ಸಂ.ಬಿಸಿಯು/ಎಸ್‌ವೈಎನ್/ಬಿಒಎಸ್/SEC/189/2023–24   ದಿನಾಂಕ.06.10.2023.

<u>ಸುತ್ತೋಲೆ</u>

ವಿಷಯ: 5ನೇ ಸೆಮಿಸ್ಟರ್ ವ್ಯಾಸಂಗದಲ್ಲಿ SEC ಪತ್ರಿಕೆಯಾಗಿ Cyber Security /
        Employability Skills ಕುರಿತು

ಉಲ್ಲೇಖ: 1. ಕರ್ನಾಟಕ ರಾಜ್ಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಪರಿಷತ್ ಪತ್ರ ಸಂ.ಕರಾಉಶಿಪ/160/1
           ರಿಂದ 6ನೇ ಸೆಮಿಸ್ಟರ್/2022–23/655 ದಿನಾಂಕ. 21.09.2023
        2. ಕರ್ನಾಟಕ   ರಾಜ್ಯ   ಉನ್ನತ   ಶಿಕ್ಷಣ   ಪರಿಷತ್   ಪತ್ರ
           ಸಂ.KSHEC/VCP/SEC/2023/658 dated.22.09.2023
        3. ಕುಲಪತಿಗಳ ಅನುಮೋದನೆ ದಿನಾಂಕ

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ಉಲ್ಲೇಖದಲ್ಲಿ ನಮೂದಿಸಿದ ಪತ್ರ ಹಾಗೂ ಸುತ್ತೋಲೆಗಳಲ್ಲಿ ಕರ್ನಾಟಕ ರಾಜ್ಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಪರಿಷತ್ತು, ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ 5ನೇ ಸೆಮಿಸ್ಟರ್‌ನಲ್ಲಿ ಅಧ್ಯಯನ ಮಾಡಬೇಕಾದ SEC - Cyber Security **Or** Employability Skills ವಿಷಯಗಳ ಪಠ್ಯಕ್ರಮವನ್ನು ಸಿದ್ಧಪಡಿಸಿ ಉನ್ನತ ಶಿಕ್ಷಣ ಪರಿಷತ್ ಜಾಲತಾಣದಲ್ಲಿ ಪ್ರಕಟಿಸಿರುತ್ತಾರೆ. ಸದರಿ ಪಠ್ಯಕ್ರಮಗಳ ಪ್ರತಿಯನ್ನು ಈ ಸುತ್ತೋಲೆಯೊಂದಿಗೆ ಲಗತ್ತಿಸಲಾಗಿದೆ. ಮುಂದುವರೆದು ತಿಳಿಸುವುದೇನೆಂದರೆ, ಲಗತ್ತಿಸಲಾದ ಸುತ್ತೋಲೆಯಲ್ಲಿ Employability Skills ಕುರಿತಂತೆ ಆಯಾ ಮಹಾವಿದ್ಯಾಲಯದ ಶಿಕ್ಷಕರಿಗೆ ಕರ್ನಾಟಕ ನೈಪುಣ್ಯ ಅಭಿವೃದ್ಧಿ ಕಾರ್ಪೋರೇಷನ್ (Karnataka Skill Development Corporation) ಸಂಸ್ಥೆಯವರು ಅಗತ್ಯ ತರಬೇತಿ ನೀಡುವುದಾಗಿ ತಿಳಿಸಿರುತ್ತಾರೆ. ಸಂಬಂಧಿಸಿದ ಮಹಾವಿದ್ಯಾಲಯಗಳ ಪ್ರಾಂಶುಪಾಲರು ಸದರಿ ಸಂಸ್ಥೆಯೊಂದಿಗೆ ಸಂಪರ್ಕಿಸಿ ತಮ್ಮ ಮಹಾವಿದ್ಯಾಲಯದ ಆಯ್ದ ಶಿಕ್ಷಕರನ್ನು ತರಬೇತಿ ಪಡೆಯಲು ನಿಯೋಜಿಸಬೇಕೆಂದು ಈ ಮೂಲಕ ತಿಳಿಸಲಾಗಿದೆ. ಈ ಕುರಿತು ಅಗತ್ಯ ಮಾಹಿತಿಗಾಗಿ ಪ್ರೊ. ಎಂ. ಜಯಪ್ಪ, ಸಮಾಲೋಚಕರು KSHEC ಇವರನ್ನು ಮೊಬೈಲ್ ನಂ. 9448235042 ರಲ್ಲಿ ಸಂಪರ್ಕಿಸಬಹುದಾಗಿದೆ (ಪ್ರತಿ ಲಗತ್ತಿಸಿದೆ).

ಕುಲಸಚಿವರು

ಗೆ,
1. ಎಲ್ಲ ಸ್ವಾಯತ್ತ / ಘಟಕ/ ಸಂಯೋಜಿತ ಮಹಾವಿದ್ಯಾಲಯಗಳ ಪ್ರಾಚಾರ್ಯರುಗಳಿಗೆ
2. ಎಲ್ಲ ನಿಕಾಯ ಡೀನರು, ಬೆಂಗಳೂರು ನಗರ ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಬೆಂಗಳೂರು
3. ಕುಲಸಚಿವರು (ಮೌಲ್ಯಮಾಪನ), ಬೆಂಗಳೂರು ನಗರ ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಬೆಂಗಳೂರು

ಪ್ರತಿಗಳು;
1. ಪ್ರಧಾನ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಉನ್ನತ ಶಿಕ್ಷಣ ಇಲಾಖೆ, ಬಹು ಮಹಡಿ ಕಟ್ಟಡ, ಬೆಂಗಳೂರು
2. ಕಾರ್ಯನಿರ್ವಾಹಕ ನಿರ್ದೇಶಕರು, ಕರ್ನಾಟಕ ರಾಜ್ಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಪರಿಷತ್, ಬೆಂಗಳೂರು
3. ಆಯುಕ್ತರು, ಕಾಲೇಜು ಶಿಕ್ಷಣ ಇಲಾಖೆ, ಶೇಷಾದ್ರಿ ರಸ್ತೆ, ಬೆಂಗಳೂರು
4. ಸನ್ಮಾನ್ಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಇಲಾಖೆಯ ಸಚಿವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು
5. ಸ್ನಾತಕೋತ್ತರ ಮುಖ್ಯಸ್ಥರು, ಬೆಂಗಳೂರು ನಗರ ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಬೆಂಗಳೂರು
6. ಕುಲಪತಿಗಳು / ಕುಲಸಚಿವರು/ ಕುಲಸಚಿವರು ಮೌಲ್ಯಮಾಪನ / ವಿತ್ತಾಧಿಕಾರಿಗಳ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ಬೆಂ.ನ.ವಿ, ಬೆಂಗಳೂರು
7. ಕಛೇರಿ ಪ್ರತಿ/ ವಿಶ್ವವಿದ್ಯಾನಿಲಯದ ಜಾಲತಾಣದಲ್ಲಿ ಪ್ರಕಟಿಸಲು

Program Name			Semester		V
Course Title	**Cyber Security**(Theory)				
Course Code:	**SEC-5**		No. of Credits		**03**
Contact hours	**30Hrs**		Duration of SEA/Exam		**01hrs**
Formative Assessment Marks		**25**	Summative Assessment Marks		**25**

Course Outcomes(COs): After the successful completion of the course, the student will be able to:

CO1	After completion of this course, students would be able to understand the concept of Cyber security and issues and challenges associated with it.
CO2	Students, at the end of this course, should be able to understand the cyber crimes, their nature, legal remedies and as to how report the crimes through available platforms and procedures.
CO3	On completion of this course, students should be able to appreciate various privacy and security concerns on online Social media and understand the reporting procedure of inappropriate content, underlying legal aspects and best practices for the use of Social media platforms.

Contents	30Hrs
Module-I. Introduction to Cyber security: Defining Cyberspace and Overview of Computer and Web-technology, Architecture of cyberspace, Communication and web technology, Internet, World wide web, Advent of internet, Internet infrastructure for data transfer and governance, Internet society, Regulation of cyberspace, Concept ofcyber security, Issues and challenges of cyber security.	10
Module-II . Cyber crime and Cyber law:Classification of cyber crimes, Common cyber crimes- cyber crime targeting computers and mobiles, cyber crime against women and children, financial frauds, social engineering attacks, malware and ransomware attacks, zero day and zero click attacks, Cybercriminals modus-operandi, Reporting of cyber crimes, Remedial and mitigation measures, Legal perspective of cyber crime, IT Act 2000 and its amendments, Cyber crime and offences, Organisations dealing with Cyber crime and Cyber security in India, Case studies.	10
Module III. Social Media Overview and Security: Introduction to Social networks. Types of Social media, Social media platforms, Social media monitoring, Hashtag, Viral content, Social media marketing, Social media privacy, Challenges, opportunities and pitfalls in online social network, Security issues related to social media, Flagging and reporting of inappropriate content, Laws regarding posting of inappropriate content, Best practices for the use of Social media, Case studies.	10

Course Articulation Matrix: Mapping of Course Outcomes (COs) with Program Outcomes

Course Out comes(COs) /Program Outcomes (POs)	Program Outcomes (POs)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Quickly understand the given problem and come up with the correct answer															
Identify, construct and compute numerical situations by work with numbers															

Conceive and develop a methodology for analyzing data and solving a problem.												
Define, modify and apply critical thinking to real time situations.												

Pedagogy: Problem Solving

Formative Assessment for Theory	
Assessment Occasion/type	**Marks**
Internal Test1	30%
Assignment/Surprise Test	20%
Total	**25Marks**
Formative Assessment as per guidelines.	

Text/References	
1	Cyber Crime Impact in the New Millennium, by R. C Mishra , Auther Press. Edition 2010
2	Cyber Security Understanding Cyber Crimes, Computer Forensics and Legal Perspectives by Sumit Belapure and Nina Godbole, Wiley India Pvt. Ltd. (First Edition, 2011)
3	Security in the Digital Age: Social Media Security Threats and Vulnerabilities by Henry A. Oliver, Create Space Independent Publishing Platform. (Pearson , 13th November, 2001)
4	Cyber Laws: Intellectual Property & E-Commerce Security by Kumar K, Dominant Publishers.
5	Fundamentals of Network Security by E. Maiwald, McGraw Hill.
6	Network Security Bible, Eric Cole, Ronald Krutz, James W. Conley, 2nd Edition, Wiley India Pvt. Ltd.

Name of the Program: Bachelor of Arts/ Science/ Commerce/ Business Administration/ Social Works; Bachelor of Arts/ Science/ Commerce/ Business Administration/ Social Works (Hons. With or without Research), and Bachelor of Performing Arts, Bachelor of Visual Arts, and Bachelor of Hotel/Hospitality Management **Course Code:** 5.6 **Name of the Course:** Employability Skills			

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
2 Credits	3 Hrs	45 Hrs

Pedagogy: Classroom lectures, Activities based learning, Practice Questions, Tutorial Classes, Group discussions, Mock Tests, etc,

Course Outcomes: On successful completion of the course, the students will be able to
   a) Develop systematic problem-solving abilities.
   b) Enhance verbal and non-verbal reasoning skills.
   c) Improve numerical and analytical abilities.
   d) Enhance English language and communication skills.

Syllabus:	Hours
Module No. 1: **General Orientation on all Competitive Exams**	3
Overview of Competitive Exams for Government Recruitment in India - Introduction, Eligibility Criteria, Exam Pattern, Syllabus, and Resources.	
Module No. 2: **Quantitative Aptitude**	30
Number system, HCF &LCM, Ratio and Proportion, Averages, Ages, Percentages, Partnerships, Time, Speed and Distance, Profit and Loss, Data Interpretation, Problems based on Simple interest, Compound interest, Clocks, and Calendars.	
Module No. 3: Verbal and Nonverbal Reasoning	6
Verbal Reasoning: Data analysis, Data sufficiency, Decision making, coding & decoding, Blood relations, Puzzle tests, Direction sense test, Problems based on Venn Diagram/Syllogisms, Alphabet test, Arithmetical reasoning, Input/Output, Series and Seating arrangements. Non-Verbal Reasoning: Analogy, Water images, mirror images, embedded figures, Completion of Pattern, Paper folding, Cubes & dice, Figure Formation & Analysis.	
Module No. 4: English Language and Comprehension Solving	6
Vocabulary, English Grammar, Verbal Ability, Sentence Structure, Spot the Error, Fill in the Blanks, Idioms & Phrases, Cloze Passages, and Comprehension Passages.	

Skill Development Activities:

Various activity-based learning methods such as problem-solving exercises, case studies, role-playing, debates, group discussions, mock tests, and assessments can be conducted, in addition to any other relevant activities for the course to ensure effective learning.

Materials:
   1. https://free.aicte-india.org/Quantitative-Aptitude-Basics.php
   2. https://onlinecourses.nptel.ac.in/noc20_hs19/preview
   3. https://www.udemy.com/course/reasoning-verbal-non-verbal/

Note: Latest editions of books such as Quantitative Aptitude for Competitive Examinations, Modern

Approach to Verbal and Non-Verbal Reasoning, Quick Learning Objective General English by R.S.Agarwal or Arihant Publications, and other renowned titles can be referred to enhance exam preparation.

Karnataka State Higher Education Council

Col. (Prof) Y. S. Siddegowda
Vice Chairman

No.: KSHEC/VCP/SEC/2023/658
Date: 22-09-2023

CIRCULAR

Subject: Inclusion of Employability Skills in the Skill Enhancement Course (SEC) in 5th Semester of UG Programmes.

In our continuous endeavour to enhance students' skillsets and align education with evolving industry demands, the new credit framework introduces an elective Skill Enhancement Course (SEC) in the 5th semester of the Undergraduate programs. Students now have the option to choose either Cybersecurity or Employability Skills.

The curriculum and content for 'Employability Skills' have been meticulously developed and are now available on the KSHEC Website. Teachers specializing in the respective streams (e.g., BA/B.Com/B.Sc.,/BBA/BCA etc.) are eligible to serve as trainers for this course. These trainers will undergo a Training of Trainers (ToT) program organized by the Karnataka Skill Development Corporation, Department of Skill Development, Entrepreneurship, and Livelihood, Government of Karnataka. The aim of this training is to equip them with the requisite knowledge and pedagogical skills to effectively deliver the Employability Skills course. For organizing/coordinating the ToT programs, the Universities may contract Prof. M. Jayappa, Consultant, KSHEC (Mobile: 9448235042, email: drmjayappa@gmail.com).

We seek your active engagement and support to ensure the seamless and successful implementation of this program across your respective universities.

VICE CHAIRMAN

To:

The Vice Chancellors of all the State Public Universities under Higher Education Department.

Copy to:

1. PS to Hon'ble Minister for Higher Education, Govt. of Karnataka, Bengaluru-for kind information.
2. The Addl. Chief Secretary to Govt., Higher Education Department, Bengaluru- for kind information.
3. Shri Ashwin D Gowda, I.R.S., Managing Director, Karnataka Skill Development Corporation, Bengaluru.
4. The Executive Director/Administrative Officer, KSHEC.