



GENERAL SIR JOHN KOTELAWALA DEFENCE UNIVERSITY
SELECTION TEST INTAKE – 42
MODEL PAPER
ENGLISH

Instructions:

Answer all questions.

Duration: 01 hour

QUESTION 1: (30 MARKS)

Fill in the blanks in each text with the words given. Two extra words are given under each text which do not belong to the text.

Text 1

become, factories, have, crowded, leisure, such as, are, major, source, together, development, present

Environmental pollution is largely the result of individual development. The need for large 1) has forced people to move closer 2) Many more people have been 3) together in smaller and smaller spaces. Factories have 4) sources of much air, water, and noise pollution. Products 5) automobiles and aircraft, which are 6) sources of environmental pollution, are produced in factories. Industrial 7) and mechanization have also created much more 8) time for the population. Some peoples' 9) uses of leisure time are becoming a major 10) of environmental pollution.

[O'Donnell, P.A., Lavaroni, C. & Weymouth, M. (1973). *Population, Production, and Pollution: A chain reaction*. California State Department of Education, page 51]

Text 2

environmental, needed, been, operational, placing, of, if, now, leaders, principles, caused, towards

Leading institutions are now integrating digital technologies into their curricula to provide hands-on experience with tools such as the predictive analytics, supply chain visibility platforms, and automation software. This approach equips students with the skills 1) to leverage technology for enhanced decision-making and 2) efficiency. Moreover, with the increasing awareness of 3) issues, supply chain education is 4) a stronger emphasis on sustainable practices. Courses on the green supply chain management, circular economy 5) , and strategies for reducing carbon footprints are becoming standard, reflecting the industry's shift 6) environmentally responsible operations. Further, the disruptions 7) by events like the COVID-19 pandemic have underscored the importance 8) resilience in supply chains. Educational programs are 9) incorporating modules on risk assessment, contingency planning, and supply chain diversification to prepare 10) for mitigating the impact of unforeseen crises. In addition, collaboration is no longer confined to internal departments. It extends across organizations and sectors.

[Jayathilake, M.N. (2024). Emerging trends in supply chain education preparing leaders for industry 4.0, *Logistics Times Magazine*, KDU, page 50-51]

Text 3

necessarily, seen, are, authority, understanding, have, accountable, instances, responsible, factual, prejudice, intended

The role of translators has vastly expanded across national and cultural boundaries. Translators are 1) as key figures in promoting better 2) and dialogue among people and nations. They should not 3) remain invisible in all situations. There may be 4) where their mediation between parties is required. They have 5) to do so when they stand for the 6) truth, try to deliver objective and unbiased translation and try to point out any 7) in the source text: religion, racism, privacy issues, etc. Above all, they need to clarify the 8) meaning of sometimes ambiguous or unclear texts as they are 9) for their bilingual and interlingual communications and also 10) for their work to the client/service provider for whom they are producing.

[Department of Official Languages (2022), *The translator's handbook*. Department of Official Languages, page 3)

QUESTION 2: (20 MARKS)

Read the following text and answer the questions given below it.

Asthma is becoming a more prevalent disease since the early 1990s. From 1982 to 1992, the rate of asthma jumped from 34.7 to 49.4 per thousand. The prevalence of asthma in the USA is around 8%. There also has been some mixed trends around the world where different countries have either had increasing cases or have been stagnant.

In children, asthma is presented predominantly in males until the age of 20, where the disease is equally prevalent. Differences in childhood can be due to atopy, or because boys have a reduced airway size compared to girls. There is a family history component of asthma, as well. However, the genes responsible for inheriting asthma remain unidentified. There are mechanisms of the

phenotype of asthma that has a strong correlation of being inherited, but the mechanism is more complex, as asthma does not follow a Mendelian pattern.

Asthma is most likely transmitted by multiple genes, with some variation of locus heterogeneity and polygenic inheritance leading to asthma expression being multifaceted. Atopy or IgE antibodies attack specific antigens or pollutants, which can contribute to the disease. Research has shown that asthma was closely related to the total IgE serum level. Enhanced IgE response to environmental factors such as house dust mites, animal allergens, mold, farm animals, have contributed to sensitize asthma exacerbating its symptoms and attributing to increased airway reactivity. The reason being is that there is increased exposure to these allergens, but less data is available on the causality. Air pollution and the causation of asthma are also less clear; however, there is a relationship with smoking and the increased risk of asthma. Interestingly enough, obesity showed a positive linear relationship between asthma and increased BMI. More research needs to be done to have a clearer picture of the multifactorial disease.

[Sinyor B, & Concepcion Perez, L., (2023), Pathophysiology of asthma. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK551579/>]

1. According to paragraph 1, which term best describes the trends observed in different countries regarding asthma cases?
 - a) uniform
 - b) consistent
 - c) varied
 - d) stable
2. Asthma became widespread in 1990s compared to the previous decade.
 - a) Yes
 - b) No
 - c) Not given
3. What is the complexity associated with the inheritance of asthma according to the passage?
 - a) The genes responsible for asthma inheritance have been identified but are difficult to study.

- b) Asthma follows a Mendelian pattern of inheritance, making it easy to predict its inheritance.
 - c) The phenotype of asthma has a weak correlation with inheritance.
 - d) Asthma inheritance involves mechanisms that are more complex than a straightforward Mendelian pattern.
4. What is meant by 'phenotype' in paragraph 2?
- a) observable characteristics of an organism
 - b) severity of asthma among children
 - c) diagnosis process of a condition
 - d) genes that cause asthma
5. What is suggested as a possible reason for the predominance of asthma in males in childhood?
- a) family history of asthma
 - b) narrow respiratory track
 - c) identified genetic factors
 - d) Mendelian inheritance pattern
6. What is the gene which is responsible for causing inherent asthma?
- a) IgE
 - b) Atopy
 - c) Mendeline
 - d) Not given
7. According to the passage, there is one predominant gene which spreads asthma.
- a) Yes
 - b) No
 - c) Not given
8. What is the relationship between asthma and IgE antibodies?
- a) IgE antibodies directly cause asthma symptoms.
 - b) Attacks of IgE antibodies on antigens can cause asthma.
 - c) There is a correlation between IgE levels and asthma.
 - d) IgE antibodies have no impact on asthma development.
9. According to the passage, which of the following causes asthma?

- a) mold
- b) smoking
- c) IgE
- d) antigens

10. According to paragraph 3, which statement accurately reflects the relationship between enhanced IgE response and asthma exacerbation?

- a) Enhanced IgE response is the primary cause of asthma exacerbation.
- b) Asthma exacerbation leads to enhanced IgE response.
- c) The link between an exacerbation of asthma and an elevated IgE response is complex.
- d) Asthma exacerbation has no connection to enhanced IgE response.