PUNJAB PUBLIC SERVICE COMMISSION

COMBINED COMPETITIVE EXAMINATION (CCE) SYLLABUS

GENERAL KNOWLEDGE

(Objective)

Duration: 90 Minutes
Total Marks: 100

a. Current Affairs: Candidates are expected to have updated knowledge of the current events, issues and developments. They are also expected to know the necessary historical perspective needed to understand these events. Candidates shall be examined in the following areas:

- **i.)** Pakistan's economic, social and political issues, regional disparities, water scarcity, Cyber laws.
- **ii.)** Pakistan's relations with neighbouring countries.
- **iii.)** Pakistan's relations with the Muslim world.
- **iv.)** Pakistan and the UN, European Union and regional organizations (ECO, SAARC, SCO, ASEAN and ARF)
- **v.)** Pakistan's relations with the US, China, EU and Russia.
- **vi.)** Global Issues: International peace and security; economy; human rights; terrorism; food security; energy security; global warming; nuclear issues, including proliferation and security; international trade; trade regimes; Sustainable Development Goals, etc.; world order; international political economy; international and regional disputes; traditional and non-traditional security threats; globalization; the divide between the Global North and the Global South; human security; climate change; artificial intelligence; non-state actors; scientific and technological advancements; migration; population growth; and transformative global trends and patterns.
- **vii.)** Relations with India, including Kashmir dispute.
- **viii.)** Issues relating to the Middle East and Southwest Asia.
- **ix.)** Prominent personalities, opinion makers, NGOs, INGOs , non-state actors, etc.
- **x.)** Globalization.
- **xi.)** Evolving socioeconomic and political situation in Pakistan and the world and important events.
- **xii.)** Sports, Music, Culture, Literature.

b. Physical Sciences:

- **i.)** Basic information about the solar system, galaxies and the universe, including common astronomical terms.
- **ii.)** Natural hazards and disasters e.g. earthquakes, cyclones, tsunamis etc. and disaster risk management.
- **iii.)** Energy sources, both fossil fuels and renewable sources and their sustainable use.
- **iv.)** Basics of Physics and Chemistry including atomic structures, chemical bonding, radiations, laws and Principles of Physics.
- **v.)** Materials, chemicals and their properties.
- **vi.)** Minerals and their mining.

c. Biological Sciences:

- **i.)** Fundamentals of living organisms, e.g. cell structure and the nucleus.
- **ii.)** Bio-molecular structures like proteins, lipids, carbohydrates, enzymes etc. and their functions/properties.
- **iii.)** Plant and animal life.
- **iv.)** Human body, its parts, organs and their functions.
- **v.)** Common diseases, their causes, prevention, vitamins, their sources and functions; vaccines, etc.
- **vi.)** Ecosystems, ecology and environmental biology.
- **vii.)** Biodiversity Conservation.
- **viii.)** Fundamentals of Genetics and Biotechnology.
- **ix.)** Regenesis: How Synthetic Biology will reinvent nature and ourselves.
- **x.)** The diversity of life.

d. Environment Studies:

- **i.)** Eco-system, biodiversity, climate change, the water cycle, the biosphere, and rock types.
- **ii.)** Atmospheric pollution, its types, sources, effects, ozone depletion, greenhouse effects, CFCs, etc.
- **iii.)** International conventions and regimes on concerning climate change, biodiversity, wetlands, desertification, carbon credits etc. and ongoing international commitments on Environment.
- **iv.)** Types, sources, effects and remedies of water pollution; sustainable use of water; recycling; waste management.
- **v.)** Sustainable Development Goals (SDGs) and climate change adaptation and mitigation, considering their growing importance in environmental governance and sustainable development.
- **vi.)** Smog & Air Quality Index (AQI).
- **vii.)** Water conservation, water scarcity, and virtual water.
- **viii.)** Renewable energy and energy conservation.

e. Food Sciences:

- **i.)** Diet and essential compounds for health.
- **ii.)** Quality of food, preservation, problems relating to the deterioration of fruits and vegetables; adulteration.
- **iii.)** Food security, global issues concerning hunger etc.
- **iv.)** Public health nutrition.
- **v.)** Food safety, adulteration, and regulation.

f. Computer Science & Information Technology:

- **i.)** Fundamentals of hardware and software.
- **ii.)** Data processing, knowledge of MS Word, Excel and PowerPoint.
- **iii.)** Networking, e-mails, social media.
- **iv.)** Basics of telecommunication including GPS, Fiber Optics etc.
- **v.)** Artificial Intelligence.
- **vi.)** Information security and privacy.
- **vii.)** Latest developments.

g. Basic Mathematics:

i.) Basic Arithmetic, Algebra and Geometry; problems relating to averages, ratios and percentages; geometric figures; sets; equations; areas of plane figures; matrices and determinants; arithmetic and geometric sequences etc.

ii.) Arithmetical Problems relating to time and work, distance and speed, age, directions etc.

iii.) Basic statistics.

h. General:

i.) Famous scientists and their claim to fame.

ii.) Famous inventions, discoveries, scientific laws, theories, and postulates.

iii.) Units and instruments of measurement.

i. English:

Candidates are expected to have basic knowledge of English grammar, parts of speech, prepositions, punctuation, active and passive voice, idioms, proverbs, phrases, synonyms, antonyms, analogies, sentence construction etc. Candidates should be able to use English correctly.

j. Urdu:

The candidates are expected to have a good command over the Urdu language, its correct usage, grammar, idioms, and proverbs etc.

k. Islamic Studies (General Knowledge for non-Muslim candidates):

The candidates are expected to display basic knowledge of the Holy Quran, Hadith, life and times of the Holy Prophet (PBUH), Khulafa-e-Rashideen, Pillars of Islam, Basic Beliefs, broad knowledge of important events in Islamic History and prominent personalities. Moreover, Non-Muslim candidates have the option either to attempt questions on Islamic Studies or the questions pertaining to general knowledge.

Note: The topics mentioned in the syllabus are only indicative for the general guidance of the candidates and cannot be deemed as an exhaustive list.

Suggested Readings:

	Title	Author(s) / Publisher
1.	Asimov's New Guide to Science	Isaac Asimov
2.	Science Restated: Physics and Chemistry for the Non-Scientist	Harold Gomes Cassidy
3.	Exploring Physical Science	Walter A. Thurber, Robert E. Kilburn, and Peter S. Howell
4.	Principles of Animal Biology	Lancelot Hogben

5.	Basics of Environmental Science	Michael Allaby
6.	Environmental Science: Systems and Solutions	Michael L. McKinney, Robert Schoch, and Logan Yonavjak
7.	Environsmental Science: A Global Concern	William P. Cunningham and Barbara Woodworth Saigo
8.	Food Science	Norman N. Potter and Joseph H. Hotchkiss
9.	Physical Geography	Harm J. de Blij, Peter O. Muller, James E. Burt, and Joseph A. Mason
10.	Physical Geography: Science and Systems of the Human Environment	Alan H. Strahler and Arthur N. Strahler
11.	Introduction to Information Technology	ITL Education Solutions Ltd.
12.	Management Information Systems	Ken Sousa and Effy Oz
13.	Fundamentals of Telecommunications	Roger L. Freeman
14.	Discovering Computers 2022: Digital Technology, Data and Devices	Misty E. Vermaat and Susan L. Sebok
15.	Computing Essentials 2021	Timothy J. O'Leary and Linda I. O'Leary
16.	Computers: Understanding Technology	Floyd Fuller and Brian Larson
17.	Pakistan Affairs	Ikram Rabbani
18.	General Science and Ability	Mian Shafiq Ahmad
19.	Environmental Science: Earth as a Living Planet	Daniel B. Botkin and Edward A. Keller
20.	Campbell Biology: Concepts and Connections	Martha R. Taylor et al.
21.	Pakistan Economic Survey	Government of Pakistan
22.	Fundamentals of Mathematics	Wade Ellis
23.	Basic Mathematics	Serge Lang
24.	Higher Algebra	Hall and Knight
25.	Elementary Food Science	R. K. Owusu-Apenten and E. R. Vieira (Springer, 2023)

26.	Essentials of Food Science	Vickie A. Vaclavik, Elizabeth W. Christian, and Tad Campbell (Springer, 2021)
27.	Microsoft Office beginner's guide / Microsoft Support and training resources	Microsoft Support — support.microsoft.com
28.	Information Security (Authentication, Privacy, Phishing, and Malware)	Cybersecurity and Infrastructure Security Agency (CISA) and National Institute of Standards and Technology (NIST)
29.	Artificial Intelligence Awareness	Tom Taulli (Apress, 2019)
30.	English Grammar in Use	Raymond Murphy, Cambridge University Press
31.	Practical English Usage	Michael Swan, Oxford University Press
32.	High School English Grammar and Composition	P. C. Wren & H. Martin, S. Chand Publishing
33.	Urdu Qawaid o Inshah	Dr. Abdul Haq

Note: **The above list is only suggestive and not exhaustive. Candidates may consult other standard books and relevant material covering the prescribed syllabus.**

End of Document