

## Guidelines for Selection of Broad Dissertation Topic – Indian Participants

Dear Officers, Greetings from College of Defence Management!

1. As you embark on the academic journey of Higher Defence Management Course (HDMC-22), please accept our heartiest congratulations for being nominated for the flagship course of CDM. Allow us to be your intellectual partner and introduce you to the enduring task 'Dissertation' during the conduct of the course.
2. **Research**, at its core, is a simple yet powerful pursuit. It is your academic and intellectual journey into a space where curiosity leads, questions matter and ideas begin to take shape. The ideas, translated into implementation, will transform the environment for future readiness. Therefore, the ideas that emerge are either the **discovery of new knowledge** or **rigorous testing** of the existing knowledge. Every meaningful study begins not with data, but with a question that genuinely intrigues the researcher.
3. Herewith, you are presented with a map, a set of broad dissertation topics (listed in excel sheet). These are no fixed or predetermined routes; however, these are the start points. Some of you may find a path here that relates and resonates immediately. Others may wish to chart own course, guided by unique experiences and perspectives. Both approaches are equally viable.
4. As you reflect on your choice of broad topic, consider the following:-
  - 4.1 *Does the topic trigger and stimulate your curiosity?*
  - 4.2 *Does your quest sustain over time?*
  - 4.3 *Does it connect with your professional experience or operational exposure?*
  - 4.4 *Does it align with an area you are passionate about or wish to explore deeply?*
  - 4.5 *Does it address a contemporary issue of relevance and significance?*
  - 4.6 *Will your study generate or deduce the much-needed meaningful thought, policy, or practice?*
5. A **well-chosen topic** does more than filling up a choice as an academic requirement, it is your **personal intellectual mission**. It is something **you will engage with, question, refine, and possibly carry forward beyond this course for effective fruition**.
6. We at the CDM, assure you that you will not traverse this path alone. You shall have an intellectual companion; experienced **mentors** assigned to you **will guide and support throughout**. We will equip you with the necessary **research methodology**, provide access to **relevant resources** and **software tools**. What we seek from you at the outset, is **thoughtful intent in choosing a subject that matters to you, considering your passion, expertise and interests**.
7. Your dissertation in addition to academic submission, will **be shared with relevant stakeholders at SHQs and defence think-tanks. For further readership, selected works will be curated as articles for publication in Defence Management Journal 'Dur-Drishti' of CDM and other reputed publications of AFTIs, ensuring your ideas have voice, wings and impact**.
8. Therefore, we invite you to review the list of broad topics shared with this communication and indicate your priority preference (P1 to P4, **one from each domain**). You may also propose a topic of your own, with a brief rationale.
9. **The intellectual journey begins with this one decision. Make it count!**

### Broad Dissertation Topics and Selection Procedure

1. **Aim.** To provide an opportunity to the participants to :-
  - 1.1 Conduct an *in-depth study* of a subject of their choice *following the process of research*.
  - 1.2 Produce original *evidence-based research work*.
  - 1.3 *Develop greater understanding* and be able to evaluate and appreciate research work in future appointments.
2. Dissertation work is also towards partial fulfilment for award of “HDMC” symbol and “MMS” degree.

### Process for Allotment of Topics

3. **Broad Topics.** For HDMC-22, a total of 306 broad topics have been prepared by collating topics from following:-
  - 3.1 Service Headquarters (*IA, IN and IAF*).
  - 3.2 NSCS
  - 3.3 Defence Think-tanks (CAPSS, CENJOWS, CLAWS, IDSA and NMF).
  - 3.4 ‘Further research scope’ of HDMC-21 Dissertations.
  - 3.5 Faculties of CDM.
  - 3.6 Relevant and significant contemporary topics carried forward from HDMC-21.
4. **Domains/ Verticals.** The collated topics have been broadly divided into following domains/ verticals:-
  - 4.1 Financial Management and Supply Chain Management.
  - 4.2 Information Sciences and Decision Sciences.
  - 4.3 Strategic Management and Strategic Studies.
  - 4.4 Organisational Behaviour and Organisational Development.
  - 4.5 Cross-domain/ Specialised.
5. **Allotment Process & Timeline.**
  - 5.1 An excel workbook comprising of list of broad topics, nominal roll and sheet for exercising choice of topics has been prepared.
  - 5.2 Participant officers are to choose one topic from any of the five verticals/ domains and assign a priority. Four topics to be chosen in the order of priority. It is mandatory that, the first three priority topics are from different domains.

5.3 Participant may also propose a topic of own choice. All such participants are required to write an application along with justification, addressed to the Commandant, CDM for consideration.

5.4 Participants are required to submit choice of topics (from the list/ written application for own choice) by **10 May 26**.

5.5 Post scrutiny and initial briefing at CDM on 'Dissertation Work', broad topics shall be allotted by **10 Jun 26**.

### Procedure for Selection of Topics in Excel Sheet

6. Open the Excel Sheet 'Choice' of workbook 'H22\_Individual Choice for Dissertation topics' and follow the steps indicated:-

#### 6.1 Step 1.

	A	B	C	D	E	F	G	H	
1	Ser	Rank	Name	Priority	Domain	Topic Code	Title	Justification (>180 & <250 characters)	Pri
2		#N/A	#N/A	P1	#N/A	#N/A			

- Write your **Ser No** here. E.g. if its '**Ser No. 1**' write only '**1**'. Your **Rank and Name** will appear in next two columns on its own. If serial number is filled correctly, the check **Personal Details** column (will show '**Correct**', else '**Error**').
- Ser Nos are indicated in **Nominal Roll Sheet**.

	A	B	C	D	E	F	G	H	
1	Ser	Rank	Name	Priority	Domain	Topic Code	Title	Justification (>180 & <250 characters)	Pri
2	1	Col	Vaibhav Attri	P1	#N/A	#N/A			

## 6.2 Step 2.

AutoSave H22\_Individual Choice for Dissertation topics Search (Cmd + Ctrl + U)

Home Insert Draw Page Layout Formulas Data Review View Automate Acrobat

Font: Arial, 12, Bold, Italic, Underline, Color, Background Color, Text Color, Paragraph, Styles, Conditional Formatting, Format as Table, Cell Styles, Insert, Delete, Format, Sort & Filter, Find & Select, Add-ins, Comments, Share, Create PDF and share link

Domain	Topic Code	Broad Topic	Remarks
IS-DS	IS1	Autonomous Weapons and Command Responsibility	CAPSS
IS-DS	IS2	Building National Cyber Resilience: A Pragmatic Look at Critical Infrastructure Protection	CAPSS & IDSA
IS-DS	IS3	Building Multi-Domain Awareness: The Start Point for Multi Domain Operations	CAPSS
IS-DS	IS4	Performance Metrics for Combat Effectiveness: Is India Ready for the next War?	CAPSS
IS-DS	IS5	Fighting a War in the Information Age: Cognitive Battles and Shaped Perceptions	CAPSS
IS-DS	IS6	Artificial Intelligence in Nuclear Decision Support	CAPSS
IS-DS	IS7	AI-driven Adaptive Command & Control Systems	CAPSS
IS-DS	IS8	Autonomous Logistics Vehicles for High-Altitude Resupply	CAPSS
IS-DS	IS9	Multi-Sensor Counter-UAS Detection Network	CAPSS
IS-DS	IS10	Autonomous EW/Jamming Systems against Unmanned Threats	CAPSS
IS-DS	IS11	Advanced Border Surveillance (Indo-China Frontiers)	CAPSS
IS-DS	IS12	Converged Cyber & Electronic Warfare for Spectrum Dominance	CAPSS
IS-DS	IS13	AR/VR Simulation for Tactical Training	CAPSS
IS-DS	IS14	Space-based ISR & Resilient SATCOM	CAPSS
IS-DS	IS15	Artificial Intelligence & Lethal Autonomous Weapon Systems	CAPSS
IS-DS	IS16	Space as a Warfighting Domain	CAPSS
IS-DS	IS17	Emerging Technologies: Quantum, 3D Printing, Hypersonic Weapons, Directed Energy & Biotechnology	CAPSS
IS-DS	IS18	Unmanned Systems & Counter-UAS Ops	CAPSS
IS-DS	IS19	China's cyber and space capability	CAPSS
IS-DS	IS20	Littering Munition as a new larger of missile Warfare: Doctrine, ethics & escalation risks	CAPSS
IS-DS	IS21	Cyber Security threats to Maritime Navigation Systems	CAPSS
IS-DS	IS22	AI Integration in MDO Environment: Challenges and Way Forward	CAPSS
IS-DS	IS23	AI Driven Command Systems and their incorporation into TTPs (Tactics, Techniques, and Procedures) of Armed Forces	CAPSS
IS-DS	IS24	Wargaming and Simulation Infrastructure for MDO Training	CAPSS
IS-DS	IS25	SWOT of Sovereign AI against Applications like ChatGPT, DeepSeek etc	CAPSS
IS-DS	IS26	Need for resilient communication networks for joint operations in contested environments	CAPSS
IS-DS	IS27	Need for Data centres for storage and usability of military data for planning, operations and analysis	CAPSS
IS-DS	IS28	Need for training of Armed Forces personnel on AI	CAPSS
IS-DS	IS29	Human Factor Analysis of Combat Cloud Applications in AI based Decision-Making Tools	CAPSS
IS-DS	IS30	Impact of Digitalisation on Human Resource Optimisation and Decision-Making Hierarchies in the Indian Army	CAPSS
IS-DS	IS31	Development of Counter-Air Assets for the Indian Air Force: Challenges and Way Forward	CAPSS

Choice Nominal Roll FM-SCM IS-DS MGMT SM-SS OB-OD

## 6.3 Step 3

Ser	Rank	Name	Priority	Domain	Topic Code	Title	Justification (>180 & <250 characters)	Priority	Domain	Topic Code	Title	Priority	Domain	Topic Code
1	Col	Vaibhav Attri	P1	IS-DS	IS5	Fighting a War in the Information Age: Cognitive Battles and Shaped Perceptions								

IS2  
IS3  
IS4  
IS5  
IS6  
IS7  
IS8  
IS9  
IS10  
IS11  
IS12  
IS13

**6.4 Step 4.** Repeat the process for P2, 3 & 4 also. If there is no duplication of domain/ topics in P1 to P3, the check domain will show '**Correct**', else '**Error**'.

A	B	C	D	E	F	G	H	I
Ser	Rank	Name	Priority	Domain	Topic Code	Title	Justification (>180 & <250 characters)	Priority
1	Col	Vaibhav Attri	P1	IS-DS	IS5	Fighting a War in the Information Age: Cognitive Battles and Shaped Perceptions		P2

**6.5 Step 5.** Write adequate justification for choosing Priority1(P1) topic. If the justification is between 180 to 250 characters the 'Check Justification' column will show 'Correct', else 'Error'.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Ser	Rank	Name	Priority	Domain	Topic Code	Title	Justification (>180 & <250 characters)	Priority	Domain	Topic Code	Title	Pri
	1	Col	Vaibhav Attri	P1	IS-DS	IS5	Fighting a War in the Information Age: Cognitive Battles and Shaped Perceptions	To examine how modern conflicts are increasingly fought in the cognitive domain, where narratives, and perception management shape outcomes. Understanding these dynamics is vital for developing effective strategies in contemporary warfare.	P2	FM-SCM	FM4	Developing the Concept of 'National Champions' in the Industry	I
2													

	M	N	O	P	Q	R	S	T	U	V	W	X
1	Priority	Domain	Topic Code	Title	Priority	Domain	Topic Code	Title	Check Topic	Check Justification	Check Pers Details	
	P3	SM-SS	SM14	Multi Domain Ops & Mission Sudarshan Chakra: Status & Way ahead	P4	MGMT	M26	Indian Shipbuilding Industry Transition - New green propulsion technologies - Challenge and Strategies	CORRECT	CORRECT	CORRECT	
2												

## 6.6 Example of Correctly Filled Excel Sheet for Choice of Topic

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Ser	Rank	Name	Priority	Domain	Topic Code	Title	Justification (>180 & <250 characters)	Priority	Domain	Topic Code	Title	Pri
	1	Col	Vaibhav Attri	P1	IS-DS	IS5	Fighting a War in the Information Age: Cognitive Battles and Shaped Perceptions	To examine how modern conflicts are increasingly fought in the cognitive domain, where narratives, and perception management shape outcomes. Understanding these dynamics is vital for developing effective strategies in contemporary warfare.	P2	FM-SCM	FM4	Developing the Concept of 'National Champions' in the Industry	I
2													

	M	N	O	P	Q	R	S	T	U	V	W	X
	Priority	Domain	Topic Code	Title	Priority	Domain	Topic Code	Title	Check Topic	Check Justification	Check Pers Details	
1	P3	SM-SS	SM14	Multi Domain Ops & Mission Sudarshan Chakra: Status & Way ahead	P4	MGMT	M26	Indian Shipbuilding Industry Transition - New green propulsion technologies - Challenges and Strategies	CORRECT	CORRECT	CORRECT	
2												

**6.7 Step 6.** If your **Serial number is 1**, Change the excel File (with choice) Name to : "**D\_Choice\_SER1\_Rank\_Name**" and **send as excel file through email to [ds53.ids@gov.in](mailto:ds53.ids@gov.in)**. If your name doesn't figure in the Nominal Roll Sheet, save excel file with your Rank & Name. E.g. If your name is Col RK Jha, save the excel file as "**D\_Choice\_Col\_RK Jha**" and forward.

## Queries/ Clarifications

7. For queries/ clarifications with respect to selection of dissertation topics/ research work/ research process etc. if any, you may kindly contact:-

Capt (IN) Suguna Kumar  
HOD Research Methodology  
College of Defence Management  
Email : [ds53.ids@gov.in](mailto:ds53.ids@gov.in)/ [sugunk17@gmail.com](mailto:sugunk17@gmail.com)  
Mob & WhatsApp : +91 9441497903