Life Science

Grade 12

PAPER 1



Oute: SEPTEMBER 2024

Time: 2 % HOURS

Mark: 550

INSTRUCTIONS AND INFORMATION

Read the following instruction carefully before answering the questions.

- Answer ALL questions.
- Write ALL the answers on the provided FOLIO PAPER.
- RIOLE OFF after each question.
- 4 Start each section on a NEW page.
- Number the answers correctly according to the numbering system used in this question paper.
- Present your answers according to the instructions for each question.
- Do ALL drawings in pencil and label then in blue pen-
- Draw slagrams or flow charts only when asked to do so.
- The diagrams in this question paper are NOT all drawn to scale.
- 101 You may use a non-programmable calculator, protractor, and compans.
- 111 You may NOT use graph paper.
- 12. Write neatly and legibly.

EXAM AGREEMENT	
 (Name & Sumane); Grade	

hereby acknowledge that I will abide by all examination rules objudited below during the writing of my LIFE. SCIENCE evans.

RULES:

- I will not have any electronic equipment in my possession (cell phones, smart watches and earphones).
- 2. I will not cause any disruption during this exam in the exam venue.
- 3. I will be honest at all times.

All rules, as discussed with me, will be honoured and obeyed.

Learner Signature

SECTION A Question 1

- Various options are provided as possible answers to the following questions. Choose the correct answer and write only the letter (A to D) next to the question number (1,1.1 to 1.1.10) on the FOLIO PAPER, for example 1.1.6 E.
- 1.1.1 Hollow, pear-shaped organ.
 - Vagina.
 - Uherus.
 - Fallopian tubes
 - Placents.
- 1.1.2 Choose the letter that does not explain the process of oogenesis.
 - The diploid germinal epithelium cells of the ovaries go through the process of mitosis. to form many folicies.
 - Every 21 days, the folicle stimulating hormone (FSH) stimulates one folicle. Only one cell inside of that folicie enlarges and goes through the process of meiosis.
 - Out of the 4 haploid cells produced through melosis, only one cell will survive to form a mature ovum.
 - The other three cells from meiosis will degenerate.
- 1.1.3 Before copulation the male sperm is stored temporarily in the ...
 - seminal vesicles.
 - sorotum.
 - prostate pland
 - epididymis.
- 1.1.4 Structure that receives a stimulus and converts it into an impulse.
 - autonomic nervous system.
 - effector
 - stimulus.
 - receptor

REPORT.

Life Science Memorandam Paper November 2014

Lasantha Ariyarathna

Life Science Memorandam Paper November 2014:

Access to Scientific Research David J. Brown, 2015-11-13 The debate about access to scientific research raises questions about the current effectiveness of scholarly communication processes This book explores from an independent point of view the current state of the STM publishing market new publishing technologies and business models as well as the information habit of researchers the politics of research funders and the demand for scientific research as a public good The book also investigates the democratisation of science including how the information needs of knowledge workers outside academia can be embraced in future **Supreme emergency** Andrew Corbett, 2022-02-15 In Supreme emergency an ex Trident submarine captain considers the evolution of UK nuclear deterrence policy and the implications of a previously unacknowledged aversion to military strategies that threaten civilian casualties Drawing on extensive archival research the book provides a unique synthesis of the factors affecting British nuclear policy decision making and draws parallels between government debates about reprisals for First World War zeppelin raids on London the strategic bombing raids of the Second World War and the evolution of the UK nuclear deterrent It concludes that among all the technical factors an aversion to being seen to condone civilian casualties has inhibited government engagement with the public on deterrence strategy since **Streaming and Copyright Law** Lasantha Ariyarathna,2022-09-05 This book examines the challenges posed to 1915 Australian copyright law by streaming from the end user perspective It compares the Australian position with the European Union and United States to draw lessons from them regarding how they have dealt with streaming and copyright By critically examining the technological functionality of streaming and the failure of copyright enforcement against the masses it argues for strengthening end user rights The rising popularity of streaming has resulted in a revolutionary change to how digital content such as sound recordings cinematographic films and radio and television broadcasts is used on the internet Superseding the conventional method of downloading using streaming to access digital content has challenged copyright law because it is not clear whether end user acts of streaming constitute copyright infringement. These prevailing grey areas between copyright and streaming often make end users feel doubtful about accessing digital content through streaming It is uncertain whether exercising the right of reproduction is appropriately suited for streaming given the ambiguities of embodiment and scope of substantial part Conversely the fair dealing defence in Australia cannot be used aptly to defend end users acts of streaming digital content because end users who use streaming to access digital content can rarely rely on the defence of fair dealing for the purposes of criticism or review news reporting parody or satire or research or study When considering a temporary copy exception end users are at risk of being held liable for infringement when using streaming to access a website that contains infringing digital content even if they lack any knowledge about the content s infringing nature Moreover the grey areas in circumventing geo blocking have made end users hesitant to access websites through streaming because it is not clear whether technological protection measures apply to geo blocking End users have a severe

lack of knowledge about whether they can use circumvention methods such as virtual private networks to access streaming websites without being held liable for copyright infringement Despite the intricacies between copyright and access to digital content the recently implemented website blocking laws have emboldened copyright owners while suppressing end users access to digital content This is because the principles of proportionality and public interest have been given less attention when determining website blocking injunctions European Welfare State Constitutions after the Financial Crisis Ulrich Becker, Anastasia Poulou, 2020-11-25 Hit by the European financial and economic crisis in 2008 several Member States of the European Monetary Union EMU were unable to refinance their public debt through the financial markets As a result they asked for financial assistance from international institutions and European financial assistance mechanisms That assistance often came at a high price for citizens cuts in pensions and social assistance and controversial reforms in public healthcare These far reaching reforms were in many cases experienced as violations of people's human rights National constitutional courts the Court of Justice of the EU and the European Court of Human Rights issued a series of rulings on the conformity of the reforms in social protection initiated during the Eurozone crisis This book offers a holistic analysis of the specific reforms in social protection introduced during the European financial crisis and their implications for constitutional law Focusing on the social reforms of nine European countries that were greatly affected by the financial crisis the volume seeks to address the legacy of the financial crisis on the application of constitutional law and the welfare state The book will act as a helpful tool to legal academics interested in the challenges of constitutional and social law initiated by financial assistance conditionality to advocates in quest of sound legal bases for the protection of individuals affected by social security reforms and to national and international judges who are confronted with cases that question the legality and legitimacy of the crisis related reforms Yearbook of International Organizations 2014-2015 (Volume 4) Union Of International Associations, Union of International Associations, 2014-09-17 The Yearbook of International Organizations provides the most extensive coverage of non profit international organizations currently available Detailed profiles of international non governmental and intergovernmental organizations IGO collected and documented by the Union of International Associations can be found here In addition to the history aims and acitvities of international organizations with their events publications and contact details the volumes of the Yearbook include networks between associations biographies of key people involved and extensive statistical data Providing both an international organizations and research bibliography Volume 4 cites over 46 000 publications and information resources supplied by international organizations and provides nearly 18 000 research citations under 40 subject headings This volume also includes a research bibliography on international organizations and transnational Corporate Power, Corruption & the Destruction of the World's Forests, 1996 Publications of the Jet associations Propulsion Laboratory, 1968 Oregon Historical Quarterly, 2019 Illinois Documents List ,1987 The Publishers' Circular and Booksellers' Record ,1914 The Journal of Biolaw & Business ,2004 Marine Algae of

the Northern Gulf of California II James N. Norris, 2014 The present treatment constitutes a taxonomic study of the benthic marine red algae known in the northern Gulf of California In all 380 species of Rhodophyta belonging to two subphyla were found the Rhodophytina represented by 2 classes 2 orders 2 families 7 genera and 14 species and the Eurhodophytina represented by 2 classes 5 subclasses 19 orders 45 families 132 genera and 366 species Of the red algae 67 are endemic species Along with the 133 species of Chlorophyta and Phaeophyceae in the northern Gulf Norris 2010 there are now 512 benthic marine macroalgal species known in the northern Gulf The systematic account includes the accepted taxon name descriptions of the subphyla classes orders families genera and species of red algae presently known in the northern Gulf with Keys to serve as a guide to their identification Along with the current name for each species are its basionym synonyms type locality relevant taxonomic studies description habitat and distribution in the Gulf of California and if applicable i e not endemic in the Eastern Pacific Central Pacific and or Western Pacific In addition to reviewing the taxonomic phycological literature pertinent to the Gulf of California and Pacific Mexico several distribution extensions and new records are given One new genus one new subgeneric section and eight new species are described One new species name is given to replace an illegitimate name Twenty seven new combinations are made Canadian Journal of Fisheries and Aquatic Sciences, 2014 General Catalogue of Printed Books to 1955 British Museum. Dept. of Printed Books, 1967 **Library of Congress Magazine** ,2017

Cue ,1973 English Mechanic and Mirror of Science and Art ,1870 Historical Abstracts .1959 Historical Abstracts Eric H. Boehm. 1960 Comparative Assessment of the Environmental Costs of Aquaculture and Other Food Production Sectors Food and Agriculture Organization of the United Nations, 2007 The global food production sector is growing In many areas farming systems are intensifying This rapid growth has in some cases caused environmental damage This document include an introduction and 12 review papers describing methods for such comparisons as well as the deliberations of their authors a group of nineteen international experts on environmental economics energy accounting material and environmental flows analysis aquaculture agriculture and international development Experts concluded that comparisons can be useful for addressing local development and zoning concerns global issues of sustainability and trade and consumer preferences for inexpensive food produced in an environmentally sustainable manner In order to be useful however methods to assess environmental costs should be scientifically based comparable across different sectors expandable to different scales inclusive of externalities practical to implement and easily understood by managers and policy makers Aquaculture in many locations and conditions is or could be much more environment friendly than other food sectors Publisher's description

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