2010
NATIONAL COMPETITIVE RECRUITMENT EXAMINATION (P-2)

For further information on the 2010 NCRE, please visit the following websites:

http://careers.un.org/ (both in English and French)
www.un.org/Depts/OHRM/examin/exam.htm (in English)
(2 July-2010)
Outline of the Exam

1. The United Nations Secretariat announces that a competitive examination will be held under the direction of a United Nations Board of Examiners to recruit nationals of selected member states at the junior professional level (P-2) for employment at United Nations offices.

2. The examination will be held in the following disciplines:

   - Administration
   - Demography
   - Economics
   - Human Rights
   - Legal Affairs
   - Radio Producer (Arabic, Chinese, French)
   - Security
   - Statistics
   - Web Design/Development

3. A general description of the duties performed in these disciplines and specific academic qualifications required are given in Annex I of this announcement. The applicant may have background in more than one discipline, but must choose one primary discipline for the application.

Eligibility

4. This examination is open to men and women who are nationals of the member states participating in the 2010 National Competitive Recruitment Examination. Qualified women are particularly encouraged to apply.

5. Applicants should hold at least a first-level university degree relevant to the discipline in which they would like to take the examination. Furthermore, applicants should not be more than 32 years old on 31 December 2010 (should be born on 1 January 1978 or after). Fluency in either English or French is required.

6. In instances where a large number of applications are received by the Board of Examiners (more than 40 per discipline in a given country), the Board reserves the right to admit to the examination only the most qualified candidates based on a review of the qualifications which are over and above the minimum entrance criteria set out in paragraphs 4 and 5. These include, but are not limited to, advanced university degrees, diplomas or certificates; knowledge of additional official languages of the United Nations (English/French, Arabic, Chinese, Russian and Spanish); a broader spectrum of work experience or any published works.

Procedure of the Examination

7. The examination will consist of a written examination and an interview.

8. The written examination consists of the following two parts:

   (a) a general paper which tests drafting skills (forty-five minutes); and
   
   (b) a specialized paper (three hours and forty-five minutes) which tests the substantive knowledge of the particular discipline that the candidate is applying for.

In cases of high number of candidates sitting for the exam in a given occupational group, the essay section of the specialized paper will be eliminatory.

9. The written examination questions are given in English and French, the two working languages of the Secretariat. Candidates must write their answers for the general paper in English or French. However, they may write their answers for the specialized paper in English, French or any of the other four official languages of the Secretariat, i.e. Arabic, Chinese, Russian or Spanish.

10. The written examinations are scheduled to take place on 1 December 2010. The exact time will be announced in the convocation notification referred to in paragraph 24 of this announcement.

11. Travel expenses to and from the site of the written examination are NOT paid by the United Nations.

12. On the basis of performance in the written examination, the Board of Examiners will invite selected candidates to the interview, which will normally take place in the first half of 2011.

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* Major United Nations offices are located in Addis Ababa, Beirut, Bangkok, Geneva, Mexico, Nairobi, New York, Santiago and Vienna.
13. The interview will be conducted in English or French, the two working languages of the Secretariat.

14. The travel of candidates to and from the location of the interview will be at the expense of the United Nations in accordance with its rules.

15. Following the completion of the interviews, the Board of Examiners will recommend to the Assistant Secretary-General for Human Resources Management the most suitable candidates.

16. Successful candidates will be placed on a reserve list of qualified candidates.

17. The decisions of the Board of Examiners regarding the results will be final and are not subject to appeal. The Board does NOT release individual results.

18. Successful candidates recruited at the P-2 level will serve at the UN Headquarters in New York or at other duty stations in Africa, Asia, Europe or Latin America. Junior Professional Officers will be subject to a mandatory Managed Reassignment Programme. The purpose of the Programme is to provide Junior Professional staff with enhanced orientation, training, mobility and career support during the first five years of service at the Professional level, in order to facilitate their adjustment and to accelerate the learning period leading to productive work and job satisfaction as international civil servants. To this effect, staff members included in the Programme shall obtain experience in two different functions during their first five years of service.

**UN Salary and Benefits**


**Application Procedure**

20. All those who wish to participate in the competitive examination are requested to fill out accurately and completely, in English or French, the online application form available on the UN Career Portal (http://careers.un.org/). The application must be submitted through the website no later than 19 September 2010 (11:59PM EST). Late or incomplete applications will NOT be considered.

21. Candidates should submit their application once only and by one medium only. **DO NOT** send a separate copy by e-mail, fax or regular mail. An acknowledgement of receipt of the application, along with an application number assigned to each applicant, will be sent to the applicants by e-mail immediately following the submission of application. Candidates must keep the acknowledgment of application as a proof of submission of their application. **You are strongly encouraged to apply as early as possible.** If you have technical difficulties in submitting the application, please contact us at the following contact information:

**UNITED NATIONS 2010 NCRE Examinations and Tests Section, OHRM E-mail: OHRM-NCE2010@un.org**

We will not be able to answer specific questions regarding the 2010 NCRE through e-mail or other means. Please consult the **“frequently asked questions”** link in our web site.

22. The decision of the Board of Examiners regarding admission to the examination will be based on a careful review of the application. In order to be considered, applicants must meet the minimum entrance criteria set forth in paragraphs 4 and 5. The Board will subsequently assess the qualifications of the candidates in accordance with the provisions of paragraph 6 above, if applicable, to decide on whether applicants should be admitted to the examination.

23. The decision of the Board of Examiners regarding admission to the examination as well as the discipline for which one is convoked is final and **NOT** subject to appeal.

24. All candidates will receive notification regarding their admission to the written examination. Applicants may also check the listing of application numbers, as described in paragraph 21, on the Internet by the end of October to find out if they are admitted to the written examination. For candidates that are convoked to the written examination, the notification will include information such as the exact date, time and site of the written examination.

25. Candidates who participate in the written examination will be notified of the results upon completion of the marking of the written examination. Those who are successful in the written examination will receive instructions for the interview.

26. Applicants are responsible for promptly informing the United Nations in writing of any changes in their address. Failure to do so may result in candidates either not being convoked in time or not being convoked at all. Such notifications should be addressed to the email address provided in paragraph 21 above.
ANNEX I

DESCRIPTION OF DISCIPLINES

Administration

Work performed within this group relates to a wide range of assignments in the provision of staff support to the internal operations and projects of the organization. These various areas of support include, but are not limited to, the following:

1. Management of staff resources, which includes work concerned with formulating and implementing policies relating to the management of human resources for the Organization and conducting programmes concerning staff recruitment, training, career development, promotion, compensation, benefits and staff-management relations;
2. Budget analysis, which includes work concerned with reviewing the budgetary requirements of the Organization and making recommendations on the appropriation of funding levels and revenue projections;
3. Management analysis, which includes work concerned with reviewing, examining and evaluating organizational structures and management systems; it also includes recommendations to line management regarding changes in organizational structure, management of physical, financial, and human resources, organization methods, procedures, forms and records management to promote efficiency within units;
4. Procurement management, which includes work concerned with negotiating and contracting for the purchase or rental of equipment, products, supplies and services;
5. Administrative support, which includes work of a general administrative nature concerned with providing staff services for management such as personnel processing, budget preparation control, housekeeping and supplies;
6. General Service management, which includes work concerned with the management, maintenance and security of the physical plant facilities, communication systems and transportation systems of the Organization; the direction of activities of staff engaged in the operation and maintenance of equipment and facilities, and arranging and monitoring the work of outside contractors in this area;
7. Project administration includes work concerned with providing staff support to the Organization's technical assistance, disaster relief and economic development projects. Duties include preparing budgets for projects, purchasing supplies, developing staffing requirements and work plans, mobilizing relief in a disaster situation, arranging such other services necessary to facilitate completion of projects, and researching and developing disaster relief plans in cooperation with other countries.

Acceptable first-level university degrees for consideration by the Board for applicants in Administration are as follows: Public or Business Administration, Commerce, Finance, Marketing, Human Resources Management or other relevant disciplines.

Demography

Work performed within this occupation relates to a wide range of assignments in the areas of population policies, fertility and family planning, population projections, trends and structures and issues related to development and population.

Work focuses on two professional specializations:

a) demographic analysis and population studies and
b) population policies and development.

Assistant Population Affairs Officers (APAO) and Population Affairs Officers (PAO) mainly engage in research work. APAOs normally work under the supervision of the senior PAOs but also undertake independent research work. Besides the UN Population Division in New York, each Regional Economic Commission has its own Population Section, where similar functions are conducted such as: analyzing fertility and mortality levels, trends and differentials; studying volume and characteristics of migration in the region; examining population spatial distribution; producing estimates of demographic and related socio-economic indicators to be used as benchmark data for the United Nation system's projects; carrying out specific population projects; undertaking studies on the determinants and consequences of population variables with a view to assisting in formulating population policies; reviewing population policies and measures in the region; following up on the review and appraisal of the world population plan of action at the regional level; promoting the integration of population variables into the various planning processes.

Acceptable first-level university degrees for consideration by the Board for applicants in Demography are as follows: demography, sociology, statistics or economics with an emphasis on population studies.

Economics

Work performed within this occupation relates to a wide range of assignments in which theoretical and
practical economic services are provided to the Organization. The tasks of the occupation vary considerably depending upon the assignment and include, but are not limited to, the following:

1. Economic and/or sector analysis: collects, evaluates, interprets, analyses specified statistics and qualitative socio-economic information obtained from a variety of sources and pertaining to particular sectors, countries, regions or development topics; maintains databases and programmes for database management and organizes non-quantitative information; assists in the design, testing, operation and modification of econometric models; prepares briefing notes, inputs to speeches and similar material on economic or sector issues in a form that is meaningful to non-specialists; prepares first drafts of sector, country or regional components of analytical studies on development issues and policies; assists in the organization and servicing of expert group meetings, seminars, etc on development issues;

2. Intergovernmental support: prepares inputs for reports to intergovernmental bodies; follows intergovernmental meetings and prepares summary reports and similar material; prepares inputs to statements by members of the Bureau and Secretariat staff to such meetings; assists in the organization of panels, round tables etc on development issues for inter-governmental processes;

3. Technical cooperation: compiles and analyses the data and other information necessary for the preparation of technical cooperation project proposals in the area of economic development; prepares documentation for technical cooperation programmes and projects; contributes to the preparation of material for the approval of regional, country or sector technical cooperation projects; monitors, backstops and assesses the implementation of technical cooperation programmes and projects.

Acceptable first-level university degrees for consideration by the Board for applicants in Economics are as follows: macroeconomics, microeconomics, international trade, political economy, econometrics, development planning and analysis, economic development and growth, and public economics.

Human Rights

Work performed within this discipline relates to formulating, communicating, implementing and evaluating policies, practices and activities for the promotion and protection of all human rights for all people. The tasks of the discipline vary considerably depending upon the assignment and may include, but not limited to:

1. Technical cooperation, advisory and field services: supporting the technical cooperation programmes and human rights monitoring mechanisms, including field presence, by identifying the needs of governments for advisory and technical cooperation, designing, developing and implementing country specific capacity building projects, gathering and analyzing information regarding human rights situation in various countries;

2. Research and analysis: conducting substantive research projects on the right to development and the whole range of human rights issues, analyzing and drafting reports, backgrinders and position papers relating human rights questions, providing policy analysis, advice and guidance on substantive procedures, researching right-based development strategies and supporting the integration of human rights into the United Nations system-wide programmes;

3. Support to the Human Rights bodies and mechanisms: planning, preparing and servicing sessions and meetings, preparing reports and other documents for the human rights treaty bodies, following-up on decisions and recommendations taken at meetings of human rights bodies, processing individual communications under the complaint procedures, supporting the work of Special Rapporteurs, and servicing Voluntary Funds and Board of Trustees.

Acceptable first-level university degrees for consideration by the Board for applicants in Human Rights are as follows: law, international relations, economics, social or political sciences, all of which must be with a specialization in Human Rights. The requirement for a specialization in Human Rights in any of the above-mentioned disciplines can be waived if the applicant has at least two years of work experience at the national or international level in an area relevant to Human Rights or two years of work experience in technical cooperation or project management, including budget management.

Legal Affairs

Work performed within this occupation relates to serving as legal researchers and advisers for the Organization. The tasks of the occupation vary considerably and may include, but not be limited to some of the following: drafting legal opinions and briefs regarding various aspects of the United Nations Charter and other legal instruments of the Organization; preparing legal research papers on various topics such as international law, treaty law, human rights, trade, energy, environment, law of the sea, natural resources and outer space; preparing draft rules and procedures
for the Organization; serving as a secretary to one of the organs of conferences of the Organization and in this capacity prepares draft agenda, resolutions, minutes, etc.; negotiating agreements between the Organization and Governments, arrangements or agreements between the Organization and vendors for the provisions of goods or service; serving as support to internal recourse committees; representing the Organization before the Administrative Tribunal or other judicial or arbitral bodies; acting as legal adviser to peace-keeping and other missions.

Acceptable first-level university degrees for consideration by the Board for applicants in Legal Affairs are as follows: law, public law, international law, law of the sea, human rights law, and international humanitarian law.

**Radio Producer**

Work performed within this field relates to a wide range of assignments in producing and disseminating information about the United Nations, its aims and activities and its policies and programmes to the information media of the world, other organizations and to the general public. These various services include, but are not limited to, the following: writing, narrating, producing and broadcasting radio news, and/or feature/documentary programmes in the official languages of the United Nations on the global activities of the United Nations; monitoring and researching on a daily basis the activities of the organizations, funds and programmes within the United Nations system; initiating contact and liaising with substantive departments of the United Nations System and other relevant sources on topical issues for radio programming; conducting interviews, gathering audio material, performing audio desktop editing and management of sound files; undertaking digital editing and recording; undertaking relevant research within and outside the United Nations, and going on field assignments to generate original materials and other current affairs for programming; liaising with broadcasting and non-governmental organizations regarding usage of radio programmes; contributing ideas to programme planning and promotional efforts.

Due to the current needs of the Organization, this examination will be held in radio production for Arabic, Chinese and French radio broadcasting only.

Acceptable first-level university degrees for consideration by the Board for applicants in Radio Production are as follows: communication, broadcast journalism or media studies. Applicants with a first-level university degree in a field relevant to the work of the Organization, i.e., political science, international relations, modern history, social science, economics, legal affairs, and with work experience in public information as television or radio producer, will also be considered. In addition to the education requirement, a minimum of two years experience in radio or television broadcast journalism as writer, producer or editor are required. Fluency in English (both oral and written) is required; Since this examination will be held in radio-production for Arabic, Chinese and French radio broadcasting only, fluency in Arabic, Chinese or French (both oral and written) is also required.

**Security**

Within limits of delegated authority, the Associate Security Officer may be responsible for the following duties: Prepare draft security plans for specific areas of operations; Conduct security assessments, in accordance with the UN Security Risk Management model, to ensure the safety of staff to enter or return to a location where actual or suspected problems exist; Investigate and prepare reports on minor cases of theft, illegal entry, assault, or other incidents when the extent of the infraction is readily determinable; Develop drafts of specific security threat and risk assessments associated with threats by criminal, terrorist or extremist groups to the UN Organizations system and its individual components. The assessments include electronic crime tracing and determination of the severity and possible impact on the Organization; Develop and enhance, at the local level, the methodology for risk assessments, maintenance of databases of threats and associated risks; Timely distribution of assessment of risks to UN duty stations and field offices affected by identified threats; Coordinate assessment activities with the appropriate focal points within the Department of Safety and Security as well as security focal points of UN systems organizations; On-site coordination of specific security operations, including but not limited to: VIP visits, evacuation and relocation, convoy movements and response to incidents or emergencies (including those involving casualties); Assist in recruitment, training and supervision of junior staff; Acting in a higher level capacity in the temporary absence of more senior security professionals.

Acceptable first-level university degrees for consideration by the Board for applicants in Security are: criminology, criminal justice, security management or related field. Military or police academy training equivalent to a first-level university degree will also be considered if the applicant has at least two years of relevant work experience.

**Statistics**

Work performed within this discipline relates to a wide range of assignments in which statistical services are provided to the Organization. The tasks of the
occupation vary considerably depending upon the assignment and include, but are not limited to, the following: preparing and designing questionnaires or other research instruments for the collection of statistical data from Member States for the statistical yearbooks and other publications giving comparative world-wide statistics; more generally: collecting, processing and disseminating data from Member States; providing technical assistance to developing countries to assist them in strengthening their national statistical capacity; assisting Member States in developing standardized statistical classifications, definitions and methods in such areas as economic statistics, like industrial, energy and trade statistics and national accounts and environment, social statistics, demography; developing statistical methods for data validation and estimation; conducting research in the area of index calculation and seasonal adjustments.

Acceptable first-level university degrees for consideration by the Board for applicants in Statistics are as follows: statistics, mathematics, economics with a specialization in statistics and/or econometrics, social sciences with a specialization in statistics, demography.

**Web Design/Development**

Work performed within this discipline relates to a wide range of assignments in which web design and development services are provided to the Organization. The tasks of the occupation vary considerably depending upon the assignment and include, but are not limited to, the following: web site development, initial project requirements, wire-framing, mock-up, and UI design; web site management, site taxonomy, navigation, usability; web site design, graphics design and presentation, taking into account requirements of the six UN official languages and accessibility for people with disabilities; web site programming, web application development and programming, including the establishment and programming of databases. Demonstrated proficiency in SQL programming, Interface Design, Adobe Photoshop and Illustrator; Multimedia and Macromedia Flash; ASP/ASP.NET, HTML; CSS; Java, MS-SQL, Dreamweaver, Visual Studio and content management systems.

Acceptable first-level university degree for consideration by the Board for applicants in Web Design/Development are as follows: web design and programming, or other relevant fields, such as computer information systems, graphic arts and public information, provided that the applicant can demonstrate at least 3 years of experience in web design/production (working with software programmers in a multilingual web-application environment) and developing websites in multiple browsers; creating and manipulating existing and original graphic design elements for client web sites using design programmes and various programming languages; maintaining and updating content and graphics on existing web sites; laying out HTML/ASP web pages with a database back-end; deploying web sites on Apache or IIS and handling SSLs; producing comprehensive visuals to give clients conceptual and visual information that will determine the final look and feel of projects, web copywriting and editing.
The other employers in the area. While employees have left package of benefits. In fact, it is more generous than that of organization. What the organization does have is a very generous organization. had to be terminated at considerable cost to the leave for better jobs. A small number of problem staff have obtain employment elsewhere. They join the organization organization too often gets those employees who cannot international organization's salaries has lagged. The internal personnel reports, but the increase of the turnover of locally recruited general service personnel is abnormally high. In fact, it is higher than for all other employers: private - state owned or transnationals. Consequences of turnover were strongly criticized in an external audit report on the efficiency of the organization's local office. This report stated "The level of turnover is significant because it is expensive and leads to lost productivity. It is costly because every time an employee leaves, the organization must incur recruitment and training costs. It is costly because there is a period of time which it takes for all new employees to reach their peak effectiveness. During this time, the employee makes mistakes. A strong effort must be made to avoid this waste of resources".

You know why the turnover is occurring: the pay of employees has been low for years. In the meantime new industry has come to the region. Since the population hasn't increased that much, the salary structure of private industry has risen to attract people. This was mentioned in previous internal personnel reports, but the increase of the international organization's salaries has lagged. The organization too often gets those employees who cannot obtain employment elsewhere. They join the organization and remain for a period of time. Once they are trained, they leave for better jobs. A small number of problem staff have had to be terminated at considerable cost to the organization.

What the organization does have is a very generous package of benefits. In fact, it is more generous than that of the other employers in the area. While employees have left for a raise in pay, the result of a survey taken by the organization indicates that the former employees now employed outside the organization have fewer fringe benefits, including less medical insurance coverage, lower pension benefits, less sick leave, fewer paid holidays and also a smaller allowance for children’s education benefits. The organization has, however, been unsuccessful in communicating this situation to its staff now on board.

Your office and you have already tried to encourage supervisors to discuss this situation with their staff but in most cases, supervisors have failed to do so. Their excuse is that the benefits are complicated and difficult to explain particularly to new staff, many of whom do not show interest in benefits.

You are requested by your supervisor, the chief of personnel, to prepare a detailed programme of action to improve on the current turnover situation. Explain your detailed plan of action including the target groups which you would address, what procedures you would recommend to be followed and how you would go about implementing such a plan.

Questions

1. Briefly explain three different recruitment interview techniques.
2. Identify three situations in which a binding purchase contract can be terminated without penalty or damage to any of the parties to it?
3. In a situation of a mandatory reassignment from one duty station to another, outline the components of a fair compensation package.
4. What is budgetary control? What is the difference between budgetary control and management control?
5. Before entering into a major contract what steps can a procurement officer take to establish the contractor's reliability and capacity to execute the contract?
6. Briefly explain the main components of a career development programme in a public sector organisation.
7. Cite five factors which you would consider in deciding whether to buy or lease equipment.
8. Identify and briefly discuss three approaches in overcoming resistance to change in administrative organizations.
9. Give three advantages of an effective communication system between managers and employees.
10. Identify and briefly discuss three major advantages of introducing electronic data processing equipment to assist in management functions.

List of topics

Suggested reading list: basic textbooks and periodicals in the field of administration. The following topics should be covered:
- Administration
- Budget
- Management
- Medium-term plan
- Personnel questions
- Principles of administration and management
- Procurement
- Recruitment and training
- Human resources development
- Programme planning, budgeting, monitoring and evaluation
**DEMOGRAPHY**

**Essays**

A. Describe the demographic transition theory. A number of authors have argued that the theory is inadequate to explain the demographic transition in many developing countries of Asia and Africa. Discuss.

B. A developing country has adopted a policy of reducing its fertility level by adopting a family planning programme. What other social policy measures would you recommend for expediting the decline in fertility? Support your recommendations with evidence.

C. Read carefully and compare the views expressed in the following statements:

*World Bank (1984)*

“Policies to reduce population growth can make an important contribution to development (especially in the long run), but their beneficial effects will be greatly diminished if they are not supported by the right macroeconomic and sectoral policies. At the same time, failure to address the population problem will itself reduce the set of macroeconomic and sectoral policies that are possible, and permanently foreclose some long-run development options.

*T.N. Srinivasan (1992)*

“There is clear evidence that in some of the poorest countries there is “population problem” in the sense of a seemingly perpetual cycle of poverty and high fertility rates. However this cycle is a reflection of policy failures such as policy induced distortions in markets (for agricultural commodities, labor, credit and capital), inadequate definition and enforcement of access rights to common property and anti-poor bias in the provision of infrastructure and public goods. The evidence also points to fertility lowering and child health improving effects of public expenditures on education (particularly female education) and health infrastructure.”

**Questions**

1. Define or explain the following:
   a. Natural growth of population
   b. Age-specific mortality rates
   c. Gross reproduction rate
   d. Stable population

2. Suppose that age-specific mortality rates above age 50 are reduced by 20 per cent (with no change in fertility rates or mortality below age 50). Will the following demographic indices (a, b and c) be higher, lower or the same 10 years later than they would be if no mortality change had occurred? Explain briefly.
   a. Life expectancy at birth
   b. Crude birth rate
   c. Gross reproduction rate

3. Under what circumstances will rising mean age at first marriage have no or little effect on fertility? Briefly explain.

4. Given the following life table values:

<table>
<thead>
<tr>
<th>x</th>
<th>a</th>
<th>l_x</th>
<th>0lx</th>
<th>a0x</th>
<th>a1x</th>
<th>T1</th>
<th>e0_x</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>5</td>
<td>5,375,000</td>
<td>67</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>5</td>
<td>75,000</td>
<td>5,000</td>
<td>350,000</td>
<td>5,000,000</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>5</td>
<td>(b)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compute:
   a. \( s_l_{20} \)
   b. \( l_{30} \)
   c. \( e''_{25} \)

5. Explain why the absolute annual increments in the population of developing countries kept increasing between 1965 and 1985 while its growth rate decreased (see table below)

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (in millions)</th>
<th>Growth Rate (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>1,684</td>
<td>2.04</td>
</tr>
<tr>
<td>1965</td>
<td>2,333</td>
<td>2.54</td>
</tr>
<tr>
<td>1980</td>
<td>3,311</td>
<td>2.09</td>
</tr>
<tr>
<td>1985</td>
<td>3,677</td>
<td></td>
</tr>
</tbody>
</table>

**List of topics**

Suggested reading includes textbooks and periodicals in the field of Demography covering the following topics:

- Fertility
- HIV-AIDS
- Indirect demographic estimation
- Internal migration
- International migration
- Mortality
- Population ageing
- Population and development
- Population policies
- Population projections
- Urbanization
ECONOMICS

Essays

A. The debt-servicing problem of developing countries has been a matter of continuing concern since the early 1980s. What are the factors that contributed to the problem? What were the domestic effects of rising external debts? What measures have been undertaken to alleviate this problem? What kinds of policies would you recommend for alleviating the balance of payments difficulties of affected countries?

B. There have been serious disagreements in the literature on economic development as to the strategies that developing countries should follow to foster the development process. Two unsettled issues refer to: (1) the advantages of stressing agriculture or of fostering industrialization; (2) policies that take as given the current income distribution and depend on a trickle-down of the fruits of economic growth to the poorer segments of the population, as against a strategy heavily oriented towards meeting basic needs. Discuss in detail these two controversies and how the current world economic situation affects them.

C. What are the main determinants of the international division of labour? In which types of economic activity has this division of labour progressed the most and what are its global advantages? Give examples based on the experiences of one or more countries.

Questions

1. The industrial development of developing countries is hampered by their lack of technologies. Give two major reasons with brief explanations as to why the developing countries lack access to appropriate technology.

2. Briefly explain why capital formation is considered to be an essential ingredient of economic expansion and diversification.

3. Suppose you are given a set of differential rates of inflation for a group of market-type economies. What effects might such differences have on exchange rates in the short and long run under flexible and fixed exchange rate systems?

4. Specify under which conditions a country can show a current account surplus at the same time as a trade balance deficit. Specify also the conditions under which the current and trade accounts are in deficit while the overall balance of payments is in surplus. Briefly discuss.

5. If the income elasticity of imports in a developing country is 1.75 and GNP is growing at 7 percent per annum, at what rate would you expect real imports to grow on average? Give two reasons why the growth of imports tends to outstrip the growth of GNP and exports in developing countries. Discuss three possible policies designed to curb the rate of growth of imports.

6. Discuss the economic rationale and the goodness of statistical fit of the statistically estimated relationship set out below. Would the estimated relationship suggest policy recommendations?

\[ C_t: 100.27 + 0.73 Y_{t-1} - 1.25 r_{t-1} - 2 \]

\[ R = 0.922 \]

\[ DW = 1.73 \]

\[ n = 37 \]

\[(1.06) (4.17) (-0.35)\]

\[ C_t: \text{private consumption in real terms;} \]

\[ Y_t: \text{personal disposable income deflated by the consumer price index;} \]

\[ r_t: \text{Nominal interest rate minus the rate of increase in consumer prices;} \]

\[ R: \text{coefficient of determination adjusted for degrees of freedom;} \]

\[ DW: \text{Durbin-Watson statistic;} \]

\[ \text{t: time;} \]

\[ n: \text{number of observations.} \]

In parentheses are the values of the T-statistic.

7. An investment project is expected to yield, in constant dollars, returns of $100, $100 and $1,100 at the end of 1, 2 and 3 years respectively and nothing thereafter. If the investment costs $1,000 now, would it be profitable at an expected real interest rate of 8 percent per annum? 12 percent?

8. Given a fiscal deficit, describe two ways in which such a deficit could be financed and explain whether each way would have different impacts on the economy.

9. It is said that, under fixed exchange rates, countries lose control over monetary policy, while under flexible exchange rates they have full control over this policy instrument. Explain briefly your agreement or disagreement with this statement.

10. Many countries in the world are seeking to privatise their public sector enterprises. What difficulties do you see for a developing country in such privatisation?

List of topics

Suggested reading includes basic textbooks and periodicals in the field of economics covering the following topics:
- Fundamental economics concepts
- National income and price indices
- Consumption, saving and investment
- Fiscal policies and taxation
- Inflation and unemployment
- Money supply and demand
- Supply and demand concepts
- Competition and monopoly
- International trade - comparative advantage
- Transnational corporations
- Tariffs quotas and free trade
- International finance
- Growth and development
- Income distribution
- Resources and environmental economics

Candidates should be able to deal with economics questions related to developing countries, economies in transition and western economies.
The Human Rights Council has mandated the High Commissioner for Human Rights to undertake a study on the effects of globalisation on the enjoyment of human rights. As an officer in the responsible branch, you have been assigned to carry out the necessary research and draft the study. You are aware that the resolution mandating the study was a contentious one, with every word hotly debated along regional lines. One delegate called globalisation the most important modern force for human rights, in its potential for creation of economic opportunities. Another identified it as the greatest threat to human rights since colonialism, in its potential for marginalizing and excluding so many. You also know that human rights groups around the world have been increasingly vocal in their calls for integrating human rights in the processes of globalisation. For her part, the High Commissioner has called for the articulation of a “rights-based approach to the processes of globalisation, in which international norms and standards serve as the rules of the game.” In a search of existing UN documents, you find plenty of political debate, but virtually nothing to define the issues associated with globalisation in human rights terms.

1. What would be the principal sources to which you would turn to establish the legal/normative framework for the study? Please list these in order of importance.
2. What key principles of international human rights law would you invoke in your study?
3. Propose an outline for the study, listing the various chapters to be included.
4. Propose a one-paragraph summary of the basic thesis or line of argument of the study.

Questions

1. Describe the role and mandate of the United Nations High Commissioner for Human Rights.
2. Explain the legal differences between a declaration, a covenant, and a convention adopted by the United Nations organs.
3. List the seven principal (UN) international human rights treaties currently in force.
4. What do you know about current endeavours to reform the principal UN human rights mechanisms? What do you see as the challenges and the political pitfalls of reform?
5. Recent years have brought important developments in strengthening the judicial enforcement of international human rights and humanitarian law. Name three (3) such developments since the 1990s.
6. One aspect of the Secretary-General’s Reform programme of 1997 called for integrating the human rights programme into a broad range of the organisation’s activities, including in the peacekeeping, development and humanitarian areas. Discuss the objectives of this process and provide three examples of how it is being accomplished.
7. Describe the “Global Compact” and discuss its importance for human rights.

The examination deals with international human rights law and the United Nations mechanisms aimed at their promotion and protection. As the questions are based upon both substantive and procedural human rights law and mechanisms, familiarity with the Charter of the United Nations, international human rights law, relevant UN procedures and mechanisms are essential.

List of topics

- Children’s Rights
- Civil and Political Rights
- Discrimination
- Economic, Social and Cultural Rights
- Human Rights Bodies
- Human Rights Council
- Human Rights in Development
- Indigenous People
- International Human Rights Instruments
- Migrant Workers
- Minorities
- Racism and Racial Discrimination
- Right to Development
- Right to Education
- Slavery
- Special procedures mechanisms (Human Rights Council)
- Technical Cooperation
- War Crimes
- Women’s Rights/gender mainstreaming
FITZAL is a multinational company of the industrialized State of Kisumu which has, since 1965, owned and operated a chemical plant for manufacturing pesticides in the developing State of Homa.

On 15 February 1975, Homa experienced another mild earthquake which, as in four similar cases occurring between 1945 and 1975, affected more seriously the area along River Kuja. The chemical plant was built in 1964 along this river which passes through the territory of Homa and two lower riparian States of Rongo and Ahero. Because of the February earthquake, the chemical plant suffered a serious damage which resulted in the sudden and excessive release of pesticides and other chemicals into River Kuja. The nature of the pollution damage caused was such that Homa alone could not cope. Three days later the pollution from the FITZAL plant was threatening to cause similar damage in the two lower riparian States which had no knowledge of the accident in Homa. Their efforts to control and abate the pollution damage threatening them downstream were too late. The information they finally received from the local press reporting on the events in the FITZAL plant did not contain enough necessary details concerning the nature of the chemicals involved. Their efforts to get accurate information from the government of Homa were frustrated because they kept on receiving conflicting views from various government departments in Homa. One of the facts which they were able to gather was that the chemical plant was indeed built on an earthquake fault line along the river, which made it susceptible to the kind of damage it finally suffered in 1975.

Prompted by these events, Homa has now called a meeting in its capital city of Rupedhi with the two lower riparian States to negotiate a treaty for cooperation in the management and utilization of the Kuja river on which they all rely for fresh water and fish.

You have been hired as a consultant to help these States to negotiate and conclude such a treaty.

(a) Outline some of the basic provisions which such a treaty should include in order to address certain specific problems brought out in the above event.

(b) Outline briefly, the basic arguments which Rongo and Ahero may rely upon if they decide to bring a case against Homa in an international tribunal to which they have all conferred jurisdiction for such cases.

Franconia and Blanconia are two neighbouring African States, members of the Organization of African Unity (OAU) and of the United Nations. Franconia was under the colonial rule of Elbia until it became independent on 25 May 1960. Blanconia was under the colonial rule of Rosia until its independence on 12 July 1961.

On 30 September 1968, Franconia and Blanconia concluded a Treaty of Friendship and Cooperation, in which they agreed, inter alia, to settle all their disputes peacefully, particularly those relating to the interpretation and application of treaties. They also reiterated their acceptance of the OAU resolution of 1964 concerning respect of the inherited colonial boundaries under the principle of uti possidetis.

Elbia and Rosia had concluded a treaty on 28 August 1923, determining the boundary between their respective colonial territories of Franconia and Blanconia. A section of the border, situated near an administrative centre of Elbia and known as the Flania Triangle remained unsettled. For administrative convenience, it was agreed between the two colonial powers that the Flania Triangle be temporarily administered by Elbia until a definitive boundary could be reached. This agreement was inspired by the fact that the Triangle was an important grazing ground for one of the nomadic tribes of Franconia. However no further agreements were reached on this section of the boundary.

Upon independence, Franconia issued a notification of succession to all treaties concluded by Elbia, including the Treaty of 1923. Blanconia, on the other hand, declared a "tabula rasa" with respect to treaties concluded by Rosia.

The Temple of the goddess Blan, considered by the Blanconians to be the mother of their nation, is located in a special section of Flania. Every year since the colonial era, a number of Blanconians attended the pilgrimage to the Temple. In 1989 and given the increasing number of pilgrims to Flania, Franconia which continued to administer the area after Elbia, changed the rules and imposed restrictions on the number of pilgrims that would be admitted there. This provoked a public outburst in Blanconia. The people of Blanconia called on their government to take action since, in their view, Flania's Temple was part of their historical heritage. A strong protest was sent to Franconia by Blanconia against these restrictions. Franconia ignored the protest. In the meantime, in order to boost its decreasing popularity, the government of Blanconia decided to invade Flania on 25 August 1989 and took control over it from Franconian administrators. In response, Franconia dispatched its armed forces to the disputed area and immediately referred the matter to the Security Council of the United Nations. The Security Council was convened on 26 August 1989.

(a) Prepare a concise statement containing the arguments which the Permanent Representative of Franconia is likely to make in the Security Council concerning the case.

(b) Prepare a concise statement containing the arguments which the Permanent Representative of Blanconia is likely to make before the Security Council in response.

(c) In your view, what should the Security Council do on this question? Explain.

Petrolminus is a landlocked State neighbouring two coastal States: the Republic of Fishfull and the Kingdom of Mineralia. The three States have ratified the 1982 United Nations Convention on the Law of the Sea. (for the purposes of this question, assume that the Convention has already entered into force.)

On 15 May 1989, seventeen nationals of Petrolminus were arrested by the authorities of Fishfull while fishing in the exclusive economic zone (EEZ) of the coastal State, without permission. Their vessel was confiscated and its contents (tilapia fish which they have traditionally relied on for food) expropriated. The arresting authorities also claimed that the vessel used by the Petrolminus nationals in their illegal fishing polluted the area through excessive discharge of oil caused by a defect in the vessel. While the Petrolminus
The Government of Petrolminus, having been informed of the incident, contacted the Government of Fishfull and suggested a meeting between them to deal with such problems which began to be of a recurring nature. In the Note to Fishfull, the Government of Petrolminus lamented the reluctance of both Fishfull and Mineralia to conclude with its appropriate bilateral agreements, in accordance with article 69 of the Law of the Sea Convention, to enable the nationals of the landlocked State to participate in the appropriate surplus of the living resources of the EEZ of the two neighbouring coastal States.

Petrolminus asserted, in particular, that, while the capacity of Fishfull to harvest tilapia fish in its EEZ was only 20%, the total allowable catch for that particular fish requires a harvesting capacity of over 67% as established by the scientific evidence provided by the Food and Agriculture Organization (FAO). This is to avoid under-utilization of that particular resource. Accordingly, the refusal of Fishfull to declare surplus with respect to tilapia fish and to allow Petrolminus to have access to such surplus was unreasonable and amounted to a violation of articles 61, 62 and 69 of the Law of the Sea Convention (Part V). Petrolminus demanded the immediate release of the vessel. The Government of Fishfull denied the assertions of Petrolminus regarding the surplus of the living resource and continued to detain the vessel.

Having failed to reach a settlement of these issues through direct negotiations between them, Petrolminus notified Fishfull of its intention to invoke the third-party procedures of Part XV of the Law of the Sea Convention against Fishfull. Both parties have made currently valid declarations under article 287 of the Convention, conferring jurisdiction to two different procedures under the article. Petrolminus conferred jurisdiction upon the International Tribunal for the Law of the Sea, while Fishfull conferred jurisdiction upon the International Court of Justice, for the enforcement of the judgement, DETAILS further prayed the Court to permit the seizure of the special bank account which the Embassy of Bangbang had maintained in Tintin for the payment of Embassy staff and for the rents of the Embassy premises.

(a) Outline how the disputes between Petrolminus (the Applicant) and Fishfull (the Defendant) should be handled under Part XV (full text made available to candidates for the examination) of the Convention, having regard to the substantive provisions of Part V (full text made available to candidates for the examination) of the Convention.

(b) Which party, in your view, should prevail and on what issues?

**QUESTION IV**

The Central Bank of the State of Bangbang concluded a contract with DETAILS International, a cement manufacturing company in the Republic of Tintin, for the supply of 510,000 bags of cement. The cement was needed by Bangbang for building a new army headquarters and for distribution to Government trading agencies to sell to the public.

Upon the conclusion of the contract at the offices of DETAILS on 15 December 1989, the Central Bank’s negotiators made a down-payment of 10% of the total cost of the transaction in United States dollars as stipulated under the contract. The rest was to be paid thirty days following delivery of the cement, which was scheduled to take place during the month of June 1990. The parties agreed that the contract was to be interpreted and applied in accordance with the laws of Tintin and further stipulated therein that any disputes arising therefrom should be settled by a competent court in Tintin.

Delivery of the cement was made by DETAILS on 15 June 1990 as scheduled. But the Central Bank refused to pay the rest of the contract price, claiming that about 5% of the cement was damaged. DETAILS refuted this claim and asserted that the entire shipment was in good order. Six months later the Central Bank had not made any payments to DETAILS, claiming that the defective bags be replaced first.

Tintin had recently passed a Sovereign Immunity Act (in force prior to the date of the said contract), according to which sovereign immunity defence could only be granted if the transaction in question is undertaken as acta jure imperii (public act) and must be denied if the transaction, judged by its nature as opposed to its purpose, is a commercial one (acta jure gestionis). That law also stipulated that all cases arising from the application of the act are to be settled by the High Court of Tintin unless the parties otherwise agreed in a contract.

On 10 January 1991, DETAILS brought a case of breach of contract against the Central Bank of Bangbang, in the High Court of Tintin. The Central Bank refused to appear before the Tintin Court, claiming sovereign immunity. The Court proceeded to hear the case ex parte. DETAILS requested the Court to order the Central Bank to pay at least 95% of the remaining purchase price of the cement already delivered. For the enforcement of the judgement, DETAILS further prayed the Court to permit the seizure of the special bank account which the Embassy of Bangbang had maintained in Tintin for the payment of Embassy staff and for the rents of the Embassy premises.

(a) As the lawyer representing DETAILS in the case, what arguments will you present to support your case, given the attitude of the Bangbang Bank?

(b) What should be the decision of the Court in this case? Why?

**List of topics**

*Contents of the examination and suggested topics*

The examination deals with areas such as the use of force, sources of international law, refugee questions, nature of United Nations instruments (e.g. General Assembly Resolutions), questions related to treaties, disputes, settlements, human rights and law of the sea. As the questions are based upon both substantive and procedural law, familiarity with the Charter of the United Nations, law of treaties, and the relevant decisions of the International Court of Justice are essential.

*Note on examination format*

The questions will call for legal analysis and demonstration of knowledge of international law. Participants will not be permitted to use any materials others than those provided by the examiners.

*Answers and evaluation*

Except where otherwise indicated, all questions must be answered according to the generally accepted principles of international law. The answers to the questions should show a recognition of material and relevant issues presented by the facts; the candidates should discuss the principles of law applicable to the facts, and set forth the different steps of reasoning by which the conclusion has been reached. In grading the examination, appropriate credit will be given, for well reasoned analyses of the legal issues.

"THE UNITED NATIONS Economic and Social Council, ECOSOC, ended its second regular session of 1985 after approving a draft agreement between the United Nations and the United Nations Industrial Development Organization, UNIDO, which was recently converted into a specialized agency. It also recommended that the Assembly do likewise 'at the earliest opportunity.' Recognizing the coordinating role and comprehensive responsibilities of the General Assembly and the Economic and Social Council, the agreement lays out avenues of cooperation between the agency and the United Nations, and establishes UNIDO's pre-eminence in the field of upgrading the industrial systems of the developing countries."

"A resolution on help to student refugees in southern Africa expressed appreciation for the contribution of Botswana, Lesotho, Swaziland and Zambia in granting asylum, and asked the High Commissioner and Secretary-General to organize a suitable assistance programme for those refugees. The social committee has adopted, without a vote, a resolution on the Genocide Convention, urging countries that have not already joined to do so without delay. Another resolution adopted without a vote called for the establishment of a Voluntary Fund for Indigenous Populations - to provide financial help to representatives of indigenous communities to take part in the deliberations of a working group that is devoted to their concerns."

"The Assembly's Economic Committee has adopted draft resolutions on special economic assistance programmes, and an International Volunteer Day, on the report of the Trade and Development Board, on the role of personnel in the development process, on technical cooperation among developing countries, and on coordination within the United Nations system. On special programmes of economic assistance, the draft adopted would have the Assembly ask the Secretary-General to report to it in 1986 on ways and means of enhancing efficiency in the implementation of decisions taken by intergovernmental bodies."

"By another draft, the Assembly would invite Governments to observe the fifth of December as an International Volunteer Day every year, and would urge them to stress the importance of volunteer service. On technical cooperation among developing countries, the Assembly would request the organisations in the United Nations system to take action to ensure the implementation of the decisions of the High-Level Committee on the Review of Technical Cooperation among Developing Countries."

B. Write a radio news report, about one minute thirty seconds long, with audio inserts, based on material consisting of a press briefing and three news stories. (Provided with examination)

You must write the radio news report in either Arabic, Chinese or French.

C. Select one of the issues below and write a 2 to 3 minute analytic story of your choice about the issue you selected concerning the United Nations.

• Is the United Nations Human Rights Commission a toothless body?
• Has the United Nations been effective in keeping the peace?
• Is the International Criminal Court going to make a difference?
• Can Kyoto Protocol save the world?

You must write the analytic story in either Arabic, Chinese or French.

D. A story provided contains a number of factual, grammatical and other mistakes. Identify and correct these mistakes on the document provided (this document is provided in Arabic, Chinese or French with the examination).

E. You have been assigned to conduct an interview of approximately 4-5 minutes based on a Press Release. (Provided in the examination).

Suggest who you would conduct the interview with (the interviewee); identify the questions you would ask in order of importance and write a short introduction to the interview. You must answer in either Arabic, Chinese or French.

F. As a Radio Producer, prepare a 30 to 45 seconds news story in either Arabic, Chinese or French of the material contained in the Press Release provided below, for inclusion in a radio news bulletin.

The subject of World Health Day 2005 is maternal and child health.

In the lead up to World Health Day on 7 April next year, six mothers-to-be living in different countries of the world are sharing their experiences of pregnancy..."
and childbirth. In this second part of Great expectations, Damiana, Samah, Hiwot, Renu, Bounlid and Claire are seven months pregnant and have only a few weeks left before their big day. We will return to their stories again at the birth of their babies, at one week after birth, and finally when their babies are six weeks old.

Hopes and fears

Every mother-to-be is filled with hopes and fears. Will the baby be healthy? Will labour be short or long? Will she have a girl or a boy? How will the new baby change her life; her day-to-day work; her relationship with her partner and family?

The women at 7 months pregnant – “hopes and fears”
Damiana, Samah, Hiwot, Renu, Bounlid and Claire share their hopes and fears. They share their thoughts about having a girl or a boy, and describe their support from loved ones and the medical care they are receiving at seven months pregnant.

The women at 5 months pregnant
At five months into their pregnancies, Damiana, Samah, Hiwot, Renu, Bounlid and Claire begin sharing their stories from different parts of the world: Bolivia, Egypt, Ethiopia, India, the Lao People’s Democratic Republic, and the United Kingdom of Great Britain and Northern Ireland.

These are unique stories, but they reflect a common theme – the central importance of maternal and child health to our families, communities and societies. In a world where more than half a million women die in childbirth every year and where four million newborns each year do not survive beyond one month, these documentaries aim to raise awareness of the challenges we face as a global community in improving maternal and newborn health. They will also draw attention to the pressing need to meet the Millennium Development Goals of reducing maternal deaths by three quarters, and reducing child mortality by two thirds by 2015.

List of topics

Suggested reading includes basic textbooks and periodicals in the field of public information covering the following topics:

- Information technology
- International communication problems
- Public information materials published and disseminated by the U.N. and its agencies
- Public resolutions
- Public services provided by international organizations
- Radio work
- The work of news agencies
SECURITY

Essays

A. You have just taken over your new position as an Assistant Chief of Security in a country which is prone to natural disasters, including earthquakes, hurricanes, floods and mud-slides. The UN presence in the country employs about 800 staff, both nationals and expatriate. It includes a number of agencies who have offices and project sites in remote rural areas as well as main offices in the capital. Your supervisor has asked you to develop a plan to prepare for such events, with the main aim being to avoid any loss of life amongst UN staff and their families. Your plan should include contingency preparations and response in the event of a disaster actually occurring. He has asked you to provide him with a brief outline of what your plan will cover before you start on the detailed work. Requirement: prepare a note for your supervisor outlining your proposed plan.

B. You are in charge of security at a large UN compound which houses the offices of several different UN organizations. Many of these offices need to be accessible to visitors, including senior government officials, diplomats from embassies, and activists of local community groups. The compound is also entered every day by some 150 local workers who are employed in the canteens, as cleaners and maintenance staff, or by contracting firms who carry out repairs and office modifications. The Director of Administration informs you that an unacceptable quantity of office equipment and personal belongings has been disappearing from offices over the last few weeks. He says that the senior management are requesting you to take action to control the situation. You would like to meet with the senior management and propose a number of options for them to consider. Describe the options which you would present to the senior managers, giving the advantages and disadvantages of each.

C. You are a Field Security Adviser for an international agency which has a large field office in the capital of country X. Country X is experiencing unstable political conditions caused by tensions that exist between its majority political group and its minority political groups. Sometimes these tensions result in violence, however inter-group riots rarely happen suddenly or without warning. They are the product of tensions that accumulate over a period of time.

The major projects carried out by your agency in Country X are all designed to benefit the most deprived inhabitants of the worst slum areas in the capital. The projects include education and sports for street children, income generation schemes to alleviate the high unemployment situation, soup kitchens for the destitute, and health, sanitation and clean water projects to reduce the spread of disease. These slum areas are fertile recruiting grounds for the extremist elements of all political factions (most of which are based on ethnicity, rather than ideology). Your concern is intensified because the field office employs many local personnel representing rival groups.

Although your agency has deservedly been praised for what it has achieved in these areas, there have also been occasions when perceived injustices in the distribution of assistance has led to angry demonstrations against your colleagues, and even, on two occasions in the last six months, attempts to enter and occupy the field office. These two attempts were fortunately prevented by a robust response from the local police (too robust according to some human rights activists), however the economic situation has led to delays in paying the salaries of government employees, including the police.

Tensions have risen further in anticipation of a re-run of the parliamentary elections which have been negotiated by international mediators following allegations of widespread fraud. In addition to the possibility of street violence, there have been rumours that some factions are setting up militias, recruiting from the most alienated young men in the slums, in order to carry out acts of greater violence.

Your agency senior management team has been discussing whether to continue with some, all or none of the projects in the slums over the election period, and has asked you to provide a security risk assessment to help them to make decisions.

Describe how you would go about carrying out the security risk assessment. How would you collect and assess information? What factors would you take into consideration, or give the greatest emphasis to? How would you assess the risk of certain events taking place? How would you develop recommendations for reducing the risks to staff to acceptable levels? What choices need to be made by the senior managers?
Questions

1. What is the primary purpose of keeping statistics on the location, nature and frequency of security/safety incidents?

2. Officer conduct at the scene of a demonstration or crowd disturbance is often an important factor in restoring order. List three of the most important rules that you would establish for security officers to deal with a disturbance of this nature.

3. List the advantages and disadvantages of using electronic monitoring devices to secure the perimeter of premises.

4. As a general rule, when a subordinate makes an error he or she should be quickly and publicly corrected so that others can learn from the mistake.
   
   a. Do you agree with this approach? If so, explain why.
   
   b. If not, explain how you would handle the situation.

5. Assuming a 40 hour work week, 8 hour shifts, 6 official holidays, 5 days of sick leave, 10 days of annual leave, and an average annual salary of $13,000:

   a. How many security officers would be required to establish and maintain a permanent 24-hour a day guard post?
   
   b. What would be the salary cost of establishing such a post?

6. There has been an accident with a gas cooker in the office canteen kitchen and a number of kitchen staff have been injured, two apparently seriously. You arrive at the canteen to find scenes of panic and chaos, with nobody in charge, some hysterical screaming, and some materials still on fire. How would you handle the situation? What are your priorities?

7. You are in a duty station where the local media has recently reported a number of assaults, both sexual and robbery, against women returning from work. The staff welfare officer asks you to give a presentation to female colleagues on what they can do to avoid becoming victims. Outline your talk.

8. List 10 priority areas that should be covered in training a new security officer. Briefly describe which training method should be used for each area listed.

List of topics

For the preparation of the specialized part of the examination, candidates are encouraged to study general literature and periodicals on:

- Security
- Law enforcement
- Safety
- Fire fighting and fire prevention

It is also advisable for candidates to possess a general knowledge of activities and programmes carried out by UN agencies and NGOs, particularly in the field.
A. The computer manufacturing industry in a country produces basically two classes of computers. An annual price survey of the industry includes two models of each class (see table below). Model 1a was discontinued after 2002, and it was replaced in the survey sample by a slightly upgraded version, called Model 1a+. The results of the survey from 2000 to 2002 are as follows:

### Price (US$) of surveyed computer models

| Year | Computers of class 1 | | Computers of class 2 |
|------|----------------------|----------------------|
|      | Model 1a             | Model 1a+            | Model 2a            | Model 2b            |
|      | 1,500                | 1,350                | 425                 | 540                 |
| 2000 | 1,450                |                     | 400                 | 550                 |
| 2001 |                     | 1,180                | 410                 |                     |
| 2002 |                     | 1,180                |                     |                     |

### Estimated number of computers sold (in thousands)

| Year | Computers of class 1 | | Computers of class 2 |
|------|----------------------|----------------------|
|      | Model 1a             | Model 1a+            | Model 2a            | Model 2b            |
|      | 20                   | 40                   | 360                 | 360                 |
| 2000 | 35                   | 40                   | 350                 | 350                 |
| 2001 | 10                   | 15                   | 150                 | 150                 |
| 2002 | 15                   | 15                   | 150                 | 130                 |

### Characteristics of computer models of class 1 included in the survey

<table>
<thead>
<tr>
<th>Model</th>
<th>Hard Disk</th>
<th>Mflops*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>40GB</td>
<td>201</td>
</tr>
<tr>
<td>1a+</td>
<td>80GB</td>
<td>201</td>
</tr>
<tr>
<td>1b</td>
<td>80GB</td>
<td>185</td>
</tr>
</tbody>
</table>

*Millions of floating point operations per second

1) The chained Laspeyres and Paasche price index number formula are (where \( p \) stands for price and \( q \) for quantity):

\[
P_{t-1,t}(q_{t-1}) = \frac{\sum p_t q_{t-1}}{\sum p_{t-1} q_{t-1}}, \quad P_{t-1,t}(q_t) = \frac{\sum p_t q_t}{\sum p_{t-1} q_t}
\]

(a) Calculate the chained Laspeyres and Paasche price indices for each computer class (using always the previous period as base year).
(b) Explain assumptions you make to obtain your results, especially regarding the replacement of Model 1a with Model 1a+.

2) The national statistical agency also collects information on production of each computer class on an ongoing basis:

<table>
<thead>
<tr>
<th>Production shares</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers of class 1</td>
<td>0.15</td>
<td>0.25</td>
<td>0.23</td>
</tr>
<tr>
<td>Computers of class 2</td>
<td>0.85</td>
<td>0.75</td>
<td>0.77</td>
</tr>
</tbody>
</table>

(a) Obtain the aggregate chained Laspeyres and Paasche price indices for computers (i.e. general price indices for the whole computer industry, setting the previous period as the base year for the current price index).

(b) According to each of the two chained index formulas, how much has the general level of prices for computers increased in 2002 as compared to 2000?

(c) How can any difference between the results obtained using Laspeyres and Paasche formulas be explained?

3) Suppose you have to interpret a time series of production or sales numbers of computers. Why would a corresponding time series of price indexes be useful? Please explain.

B. You have been asked to construct a questionnaire for a survey on housing. The survey will be administered door-to-door by interviewers. Your colleagues remind you that respondents often fail to understand the questions the researcher is trying to ask.

1) What are five common causes of this failure to communicate to the respondent (limit your answer to five causes)? What can you do to avoid making these mistakes?

In designing the sample for the housing survey you are asked to make sure it is representative of the population. One of your colleagues suggests that you use clusters in your sample design whilst another suggests that you should stratify your sample.

2) What effect does clustering and stratification for this sample have on, for instance, the standard error? Contrast these methods of sampling with simple random sampling.

Questions

1. Suppose

\[ f_{Y|X}(y|x) = \begin{cases} 
1 & x < y < x + 1 \\
0 & \text{otherwise} 
\end{cases} \]

and that \( X \) has the uniform \((0,1)\) distribution

(a) Find \( E(Y) \)

(b) Find \( f_{X|Y}(x|y) \)

(c) Find \( P(X + Y < 1) \)

2. Define the mean, mode and median and show by diagram how they are normally related in a distribution which is skewed to the right.

3. A bowl contains four lottery tickets with the numbers 111, 221, 212, and 122. One ticket is drawn at random from the bowl and \( A_i \) is the event that 2 is in the \( i \)th place, \( i = 1, 2, 3 \).

Determine whether \( A_1, A_2 \), and \( A_3 \) are independent.
4. Describe two ways of measuring growth rates of time series and comment on the advantages and disadvantages of each.

5. Distinguish clearly between systematic errors and random errors in a sample inquiry.

6. In a college class, there are 80 men and 40 women. There are 36 smokers and 84 non-smokers. What is the likelihood that any student selected at random is a male smoker under the following conditions:
   
   a. If the percentage of smokers among men is the same as the percentage of smokers among women (i.e. no relationship between sex and smoking)?
   
   b. If the percentage of smokers among men is twice the percentage of smokers among women (i.e. men are twice as likely to smoke as women)?

7. A national service requires all applicants to undergo a drug screening examination. In a batch of 25 applicants one fails the test. The applicant claims never to have used any drugs. It is known that the equipment used in the test has been shown empirically to be able to detect the presence of drugs 99% of the time when the drugs are present. The manufacturer also admits that 5% of the time the equipment detects drugs even when they are not there. It is also known that at least 90% of those who enlisted in the armed forces of the country have not used drugs. What, if anything, can be said about the claims of the applicant?

8. The table below shows the number of “excellent” students (receiving A scores in their exam) and the number of “mediocre” students (receiving C scores in their exam) according to three different teachers, Mr. X, Mr. Y and Mr. Z, that have been asked to mark the same exam.

   Test the hypothesis that the number of “mediocre” students is the same for each teacher (Hint: test the hypothesis that being “excellent” or “mediocre” is independent by the teacher who marked the exam).

<table>
<thead>
<tr>
<th></th>
<th>Mr. X</th>
<th>Mr. Y</th>
<th>Mr. Z</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent (A)</td>
<td>50</td>
<td>47</td>
<td>56</td>
<td>153</td>
</tr>
<tr>
<td>Mediocre (C)</td>
<td>5</td>
<td>14</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>61</td>
<td>64</td>
<td>180</td>
</tr>
</tbody>
</table>

9. Of the 50 people on a bus, 1/5 opposes the smoking ban on the bus. If 15 of these passengers are selected at random, without replacement, (a) what is the probability that exactly 5 of them oppose the smoking ban and (b) what is the expected number of passengers in the sample that opposes the smoking ban?

List of topics

Suggested reading includes basic textbooks or manuals in the field of statistics covering the following topics:

- Probability Theory
- Descriptive Statistics
- Inferential Statistics
- Demographic and Social Statistics
- Economic Statistics
WEB DESIGN/DEVELOPMENT

Essays

A. You have been asked to set up a new multilingual site under the United Nations main web site (www.un.org), on the issue of the Millennium Development Goals. What are the basic requirements for setting up such a site? Describe the steps involved in establishing the site from concept to launch, including the taxonomy of the site and its multilingual and accessibility aspects.

B. A developer has been engaged to set up a database-driven web site in which content is to be entered via a web-based form into a MS-SQL Database. The public-facing web pages for retrieving the data and populating a template would be in .ASP. The Web Server being used is Apache running on a Sun Solaris Operating System. Draw a flow chart to illustrate the set-up. Would the developer need any additional software to complete the development of the proposed site? If so, what is required, and where would it be in the data-flow?

C. You are the Manager of the United Nations web site, which comprises of a number of sub-sites, in the six official languages, with information prepared and produced by different Departments. You have been asked by senior Management to devise and establish a clear, coherent, workable and acceptable governance mechanism for the entire site which will take into account the different needs of the content-providing Departments which maintaining a degree of centralization so that institutional branding is not compromised. Prepare an outline for this governance mechanism setting out responsibilities of content-providers, the technical group and the management group.

Questions

1. What is a Content Management System? What are its advantages and disadvantages? Describe the underlying technology of a Content Management System – how content is entered, stored and displayed.

2. Briefly describe what is meant by the following terms:
   a. Hits to a website
   b. Page-views to a web site
   c. Unique visitors to a web site
   d. 404
   e. SHTML
   f. XML

3. What is streaming media? What are the main formats of streaming media that are currently in use on the Internet? Discuss the relative advantages of each of the formats over the others.

4. Create a basic HTML page which will use JavaScript code embedded into the page that will display the day, date and time on the top left corner of the web page. Write out the entire HTML code for the page including the JavaScript element.

5. Are there any differences in the way the major Internet browsers display HTML content? Describe how Internet Explorer, Firefox (Mozilla), Opera may display the same content differently. What does a developer need to keep in mind when creating web pages so as to ensure that these pages will display as intended in all the major browsers?

6. What are the image formats that can be displayed on a web browser? What are some formats that cannot be used on a web page? Explain which format is best suited to display each of the following and why:
   - A colour photograph on a web page;
   - A two-colour navigation button.

7. What is UTF-8? Under what circumstances would you recommend using UTF-8? Is there an alternative to it that will serve the same purpose?

8. What is a cookie? When and why are they used? Describe a situation when using a cookie or cookies could enhance user experience. How can cookies on a website provide improved user analysis?

List of topics

Suggested reading includes basic textbooks and periodicals in the field of web design and development covering the following topics:

- web site programming
- web application development and programming
- database programming using SQL
- interface design
- Adobe Photoshop and Illustrator
- Multimedia and Macromedia Flash
- ASP/ASP.NET, HTML
- Cascading Style Sheets (CSS)
- Java
- Dreamweaver
- Visual Studio
- content management systems
- graphic design
- public information
EXAMINATION SAMPLES
GENERAL PAPER

Summary

Summarize the following report in your own words. The report should be reduced to approximately one third of its original length; the summary should have between 200 and 300 words. Failure to meet these guidelines will result in point loss.

Text

Ecology and economics should push in the same direction. After all, the “eco” part of each word derives from the Greek word for “home”, and the protagonists of both claim to have humanity's welfare as their goal. Yet environmentalists and economists are often at loggerheads. For economists, the world seems to be getting better. For many environmentalists, it seems to be getting worse. These environmentalists have developed a sort of “litany” of three big environmental fears: natural resources are running out; the population is ever growing, leaving less and less to eat and the planet's air and water are becoming ever more polluted. Human activity is thus defiling the earth, and humanity may end up killing itself in the process. The trouble is, the evidence does not back up this litany. The early environmental movement worried that the mineral resources on which modern industry depends would run out. Clearly, there must be some limit to the amount of fossil fuels and metal ores that can be extracted from the earth: the planet, after all, has a finite mass. But that limit is far greater than many environmentalists would have people believe. Reserves of natural resources have to be located, a process that costs money. That, not natural scarcity, is the main limit on their availability. However, known reserves of all fossil fuels, and of most commercially important metals, are now larger than were believed to be. In the case of oil, for example, reserves that could be extracted at reasonably competitive prices would keep the world economy running for about 150 years at present consumption rates. Add to that the fact that the price of solar energy has fallen by half in every decade for the past 30 years, and appears likely to continue to do so into the future, and energy shortages do not look like a serious threat either to the economy or to the environment. The population explosion is also turning out to be a bugaboo. As far back as the end of the 18th Century Thomas Malthus claimed that, if unchecked, human population would expand exponentially, while food production could increase only linearly, by bringing new land into cultivation. He was wrong. Population growth has turned out to have an internal check: as people grow richer and healthier, they have smaller families. Indeed, the growth rate of the human population reached its peak, of more than 2% a year, in the early 1960s. The rate of increase has been declining ever since. It is now 1.26%, and is expected to fall to 0.46% in 2050. The United Nations estimates that most of the world's population growth will be over by 2100, with the population stabilising at just below 11 billion. Granted, the threat of pollution is real, but exaggerated. Many analyses show that air pollution diminishes when a society becomes rich enough to be able to afford to be concerned about the environment. For London, the city for which the best data are available, air pollution peaked around 1890. Today, the air is cleaner than it has been since 1585. There is good reason to believe that this general picture holds true for all developed countries. And, although air pollution is increasing in many developing countries, they are merely replicating the development of the industrialized countries. When they grow sufficiently rich they, too, will start to reduce their air pollution. All this contradicts the litany. Yet opinion polls suggest that many people, in the rich world, at least, nurture the belief that environmental standards are declining. Scientific funding goes mainly to areas with many problems. That may be wise policy, but it will also create an impression that many more potential problems exist than is the case. The attitude of the media is also a factor in the distortion. People are clearly more curious about bad news than good. Newspapers and broadcasters are there to provide what the public wants. That, however, can lead to significant distortions of perception. To replace the litany with facts is crucial if people want to make the best possible decisions for the future.