. Waheed Radwan and Dr. Manal
Sayed

Abstract :

During the last 10 years, pacing improves the quality of patients' life and reduces morbidity and possibly mortality. Clinical pathways are increasingly guiding the care of hospitalized patients. Therefore the aim of this study was to examine the impact of a designed nursing clinical pathway guidelines on cardiac pacing patients' outcome. To fulfill the aim of this study, the following research hypothesis was formulated: Cardiac pacing patients who will be exposed to a designed nursing clinical pathway guidelines will show better outcome than those who will not. A convenience sample of 60 adult male and female patients admitted to the Critical Care department at El-Manial University Hospital for insertion of temporary or permanent pacemakers were recruited to fulfill the aim of this study. Six tools were formulated& tested to collect data pertinent to the study; Sociodemographic and medical data sheet, Pre/Post knowledge questionnaire sheet, an Observational checklist, Complication assessment sheet, Compliance assessment sheet and Variances analysis sheet. Structured interview, reviewing medical records, direct observation and physical examination techniques were utilized for data collection. The study results revealed, the post total mean knowledge scores of the study group subjects is increased significantly as compared to the control group ones during the different assessment periods with the following t& p values ($t= 39.3$, $t= 34.9$, $t= 38.9$, $t= 34.3$ at $p=0.000$), higher total compliance scores among the study group subjects as compared to the control group ones during the three follow up assessment visits with the following t& p values ($t=11.28$, $t=11.68$ & $t=10.99$ respectively at $p= 0.000$ for all t values), also, study group subjects showed a significant shorter hospital stay than the control group ones with the following t and p values $t=2.93$ at $p=0.005$ as well, the study group subjects showed a significant lesser complications as compared to the control group ones during the three follow up assessment visits with the following X^2 &p values ($X^2=8.52$ at $p=0.004$, $X^2= 10.41$ at $p= 0.001$ & $X^2=5.95$ at $p= 0.015$ respectively).

It can be concluded that, enrichment of patients' knowledge and practices in relation to their condition and utilization of the clinical pathway as an approach of care in addition to negative variances control and adherence to the therapeutic regimen could have a positive impact upon reduction of pacemaker complications and an improvement of patients' outcome. So the study recommended, conduction of further studies in order to assess the effectiveness of clinical pathway applications on patients' outcome regarding different cardiac disorders with replication of this study on a larger probability sample from different geographical locations at the Arab Republic of Egypt.

Keywords:

Cardiac pacing; Clinical pathway; Knowledge; Compliance; Hospital stay; Complications and variance analysis.

Name : ola abd el-rahman hekal

Faculty : Nursing

Dept. : Pediatric Nursing

Degree : M.Sc.



Title of Thesis: Breastfeeding Pattern among Infants with Congenital Heart Diseases At Cairo University Pediatric Hospitals

Supervisors : Dr. Mirret M. Darwish, Dr. Wael M. Lotfy and Dr. Shadia R. EL Guindy

Abstract :

It is a widespread misconception that infants with CHD are not able to breastfeed. Malnutrition and growth retardation are common worldwide in infants and children with CHD. So, the aim of this study was to investigate breastfeeding pattern among infants with CHD at medicine departments and pediatric outpatient clinics at Cairo University Specialized Pediatric Hospital and at medicine departments at Pediatric University Hospital (EL Moniera Hospital). Total sample of 100 infants with CHD and aged from birth to 24 months was recruited for this study. Data were collected by using interview schedule. The results of this study revealed that the highest percentage of the infants' age was between 1 month and 6 months. Regarding to mothers' characteristics the majority of mothers' age ranged from 20 to 35 years old and more than one third of mothers had secondary school education and most of the mothers were housewives. The highest percentage of the sample had normal weight according to Egyptian growth curves. The majority of infants were diagnosed as having acyanotic heart diseases. Most of the infants were on breastfeeding. Nearly two thirds of the sample was on exclusive breastfeeding, more than one quarter of the sample was using bottle feeding beside breastfeeding, and the lowest percentage of the sample was taking bottle feeding only. The majority of mothers were continuing breastfeeding for their infants although they were having health problems during breastfeeding. There were no statistically significant differences between breastfeeding pattern (time of starting breastfeeding after delivery, mode of breastfeeding, frequency of breastfeeding, and breastfeeding on demand) and types of CHD. It can be concluded that most of the infants were taking breastfeeding while they complain from tachycardia and tachypnea. This study recommended that educational programs about optimal breastfeeding practices for infants with CHD must be conducted for mothers, nurses, and doctors to understand the various feeding techniques and strategies to overcome feeding challenges that may encountered those infants.

Keywords:

Breastfeeding; Feeding Pattern; CHD.

Name : Ahmed El Saied El Bastawisy

Faculty : National Cancer Institute

Dept. : Medical oncology

Degree : Ph.D.



Title of Thesis: Outcome of Neoadjuvant Chemotherapy in Inflammatory Breast Cancer

Supervisors : Dr. Rabab Mohamed Gaafar, Dr. Saad Said Eisa, Dr. Gamal Amira Mohamed and Dr. Maha Hussein Helal

Abstract :

Background: Inflammatory breast cancer (IBC) is the most aggressive form of primary breast carcinoma and is associated with peculiar clinical and biological features and with a dismal outcome despite multimodality treatment approaches.

Patients and methods: This is a prospective case control study comparing two groups of newly diagnosed patients with: 1) inflammatory breast cancer (IBC). 2) non inflammatory locally advanced breast cancer(LABC) .In both groups: MIB1, ER,PR,Her2neu were assessed. Neoadjuvant chemotherapy consisted of four cycles of FEC100 , fluorouracil (500 mg/m² day 1), epirubicin (100 mg/m² day 1), and Cyclophosphamide (500mg/m² day1), all i.v. every 21 days, followed by modified radical mastectomy according to clinical response , postoperative chemotherapy with two courses of the same regimen was given. Radiotherapy was administered after the completion of chemotherapy, a total dose of 50 Gy in 2.0 Gy daily fractions was delivered to the chest wall and the ipsilateral supraclavicular fossa. Hormonal manipulation was administered according to the hormonal status of the tumor (Tamoxifen 20 mg po dailyfor 5 years) in ER and or PR positive tumors starting after the completion of radiotherapy. primary end points were a)comparison of MIB1 score in both groups. b) comparison of clinical and pathological responses in both groups. secondary endpoints were comparison of progression free survival and overall survival in both groups.

Results: A total of 42 patients ,of them 21 cases are stage III B (T4d,N0-2 M0) IBC and 21 are stage III B (T4a-c,N0-2,M0) LABC,aged 28 to 68 (mean 47.28 ± 9.08) were included and followed up from November 2007 till February 2010 with a median follow up period of 22.5 months (5-26). Toxicity of both arms, mainly hematologic , nausea and vomiting, was in general acceptable without treatment-related death. 81.3% of IBC patients had high score MIB1 as compared to only 43.8% of LABC patients and the difference was highly significant statistically. (P-value =0.028). There was a trend towards worse objective clinical response to neoadjuvant chemotherapy in IBC arm, 57.1% (4.8% complete response,CR) as compared to LABC ,81% (9.5 % CR) in LABC.

(P-value= 0.09). Overall pathological response (complete pathological response, pCR +partial pathological response, pPR) was 35.3% in IBC arm as compared to 40% in LABC arm ,(P-value = 0.618) .1 , 2 years and median progression free survival (PFS) were 55.87% ,37.71% and 21.7 months respectively in IBC arm compared to 85.71% ,66.67% in LABC(median PFS was not reached),(P-value=0.072). 1 and 2 years overall survival(OS) were 69.82 % and 51.20% respectively in IBC arm compared to 95.24%, 95.24% in LABC arm .(P-value = 0.0038).

Conclusions: IBC should be considered and managed as a separate entity.MIB1 high score is a potential molecular marker for IBC.

Keywords:

Inflammatory breast cancer; Outcomes; Neoadjuvant chemotherapy.

Name : Rania Fathy
Faculty : National Cancer Institute
Dept. : Radiation Oncology
Degree : M.Sc.



Title of Thesis: Clinico-Epidemiological Study of Breast Cancer Patients Presented to National Cancer Institute-Cairo University (1999-2003)
Supervisors : Dr. Magda El Mongy, Dr. Farouk Haggag and Dr. Hesham El Hossieny

Abstract :

Aim of study: This retrospective study was designed to evaluate clinicopathological data including stage, results of treatment, and prognostic factors which affect the overall survival & disease free survival.

Patients and methods: This is a retrospective study carried out at the radiotherapy department, National Cancer Institute, Cairo University on 1009 patients treated for primary breast cancer between 1999 – 2003.

Results: The median follow-up was 68 months. Local regional relapse occurred in 23 patients (2.3%) and distant relapse occurred in 203 patients (20.1%). Both locoregional and distant relapse were reported in 32 patients (3.2%). The DFS at 3 and 5 years were 87% and 78% respectively, while OAS at 3 and 5 years were 96.4% and 91.4% respectively. Multivariate analysis of different prognostic factors showed that the independent bad prognostic factors in the study for disease relapse are positive lymph nodes (more than 10), tumor size T3, T4 with significance of 0.0001 for each and pathologic grade with significance of 0.003. Adjuvant chemotherapy showed no significant improvement in the survival for node negative patients as a whole, but for T3 and T4 lymph nodes negative patients, significant improvement in the median survival in favor of the use of adjuvant chemotherapy was reported. (P value = 0.03).

Conclusions & Recommendations: The most important independent bad prognostic factors for relapse are positive LNs more than 10, tumor size T3, T4 and pathologic grade. The timing of radiotherapy affects the disease free survival significantly also it is recommended to analyze the group of patients with LNs negative using well designed randomized trials.

Keywords :

Clinico; Pathological study breast cancer.

Name : Ibrahim Mohammed A. Ragab

Faculty : Physical Therapy

Dept. : Physical Therapy for Musculoskeletal Disorder and its Surgery

Degree : Ph.D.



Title of Thesis: Effects of a Suggested Physiotherapy Program on Function in Bilateral Leg Lengthening Using the Ilizarov Method

Supervisors : Dr. Nadia Abd El Azeem Fayiaz, Dr. Alaa El deen Abd Al Hakim Balbaa and Dr. Yasser Ali El Batrawy

Abstract :

Purpose: This study was conducted to investigate the functional performance of patients underwent bilateral leg lengthening for constitutional short stature with Ilizarov external fixation by comparing the suggested physical therapy program to Barker's program. **Methods:** The study included 36 patients assigned randomly into two groups; (group A) which received the suggested physiotherapy protocol and (group B) which received Barker's exercise program. A one hundred-point scale was developed for evaluation. This scale was designed based on symptoms, functional tests, clinical examination findings, and performance tests. Rating was executed at different time intervals (latent period, distraction phase, consolidation phase, and one week post-frame removal) during a six-month physiotherapy program. Scores at different periods were compared for both groups. **Results:** showed, at the end of the latent period, (group A); good 6 patients, fair 9 patients, poor 3 patients. While for (group B); good 5 patients, fair 8 patients, poor 5 patients, while significant difference was demonstrated at the end of distraction phase, (group A); good 6 patients, fair 11 patients, poor 1 patient, for (group B); good 5 patients, fair 10 patients, poor 3 patients, significant difference at the end of consolidation phase was manifested, for (group A); excellent 15 patients, good 3 patients, for (group B); excellent 9 patients, good 8 patients, fair 1 patient, and finally, at the end of one week post-frame, (group A); excellent 16 patients, good 2 patients, for (group B); excellent 13 patients, good 4 patients, fair 1 patient. **Conclusion:** We concluded that the suggested program could be considered important during rehabilitation of patients treated with Ilizarov leg lengthening.

Keywords:

Bilateral Leg Lengthening; Ilizarov; Physiotherapy.

Name : Abeer Farag Hanafy

Faculty : Physical Therapy

Dept. : Biomechanics

Degree : M.Sc.



Title of Thesis: Assessment of Summated Extension Moment of Lower Limbs Following Anterior Cruciate Ligament Reconstruction

Supervisors : Dr. Salam Mohamed El-Hafez, Dr. Ahmed Abdel-Azziz and Dr. Ahmed Yousry Radwan

Abstract :

The forces imposed on the body during landing must be attenuated primarily by the musculoskeletal system through eccentric muscle action of the lower limb extensors, so the summated extension moment (SEM) of lower limbs had been used as a measure for the shock absorption capacity of the limb. The purpose of this study was to assess the effect of ACL reconstruction using semitendinosus tendon as an autograft on the shock absorption capacity, through measuring the SEM of the lower limbs during jogging and forward single leg hopping tasks. Kinetic parameters were collected from both operated and non-operated lower extremities of 20 subjects; 6-12 months after ACL reconstruction (mean age 24.8 ± 5.1 year, mean height 1.76 ± 0.03 meter, and mean weight 75.6 ± 7.08 Kg). A within-subject design was selected to compare the operated and non-operated sides. Data were analyzed using two tailed paired t-test with an alpha level of 0.025. There was no significant difference in the SEM values between the operated and non operated lower extremities during jogging, or during hopping. Additionally, Hotelling's test (Multivariate Analysis of Variance (MANOVA), was used to compare each individual joint's extension moment within the operated sides to its respective contralateral joint. There was no significant difference between the operated and non-operated lower extremities during jogging or during forward hopping tasks. Correlation coefficient revealed a non significant negative correlation between the extension moments of the hip and knee joints of the operated lower extremities during jogging and hopping. These results may indicate that patients who underwent this operative technique developed an adequate shock absorption capacity in their lower extremities during highly demanding activities like jogging and forward hopping, the negative correlation also indicates a reestablishment of a sound neuromuscular adjustment pattern between the extensor muscles of the operated lower extremities which is essential for functional performance.

Keywords:

ACL Reconstruction; Summated extension moment; Support moment.



Engineering Sector

- * Engineering
- * Urban Planning
- * Computers and Information



Name : Haneen Abdel-Salam Ibrahim

Faculty : Engineering

Dept. : Chemical Engineering

Degree : Ph.D.



Title of Thesis: Evaluation of Using Synthetic Zeolite as A Backfill Material In Radioactive Waste Disposal Facility

Supervisors : Dr. Nabil Mahmoud Abdel Monem, Dr. Mohamed Hanafy Mahmoud and Dr. Ahmed El- Kamash

Abstract :

The work presented in this thesis is an examination of the feasibility of using synthetic zeolite NaA-X blend prepared from fly ash (FA) as backfill material in the proposed radioactive waste disposal facility in Egypt. The migration behavior of cesium and strontium ions, through the proposed backfill material is studied using mathematical models. The conducted work showed that the prepared zeoliteNaA-X blend have proven a good behavior in the containment of the studied radionuclide and can be fruitfully used as backfill material in the proposed shallow disposal facility in Egypt.

Keywords :

Backfill material; Synthetic zeolite; Cesium; Strontium; Sorption.

Name : Taher Mohamed Salah El-Din

Faculty : Engineering

Dept. : Mechanical Design and Production

Degree : Ph.D.



Title of Thesis: Enhancement of Performance of an Electrohydraulic Servo System for Mould Oscillation Control in Continuous Casting Machines

Supervisors : Dr. Saad Abdel Fattah Kassem, Dr. Siegfried Helduser and Dr. Yasser Zeyada

Abstract :

A large mass oscillatory motion with controllable frequency, amplitude and form is frequently realized by means of two or more hydraulic servo cylinders of synchronized motion. A method for improving the synchronization of motion of two hydraulic servo cylinders used to oscillate the mould in a continuous casting steel plant is proposed. In this method a fuzzy logic controller (FLC) and a PID controller are alternatively proposed to establish a cross coupling synchronization between the motions of the two originally uncoupled and independently driven servo controlled cylinders. This is performed with the aim to enhance the performance of the lagging cylinder, and accordingly to reduce the instantaneous errors in the positions of the two cylinders. A mathematical model is derived for the investigated system to study the effect of some disturbances which have a detrimental effect on motion synchronization, such as the cylinder internal leakage, the servo valve disturbed input signal and the servo valve delay in response. Simulation results show that using either a FLC or a PID controller for motion cross coupling synchronization improves the system performance in terms of reducing the errors in the cylinders positions to the practically acceptable values. Simulations also show that the FLC controller yields a better performance, under the investigated parameters, compared with the PID controller.

Keywords :

Modeling; Hydraulic servo cylinders; Synchronization; Fuzzy logic control; PID controller.

Name : Reda Rabiea Abd El Rasol

Faculty : Engineering

Dept. : Petroleum

Degree : M.Sc.



Title of Thesis: Production Allocation in Multi-Layers Producing Wells Using Temperature Measurements

Supervisors : Dr. Mohamed Abdel Dayem, Dr. El-Sayed Ahmed El-Tayeb and Dr. Ahmed Mohamed Daoud

Abstract :

Temperature measurements inside wellbore using Distributed Temperature Sensors (DTS) are increasingly used for monitoring producing layers of vertical wells. The temperature data from DTS are reliable, accurate and continuous in time (readings every few minutes) and space (readings every meter). One of the potential uses of temperature measurements is to infer the amount and types of fluid entering wellbore. To perform such an inference requires a temperature model.

A new methodology is developed to allocate gas rate and associated water of each individual layer using (DTS) and the total surface production of gas and water. This methodology consists of two parts, in the first one; an Analytical forward model, for wellbore temperature response under single and two-phase production in a single and multilayer geometry, is proposed using a nodal representation of the well. This model accounts for the formation geothermal gradient, steady-state gas-water flow in the wellbore, friction loss and Joule-Thomson effect in the wellbore, contrast in the thermal and physical properties of gas and water, wellbore heat losses due to unsteady heat conduction in the earth, and the mixing of the fluid streams of contrasting temperature.

The second part shows the solution technique, that is used to allocate the single phase gas and two phases gas and water rate for each layer by using derived forward model and software package (PIPESIM / PROSPER) for pressure loss estimate required by the derived temperature model.

In order to test the validity of the developed model, two hypothetical cases were used for this purpose. The first one is account for a well that produces from a single layer, while the second one is account for a multilayer well in which the temperature in the wellbore and production rate are known. The developed model is applied to calculate the temperature profile inside the wellbore. The calculated

profile is compared with the measured or the actual profile. The results showed that the developed model is valid and reliable.

At the end, the implementation of the developed production allocation model is shown, in details, by using the data of two actual cases studies to apply the developed model. The results showed that the model succeeded to accurately allocate the flow rate of gas and water phase for the multilayer producing wells.

Name : Robert Rezk Sudrak Andrawis

Faculty : Engineering

Dept. : Computer Engineering

Degree : M.Sc.

Title of Thesis: New Methods for Improving Forecasting Models Using Approach and Forecast Combinations

Supervisors : Dr. Amir Fouad Sorial Atiya

Abstract :

In this thesis we propose a Bayesian forecasting approach for holt's additive exponential smoothing method. Starting from the state space formulation, a formula for the forecast is derived and reduced to a two-dimensional integration that can be computed numerically in a straightforward way. In contrast with much of the work for exponential smoothing, this method produces the forecast density and, in addition, it considers the uncertainty in the initial level and the initial trend as part of the parameters to be evaluated. Another contribution of this paper is that we have derived a way to reduce the computation of the maximum likelihood parameter estimation procedure to that of evaluating a two-dimensional grid, rather than applying a five-variable optimization procedure. The forecast combination methods are investigated also and a new combination method based on geometric and harmonic mean is developed. This in addition to developing a new idea for introducing diversity in models under combination using different time aggregate window. The last contribution of this work is developing a model based on combination of machine learning and linear models that is used for NN5 data set. This model achieved the first place in the NN5 competition 2008.

Name : Eid Mohamed Emary Ahmad

Faculty : Computers and Information

Dept. : Information Technology

Degree : Ph.D.



Title of Thesis: Multi-scale Image Change Detection

Supervisors : Dr. Hoda Onsi and Dr. Khaled Mostafa

Abstract :

Landscapes are known to exhibit distinctive spatial patterns associated to different processes at different scales. Most of the existing change detection methods don't consider the scale of each individual phenomenon while each phenomenon requires its own preferable scale. In this work we propose a scale driven change detection system. The changes are generated from the input images at different resolutions. The generation of the multi-scale data set is performed based on the fractal net evolution approach (FNEA). Scale set used by FNEA are optimally selected from the scale domain ensuring good enough representation of the scale domain. Pattern search is used to optimize the selection of the required scales ensuring that no redundancy exist among the selected levels. Each scale images are analyzed to generate the changes existing in this scale. The used set of change indicators are spectral difference, texture difference and PCA low Eigen values which are threshold to obtain a change map at each scale. To obtain the final change map, a scale-driven fusion of all the extracted change maps is performed. The fusion is based on detecting for each object the preferred scale to obtain its change information. The best scale for an object is the scale where the object extent keeps static/almost static while moving from one scale to next scale(s). The system is applied for detecting changes in IKONOS data, for segmenting blood vessels in CT data, and for predicting future extent of sclerosis in MRI data. The results of applying the proposed system on the given data sets prove the relevancy of performing image analysis at different scales. Comparing the proposed system to other single scale systems and existing multi-scale systems one can remark an advance in the overall accuracy by more than 3%.

Keywords :

Change detection; Multi-scale image analysis; Optimal scale selection.

Name : Hussein Hussein Nasser Maza'ar

Faculty : Computers and Information

Dept. : Information Technology

Degree : M.Sc.

Title of Thesis: Improving the Performance of Image Recovery Over Computer Networks

Supervisors : Dr. Hesham Nabih El-Mahdy

Abstract :

The world has become a small village. The internet has played an important role in the communications revolution. It facilitates the management of institutions and organizations in many countries. Due to advances in using multimedia streaming (especially image), it becomes important to recover the transmitted data over lossy networks.

Link failures are common problems that might occur frequently in single and multiple operating communication systems. The image recovery against link failures is a branch in data recovery because of the wide variety of unintentional failures caused by natural disasters (earthquakes, fires, and floods), wear out, overload, software bugs, human errors, and so on, as well as intentional failures caused by maintenance action or sabotage. Such failures affect network facilities such as transmission or switching infrastructure, whose failure in turn disrupts communication services for business and residential users in Communications networks. In network survivability and network resilience, one needs to design efficient strategies to overcome this problem. Recently, Multiple description coding (MDC) has gained popularity as an effective technique to cope with transmission errors when compressed media contents are delivered via error-prone channels/networks. Multiple descriptions coding (MDC) approaches provide a reasonable solution for such mediums. MDC creates self decodable data packets, so called descriptions, to transfer data over unreliable networks. In the case of packet loss some of the descriptions might not reach the decoder. In such cases, the decoder utilizes only the received descriptions to reconstruct the original data as good as possible. If all descriptions are received, a higher quality signal can be reconstructed. The purpose of MDC is to effectively transmit data such as voice, image and video, over error-prone networks. Also network coding is a powerful tool that has been recently used to increase the throughput, capacity, and performance of communication networks. Network coding is used to maximize the throughput. Also, it is robust against packet losses and network failures. As an application of network coding, data loss because of failures in communication links can be detected and recovered if the sources are allowed to perform network coding operations.



This thesis presents a proposal for transmitting and recovering images using Multiple Description Coding (MDC) techniques over unreliable multiple links in a mesh network, while using network coding technique to add protection paths. In pure MDC, the loss of one or two descriptions degrades the received image quality. In the proposed technique, the protection paths ensure that all the descriptions are received even when one or two descriptions are lost, but at the expense of additional links. The image is divided into subimages called descriptions by the sender. Each description is encoded by JPEG standard. The descriptions transmit on different links or channels. The proposed method (MDC+NC) can recover the exact lost pixels rather than the interpolated pixels in classical methods such as interpolations.

Finally, we used MATLAB R2008a programming language to develop the proposed method (MDC+NC). A comparative evaluation between the classical method and proposed method and measures based on PSNR is presented. We studied the PSNR measure according to different quality factors and bit rates. We found the proposed method (MDC+NC) improved the quality of image reconstruction better than the classical method (MDC+BI). Also, the proposed method (MDC+NC) is simple and efficient.

Keywords:

Network Coding; Quality Factor; Mesh Network; Bilinear Interpolation; Multiple Description Coding; JPEG; Image Recovery.

Name : Mustafa Monir Mahmoud

Faculty : Urban and Regional Planning

Dept. : Urban Regional

Degree : Ph.D.



Title of Thesis: Adaptation the Regional Unites to Attract Cross Border Investments in the Framework of Regional Integration Agreements and National Development Strategy

Supervisors : Dr. Sami Ameen Amer, Dr. Rawya Aglan and Ebtahal Abdel Moety

Abstract :

Through what is happening in the world of rapid economic transformations and their differential impact on the development in various countries especially developing ones, many procedures - followed by the States - were appeared to limit the negative effects of those changes and to derive benefit from the positives, and the most important of these procedures is joining most of the countries to the Regional Integration Agreements as they are currently the main engine of global economic system and the direct framework which is organizing movement of the Cross Border Investment.

Under that, there was a need to re-state's role in development about how to prepare the Specialist Regional Unites which has the ability to attract Global Investments to become the radiant center of development at the state level in general, and particularly in the Economic Planning Regions.

Hence the importance of research which concerns about how to prepare the Regional Unites to attract global investments, and to coincide with the Strategic Development Trends of the State.

Keywords :

Regional integration; Cross border investments; Metropolitan areas; Regional development; Regional adaptation.

Name : Assem Abdel Salam Mohamed Kador

Faculty : Urban and Regional Planning

Dept. : Urban Design

Degree : M.Sc.



Title of Thesis: Redevelopment of Public Green Spaces Network in Cairo City

Supervisors : Dr. Sameh El Alaily, Dr. Abd Allah Abdel Aziz and Dr. Abbas El-Zafarany

Abstract :

This research investigates the problems of green areas in Cairo City and the possibility of solving these problems through transforming some of the state lands to new green areas and planting all the other parts, based on a Green Strategic vision of network green spaces. The research is divided into five main sections. The First is an analytical study of green spaces shortage in Cairo City. The second presents an evaluation for the state lands that could be turned into green spaces. and The Third discusses the tools and programs in forming green strategies and networks that is consisted of two major parts: the first one is the urban planning criteria of forming green networks. The second one is the role of ARC GIS in forming the network special data base. The fourth exhibits similar applied case studies, Finally proposed Green Strategy for the open and green space network.

Keywords :

Pumlic green spaces network; Green vision; Green strategy Green network; The Stats lands; Rues; Arc gis.



Basic Science Sector

- * Agriculture
- * Science
- * Veterinary Medicine



Name : Mohamed Hamza Abd El-Hameed

Faculty : Agriculture

Dept. : Agronomy

Degree : Ph.D.



Title of Thesis: Response of Some Promising Safflower Genotypes to Different Nitrogen Levels under Modern Irrigation Systems in Newly Reclaimed Soils

Supervisors : Dr. Nagah Mohamed Abu-Hagaza, Dr. Nabil Mohamed Mahrous and Dr. Samy Attia Mohamed

Abstract :

Two separate field experiments were carried out at the Agricultural Experiment Desert Station of the Faculty of Agriculture, Cairo University in Wadi El-Natroon, El-Beheira Governorate, Egypt, and were replicated during 2006/2007 and 2007/2008 seasons to study the response of 6 local and 7 introduced safflower (*Carthamus tinctorius*, L.) genotypes to four nitrogen levels (30, 45, 60 and 75 kg N/fad) under drip and sprinkler irrigation systems.

The objectives of this research were to find out the best genotype(s) to be grown under the stress conditions (salinity of irrigation water and soil, as well as, low soil fertility) and to determine the optimum nitrogen level for each genotype and their water use efficiency under drip and sprinkler irrigation systems. A split-plot design was used. The main plots were devoted to the nitrogen levels and sub-plots to genotypes.

The results obtained could be summarized as follows: under both of irrigation systems, 75 kg N/fad recorded the highest values of plant height, number of branches/plant, petal weight/plant, number of capitula/plant, number of seeds/capitulum, seed yield/plant, seed index, seed oil and protein percentage, as well as, petal, biological, seed, oil yields/fad, and water use efficiency (WUE). Two local genotypes (Bani-Suef and Aswan), as well as, three exotic genotypes, (Demo-137, S-350 and Turkey-168) surpassed other genotypes in seed, oil and protein yields/fad and WUE. The interaction of nitrogen levels and genotypes was significant for petal weight/plant, seed oil and protein percentages, as well as, petal, biological, seed, oil, protein yields, harvest index and WUE. Under drip irrigation, the highest seed yield and WUE were realized for Bani-Suef genotype fertilized with 60 kg N/fad. Meanwhile, the highest oil yield was achieved under 75 kg N/fad by the exotic genotype: Turkey-168. Under sprinkler irrigation, the highest seed

yield, oil yield and WUE were realized for Aswan genotype fertilized with 75 kg N/fed. Safflower collection contains two exotics, Turkey-168 and Cyprus-1697, useful for development of healthier oils with high 18:2 (ω 6) and low saturated fatty acids (SFA) by increasing N-level up to 60 kg N/fad.

The correlation study shows significant positive association between seed yield and most studied characters. Drip irrigation system surpassed sprinkler system in all studied characters.

Keywords:

Safflower; Genotypes; Nitrogen; Reclaimed soils; Drip; Sprinkler; Irrigation; Fatty acid composition; Correlation coefficients; WUE.

Name : Ahmed Eisa Mahmoud Ghoniem

Faculty : Agriculture

Dept. : Agricultural Botany

Degree : Ph.D.



Title of Thesis: Effect of *Bradyrhizobium japonicum*, Indoleacetic acid, Benzyladinine and Garlic extract on growth and structure of Soybean (*Glycine max* (L.) Merr).

Supervisors : Dr. Abdel-Fattah Ibrahim El-Shaarawi, Dr. Atef Zakaria Sabh and Dr. Sawsan Mahmoud Abou-Elela

Abstract :

The present investigation was carried out during the two successive seasons of 2006 and 2007, to study the effect of *Bradyrhizobium japonicum* with different levels of inorganic nitrogen, (IAA), (BA) and garlic extract on growth and characters, yield and some anatomical features of soybean. In addition, the study of structure and vascular development of the transition region of soybean seedling was intended.

The obtained results indicated that, application of inorganic nitrogen with level (20 or 30kg/fed.) lower than the recommended dose (40 kgN/fed.) negatively affected the growth and yield of soybean plant. Inoculation by *B. japonicum* and fertilization with low level of inorganic nitrogen (specially 20kg/fed.) improved plant growth characters and yield characters. In addition differentiation and development of root, stem and leaf tissues, specially xylem and phloem are promoted, compared with those of plants fertilized by inorganic nitrogen without *B. japonicum*. IAA, specially with the rate of 100 ppm, BA with 100 and 200 ppm in addition to Spraying plants with garlic extract specially at 400 and 600ppm. Improved plant growth characters and induced increase, mostly significant, in seed yield and most yield components.

Anatomical studied of the transition region of soybean revealed that, the beginning of vascular transition took place about 3 cm. below the soil surface, extended along the hypocotyl, and reorientation of vascular tissues from exarch radial to endarch collateral arrangement is completed in the upper portion of the hypocotyl.

Keywords:

Soybean; *B. japonicum*; IAA; BA; Garlic extract and Transition region.

Name : Ahmed Ismael Sayed Ismael

Faculty : Agriculture

Dept. : Animal Production

Degree : M.Sc.



Title of Thesis: Using Open Nucleus Breeding Scheme for Multiple Generations for Genetic Improvement of Milk Production in Egyptian Buffalo

Supervisors : Dr. Samy Abou-Bakr Mahmoud, Dr. Manal Mohammad A. El-sayed and Dr. Sameh Abd-Elfattah Abd-Elsalam

Abstract :

Populations of buffaloes with one milk record for each buffalo were generated using Monte Carlo simulation procedure of SAS (2004) with assumed mean (0) and variance (1). Four different sizes of populations (z): 10000, 25000, 50000 and 100000 animals were obtained. Four generations of progeny were obtained by selection of sires and dams of the next generations. Mating ratio (male: females) were designed to differ from 1:25 to 1:100 in natural mating (NM) and from 1:1000 to 1:5000 in artificial insemination (AI). The objective of using different mating ratios was to compare between different selection intensities among males. Genetic gain per generation and annual genetic gain were calculated.

Genetic gain increased significantly ($P < 0.05$) with the increase in generation number (G) being 282, 389, 457 and 488 kg milk for G_1 , G_2 , G_3 and G_4 , respectively. The annual genetic gain (G/Y) ranged from 48 kg/yr for G_1 to 83 kg/yr for G_4 . The annual genetic gain ranged from 64 kg/yr for $z=10000$ to 73 kg/yr for $z=100000$. Increasing nucleus size (p) from 0.05 to 0.10 increased genetic gain significantly ($P < 0.05$) from 390 to 418 kg milk. Non-significant differences in genetic gain among different proportions of males born used as sires (a) were observed. The main variables affecting the fraction of base sires born in nucleus (w) were z , p and a .

Annual genetic gain ranged from 50 to 66 kg milk/yr in NM and from 80 to 82 kg milk/yr in AI. Applying open nucleus breeding scheme for multiple generations of selection could accelerate the rate of genetic gain of milk production in Egyptian buffalo and increased the average milk yield from 15% in G_1 to 26% in G_4 .

Inbreeding coefficient increased significantly ($P < 0.05$) with the increase in generation number (G) in both the nucleus and the base populations.

Significant increase in inbreeding coefficient ($P < 0.05$) were observed between mating ratios (MR) in natural mating (NM) and artificial insemination (AI) in both the nucleus and the base populations.

Keywords:

Open nucleus breeding scheme; Genetic gain; Simulation; Inbreeding; Egyptian buffalo.

Name : Osama Ahmed Naser El-Din

Faculty : Agriculture

Dept. : Agricultural Economics

Degree : M.Sc.



Title of Thesis: An Economic Study of Egyptian Agriculture Labour Force in the Context of Economic Liberalization Policies

Supervisors : Dr. Mohamed Salem Mashaal, Dr. Ahmed Fouad Abd Elhakim and Dr. Khadiga Mohamed Elaasar

Abstract :

Employment is the backbone of human productive activity in the Egyptian national economy and the backbone of agricultural production activity in the agricultural sector in particular, which in turn, is one of the most important economic sectors in Egypt and is one of the basic pillars of economic development in Egypt. Therefore, it requires a description and economic analysis of the labor force and the agricultural labor force in Egypt. Contributing to the steady improvement in the performance of the Egyptian National prudent in recent years, reaching growth rates of 7.2% in 2008 as national investments increased until it reached a maximum of 179.3 billion in the same year, resulting in an increase in the absorptive capacity of the labor market, has been the provision of some 990 thousand new jobs, bringing the number of workers to 22.6 million people in 2008, leading to a decline in the unemployment rate to 8.4%. As for the national employment, it was found to be 10.33 million workers in 1981 then reaching 22.64 million in 2008. In the case of non-agricultural employment, there were over 6.38 million workers in 1981, and then non-agricultural employment increased until it reached 13.37 million in 2008. Given the importance of the agricultural sector as the leading sector in the Egyptian economy, it was found that agricultural employment encompassed 3.95 million workers in 1981, and then through the development of the agricultural sector, this gave rise to the rate of employment with an even greater number in agricultural employment that reached 7.27 million workers in 2008.

Shows through the study of economic efficiency that the national production is in the initial production phase, a phase of non-economic. That is, it does not use the labor as efficient. When examining the demand for labor using an explained variables function, production function, Cobb Douglas function and found that the GDP, the Invest and Wages have a positive impact on the demand for national employment, non-agricultural employment, Agriculture employment sectors.

And when predict the demand for labor during the time period 2009 - 2017 based on assumptions of growth rates, especially unexplained changes to the demand for employment for the three scenarios alternative to the reference scenario and the medium growth scenario and the scenario of high growth. It was found that the demand for workers at the national level and at the level of the agricultural sector increase with the transition from the reference scenario to the scenario of growth medium to high growth scenario, and along the years to predict.

Keywords:

Employment; National employment; Agricultural employment; Unemployment; the national unemployment; Unemployment agricultural; Gross domestic product; Production function; A function of demand for labor.

Name : Shimaa Muhammad Mahmoud Ali

Faculty : Science

Dept. : Chemistry

Degree : Ph.D.



Title of Thesis: Synthesis of Nano-particles Using Microwave Technique, the Study of their Physical Properties and Some Applications

Supervisors : Dr. Ahmed Galal Helmy and Dr. Soher Amin Darwish

Abstract :

SrRuO₃ was prepared by three different methods, microwave-assistant citrate, citrate-nitrate and coprecipitation methods. The electrocatalytic activity toward hydrogen evolution reaction was investigated by Tafel linear polarization and impedance measurements. The synthesis method affected structural, surface and catalytic properties of the prepared catalysts to a great extent. A catalyst prepared by the microwave method showed superior catalytic activity compared to those prepared by other conventional synthestic methods. The affect of the A-metal ion, in ARuO₃ (A = Ca, Sr and Ba), on the catalytic activity was studied. The A-site metal ion not only has a strong effect on the stability of the whole crystal configuration but also provides the possibility to improve catalyst performance by synergetic interactions with Ru⁴⁺ ion. In addition, the effect of the partial substitution at the A-site, in Sr_{1-x}Ca_xRuO₃, was also studied. The catalytic activity of ternary perovskites was higher than that of binary ones. Lanthanide-transition metal perovskites were prepared by the microwave-assistant citrate method. Factors affecting the catalytic activity, such as the operating microwave power and the microwave irradiation time, were investigated. The highest catalytic activity was obtained by preparing the catalyst at 720 W, and increased by increasing the irradiation time due to the increase in surface area. The effect of both A and B metal ions on the catalytic activity was investigated by preparing two series of catalysts, LaBO₃ (B = Ni, Co, Fe and Mn) and AFeO₃ (A = La, Nd, Sm and Gd). The effect of the partial substitution at the A- and B-sites was also investigated by preparing series of LaNi_{1-x}Co_xO₃ and La_{1-y}Sm_yFeO₃. A complete kinetic study (determination of the reaction order, the activation energy and the reaction mechanism) was made for all the prepared perovskites.

Keywords:

Perovskite; Nano-catalyst; Hydrogen evolution; Microwave synthesis; Tafel linear polarization; Impedance; XRD and SEM.

Name : Ahmed Adel Ahmed Mohamed

Faculty : Science

Dept. : Physics

Degree : Ph.D.



Title of Thesis: Studies on Superheavy Nuclei

Supervisors : Dr. Mahmoud Yahia Ismail, Dr. Ali Yahia Ellithi and Dr. Manal Makram Saad Botros

Abstract :

The present thesis deals with some properties of even-even superheavy nuclei, namely, their binding energies and α -decay half-lives. The binding energy of some even-even superheavy nuclei with the proton number $Z = 98 - 120$ is studied using a semi-microscopic but not self-consistent model. The calculated binding energies are in good agreement with the available experimental data. Moreover, we present a systematic calculation on α -decay half-lives of even-even heavy and superheavy nuclei in the framework of the preformed α -model. The obtained α -decay half-lives agree reasonably well with the available experimental data. The interplay of closed-shell effects in the α -decay calculations in giving the associated known magic or submagic closed-shell structures of both the parent nuclei and daughter products is also investigated.

Keywords :

Superheavy nuclei; Shell corrections; Binding energies; Alpha-decay half-lives.

Name : Amr Mohamed Abdel Moniem Hassan

Faculty : Science

Dept. : Chemistry

Degree : M.Sc.



Title of Thesis: Enamines and Azaenamines as Starting Materials for Synthesis of Some New Heterocycles

Supervisors : Dr. Said Ahmed Soliman Ghozlan, Dr. Mona Hassan Mohamed and Dr. Ismail Abdelshafy Abdelhamid

Abstract :

In this thesis a variety of polyfunctionally substituted pyridazines could be achieved through utility of simple readily obtainable starting materials. In the first part, we managed to prepare a series of azaenamines which then reacted with varieties of α , β -unsaturated nitriles to yield 1,4-dihydropyridazines and fused pyridazinoquinazolines. The prepared pyridazines were then used as precursors for synthesis of polycondensed pyridazine ring systems. The structure of the reaction products could be established with certainty through inspection of spectral data. In the second part, we were able to prepare 3-cyanomethylidene oxindole derivatives in excellent yields utilizing DBU-promoted Knoevenagel condensation of isatin derivatives with active methylene reagents. The isolated products were then reacted with azaenamines to yield spiro cyclic 2-oxindole derivatives incorporated with 6-amino-4H-pyridazines and their fused derivatives. The synthesized compounds are well established based on the various analytical and spectral analyses as well as X-ray single crystal.

Keywords:

Azaenamine; Chitosan; DBU; 1,4-dihydropyridazine; Pentaazabenz[a]fluorene; Pyrimido[4,5-c] pyridazine; Pyridazino[1,6-a]quinazoline-4-carbonylformimidate; 3-cyanomethylidene-2-oxindole; 4,3'-spiro(pyridazine)-2-oxindole.

Name : Gihan Farag Mohamed Asaad

Faculty : Veterinary Medicine

Dept. : Pharmacology

Degree : Ph.D.



Title of Thesis: Pharmacological and Toxicological Studies on Some Food Colouring Agents in Rats

Supervisors : Dr. Mohamed Mohamed Hashem, Dr. Attia Hassan Atta and Dr. Mahmoud Soliman Arbid

Abstract :

The effect of three colouring agents (Amaranth, Sunset Yellow and Curcumin) on the immune response of albino rats sensitized with sheep RBCs was studied. Each was administered at doses equal to and 10 times the acceptable daily intake (ADI). They were found to depress cellular immunity but not humoral immunity. Curcumin is also used as anti-inflammatory in higher doses than ADI as a result of cellular immunity depression and inhibition of interleukin release. The pharmacological and toxicological effects of the three colouring agents were studied. They found to have no adverse effect on glutathione and lipid peroxide on the other hand Curcumin after 3 months of administration in low and high doses decreased concentration of hepatic lipid peroxide so maintaining the integrity of the cell membranes. They also did not alter the liver and kidney function at the ADI dose but increase aminotransferases, alkaline phosphatase and urea at high doses. Administration of Amaranth at ADI dose caused skeletal abnormalities at 25% of the examined alive foeti which could be considered as a drastic result. So we conclude that amaranth should be avoided completely during pregnancy.

Keywords :

Colouring agents; Antioxidants; Liver; Kidney; Haematology; Teratology; Immunity.

Name : Moustafa Ismail Radwan

Faculty : Veterinary Medicine

Dept. : Microbiology

Degree : Ph.D.



Title of Thesis: Comparative proteomic and genomic study between *Salmonella Gallinarum* and other *Salmonella* serovars isolated from poultry

Supervisors : Dr. Kamilia Mahmoud osman and Dr. Mona Mehrez Ali

Abstract :

Comparative proteomics analysis of the cytosolic proteins of *Salmonella Gallinarum* (SG) and *Salmonella* Enteritidis (SE) isolated from poultry was performed. The 2-DE-separated proteins were compared between serovars via image master 2D Elite software and the identified spots that showed up or down regulation were selected for further identification using MALDI-TOF-MS. The differential expression among different serovars of the NCBI-matched proteins was further confirmed by Quantitative Real Time PCR.

The protein spots that were either constantly detected in all representative gels of SG and were completely absent in SE, or those spots that showed marked over-expression in SE over SG were selected for further characterization. A total number of 34 proteins were identified that representing diverse functional activities including energy production, metabolism, nucleic acid synthesis. Interestingly, some identified proteins have some relevance to bacterial virulence e.g. *Salmonella* pathogenicity island 1 effector protein, T-cell inhibitor protein, response regulator protein, paratose synthetase protein (*RfbS*) and heat shock protein 90. The study revealed the presence of some proteins of unknown function, which raise the speculation for their importance in either host adaptation or pathogenicity among *Salmonella Gallinarum* serovars.

Keywords :

Salmonella; Proteomics; Two dimensional gel electrophoresis; Mass spectrometry; q RT-PCR.

Name : Shymaa Ahmed EL B. EL Sherbiny

Faculty : Veterinary Medicine

Dept. : Pharmacology

Degree : M.Sc.



Title of Thesis: Pharmacokinetics and Effect of Tulathromycin on Abomasal Emptying Rate in Goats

Supervisors : Dr. Aziza Mahrous Mohamed Amer, Dr. Ayman G. Mostafa and Dr. Peter D. Constable

Abstract :

The pharmacokinetics of tulathromycin and its effect on abomasal emptying rate were investigated in lactating goats. Five goats received 2.5 mg/kg of tulathromycin by either (i.m.) or (i.v.) route with six weeks interval. Tulathromycin concentrations were determined in blood, milk and urine samples by microbiological assay method. Tulathromycin effect on abomasal emptying rate was estimated by paracetamol absorption test. Paracetamol concentrations determined in blood samples by colorimetric nitration assay. After IM injection, (C_{max}) was reached at 0.5 h postinjection (t_{max}) and F% of 95.8 ± 6.5 % was achieved. After IV injection the (V_{ss}) was $16,075 \pm 2,049$ ml/kg. The ratios between $C_{max-milk}/C_{max-plasma}$ and AUC milk /AUC plasma were high. Gastric emptying half life T_{50} after IM, IV was shorter than in control experiment. In conclusion, tulathromycin is rapidly absorbed with high bioavailability, highly distributed in tissues, slowly eliminated and extensively penetrating into milk. Tulathromycin has accelerating effect on abomasal emptying rate.

Keywords:

Pharmacokinetics; Tulathromycin; Abomasal emptying rate.



Inter/Multidisciplinary and Future Science Sector

- * **African Studies Institute**
- * **National Laser Institute**
- * **Institute of Statistical Studies and Research**



Name : Asmaa Elhassan Ramdan
Faculty : National Institute of Laser Enhanced Science
Dept. : Applications of laser in Meteorology, Photochemistry and Agriculture
Degree : PhD.



Title of Thesis: Study of the Elemental Composition of Bronze Alloys Artifacts Via LIBS Technique

Supervisors : Dr. Mohamed Abdel Harith Mohamed

Abstract :

In order to improve the performance of the LIBS technique, namely its sensitivity, reproducibility and limit of detection, we studied the effect of applying static electric field with different polarities on the emission spectra obtained in a typical LIBS set-up. The effect of applying electric field on the plasma plume parameters, i.e. plasma temperature T_e , and electron density N_e has been studied. In addition to the spectroscopic analysis of the plasma plume, the laser-induced shock waves were exploited to monitor the probable changes in the plasma plume dynamics, due to the applied electric field. The present study showed a pronounced enhancement in the signal to noise (S/N) ratio of different Al, neutral and ionic lines in case of forward biasing voltage (negative target and positive electrode). On the other hand there was a clear deterioration of the emission line intensities in case of reversed polarity. Such negative effect may be attributed to the reduction in electrons-ions recombination due to the stretched plasma plume. The plasma temperature has constant value in the average with the increasing electric field in both directions. This effect may be due the fact that the measured values of T_e are averaged for the whole plasma emission volume. The electron density decreases slightly in case of forward biasing while no significant effect is noticed in case of reversed biasing. Such slight decrease of N can be interpreted in view of the increase in the rate of electrons-ions recombination due to the presence of the electric field.

Keywords :

LIBS; Femtosecond laser; Metallic artifacts; Bronze alloys; Theoretical model of LIBS; Single and double laser pulse; LOD.

Name : Ahmed Mahmoud Saad
Faculty : National Institute of Laser Enhanced Science
Dept. : Laser Sciences and Interactions
Degree : M.Sc.



Title of Thesis: Near IR Lasing Properties of Semiconductor Nanocrystals

Supervisors : Dr. Iftitan E M Munir Azzouz, Dr. Mona Bakr Mohamed and Dr. Maram Taha Hussein

Abstract :

Great scientific and technological interests have been devoted to semiconductor nanocrystals quantum dots because of their promising applications such as display devices, biological tagging materials, photovoltaic and lasers. The colloidal synthesis of semiconductor nanomaterials allows for engineering their optical properties and electronic structure. Tuning the size of type II-VI semiconductor such as CdS, CdSe and CdTe allows for controlling their band gap all over the UV, visible and near IR regions.

We prepare different types of II-VI semiconductor such as CdSe and CdTe nanoparticles and studied how their absorption spectra and emission properties depend on the size and the surface of these properties nanomaterials. In addition, hetero-structure of CdTe/CdSe core shell nano-system has been prepared and their optical properties have been examined. These nanostructure materials are very promising to be used as lasing materials, because of the large stock shift and the long lifetime of these. Especially, the CdTe/CdSe core shell hetero-structure has a tunable band gap near the IR region depending on the ratio of the core to the shell size. The optical properties of CdSe, CdTe, CdTe/CdSe core shell quantum dots have been investigated under different lasing excitation intensity and at different temperatures. The optical gain and its dependence on the excitation power were examined and the lifetime of the emitting stat was determined.

Keywords :

Nanopartical; Laser; Semiconductor; Infer red lasing; Quantum dots; Execiton; Biexciton; Multiexciton; Trion; Core-shell materials; Cadmium selenide; Cadmium telluride; Photoluminescence; Synthesis; Life time; Power dependence; Temperature dependence; Auger Processes.

Name : Khaled El-Hossiny Mohamed Salih

Faculty : Institute of African Research and Studies

Dept. : Natural Resources

Degree : PhD.



Title of Thesis: Thermoelectric Reduction of Ilmenite Ore of North African Black Sands to Production of High Titanium Slag

Supervisors : Dr. Mohamed Tarik Labib, Dr. Mohsen Mohamed Aly, Dr. Mohamed El Menshawi Shalabi and Dr. Abbas Mohamed Sharaky

Abstract :

The maximum reducibility of this Rosset ilmenite (77%) can be achieved by using 1.5 stoichiometric amount metallurgical coke at 1200 °C. and increase to about 92% by using calcium fluoride 4 wt% as additive. And the maximum metallic yield is (87%) is obtained after 50 min. melting time by smelting of the ilmenite charges contain 1.5X coke stoichiometry in electric arc furnace. Presence of 4 wt. % calcium fluoride in the charges to be smelted increases the metallic yield to 93%, and increases the ratio of metal.

Keywords:

Ilmenite; Carbothermic reduction; Electro-thermic smelting.

Name : Shiren Mubarak Bases
Faculty : Institute of African Research and Studies
Dept. : History
Degree : M.Sc.



Title of Thesis: River Nile in the Ethiopian Egyptian Relations 1952-1974

Supervisors : Dr. Al Sayed Ali Ahmed Felifal

Abstract :

The River Nile is the Geographical Link between Egypt and Ethiopia, which influences the relations between both countries positively or negatively, hence the study of Egyptian and Ethiopian, with the River Nile at its Care is of Paramount Importance this due to the fact that the Nile is primary source of water in Egypt.

Keywords :

River Nile; Ethiopia; Egypt.

Name : Hiba Zeyada Muhammed Zeyada
Faculty : Institute of Statistical Studies and Research
Dept. : Mathematical Statistics
Degree : M.Sc.



Title of Thesis: On the Bivariate Generalized Exponential Distribution

Supervisors : Dr. Samir K. Ashour, Dr. Essam A. Amin and Dr. Hiba Z. Muhammed

Abstract :

Gupta and Kundu (1999) introduced the univariate generalized exponential (GB) distribution as a possible alternative to the well known gamma or Weibull distributions. The GE has lots of interesting properties and it can be used quite effectively to analyze several lifetime data. In many cases it is observed that it provides better fit than gamma or Weibull distributions. Since the distribution function of the GE is in a closed form, it can be used quite easily for analyzing censored data. The frequentest and Bayesian inferences for the unknown parameters of GE distribution have been developed by Gupta and Kundu (2007).

Although quite bit of work has been done in recent years on GE, but not much attempt has made to extend this to the multivariate case. Recently Kundu and Gupta (2009) define a bivariate generalized exponential distribution (BVGE), and proved that its marginal distributions are GB distribution. The joint cumulative distribution function, the joint probability density function and the joint survival distribution function of the BVGE are in closed forms, which make it convenient to use in practice. They used the method of maximum likelihood to estimate the unknown parameters of the BVGE distribution from complete samples. Although, the MLEs as expected can not be obtained in explicit forms, they used the EM algorithm to obtain them.

The first purpose of this thesis is to obtain the joint and the marginal moments and the joint moment generating function of the BVGB distribution. The second purpose is to estimate the unknown parameters of the BVGE distribution

from censored type I samples with random censor time using the method of maximum likelihood. The determination of parameters estimators requires solving non-linear equations, therefore, an estimation algorithms are implemented using the Mathcad (2001) software, for solving the aforementioned non-linear equations. Since Kundu and Gupta's (2009) estimates are from complete samples, then these estimates may be considered as a special case from our results.



Humanity Educational Sector

- * Arts
- * Dar El-Ulum
- * Archaeology
- * Educational Studies Institute
- * Kindergarten Education
- * Specific Education



Name : Tamer Youssef Amron

Faculty : Arts

Dept. : Geography

Degree : Ph.D.



Title of Thesis: Geomorphology of the Alluvial Fans Along the Coasts of the Red Sea in Sinai

Supervisors : Dr. El-Sayed El-Sayed El-Husseini

Abstract :

This thesis is a study of the geomorphological characteristics of the Alluvial Fans, which is located on the coast of the Gulf of Aqaba, the Gulf of Suez and Red Sea in South Sinai, between longitudes 32° – 34° east and latitudes 27° – 29° north. Number of these alluvial fans is 84 fans, with total area of 640.13 km², and the average area of 7.6 km². These fans were formed by a group of valleys, that covered area about of 17,229.20 km², with an average area of 205.11 km². This study prepared by using descriptive, statistical, analytical and comparative methods, to describe the properties of these fans and valleys, within the three regions (Aqaba, Suez, Red Sea). The scientific tools and methods, and modern software for data processing, are used in the context of geographic information systems and remote sensing.

Keywords :

Alluvial fans; Valleys; Gulf of aqaba; Gulf of suez; Red sea; Geomorphology geography; Geology; Geographic information systems (GIS); Remote sensing.

Name : Naiera Mohamed Mohamed Elwan

Faculty : Arts

Dept. : Sociology

Degree : Ph.D.



Title of Thesis: Civil Society's Elites A study of the Formation and Practices of the Syndicates' Elites

Supervisors : Dr. Ahmed Abdala Zayed

Abstract :

This study is concerned with the formation of lawyers and press syndicate's elites and their practices considering them models for civil society elites.

This study is concerned about the main concepts, into research cal heritages and analyzed elite and civil society sociologically.

Then the study put the elite in its historical and structural context.

The study deals with the formation of lawyers and press elites through recognizing the social background of the elite, the ways that they are rising up, the form of the organizational structure, and the oligarch cal trend.

This study is concerned with the elites practices whether in elite circle or between the state and public sphere.

Keywords :

Elite; Civil Society; Syndicate.

Name : Mervat Mohamed Abd-El Tawab

Faculty : Arts

Dept. : English

Degree : M.Sc.



Title of Thesis: Assessing Machine Translation Versus Human Translation

Supervisors : Dr. Salwa A. Kamel

Abstract :

This study aims to determine the state of the output of Arabic-into-English machine translation (MT) systems today. For this purpose, five Arabic texts machine-translated into English are compared with those created by human translators (HT). The output of five different online MT systems has been reviewed, and Sakhr (SR) MT was selected by virtue of its relatively advanced performance. The data has been obtained by using (SR) MT program to translate five Arabic texts, which were also handled by two qualified human translators. The translation has been assessed for quality by a panel consisting of three university professors who are at the same time proficient translators. Based on previous researches concerned with developing criteria for the objective evaluation of translation quality, five criteria are adopted: grammaticality, semantic lexical choice, cohesion, pragmatic equivalence and cultural accommodation. An assessment sheet has been designed to guide the judges in conforming to the same aspects of analysis and scales have been developed to allow the judge to assign scores to both HT and (SR) MT for each of the five criteria.

The scores were then accumulated and averages were calculated. The results show that (SR) MT output ranges from acceptable to poor. (SR) MT achieves the highest average scores for the spelling errors category and the lowest average scores for sentence structure. Most sentences are structurally incorrect and many inappropriate words have been chosen, resulting in serious damage to the meaning of the texts.

The output of (SR) MT is distorted and the texts lack cohesion and coherence. Machine translation can be used for gist understanding, for translating web pages and technical documents.

Name : Walaa Tawfik Farah Eshak

Faculty : Arts

Dept. : Classics

Degree : M.Sc.



Title of Thesis: The Etymology of Names, their Nature and Function, in Plato's Theory of Language. A Linguistic Approach to "Cratylus"

Supervisors : Ahmed Mohamed Etman

Abstract :

This study is divided into an introduction, three sections, a conclusion and three appendices. I is the etymology contained in "Cratylus", II proper names and place III includes an index of names of authors, and a list of shortcuts as well as the list of sources and referent Foreign and Arabic. The first section "the concept of name before Plato. The second section" the origin and nature of names in "Cratylus". the final section "the function of names".

Name : Rehab Ibrahim Ahmed Ahmed

Faculty : Archaeology

Dept. : Islamic Archaeology

Degree : Ph.D.



Title of Thesis: Iranian Lacquer Objects Through New Collection in Reza Abbasi Museum at Tehran-An Artistic comparable Study

Supervisors : Dr. Rabia Hamed Khalifa and Dr. Shabl Ibrahim Abaid

Abstract :

Iran has contributed a noticeable and effective role in the Islamic art development in general, and in the field of applied masterpieces industry in particular, as Iran has come, in such field, to an unparalleled head. Iranian museums are full of many masterpieces the Iranian craftsmen have created, some of which have found its luck in study, whereas a greater division the researcher and scholar hands have not reached for many various reasons. My choice had fallen upon a set of lacquered embellished Iranian masterpieces the Reza Abbasi Museum in Tehran preserves.

The lacquered masterpieces are considered as of the most important and prominent Iranian applied masterpieces, many of the World museums and private sets, are full of. Many scholars and researchers, particularly foreigners, have studied and shed light on many of them, which urged me to research and to go deeply into study such kind of masterpieces, through the set of the Reza Abbasi Museum in Tehran, as such set has not acquired its deserved share of study and documentation despite its importance, and what it contains of drawings and illustrative scenes and signature of craftsmen, beside its belonging to the most important four historical periods Iran had passed by, that is; the Safavid state, the Afshared state, the Zand state, and the Qajar state.

Such set is distinguished with that it includes many illustrative subjects, vegetal and animal paintings, ornamental elements, inscriptions and others, as well as the signature of many painters.

What is also remarkable is the researcher disagreement on determination of a definite convention in expression of the manufacturing approach used in such kind of masterpieces, particularly among the three conventions; "lacquer, varnish, lac".

I've divided the thesis into: Introduction which includes the subject importance, reasons of its selection, research problematic and difficulties and literature

preview. Preface; it addresses a historic passage on the Safavid epoch till the end of the Qajar epoch, and then four Parts. Finally, there are the results and recommendations. The thesis includes three annexure which are followed by the paintings and figures table of content, source table of content and references.

Keywords:

Laque; Lac; Lacquer; Safavi; Afshar; Zand qajar; Rezza abassi; Persian objects; Papier; Maché Miniature.

Name : Maha Ahmed Ali Ahmed

Faculty : Archaeology

Dept. : Conservation

Degree : M.Sc.



Title of Thesis: Study of Forms of Chemical Degradation "Discoloration, Fading, and Stains" of Black-and-white Fiber-Based Photographic Prints due to the Deterioration of the Silver-Gelatin Emulsion Layer "Applied on Selected Objects"

Supervisors : Dr. Mona Fouad Ali, Dr. Abdel Azez El Bayoumi and Dr. Mohamed Osama Sakr

Abstract :

Photograph conservation is a relatively new field triggered by the increasing awareness of the value of photographic records as powerful documentary tools that tell us stories about ourselves and our society. The invention of photography did not occur in a moment of inspired insight; it has a long history. Many photographic processes were introduced as a result; however, silver gelatin process is by far the most common process. Egypt as a country known for its unique treasures attracted many pioneer photographers; and therefore, Egypt owns numerous valuable and rare photographic records. Lack of awareness of the nature of photographs and how they deteriorate, lack of professionals, poor storage and display, air pollution, and neglect are the main agents that threatens Egypt's photographic heritage. The research included in this thesis studies the nature of silver gelatin prints and the different factors which affects their permanence. Additionally, it provides a preservation guide on how to properly store and display silver gelatin prints. The study also focuses on chemical degradation as a main form of damage popular between silver gelatin prints. This study was carried out through exposing greyscales imaged on black-and-white photographic paper to different aging conditions. The results were studied by means of visual inspection, reflection densitometer, fourier transform infrared, amino acid analysis, transmission electron microscope, and x-ray diffraction. The final part of the thesis involves steps of the treatment and conservation of five silver gelatin prints that were kept in storage for years.

Keywords:

Silver gelatin prints; Image silver; Deterioration agents; Chemical degradation; Oxidizing gases; Remedial conservation; Preventive conservation; Accelerated aging; Poor processing; Transmission electron microscope; Amino acid analysis; Fourier transform infrared.

Name : Khaled Fouad El-syed Abuelala

Faculty : Dar Al-Oloum

Dept. : Islamic Sharia

Degree : Ph.D.



Title of Thesis: Verdicts Concerned With the Absent Person in Islamic Jurisprudence Comparative Study

Supervisors : Dr. Mohammed Ibrahim Sherif and Dr. Mohammed Beltagy Hasan.

Abstract :

This is a comparative study for the verdicts and rules related to the absent person in Islamic jurisprudence (in the eight Madhahib and Egyptian Law).

Keywords:

Absent person; Islamic jurisprudence; Verdicts; Eight madhahib; Prayer; Fasting; Alms; Pilgrimage; Umrah; Personal status-marriage; Divorce; Expense-inheritance; Will; Financial transaction and sanctions; Sales; Company; Agency; Pre; Emption; Judicature; Penalty; Adultery; Theft.

Name : Saeed Senosy Abdulgawad
Faculty : Dar Al-Oloum
Dept. : Rehtorics and Literary Criticism
Degree : M.Sc.



Title of Thesis: Various Expressions of the Verb Modifiers in Holy Qur'an: Rhetorical Study

Supervisors : Dr. Hassan Tabl

Abstract :

This thesis concerns with verb modifier as a syntactical meaning expressed in many ways to perform it's intended purpose- through following it's postions in all Qur'an's text, recording forms of variation in employing these multi- ways to reach the technical basis on which the choice was made form all possible ways.

Keywords:

The single verb modifier; The sentence; Verb modifier; Variety of verb modifier.

Name : Hebe Salah Salim Abd El Wahab

Faculty : Kindergarten

Dept. : Basic Sciences

Degree : Ph.D.



Title of Thesis: Effectiveness of a Program to Develop the Skills of the Student-Teacher in Writing and Presenting the Theatrical Text of the Puppet Show Presented to Kindergartners

Supervisors : Dr. Kamal El Din Hussein Mohamed and Dr. Mahmoud Hammam Abdel Latif

Abstract :

1. Drawing the attention of those who work with kindergartners to how to prepare theatrical texts and to present them properly.
2. Raising the degree of academic and technical competence of the student-teacher in the field of writing theatrical scripts for kindergartners.
3. Enriching the activities presented in the kindergarten and activating the role of the Puppet Theater in kindergartner's education.
4. Supplying the student-teacher with a number of basic skills concerning how to dramatize activity units presented to kindergartners throughout the school year.

Keywords :

Theatrical Text; Artistic construction of the Play; Theatrical show.

Name : Rasha Saied Ibrahim Mohamed

Faculty : Kindergarten

Dept. : Psychological Sciences

Degree : M.Sc.



Title of Thesis: Aprogram to Develop Critical Thinking Skills for Kindergarten Children

Supervisors : Dr. Souheir Kamel Ahmed

Abstract :

Study problem concentrated on the possibility of developing critical thinking skills for kindergarten children through an interesting activities program for children. Study used the Quasi-experimental methodology.

The sample of the study consisted of two groups from El Andalous private school (Arabic), divided as:

the experimental group: 30 children (17 males-13 females) and the control group: 30 children (18 males- 12 females).

Study used Porteus Maze Test of Intelligence, critical Thinking Instrument for Kindergarten (Prepared by the researcher), and varied activities Program to Develop Critical Thinking Skills for Kindergarten Children (Prepared by the researcher). Findings revealed that the program succeeded in developing critical thinking skills for kindergarten children.

Keywords:

Critical Thinking; Precision Skill in examining facts; Interpretation skill; Analysis skill; Reasoning skill; Evaluation skill; Kindergarten child.

Name : Rawdah Mahmoud EL-Amrousy

Faculty : Specific Education

Dept. : Art Education

Degree : Ph.D.



Title of Thesis: Formative Aesthetic and Functional Dimension of Living Organisms as an Entry for the Students in the Faculty of Specific Education Innovation of a Metal Light Unit

Supervisors : Dr. Hamed El Saied El Bezra and Dr. Abd El Rahman Abd El Hameed

Abstract :

The research includes studying the formative, Aesthetic and functional dimensions of organic being, especially the sea (Naval) beings, and making use of them as an entry for innovating for metal lightening units with using the various technical and formative styles in metal works field, which consequently helps in developing innovative abilities of the student through studying and analyzing the sea (Naval) beings. Furthermore, this helps in developing student's skills through executing a light unit with using various techniques that emphasize expressive value of the shapes of the sea beings, and suit the actual function of the metal lightening unit which is a source of light.

In addition, the research involves an analytical study for a selective of cultural lightening units, especially in the ancient Egyptian arts, the Islamic and modern one, and also includes an analytical study for selected examples for some of the lightening units of the Egyptian and foreign artists. That is to say, this aim to invest the Aesthetic values of the organic beings in order to have an updated formative and expressive vision in structuring the metal lightening unit.

Keywords :

Formative Aestheti; Living organisms; Metal light unit.

Name : Farouk Gafer Abd El hakem

Faculty : Institute of Educational Studies

Dept. : Adult Education

Degree : Ph.D.



Title of Thesis: A Proposed Strategy for Developing Open Learning Administration in Egyptian Universities in the Light of Governance Principles

Supervisors : Dr. Sami Mohamed Nassar and Dr. Noha Hamid Adb El-Karim

Abstract :

The results of studies and researches tried to evaluate and develop the Egyptian experience in open learning , dealt with the administrative part only , asked for providing the management and technical cadres and for applying the total quality management method, and for confirming the quality of the planning, implementation and evaluation processes in all stages. Accordingly, there is a crucial need to review the management and organizational structures that govern the practices and procedures in these universities and centers, to reflect the philosophy and objectives of the modern higher education and open learning, and to respond to its flexibility and speed of taking the management procedures and participation in the management decision-making.

The problem of the study was stated in the following main question: What is the strategy proposed for developing the open learning management in the Egyptian universities according to the governance principles?

Recommendations of the study:

- Establishing an Egyptian university of Open Learning which should be independent and different from what exists in the traditional universities.
- Adopting of new management approaches vary in nature with the currently used administrative methods, especially the dependence on of the administrative papers and correspondences.
- Further studies on governance as an input to development of management in educational institutions should be enhanced.
- Studies concerning the evaluation of the Egyptian experience in the field of education should be conducted by focusing on inputs, processes and outputs of the system of higher open education.
- Forming a higher committee for the Open Education that conducts its affairs,

supervision, planning, and follow-up. Such formation should involve all the effective parties who have, interests. In addition, it should also include institutions of civil society, businessmen, and students.

- Developing Awareness of the proposed strategy for Developing Egyptian higher education open universities, monitoring its implementation, and what hinders its success.

Key words:

Governance principles; Open learning administration; Egyptian universities.

Name : Salah Ahmed Fouad Salah
Faculty : Institute of Educational Studies
Dept. : Curriculum and Instruction of Mathematics
Degree : M.Sc.



Title of Thesis: The Effectiveness of a Teaching Strategy Based on the Use of MATHEMATICA Program in Teaching Algebra to Secondary School Students in the Development of their Intelligences and Achievement of Mathematics

Supervisors : Dr. Mahmoud Ahmad Shawq, Dr. Ibrahim. A. El-Far and Dr. Salwa Fathy Mahmoud El-Masry

Abstract :

The study used the current teaching strategy based on using Mathematica program to solve the problem of the low level of secondary school students (second graders secondary "literary") in the unit function of real variable is the first unit of the decision of redress in the article mathematics (1) in the first semester, where the current study used both analytical and descriptive approach experimental method. The aim of the present study to identify the effectiveness of the teaching strategy based on the use Mathematica program in the teaching of algebra in the collection of secondary school students and the development of some intelligences have. Has been the most important tools in the study materials (teaching strategy), either for study tools has been the (achievement test in the unity of the function of real variable, logical-mathematical intelligence scale for Branton Sheror, the measure of visual spatial intelligence for Branton Sheror).

The study sample included a group of second graders secondary literary and numbered (30 students) as a pilot study and unit function of real variable during the processing of the experimental and control group also consisted of (30) students studying the unit selected in the usual manner.

The current study aimed To identify effective teaching strategy based on the use of mathematica program in the teaching of the unity of the real function of the variable on the development of academic achievement (remember understanding of the application analysis) of a sample of second graders secondary literature. Elevating the level of skill among students in the second row in the secondary literature and drawing function of real variable and acquire the ability to imagine. Stand on the effectiveness of teaching strategy based on the use MATHEMATICA program in the teaching of the unity of the real function of the variable on the

development of visual spatial intelligence to second-graders secondary literature.

4. Stand on the effectiveness of teaching strategy based on the use MATHEMATICA program in the teaching of the unity of the real function of the variable on the development of logical-mathematical intelligence among students in second grade secondary literature.

Key words:

Teaching strategy; Mathematica program in the teaching of algebra; The collection of secondary school students; Multiple Intelligences.



Social Sector

- * Law
- * Commerce
- * Mass Communications
- * Economics and Political Science



Name : Hassan Youssef Mahmoud

Faculty : Law

Dept. :

Degree : Ph.D.



Title of Thesis: Insurance Against the Responsibility of International Air Carrier of Passengers, Comparative Legal Study

Supervisors : Dr. Ali Sayed Kassem, Dr. Hamd Allah Mohamed Hamd Allah and Dr. Samy Abdel Baky Abou Saleh

Abstract :

Subject matter of the thesis: insurance against the liability of the international air carrier- comparative legal study- as applied to the Egypt Air Corporation. This thesis was divided into two chapters preceded by an introduction where the researcher presented the beginning of insurance against the air carrier historically, and its development and spread in England, the United States and Egypt. Chapter one discussed the general principles or elements of air insurance in five topics where it presented the element of interest in insurance and the principle of good faith, in addition to the elements of installment and compensation, then the principle of solutions, focusing on the properties of insurance against the air carrier liability within the scope of these elements and the general principles of the rules that may distinguish it from the other types of insurance. In addition, the researcher was concerned with presented the main British judicial rules that state the British judicial trend and its consideration of these principles and their application to the air insurance contract. Chapter two was dedicated to the study of the civil liability insurance contract of the international air carrier in two sections. Section one began with the study of the international legal organization of the air carrier liability, and its development and effect on the insurance against liability. Then it presented the main air insurance corporations in England and the United States, and the main properties of the Anglo-American insurance markets and the legal rules to which it is subject in England and the United States. In chapter two, the researcher examined the rules related to the conclusion of the air insurance contract in England and the United States, and those rules related to the negotiation stages that precede the conclusion of the contract and the relevant presentation of memos and forms of suggestion in use, and the relevant prominent role to be assumed by the insurance brokers and agents in the Anglo-American market.

In the last topic of the chapter, the researcher presented the air insurance contract and the rules and bases that distinguish it, then he presented the forms of air reinsurance and the main paragraphs and conditions usually related to the air

reinsurance, and its effect on the liabilities of the parties and the important foreign judicial rules in this context.

The researcher concluded his subject with the presentation of the main results that he concluded and the recommendations regarding the insurance department in Egypt Air Company as representing the applied side of this study.

The researcher presented the main English terms used in the field of air insurance and their Arabic translation to maximize the benefit for those who may review the thesis.

The appendices of the thesis comprised in two parts. In the first part, the researcher presented some insurance documents used in England, the United States and Egypt. The most important of these documents is the general English document No. (A VN 1C 21.12.98) for insuring the plane body and the civil liability together, and the English policy (A VN20) for insurance of only the plane body in the United States, and document (A VN16) for insurance of the civil liability for a plane in the United States, and finally the Egyptian document (1710) issued by the Egypt Air Company for the favor of the Egypt Air Company to insure the plane body, liabilities and parts. The researcher compared these documents to Arabic translation to make them easy for reference before section two of the appendixes of this thesis. In this part, the researcher presented the provisions of 1999 Montreal agreement, regarding the unification of some air transport rules which replaced the 1929 Warsaw Convention, as having contained the first international legitimate sign to the subject matter of the air carrier liability insurance against the damages happening to the plane passengers, in article 50 of the convention, and as being effective in Egypt as of 25/04/2005.

Since this thesis is the first one on this subject in the Egyptian universities, which means that there are no specialized Arabic references in the subject, the researcher made his best to get the specialized Anglo-American references on the subject, in addition to the English judicial rules that had the greatest effect in enriching the subject matter of the thesis and rising its scientific and practical value for the researchers in the field of air insurance and insurance in general.

Name : Asem Ramadan Morci

Faculty : Law

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Degree : Ph.D.



Title of Thesis: Résumé de thèse de doctorat sous le nom de (Les Libertés publiques aux Circonstances Exceptionnelles)

Supervisors : Dr. Tharwat Badawi, Dr. Souad Cherkaoui and Dr. Salah al-Din Fawzi

Abstract :

J'ai traité le sujet des libertés publiques aux circonstances exceptionnelles. C'est pour cela que j'ai mis en relief le concept des circonstances exceptionnelles ainsi que la protection Internationale des droits et des libertés publics lors des ces circonstances.

Dans la première partie, j'ai traité la régulation constitutionnelle de l'état de crise et l'effet de cette régulation sur les droits et les libertés publics. Ensuite, j'ai exposé le régime de la délégation législative, les statuts des circonstances exceptionnelles et de la possibilité du traitement des décisions avec des lois réglant les droits et les libertés publics

Dans la deuxième partie j'ai abordé le sujet de la loi d'urgence et son effet sur les droits et les libertés publics et ce qui résultent des mesures et des règles ayant une relation avec. Et ensuite j'ai exposé la loi de la confrontation du terrorisme et son effet sur les droits et les libertés publics. Enfin, on trouve la conclusion de la recherche qui indique le plus important des résultats et des recommandations suggées par cette recherche.

Name : Ashraf Mahmoud M. Mahfouz

Faculty : Law

Dept. :

Degree : M.Sc.

Title of Thesis: International Guarantees and the Position of Egyptian Law Regarding Fair Trial

Supervisors : Dr. Salah aldin Mahmoud F. Amer, Dr. Sharif Syed kamel and Dr. Ahmad Fawzi Abdel-Moneim



Abstract :

This study aims to try to establish the framework of legal knowledge of fair trial in light of the provisions of general international law and Egyptian law; through the compilation and analysis of the principles and rules and conditions of fair trial scattered in many international conventions and regional human rights ratified by the Egyptian Government and comparing it with the laws of Egypt.

Through the four pillars which form the content of fair trial guarantees and safeguards these pillars are fair directors before and during trial, and the judiciary, safeguards and guarantees of public prosecutions, and guarantees the right of defence.

Keywords:

International guarantees of a fair trial; A fair trial; Equitable trial.

Name : Mohamed Mahmoud Al-Shenawi

Faculty : Low

Dept. : Criminal Low

Degree : M.Sc.



Title of Thesis: The use of DNA in the Invesation of Crimes

Supervisors : Dr. Hassanien E.Ebid, Dr. Ablaa M El Kahlaawi and
Dr. Omar M. Salem

Abstract :

The application of DNA technology to the biological evidence In criminal casework has revolutionized forensic Science.

The ability to identify, with a high degree of certainty, a suspect in violent crimes now routinely provides valuable results to criminal investigators worldwide. Forensic DNA technology is a very sensitive and universally accepted scientific technique. The Combined DNA Index System (CODIS), administered by the Federal Bureau of Investigation (FBI), is a distributed database and national comparisons among convicted offender profiles and with crime scene samples.

As of June 2006, it contains more than 3.3 million convicted offender profiles and more than 142,000 profiles from crime scenes, and has produced 36,000 "investigation-aided" matches in 49 States and 2 federal laboratories. DNA analysis also benefits the innocent.

Suspects may be eliminated before arrest or exonerated even after conviction. Information is the lifeblood of the criminal justice system. Despite the wonders of DNA science and technology, DNA use cannot achieve its full promise in the context of criminal justice applications unless there are efficient means in place for criminal investigators to obtain the criminal history information of a suspect when a match is made between physical evidence collected at the crime scene and a profile stored in national database. Once the crime lab completes its work, should it report a match, the investigator must learn as much as possible about the suspect.

This Study aimed to raise concerns about linkages between DNA typing technology and crime. This issue has led to policies and practices suggestions for DNA typing uses in criminology, which involve important factors such as:

- 1- The right of victim in suspect sampling.
- 2- The large procedures of suspect sampling
- 3- Development of a new view for DNA typing whereby there is no formal interface between CODIS and any criminal history record information systems.

Further, CODIS does not store criminal history information, nor was it designed to include any personally identifying information about the subject of the DNA sample.² States have tended to follow the FBI's lead in this area. In fact, a number of the State laws expressly prohibit the linking of criminal history record information with an offender's DNA profile.³ Yet establishing linkages between DNA databases and State and Federal criminal history databases would enable an investigator to know that a suspect's DNA profile is available for comparison.

Perhaps just as important, a linkage mechanism could serve as a flag to indicate that an offender's DNA sample has *not* been obtained, although required by law. Consequently, the offender's DNA profile would be unavailable for comparison with material recovered from a crime scene.

The challenge for the criminal justice community is to create an environment that efficiently leverages the power of DNA technology, while allowing for sharing (or at least access to) essential information in a manner that respects privacy concerns. Finally this study is considered the real binding between advanced trend in Molecular biology technique and Criminology Detection through discussion the relation between DNA typing and Low.

Name : Rewayda Mahmoud Mohamed Tobar

Faculty : Commerce

Dept. : Mathematics and Insurance

Degree : Ph.D.



Title of Thesis: Quality Assurance of the Technical Operations in the Egyptian Insurance Companies

Supervisors : Dr. Galal Abdel Haleem Harby

Abstract :

Six Sigma is considered relatively a new quality initiative which has achieved a lot of success recently. The researcher used it to achieve the objectives of the research. Its application in the financial services sector is still very limited, specially, on technical operations of insurance. The main objective of the research is to apply the Six Sigma on one of the most important technical operations which is the underwriting. After using the Six Sigma five phases and testing the hypotheses on the data obtained from the comprehensive motor insurance branch in one of the public sector insurance companies. The results show that the sigma level of this branch's performance in underwriting is far from six and that makes the company facing a threat of being unable to compete in the future unless a remedial action is taken.

Keywords:

Quality Assurance; Six Sigma; Technical operations; Underwriting Loss Ratio; Overall Operating Ratio; Combined Ratio.

Name : Yasser Ahmed Mohamed Eliwa

Faculty : Commerce

Dept. : Accounting

Degree : M.Sc.



Title of Thesis: The Effect of Enhancing the Balanced Scorecard With the Intellectual Capital for Maximizing the Value of the Business Firm

Supervisors : Dr. Said Daw.

Abstract :

This research is concerned with the verification of direct and positive effect of the intellectual capital on the value business firm. It also aim that verifying the direct positive effect of the balanced scorecard on the value of the business firm. The indirect positive effect of the intellectual capital on the value of the business firm is studied through a mediator representing the balanced scorecard.

The empirical study was casted on a sample of operating business firms in the Cairo and Giza governorates of Egypt. The sample included 375 firms with a response rate of 102 firms representing 27.2%. the designed questionnaires was circulated through E-mails and some were handled personally.

The path analysis technique was used to test the possible relationship between variables included in the research model of this study.

When the effect of intellectual capital on the value of the firm was subjected to statistical analysis, it has been found that there was a direct negative effect of intellectual capital on value of the business in the short run.

A direct positive effect of balanced scorecard on the value of the firm has also been found. When investigating the indirect positive effect of intellectual capital on the value of the business firm, the statistical analysis indicated that there is positive indirect effect of intellectual capital on the value of the firm through the balanced scorecard - a result which supports the findings that the balanced scorecard which is supported by intellectual capital leads to the maximization of the value of the firm.

This study indicated that the structural capital is the principle component of the intellectual capital, while learning and growth are on the other hand the principle component of the balanced scorecard. In general, the result of the study reveals that the balanced scorecard which is supported by intellectual capital leads to the maximization of the value of the business firms which applies

the enhancing balanced scorecard more than the firms which applies the balanced scorecard without enhancing it with intellectual capital.

This is due to the indirect positive effect of the intellectual capital on the balanced scorecard leading finally to the maximization of the value of the business firm.

Keywords:

The Intellectual Capital/Balanced Scorecard; Value of The Firm; Path Analysis.

Name : Iman Mohamed Mohamed Zahra
Faculty : Mass Communication
Dept. : Public Relations and Advertising Dept
Degree : Ph.D.



Title of Thesis: The Effect of Integrated Communication Activities on the Relationship Between the Egyptian Population and Brands

Supervisors : Dr. Mahmoud Youssef Mostafa

Abstract :

The purpose of this dissertation is to determine the brand relationship form and the brand relationship quality (BRQ) that bond different categories of the Egyptian population to brands as active relationship partners (BARP), and to identify the factors responsible for the formation of such relationships, through sending intended or unintended messages that can maintain or destroy the relationships in question and these factors are:

- Brand attributes, benefits and distinctive differences of the five brands that were characterized through focus group discussions as having the highest Customer Based Brand Equity (CBBE) in the Egyptian marketplace and these are: Pepsi, McDonald's, Mercedes, Mobinil and Nokia
- Distribution and Pricing
 - Marketing Communications and Word- of- Mouth
 - Demographics, experience and usage status of the purposive sample consisting of 500 residents of Greater Cairo who answered the five separate questionnaires of each brand, accounting for 100 respondents for each brand.

And through the practical study the research hypotheses were verified for it was revealed that:

- There is a true relationship that could be built and maintained between human beings and brands as active relationship partners.
- This relationship in question is affected by: brand characteristics, marketing, marketing communications, word of mouth, and population characteristics.
- This effect is even greater when there can be an integration between the messages released at each level, whether intended or unintended.

Key words :

Brands; Brand person relationship; Brand attributes; Brand equity; Marketing communications; Word of Mouth; Experience.

Name : Bassant Mourad Fahmi Hassan

Faculty : Mass Communication

Dept. : Radio and Television

Degree : M.Sc



Title of Thesis: The Relationship Between University Students and Reality Television Programs "in the Framework of Third Person Effect Theory Application"

Supervisors : Dr. Hassan Emad Mekkawi

Abstract :

This study investigated the relationship between University students and reality television programs in the framework of the third person effect theory application; The study was based on a questionnaire survey, administrated on 450 students who watch reality television programs.

The study aimed at answering twenty-five questions and examining eight hypotheses. The results demonstrated that most of the University students watch both the Arabic and foreign reality television programs.

The most Arabic reality program watched was "Star Academy", while the foreign one was "The Biggest Loser". Students perceived that what they watched in reality television was realistic. They identified with the favorable characters, gave attention and made elaboration during watching. They thought that this type of programs was very exciting, having many advantages and disadvantages. They had some motives to watch this type of programs, especially because of the spirit of competition and challenges involved.

The students evaluated most of the Arabic and foreign reality shows as containing positive values, and this evaluation is consistent with the third person effect theory; Most of the sample members favored producing more reality television programs and was in favor of censoring negative messages.

In the part of the third person effect theory, the results shed light on supporting the general perceptual hypothesis which stated that individuals expect the negative reality television messages to have a greater effect on others than on themselves, The hypotheses of social distance, the differences in demographic variables between self and others, and social desirability were supported partially.

The results demonstrated that no effects from some variables on the perceptual gap or third person effect were observed, e.g. self-esteem, self-efficacy, identification, enjoying the content, level of watching, elaboration, attention and perception of reality.

The study partially supported the behavioral component at the part of internal censorship (e.g. parental mediation) not the external censorship (e.g. government). Finally, there were effects from some demographic variables on the third person perception; or the attitude of willingness for restriction.

Keywords:

Reality Television; Third person effect.

Name : Mona Esam Othman Fayed
Faculty : Economics and Political Science
Dept. : Economics
Degree : Ph.D.



Title of Thesis: Interest-Rate Spreads and Efficiency in the Banking Market: A Panel Data Analysis for Egypt (1984- 2007)

Supervisors : Dr. Alaa El Shazly

Abstract :

This study investigates the efficiency of financial intermediation in the Egyptian banking market by determining the variables affecting the behavior of the interest-rate spread in Egypt for the period 1984-2007. It is shown that the dynamic approach is more appropriate than the static one and has richer results. This is clear in its result about mean reversion of the interest rate spread as expected from theory, as well as the error correction term, which gave information about the adjustment of the spread towards its equilibrium level. The study concluded that, in the long-run, bank policies that attempt to lower the overhead costs would have a positive effect on the efficiency of the intermediation process. The same applies to monetary policies that reduce the levels of the reserve requirement ratio and discount rates to the minimum safe levels that still protect depositors' funds. Also, the increased level of competition between banks would cause a reduction in interest-rate spread. On the macroeconomic level, financial liberalization and stability of the exchange rate would result in desirable effects in this aspect. However, in order to improve the intermediation efficiency of the banking sector in the short-run, the following findings have to be taken into considerations. First, an increase in the liquidity ratio leads to a decline in the interest-rate spread. Second, relatively stable inflation rates have a desirable impact on the level of interest rate spread. Third, it is a stylized fact that the spread has a mean-reverting behavior. Finally, more than half of the disequilibrium between the spread and the explanatory variables is made up in the subsequent period. The dynamic econometric approach has the advantage of taking these short term characteristics and so yields richer results than the static modeling approach.

Key Words:

Banks intermediation efficiency; Static approach; Dynamic approach.

Name : Marwa Mohamed Shibl Biltagy
Faculty : Economics and Political Science
Dept. : Economics
Degree : Ph.D.
Title of Thesis: Determinants of Optimal Schooling Level in Egypt Using A Human Capital Model
Supervisors : Dr. Mona El Baradei and Dr. Ashraf El Araby

Abstract :

The concept of human capital is first introduced by Mincer (1958) and then elaborated by two of the Nobel Prize winners, Schultz (1961) and Becker (1962). It means that, individuals acquire skills and knowledge in order to increase their future earnings stream. Individuals acquire these skills through education, training and experience. The main types of investment in human capital are on-the-job training, the time spent to increase knowledge, expenditures on health and education and enhancing job opportunities by the internal migration. The magnitude of human investment can be estimated by determining the expenditures of producing this kind of investment or by estimating the increase in earnings resulting from this investment. The models of investment in human capital ascertain that, the optimal schooling level occurs when the marginal benefits of schooling equal its marginal costs. In order to determine the optimal level of schooling in Egypt, a model is formulated and estimated by using data of Egypt Labor Market Panel Survey 2006 (ELMPS 06), which was presented by CAPMAS in cooperation with Economic Research Forum. It is concluded that, the private rate of return to education is greater for the females' sample than males.

There is a positive relationship between the number of years of schooling and the private rate of return to schooling. It is estimated that, the rate of return to the number of years of experience is also greater for the sample of females than males. Furthermore, males who work in government sector or public enterprises get fewer earnings than others who work in private sector and vice versa for females. It is estimated that, the optimal level of schooling for males' sample is 12.14 years on average. Moreover, the optimal level of schooling for females' sample is 13.45 years on average. It is obvious that, the optimal level of schooling is greater for females than males.

The main determinants of optimal level of schooling in Egypt are: the father's and mother's level of schooling, which represents the income of the family, the ability differences and the quality of education.

Keywords:

Human capital theory; Quality of education; Human capital investment models; Education production function; Optimal level of schooling.

Name : Heidi Aly Aly Fahmy
Faculty : Economics and Political Science
Dept. : Economics
Degree : M.Sc.



Title of Thesis: The Development of Intergovernmental Transfers as a Gateway to the Implementation of Fiscal Decentralization in Egypt

Supervisors : Dr. Lobna Abd El Latif and Dr. Khaled Zakaria Amin

Abstract :

The importance of this study stems from the need for an efficient system of intergovernmental transfers that is able to achieve the objectives of fiscal decentralization in Egypt.

This system is needed to help in increasing the economic efficiency as well as the social welfare at both the national and the local levels. Therefore, the desired system of fiscal transfers should be able to address the problems resulted from centralized governmental decisions and limited decision-making powers assigned to local units. Accordingly, this study seeks to analyze and evaluate the current system of intergovernmental transfers in Egypt and examine the process through which these transfers can be adjusted and improved to allow for greater authorities to be directed to the local level. In other words, the study aims at proposing a system for intergovernmental transfers that can allow for implementing fiscal decentralization instead of using transfers only as a mechanism to finance the deficit in local budgets.

Key Words:

Fiscal decentralization; Intergovernmental transfers; Taxes; equalization grants; Local; Revenues; Local expenditures; Fiscal formulas; Fiscal authority; Local deficit.



APPENDIX



Appendix

Degree	Name	Page
Ph.D	Ahmed Adel Ahmed Mohamed	46
	Ahmed Eisa Mahmoud Ghoniem	41
	Ahmed El Saied El Bastawisy	19
	Aisha Mahmoud Abd El-Aziz	5
	Asem Ramadan Morci	81
	Asmaa Elhassan Ramdan	53
	Dina Ahmed Mehaney Osman	4
	Dina Mohamed Lotfi El-Bwshlawy	11
	Eid Mohamed Emary Ahmad	32
	Farouk Gafer Abd El hakem	73
	Gihan Farag Mohamed Asaad	48
	Haneen Abdel-Salam Ibrahim	27
	Hassan Youssef Mahmoud	79
	Hebe Salah Salim Abd El - Wahab	70
	Ibrahim Mohammed A. Ragab	22
	Iman Mohamed Mohamed Zahra	88
	Khaled El-Hossiny Mohamed Salih	55
	Khaled Fouad El-syed Abuelala	68
	Marwa Galal El-Din El- Gazzar	9
	Marwa Mohamed Shibl Biltagy	92
	Mohamed Hamza Abd El-Hameed	39
	Mona Esam Othman Fayed	91
	Moustafa Ismail Radwan	49
	Mustafa Monir Mahmoud	35

Degree	Name	Page
	Naglaa Fathy Mahmoud Ibrahim	15
	Naiera Mohamed Mohamed Elwan	62
	Noha Mohamed El- Hussein	3
	Rawdah Mahmoud EL-Amrousy	72
	Rehab Ibrahim Ahmed Ahmed	65
	Rewayda Mahmoud Mohamed Tobar	85
	Shaymaa Ibrahim Mohamed Habib	12
	Shimaa Muhammad Mahmoud Ali	45
	Taher Mohamed Salah El-Din	28
	Tamer Youssef Amron	61
	Yousria Abd El Salam Seloma Abd El Ghani	16
M.Sc	Abeer Farag Hanafy	23
	Ahmed Ismael Sayed Ismael	42
	Ahmed Mahmoud Saad	54
	Amr Mohamed Abdel Moniem Hassan	47
	Ashraf Mahmoud Mohammed Mahfouz	82
	Assem Abdel Salam Mohamed Kador	36
	Basant Mourad Fahmi Hassan	89
	Eman Abas Farag	6
	Heidi Aly Aly Fahrny	93
	Hiba Zeyada Muhammed Zeyada	57
	Hussein Hussein Nasser Maza'ar	33
	Khaled Ahmed Attia Taha	8
	Maha Ahmed Ali Ahmed	67
	Mai Nabil Mohamed	10
	Mayada Mohamad Mohamad	7

Degree	Name	Page
	Mervat Mohamed Abdel Tawab Elgindy	63
	Mohamed Mahmoud Al-Shenawi	83
	Nehal Nabil Abdel Aziz Roshdy	14
	Ola Abdel Rahman Hekal	18
	Osama Ahmed Naser El-Din	43
	Rania Fathy	21
	Rasha Saied Ibrahim Mohamed	71
	Reda Rabiea Abdel Rasol	29
	Reham Salah Hamed	13
	Robert Rezk Sudrak Andrawis	31
	Saeed Senosy Abdulgawad	68
	Salah Ahmed Fouad Salah	75
	Shiren Mubarak Bases	56
	Shymaa Ahmed EL B. EL Sherbiny	50
	Walaa Tawfik Farah Eshak	64
	Yasser Ahmed Mohamed Eliwa	86

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