

Toolkit for NOC to Start ODL Programs

Part-A: Institutional Readiness

Readiness Area	ODL Policy Section / clause	Specific Review Standards	Yes / No	Evidence (e.g. Annex-1, 2 ... etc.) or Remarks
Organizational Readiness	Part-II: 2.2	1. Has HEI completed a minimum of two batches of the proposed ODL program in the conventional /regular/face-to-face mode of classroom teaching?		
	Part-II: 2.3	2. Approval by the statutory bodies to offer ODL program(s) granted?		
	Part-II: 12.1	3. Is the ODL management office/unit/Equivalent to administer ODL programs operationalized?		
	Part-II: 9.iv	4. Are dedicated offices to efficiently host academic, administrative, technical, and support staff available?		
HR Readiness	Part-II: 13	5. Are approved sanction positions (academic & technical) available to run ODL programs as required under section 13 of the ODL policy?		
	Part-II: 13	6. Are roles, responsibilities, rules & regulations, job descriptions/specifications, workload, etc. defined and approved as required under section 13 of the ODL policy?		
	Part-II: 13	7. Are qualified experts (instructional designers, Graphic designers, video/audio producers) shortlisted/appointed/engaged?		
Technology Readiness	Part-II: 9.i	8. <u>Is ICT-based infrastructure to govern academic, teaching-learning procedures, and administrative procedures installed?</u> ¹		
	Part-II: 9.iii	9. <u>Is a Multiple Delivery Model (MDM) installed to enhance the learning experience of learners?</u> ²		
	Part-II: 9.v	10. <u>Is IT support equipment and services acquired to assist ODL programs?</u> ³		
	Part-II: 9.vi	11. <u>Is the computing infrastructure like hosting services, operating systems, communication software, applications, security, and packages used in teaching and learning installed and updated?</u> ⁴		
	Part-II: 9.vii	12. <u>Is the communication infrastructure providing seamless interaction at a fast speed between students and teachers, students and HEI departments, teachers and administration, and other stakeholders in</u>		

¹ To be assessed using toolkit benchmarking minimum requirements for ICT/Hardware Infrastructure (Part-C).

² To be assessed using toolkit benchmarking minimum requirements for Online Learning Platform (Part-D).

³ To be assessed using toolkit benchmarking minimum requirements for ICT/Hardware Infrastructure (Part-C).

⁴ To be assessed using toolkit benchmarking minimum requirements for Computing Infrastructure (Part-E).

Readiness Area	ODL Policy Section / clause	Specific Review Standards	Yes / No	Evidence (e.g. Annex-1, 2 ... etc.) or Remarks
		education, available? ⁵		
	Part-II: 10.i	13. <u>Is Learning Management Systems (LMS), mandatory for the ODL program, installed and functional to host the program's requirements?</u> ⁶		
	Part-II: 10.ii	14. <u>Are the key features like course administration, monitoring, evaluation, and assessment available?</u> ⁷		

⁵ To be assessed using toolkit benchmarking minimum requirements for ICT/Hardware Infrastructure (Part-C).

⁶ To be assessed using toolkit benchmarking minimum requirements for Online Learning Platform (Part-D).

⁷ To be assessed using toolkit benchmarking minimum requirements for Online Learning Platform (Part-D).

Part-B: Program Readiness

Readiness Area	ODL Policy Section / clause	Specific Review Standards	Yes - No	Evidence (e.g. Annex-1, 2 ... etc.) or Remarks
Statutory Approvals	Part-II: 5.i	1. Is the program approved by the Board of Studies?		
	Part-II: 5.i	2. Is the program approved by the Academic Council/ equivalent?		
Program's aims and goals	Part-II: 5.1.2.i	3. Are the program aims and goals aligned with the HEI's Act, mission; meet societal needs and industry demands; and guide the future course of action towards their achievement?		
Profile of Prospective Learners	Part-II: 5.1.2.ii	4. Does the proposal provide the profiling of the target learners identifying their learning needs, and classifying them into different groups, e.g., low-income, rustic inhabitants, women, unskilled, etc.?		
	Part-II: 5.1.2.ii	5. Does the proposal offer a SWOT analysis to justify the launch of the program in ODL mode?		
The relevance of the program offered in ODL mode to acquire specific abilities and proficiencies	Part-II: 5.1.2.iii	6. Are expectations for knowledge, skills, and competencies in the discipline and/or any required measurable competencies clearly stated in the program's proposal?		
	Part-II: 5.1.2.iii	7. Are the module/unit-level learning objectives or competencies describe outcomes measurable and consistent with the course-level objectives or competencies?		
	Part-II: 5.1.2.iii	8. Are the mapping of the Program's learning objectives and Course learning outcomes appropriately aligned, quantifiable, and measurable?		
Instructional Design	Part-II: 5.1.2.iv	9. Does the proposal justify the mode of delivery Synchronous, Asynchronous, or Blended?		
	Part-II: 5.1.2.iv	10. Does the proposal explain the instructional design or method separately for the program to be offered through the ODL mode?		
	Part-II: 7.iii	11. <u>Do the instructional materials contribute to the achievement of the stated learning objectives or competencies?</u> ⁸		
	Part-II: 7.iv.a&	12. Is the course content interactive, engaging, self-explanatory, and inclusive enough to		

⁸ To be assessed using toolkit benchmarking minimum requirements for an ODL course (Part-F).

Readiness Area	ODL Policy Section / clause	Specific Review Standards	Yes - No	Evidence (e.g. Annex-1, 2 ... etc.) or Remarks
	d	reflect and include the concerns and expectations of learners from diversified backgrounds to ensure knowledge retention?		
	Part-II: 7.iv.c	13. Do learning activities and practical components (application/implementation of knowledge) provide opportunities for interaction that support active learning?		
	Part-II: 7.iv.a&e	14. Does the proposal prioritize student engagement by assessing their interests, interactions, and motivation to learn?		
	Part-II: 7.iv.f	15. Are the innovations in pedagogies and delivery modes suiting the target groups' needs, expectations, and learning styles, discussed appropriately?		
	Part-II: 9.iv&vii	16. Does the proposal highlight student-teacher interactions and utilize innovative technologies to promote in-class communication?		
	Part-II: 5.1.2.vi	17. Does the proposal provide the guidelines to execute the laboratory work, where applicable? Is proper costing for material, equipment, and other related study content provided?		
	Part-II: 6	18. Does curricula offer personalization and flexible pathways for the students?		
	Part-II: 11	19. Does the proposal appropriate evaluation and assessment mechanism to measure the learning objectives of the program?		
	Part-I: 3(g)	20. Are education resources available in multiple formats (PDF, PPT, Word, audio, and video)?		
Open Educational Resources (OER)	Part-II: 7.ix	21. Are OER available on various platforms (LMS, open access, website, DVD, USB)?		
		22. Are OER protected from copyright issues?		
		23. Is infrastructure available for OER development?		
		24. Does the proposal describe the policy for admission and/or rules for the proposed program in addition to the minimum eligibility criteria and fee structure? Does the policy guide the necessary criteria and eligibility for scholarships, monetary aid, or assistance, if applicable?		
The Method of Admissions, Curriculum Transaction, Assessment, and Evaluation	Part-II: 15-16	25. Does the HEI provide clear guidelines related to the laboratory facility for the students to perform their prescribed practical work through face-to-face mode (if required within the program)?		
Laboratory and Library Resource Requirement	5.1.2.vi	25. Does the HEI provide clear guidelines related to the laboratory facility for the students to perform their prescribed practical work through face-to-face mode (if required within the program)?		

Readiness Area	ODL Policy Section / clause	Specific Review Standards	Yes - No	Evidence (e.g. Annex-1, 2 ... etc.) or Remarks
		26. Has the HEI arranged facilities to perform practical work of an ODL program through face-to-face mode?		
Cost estimation of the program	5.1.2.vii	27. Is the cost estimation to launch an ODL program comprehensive and indicate allocations for development and maintenance of the program?		
Quality assurance method and projected program outcomes	Part-II: 21.1.i	28. Is a mechanism to review the ODL program periodically available?		
		29. Does a program team exist to review the program to highlight the changes to meet future needs?		
		30. Are the E-learning materials interactive and provide regular feedback through self-assessment?		
		31. Is the frequency of the annual meetings of the statutory bodies to monitor the successful implementation of ODL programs, satisfactory?		
		32. Are reports and dashboards developed to review the progress of the ODL program?		
		33. Is the mechanism exist for the evaluation of ODL program?		
		34. Is a third-party evaluation mechanism available to evaluate an ODL program?		
		35. Is the mechanism available to get feedback from diverse stakeholders (faculty, students, and employers)?		
		36. Is the program evaluation and assessment mechanism aligned with the program's learning objective?		
		37. Are the assessments used sequenced, varied, and suited to the level of the courses?		
		38. Are audit reports and dashboards used to evaluate programs and courses?		
		39. Are the program/courses providing learners with multiple opportunities to track their learning progress with timely feedback?		
		40. Are assessments measure the achievement of the stated learning objectives or competencies?		
		41. Is institution integrated multiple mechanisms to ensure proper identity verification and guard against plagiarism?		
		42. Are rules & regulations regarding assessment & evaluation approved from competent forum?		

Part-C: Toolkit Benchmarking Minimum ICT/Hardware Infrastructure

(Rented or Purchased)

Readiness Area	Specific Review Standards	Yes - No	Evidence (e.g. Annex-1, 2 ... etc.) or Remarks
ICT/Hardware Infrastructure	Domain/Application Management Server Web Application Server (High end computing machine with HA/FT option) vCore=16 RAM=32GB HDD=1TB		
	Learning Management Server Web Application Server (High end computing machine with HA/FT option) vCore=16 RAM=32GB HDD=2TB		
	Database Server (High end computing machine with HA/FT option) vCore=32 RAM=48GB HDD=5TB		
	Load Balancer (dedicated for LMS traffic) vCore=16 RAM=32GB HDD=2TB		
	Web Application Firewall (as per node)		
	Centralized Storage (SAN) (15TB)		
	Backup Solution (25TB)		
	Internet Bandwidth (Redundant) 50Mbps x 2		
	The primary site shall have the provision of High Availability, Scalability to cater increasing number of the students.		
	The DR site shall be established to back up the services of the primary site		

Part-D: TOLKIT BENCHMARKING LMS

Online Learning Platform (OLP)

Readiness Area	Specific Review Standards	Yes / NO	Evidence (e.g. Annex-1, 2 ... etc.) or Remarks
Course Management Part-II: 10.ii	1. Content Creation, Organization, and delivery <ul style="list-style-type: none"> • Text and Multimedia • WYSIWYG Editor • Multimedia Integration • Hierarchical Structure • Taxonomy and Tagging 2. Sharable Content Object Reference Model (SCORM) ⁹ and xAPI Compliance 3. Gamification Features ¹⁰ 4. Course Calendar 5. Content Delivery and Tracking: <ul style="list-style-type: none"> • Synchronous and Asynchronous Learning • Tracking Tools 6. Search and Navigation: <ul style="list-style-type: none"> • Search Functionality • Navigation Menus 7. Student & Faculty Profile Management 8. Communication and Collaboration: <ul style="list-style-type: none"> • Discussion Forums • Threaded Discussions • Moderation Controls • Announcements • Real-Time Messaging and Chat • Group Chats 9. Collaborative Document Editing and File Sharing: <ul style="list-style-type: none"> • Real-Time Editing • Version History • Centralized Storage • Permission Controls 10. Video Conferencing and Virtual Meetings: <ul style="list-style-type: none"> • Virtual Meetings • Screen Sharing 		

⁹ Designed to ensure that different e-learning content and LMS systems can work together e.g., interoperability, content packaging, sequencing, and navigation, and tracking and reporting.

¹⁰ Integration of game like elements into non-game contexts to enhance student engagement, motivation, participation and learning experience e.g., awarding points, badges, ranking of learners or showing learners level of progression.

Student Information System (SIS)	11. Assessment and Evaluation: <ul style="list-style-type: none"> • Quizzes and Exams • Assignment Submission 		
	12. Progress Tracking and Reporting: <ul style="list-style-type: none"> • Analytics • Gradebook 		
	13. Project Management: <ul style="list-style-type: none"> • Task Assignment • Gantt Charts 		
	14. Calendar and Event Management		
	15. Customization and Flexibility		
	16. User Support		
	17. Email Integration: <ul style="list-style-type: none"> • Email Notifications • Single Sign-On 		
	18. Integration with other Systems		
	19. Student Registration and Enrolment: <ul style="list-style-type: none"> • Online Registration • Automated Enrolment Processes 		
	20. Personal and Academic Profiles: <ul style="list-style-type: none"> • Instructor Profiles • Student Profiles • Academic Records 		
	21. Class Scheduling and Timetables: <ul style="list-style-type: none"> • Automated Scheduling • Timetable Access 		
	22. Grading and Transcript Management: <ul style="list-style-type: none"> • Grading System • Transcript Generation 		
	23. Communication and Alerts: <ul style="list-style-type: none"> • Messaging System • Notification Settings 		
	24. Attendance Tracking: <ul style="list-style-type: none"> • Automated Attendance • Reports and Analytics 		
	25. Student Portals: <ul style="list-style-type: none"> • Self-Service Portals • Profile Updates 		
	26. Integration with Learning Management System (LMS): <ul style="list-style-type: none"> • Seamless Integration • Single Sign-On 		
	27. Reporting and Analytics: <ul style="list-style-type: none"> • Data Analysis • Custom Reports 		

	<p>28. Security and Data Privacy:</p> <ul style="list-style-type: none"> • Access Controls • Data Encryption <p>29. Mobile Accessibility</p>		
Payment and Billing System	<p>30. Tuition and Fee Management:</p> <ul style="list-style-type: none"> • Fee Structures • Variable Fees <p>31. Online Payment Processing:</p> <ul style="list-style-type: none"> • Secure Transactions • Payment Gateways <p>32. Automated Invoicing:</p> <ul style="list-style-type: none"> • Invoice Generation • Schedule-Based Invoicing <p>33. Financial Aid and Scholarship Management:</p> <ul style="list-style-type: none"> • Financial Aid Processing • Verification Processes <p>34. Refund Processing:</p> <ul style="list-style-type: none"> • Refund Policies • Automated Refunds <p>35. Late Fee Management:</p> <ul style="list-style-type: none"> • Late Payment Notifications • Calculation and Assessment <p>36. Integration with Virtual Information System (VIS):</p> <ul style="list-style-type: none"> • Synchronized Data • Single Sign-On <p>37. Financial Reporting:</p> <ul style="list-style-type: none"> • Financial Dashboards • Custom Reports <p>38. Security and Compliance:</p> <ul style="list-style-type: none"> • Secure Transactions • Regulatory Compliance <p>39. Automated Communication:</p> <ul style="list-style-type: none"> • Payment Confirmations • Payment Reminders <p>40. Mobile Accessibility:</p> <ul style="list-style-type: none"> • Responsive Design 		
	41. Responsive Design		
	42. Cross-Browser Compatibility		
	43. Mobile-Friendly Content		
	44. Microlearning Modules		
	45. Mobile Applications		
	46. Collaborative Tools		
	47. Mobile Assessments		

	48. Mobile-Optimized Quizzes		
	49. Mobile Learning Analytics and Device Compatibility		
Accessibility Features	Web Content Accessibility Guidelines (WCAG):		
	50. Semantic HTML		
	51. Keyboard Navigation		
	52. Descriptive Alternative Text (Alt Text)		
	53. Video Accessibility		
	54. Multimedia Alternatives		
	55. Read-Aloud Compatibility		
	56. Text to Speech (TTS) Integration		
	57. Color Contrast		
	58. Resizable Text		
	59. Accessible Forms		
	60. Focus Indicators		
	61. Logical Heading Hierarchy		
	62. MathML Support		
	63. Descriptive Science Content		
	64. Personalization Features		
	65. Accessibility Documentation		
	66. Accessibility Training Resources		
	67. Compatibility with Assistive Technologies (AT)		
	68. Interoperability Testing		
Analytics and Reporting Tools	69. Learning Management System (LMS) Data		
	70. User Interaction Data		
	71. Student Performance Metrics		
	72. Learning Progress		
	73. Predictive Analytics		
	74. Interventions		
	75. Course Engagement Metrics to Gauge Effectiveness		

	76. Content Popularity		
	77. User Engagement and Participation		
	78. Assessment Analy VIS		
	79. User Demographics and Behaviour		
	80. Customizable Reports		
	81. Custom Dashboards		
	82. Integration with Other Systems		
	83. Single Sign-On		
Data Backup and Security Measures	84. Data security through routine Backups with Automated and Incremental capabilities.		
	85. Utilization of redundant servers and infrastructure.		
	86. Encryption Protocols for sensitive data, including personal information and financial transactions at storage level as well as during transmission using secure protocols such as SSL/TLS.		
	87. Role-Based Access Control (RBAC)		
	88. Multi-Factor Authentication (MFA)		
	89. Firewall Protection		
	90. Intrusion Detection Systems and Prevention		
	91. Comprehensive Security Policies		
	92. Incident Response Plans		
	93. Data Recovery Strategies		
	94. Data Centre Security		
	95. Device Security		
	96. Sensitive Data Classification and Handling		
	97. Regular Software Updates		
	98. Patch Management Procedures		
	99. Compliance with Regulations: such as GDPR, HIPAA, or FERPA.		
	100. Data Governance Policies		
	101. Regular Testing		
	102. Documentation and Training		

Part-E: TOLLKIT BENCHMARKING COMPUTING INFRASTRUCTURE

Readiness Area	Specific Review Standards	Yes - No	Evidence (e.g. Annex-1, 2 ... etc.) or Remarks
Workstations for Student			
Hardware	<ul style="list-style-type: none"> • Minimum Intel Corei3 (6th Generation) • Minimum 4GB (Preferably 8GB) RAM • Minimum 320GB Drive 		
Software	<ul style="list-style-type: none"> • Windows 10 (with latest service pack available). • Google Chrome. • And other supporting software as required. 		
Domain Controller for Exam Center (Number depends on capacity)			
Hardware	<ul style="list-style-type: none"> • Minimum Intel Corei5 (6th Generation) • Minimum 8GB RAM • Minimum 500GB Drive 		
Software	<ul style="list-style-type: none"> • Windows Server 2019 Standard Edition (with latest service pack available). 		
Exam Server			
Hardware	<ul style="list-style-type: none"> • Minimum Intel Corei5 (6th Generation) • Minimum 8GB RAM • Minimum 500GB Drive 		
Software	<ul style="list-style-type: none"> • Windows Server 2019 Standard Edition (with latest service pack available) • Microsoft SQL Server 2014 Express Edition (with tools) • Web Server Windows Role (Internet Information Server) • AJAX Web Extensions • Microsoft Access Database Engine (x64) • Google Chrome 		

Part-F: TOLKIT BENCHMARKING An ODL COURSE)

General Standards	Specific Review Standards	Yes - No	Evidence (e.g. Annex-1, 2 ... etc.) or Remarks
Course Overview and Introduction	1. Instructions make clear how to get started and where to find various course components.		
	2. Learners are introduced to the purpose and structure of the course.		
	3. Communication expectations for online discussions, email, and other forms of interaction are clearly stated.		
	4. Course and institutional policies with which the learner is expected to comply are clearly stated within the course, or a link to current policies is provided.		
	5. Minimum technology requirements for the course are clearly stated, and information on how to obtain the technologies is provided.		
	6. Computer skills and digital information literacy skills expected of the learner are clearly stated.		
	7. Expectations for prerequisite knowledge in the discipline and/or any required competencies are clearly stated.		
	8. The self-introduction by the instructor is professional and is available online.		
	9. Learners are asked to introduce themselves to the class.		
	10. Course includes Welcome and/or Getting Started content via a Course Information area that includes the Syllabus. A printable PDF of the syllabus is available for learners.		
	11. An orientation or overview is provided for the course letting students know how to navigate and what tasks are due.		
	12. Homepage provides visual representation of course; a brief course description or introduction; clear instructions for students (e.g. where to begin) and navigation to current content in less than three clicks.		
	13. Home page utilizes a course banner with imagery that is relevant to subject/course materials.		
	14. Course card/dashboard provides visual representation of subject by adding an image in Course Settings.		
	15. Items not used are hidden from Course Navigation.		
	16. Instructor has provided learning objectives;		

	policies for grading, late work and make up work; communication instructions, guidelines and contact information.		
	17. Student is made aware of participation expectations; technology requirements; and supplemental textbooks, reading lists, and course materials.		
	18. Course provides access to campus and HEC resources (technical help, orientation, tutoring).		
	19. Course includes links to relevant campus policies on plagiarism, computer use, student grievances, accommodating disabilities, etc.		
Learning Objectives (Competencies)	20. The course learning objectives, or course/program competencies, describe outcomes that are measurable.		
	21. The module/unit-level learning objectives or competencies describe outcomes that are measurable and consistent with the course-level objectives or competencies.		
	22. Learning objectives or competencies are stated clearly, are written from the learner's perspective, and are prominently located in the course.		
	23. The relationship between learning objectives or competencies and learning activities is clearly stated.		
	24. The learning objectives or competencies are suited to the level of the course.		
Instructional Materials	25. The instructional materials contribute to the achievement of the stated learning objectives or competencies [ODL Part-II: 7.vi].		
	26. The relationship between the use of instructional materials in the course and completing learning activities is clearly explained[ODL Part-II: 7.v].		
	27. The course models the academic integrity expected of learners by providing both source references and permissions for use of instructional materials [ODL Part-II: 7.iv].		
	28. The instructional materials represent up-to-date theory and practice in the discipline.		
	29. Variety of instructional materials is used in the course [ODL Part-II: 7.v].		
Course Content	30. Copyright law is followed. Course breaks no copyright considerations [ODL Part-II: 7.x].		
	31. The process ensuring permissions (Creative Common, Copyrights, Fair Use, Public Domain, etc.) are in place and the HEI follows the same [ODL Part-II: 7.xi].		
	32. Appropriate funds are allocated for the		

<p>purchase/development of electrical study material [ODL Part-II: 7.xii]..</p>		
<p>33. Every course has a complete instructional material package, including e-resources that is be available in the central Learning Object Repository. All links, files, videos and external URLs are active and working [ODL Part-II: 7.xiii].</p>		
<p>34. Course contents, material and activities are designed ensuring the credit hour requirements delineated in clause 8.1 of the ODL policy exclusively for each delivery mode [ODL Part-II: 8.1].</p>		
<p>35. Content is "chunked" into manageable pieces by leveraging modules (e.g. organized by units, chapters, topic, or weeks).</p>		
<p>36. Text Headers and indentation are included within modules to help guide student Navigation.</p>		
<p>37. Modules and items within modules have a thoughtful naming convention.</p>		
<p>38. Modules begin with an Introduction/Overview page and end with a Conclusion/Summary page to "bookend" each module</p>		
<p>39. External tools are embedded within modules or in a page, assignment, discussion, or quiz.</p>		
<p>40. Lessons include at least one of three forms:</p> <ul style="list-style-type: none"> • Student-Student Interaction (e.g. discussions and/or collaborative projects) • Student-Teacher Interaction (e.g. quality feedback) • Student-Content Interaction (e.g. engaging content and resources with which students must interact and not just read or watch (Foster collaboration and community)) 		
<p>41. There is a "Welcome" or "Let's Get Acquainted" discussion</p>		
<p>42. Auto-open Inline Preview used thoughtfully</p>		
<p>43. Personalized learning is evident (e.g., utilized module completion requirements and/or prerequisites.</p>		
<p>44. Differentiation is evident (e.g. utilized different due dates).</p>		
<p>45. Course offers access to a variety of engaging resources that facilitate communication and collaboration, deliver content, and support student learning and engagement.</p>		
<p>46. Course provides activities for students to develop thinking and problem-solving skills, such as critical reflection and analysis corresponding to that of prescribed in NQF for</p>		

<p>the relevant qualification level.</p>		
<p>47. The course contents reflect the following characteristics:</p> <ul style="list-style-type: none"> • Interactive and engaging to ensure knowledge retention. • Self-explanatory and aligned with philosophy of self-regulated learning in online mode of delivery. • Practical components (application/implementation of knowledge) shall be carefully integrated into the content. Student-centered instruction shall be focused during the course development process. • Inclusive enough to reflect and include the concerns and expectations of learners from diversified backgrounds including cultural, linguistic, learning styles, and differently abled etc. • Visualizing i.e., imparting quality images and graphics to improve interaction and engagement. • Contextualized and enabling i.e., using comprehensible language, jargon, and examples to improve understanding and comprehension of the learner. • Progressive with incremental complexity to support sequential learning. • Seat time and length of the recorded lectures: in general, an effective length of time for a course content is below 30 minutes. • Flexible in terms of the supplementary material which may be integrated as extra readings for the reinforcement of the learning. 		
<p>48. Course provides activities that emulate real world applications of the discipline, such as experiential learning, case studies, and problem-based activities</p>		
<p>49. Open Courseware and Small Learning Objects have been developed in line with the requirements clause 7.xvi of the ODL policy. The content includes enough explanation of the significant topics, activities, self-assessment questions, links to further reading, and reference material.</p>		
<p>50. Where available, Open Educational Resources, free, or low-cost materials are used</p>		

	51. A policy is formulated for periodic review – at least every 3 years, of course contents, materials, and activities to keep the courses aligned with the demands of the society and learning outcomes. However, refinement and updating of assessment material is carried out every semester.		
Design and Layout	52. A logical, consistent, and uncluttered layout is established. The course is easy to navigate (Consistent color scheme and icon layout, related content organized together, self-evident titles).		
	53. Large blocks of information are chunked into manageable sections with ample white space around and between sections.		
	54. There is enough contrast between text and background for the content to be easily viewed.		
	55. Instructions are provided and well-written		
	56. Course is free from grammatical and spelling errors.		
	57. Flashing and blinking text is avoided.		
	58. Slideshows use a predefined slide layout and include unique slide titles. Clear transitions are set between slides.		
	59. Accommodation Statement is present and easily located (e.g., on Home Page or Course Overview).		
Course Accessibility	60. Color does not overpower the course information; sufficient contrast between text and background makes information easy to read; and color is not used in isolation to convey meaning (e.g., color and bold are used to indicate importance).		
	61. Images are used to support course content (e.g., banners, headings and icons) and accompanied by text descriptions (Alt text) or captions for more complex descriptions.		
	62. Styles (e.g. Paragraph, Heading, etc.) are used to format text with a preference to use sans serif (e.g., Arial or Helvetica).		
	63. Accessibility to a course is limited to the concerned faculty,		
	64. registered students, and head of the academic department and LMS administrator is also add observer guest members after due approval from relevant HEI authorities.		
	65. Hyperlink text incorporates the hyperlink destination/purpose (avoid raw URLs) and includes words and phrases to provide context		

	for screen-readers.		
	66. Audio materials (mp3, wav, etc.) are accompanied by a transcript and videos /screen casts are closed-captioned.		
	67. Tables are only used for tabular data		
Learning Activities and Learner Interaction	68. The learning activities promote the achievement of the stated learning objectives or competencies.		
	69. Learning activities provide opportunities for interaction that support active learning.		
	70. The instructor's plan for interacting with learners during the course is clearly stated.		
	71. The requirements for learner interaction are clearly stated.		
Course Technology	72. The tools used in the course support the learning objectives or competencies.		
	73. Course tools promote learner engagement and active learning.		
	74. Variety of technology is used in the course.		
	75. The course provides learners with information on protecting their data and privacy.		
Learner Support	76. The course instructions articulate or link to a clear description of the technical support offered and how to obtain it.		
	77. Course instructions articulate or link to the institution's accessibility policies and services.		
	78. Course instructions articulate or link to the institution's academic support services and resources that can help learners succeed in the course.		
	79. Course instructions articulate or link to the institution's student services and resources that can help learners succeed.		
Accessibility & Usability	80. Course navigation facilitates ease of use.		
	81. The course design facilitates readability.		
	82. The course provides accessible text and images in files, documents, LMS pages, and web pages to meet the needs of diverse learners.		
	83. The course provides alternative means of access to multimedia content in formats that meet the needs of diverse learners.		
	84. Course multimedia facilitate ease of use.		
	85. Vendor accessibility statements are provided for all technologies required in the course.		
	86. In the context of conducting the examination, the HEI observes the policies/rules/regulations issued by the HEC from time to time.		

<p>87. The HEI has formulated a policy and rigorous process for developing question papers, question banks, assignments and their moderation, the conduct of examination, evaluation of answer scripts by qualified teachers, and consequently in the declaration of results. Additionally, the HEI's policy ensures inclusion of the following provisions:</p> <ul style="list-style-type: none"> • The examinations are conducted by the controller of examinations of the HEI and held in the HEI-approved examination center. • The two types of assessments comprise continuous evaluation: formative evaluation in the form of Assignments/Quizzes/ Graded Discussion Board (GDB) and summative evaluation in the shape of mid and end semester examinations. • The qualifying/passing score are set by aggregate marks in the Mid-semester, Assignments/Quizzes/GDB, and end-semester exam, as per HEC policy. • The Assessment and Grading Policy of the HEI is the same for ODL and conventional courses/programs and in line with the HEC's Policy Guidelines for the Implementation of Uniform Semester Examination System in Higher Education Institutions of Pakistan. • The practical work (if any) of the courses offered through ODL mode, is conducted, and evaluated through traditional / face-to-face/ regular mode and without the completion of the practical work, the semester examination would not be held. • The 'Examination Centre' is to be established either within the premises of the HEIs or other HEIs/ educational institutions, with the approval of statutory bodies, and to comply with all the requirements as delineated in clause 11.xi of ODL policy. 		
<p>88. The assessments measure the achievement of the stated learning objectives or competencies in all learning domains i.e. cognitive, affective, and psychomotor.</p>		
<p>89. The course grading policy is stated clearly at the beginning of the course.</p>		
<p>90. Specific and descriptive criteria are provided for the evaluation of learners' work, and their connection to the course grading</p>		

91. policy is clearly explained.		
92. The assessments used are sequenced, varied, and suited to the level of the course.		
93. The course provides learners with multiple opportunities to track their learning progress with timely feedback.		
94. Multiple methods of assessments are used (e.g. discussion, assignments (individual or group) and quizzes).		
95. Detailed instructions and guidelines for completing assignments and discussions are provided.		
96. Sample assignments are provided to illustrate instructor expectations.		
97. Rubrics used to evaluate assignments and/or discussions.		
98. Outcomes tied to assessments.		
99. Learning Mastery Grade-book enabled for visual representation of Outcome mastery.		
100. Students have opportunities to review their performance and assess their own learning throughout the course (pre-tests, automated self-tests, elective assignments, etc).		
101. Students are informed when a timed response is required. Proper lead time is provided to ensure there is an opportunity to prepare an accommodation		
102. Students have easy access to a well-designed and up-to-date grade book.		
103. Students have multiple opportunities to provide descriptive feedback on course design, course content, course experience, and ease of online technology.		

Part-G: TOLLKIT BENCHMARKING EXAMINATION REQUIREMENTS FOR ODL MODE

Readiness Area	Specific Review Standards	Yes - No	Evidence (e.g. Annex-1, 2 ... etc.) or Remarks
Infrastructure Requirements	<ul style="list-style-type: none"> • A computer lab having the capacity to accommodate/conduct examinations of all students. • Computer workstations having Core i5 Processor 6th Generation or above with min. 4 GB of Ram. • All workstations must be connected on a local LAN through Domain based networking. • Windows 10 or above Operating system • Stable Internet connection along with one backup connection. • Electricity Backup measures i.e. UPS/ Generator/Solar. • CCTV Cameras covering all areas of the Lab & Entrance of Hall. 		
Exam Software Requirements	<ul style="list-style-type: none"> • A setup package of exam software will install all required libraries of exam software on local server. 		
Question Bank	<ul style="list-style-type: none"> • A separate Question Bank for each course/topic is available. • The questions, assess relevant SLOs and PLOs, and the difficulty level is based on bloom's taxonomy. • Questions are reviewed after a specific time period. 		
Date sheet Mechanism	<ul style="list-style-type: none"> • Flexible date sheet • Students register for their exams as per announced examination period. • Students pick their examination city/center by themselves. • Students make date sheet according to their own convenience. 		
Question Paper Generation	<ul style="list-style-type: none"> • Question papers base on the relevant course? • Distinct paper(s) for each student are generated. 		

	<ul style="list-style-type: none"> • Each paper is encrypted and password protected. 		
Conduct of Examinations	<ul style="list-style-type: none"> • Exams are conducted on specifically designed software under the supervision of duly appointed Supervisory Staff • Data available for Evaluation on same exam day 		
Evaluation Strategy	<ul style="list-style-type: none"> • Answer papers are marked systematically. • Students identification is hidden. • Answer papers are marked question by question. • 		
Result Preparation/Declaration Mechanism	<ul style="list-style-type: none"> • Results are compiled subject/course wise. • A system/mechanism exists to identify and remove anomalies. • Grades are assigned in line with HEI's approved policy. 		