1. **Deep Ocean Mission (CS)**

FINANCIAL OUTLAY (Rs in Cr)	**OUTPUTS 2022-23**			**OUTCOMES 2022-23**		
2022-23	**Output**	**Indicators**	**Targets 2022-23**	**Outcome**	**Indicators**	**Targets 2022-23**
650	Design and development of Manned submersible rated for 6000 metre water depth	Number of off the shelf components realized	8	Developed manned submersible system	Successful deployment at maximum ocean depth at sites of underwater mineral resources upto full ocean depth varying from 5500 mtr to 6000 mtr (Yes/No)	No
		Deep- water personnel sphere (% completed)	30		Number of Certified subsystems realized to proceed for system integration	8
		Hyperbaric chamber design and development (% completed)	30		Testing and qualification of deep water personnel sphere (Yes/No)	No
		Design and realisation of life support systems (% completed)	50		Establishment of Hyperbaric facility with infrastructure (% completed)	50
		Integration personnel sphere, propulsion systems, sensor and controls (% completed)	20		Number of publications done related to research on Manned submersible	3
		Completion of Harbour and Sea Trials (Yes/No)	No		Number of technologies patented	1

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2022-23			OUTCOMES 2022-23		
2022-23	**Output**	**Indicators**	**Targets 2022-23**	**Outcome**	**Indicators**	**Targets 2022-23**
	Development of underwater Mining Machine for mining of the underwater minerals	Development of mining machine done (% completed)	40	Demonstrative mining at PMN site	Number of publications done related to research on underwater mining machine.	3
		Development testing of riser system with umbilical cable & hose (% completed)	15			
		Sea trials of the integrated mining system (% completed)	15		Number of technologies patented for underwater mining machine.	0
	Development of ocean climate change assessment system	Development of statistical and dynamical framework for the projection of climate indicators (in %)	50	Improved understanding of the impact of ocean climate change indicators and future projections for the Indian coastal regions	Number of interim climate change reports	1
					Number of publications in scientific journals	2
					Web interface for assessing the impact of ocean climate change indicators on coastal region (% completed)	20
	Deployment of observing systems	Number of observing systems deployed (Deep Ocean Gliders, Deep Argos floats and Directional wave spectra drifters)	30	Improved understanding of deep ocean physical-biogeochemical parameters and Utilization of in-	Number of completed glider transact	2
		Number of ship-borne observation campaign	1		Number of publications in scientific journals	1

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2022-23			OUTCOMES 2022-23		
2022-23	**Output**	**Indicators**	**Targets 2022-23**	**Outcome**	**Indicators**	**Targets 2022-23**
				situ data for model validation		
					Number of technical documents	2
	Database for deep sea flora and fauna of seamount	Number of Deep sea biodiversity surveys undertaken.	1	Conservation of deep sea Biodiversity hotspots within Indian EEZ	No. of publications and taxonomic catalogues	2
	Technology for culture of deep-sea symbionts, piezotolerant and piezophilic microbes	Realization of pressure retainable sampler	1	Characterization of novel deep sea symbionts, piezophiles, peizo tolerant microbes and biomolecules	Number of Symbionts, piezophilic and piezotolerant microbes isolated	50
					Number of high impact publications related to research on technology innovations for exploration	2
	Study of deep sea bio-fouling, corrosion and life friend molecules	Setting up of experiment facility	1	Assessment of bio fouling, corrosion process and formation of life friendly molecules in deep sea	Number of samples collected and experiment carried out	2
	Repository and DNA bank of deep-sea flora and fauna	No. of deep-sea organisms collected	100	Reference facility for DNA based research	No. of access to the DNA resources by researchers	2

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2022-23			OUTCOMES 2022-23		
2022-23	**Output**	**Indicators**	**Targets 2022-23**	**Outcome**	**Indicators**	**Targets 2022-23**
	Exploration of Hydrothermal Deposits	Exploration and Identification of plumes (Yes/No)	Yes	Understanding of hydrothermal distribution in the exploration area	Number of confirmed plumes	2
		Exploration and Identification of active/ inactive vents (Yes/No)	Yes	Identification of inactive vent fields in the exploration area	Exploration of inactive vents	4
	Acquisition of new research vessel	Identification of shipyard, basic design, construction activities done/completed (Yes/No)	Yes	Enhance scientific capability to conduct ocean research	No. of days vessel is deployed for survey and exploration activities (Utilization of Vessel)	0
		Vessel delivery (Yes/No)	No			
		Vessel deployment and operations done (Yes/No)	No			
	Detailed design document for a high capacity offshore OTEC powered desalination plant.	Design of closed & open cycle OTEC system plant components (in %).	20	Design of system for the generation of energy & water by making use of ocean thermal gradient	Detailed engineering design for generation of electricity and water from OTEC (in %).	20
	Capacity building in Marine Biology	Number of international institutions from whom collaboration done	1	Human Resource Development in	No. of publications based on Ocean Biology	1

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2022-23			OUTCOMES 2022-23		
2022-23	**Output**	**Indicators**	**Targets 2022-23**	**Outcome**	**Indicators**	**Targets 2022-23**
		Number of national institutions from whom collaboration done	2	the areas of Ocean Biology		

2. Ocean Services, Modelling, Applications, Resources and Technology (OSMART) (CS)

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2022-23			OUTCOMES 2022-23		
2022-23	**Output**	**Indicators**	**Targets 2022-23**	**Outcome**	**Indicators**	**Targets 2022-23**
460	1. Developing infrastructure for monitoring coastal hazards	1.1 No. of buoys commissioned for Marine Observation along Indian Coast -Coastal buoys	1	1.a Coastal water monitoring	1.1 No of hotspots under coastal water quality monitoring	1
		1.2 No. of GNSS stations – Operational 24*7	32	1.b Increased lead time for enabling timely response on emergency advisories	1.2 Time taken to issue tsunami advisories (in minutes)	12
	2. Coastal monitoring and services	2.1 Number of locations for monitoring of coastal pollution	50	2.a Monitoring of marine pollution and erosion	2.1 Assessment of health of the coastal waters of India (number of coastal stations)	50
		2.2 No of sensor based buoys for Monitoring coastal water quality	1		2.2 No. of locations for time series data on coastal water quality	1
		2.3 No of states where Coastal Erosion is being monitored	5	2.b Issuance of weather and fishery advisories to support fishing industry	2.3 Assess the shoreline changes of the Indian Coast (sites)	5

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2022-23			OUTCOMES 2022-23		
2022-23	**Output**	**Indicators**	**Targets 2022-23**	**Outcome**	**Indicators**	**Targets 2022-23**
		2.4 New system setup for species specific advisory services as well as potential fishing zone assessment services	2		2.4 No. of additional registered mobile user of fisherman community	10000
		2.5 No. of fisheries advisories issued	300		2.5 Reduction in search time of fishermen for fishing grounds (%)	30%
		2.6 No of Coral reef Alert Services issued	120	2.c. Health of the coral reef and advisory	2.6 No. of coral reef ecosystems monitored	5
	3. Exploration of Marine resources: Marine living resources -	3.1 No. of cruises to assess ocean acidification	2	3. Identifying the marine biodiversity hotspots, augmentation of IndOBIS, hatchery rearing of marine wild stocks	3.1 No. of mesocosm experiments	2
		3.2 Generation of barcodes of deep sea organisms	20		3.2 No. of voucher specimens augmented	100
		3.3 No. of cruises to assess fish eggs and larval abundance and diversity	2		3.3 Area covered within the Indian coastal seas (%)	20%

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2022-23			OUTCOMES 2022-23		
2022-23	**Output**	**Indicators**	**Targets 2022-23**	**Outcome**	**Indicators**	**Targets 2022-23**
	4. Exploration of Marine resources: Underwater Non-living resources – eg. minerals	4.1 Area covered under bathymetric data acquisition in exclusive economic zone of India (in sq. km.)	3000	4.a Enhancement of Knowledge and new information	4.1 Number of research Papers in peer reviewed journals	3
		4.2 Number of cruises undertaken	1	4.b Exploration of polymetallic nodules and sulfides	4.2 Continuation of work as per the contract with International Seabed Authority (Yes/No)	Yes
	5. Commissioning of two Desalination plants funded by MHA and being implemented by NIOT.	5.1 Percentage of work completed (Procurement-30%, setting up marine structures 30%, , laying of cold water pipe 20%, Final commissioning 20%)	100%	5. Benefit to islanders of Lakshadweep	5.1 Amount of freshwater generated per day per plant (in litres)	150000
	6. Commissioning of OTEC powered Desalination plant	6.1 Floating of tenders for pipe work at Kavaratti (%).	25%	6. Benefit to islanders of Lakshadweep	6.1 Amount of freshwater generated per day per plant (in litres)	0

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2022-23			OUTCOMES 2022-23		
2022-23	**Output**	**Indicators**	**Targets 2022-23**	**Outcome**	**Indicators**	**Targets 2022-23**
	7. Development of technology for food products and industrial biochemical from marine microbes, algae, seaweeds and open sea cage culture.	7.1 Identification of potential marine microbes, algae, seaweed species and cage tests	2	7. Development of technology for food products and industrial biochemical from marine microbes, algae, seaweeds and open sea cage culture.	7.1 Number of technologies developed for production industrial biochemical from marine microbes, algae, seaweed and number of cages developed	1
	8. Coral habitat monitoring at Mahatma Gandhi Marine National Park (MGNP), Port Blair	8.1 Installation of coastal data buoy moored with relevant sensors for continuous monitoring	1	8. Continuous in-situ monitoring of coral reef habitat	8.1 Number of installation of in-situ monitoring station	1
	9. Development of underwater acoustic systems	9.1 Designing of indigenous acoustic telephone for oceanographic applications (%)	25%	9. Development of underwater acoustic telephone	9.1 Technology developed for underwater acoustic telephone (Yes/No).	Yes

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2022-23			OUTCOMES 2022-23		
2022-23	**Output**	**Indicators**	**Targets 2022-23**	**Outcome**	**Indicators**	**Targets 2022-23**
		9.2 Development of algorithm for detection and classification of submerged vessel (%)	25%			
	10. Establishment of Ocean Technology based Incubator for NIOT	10.1 Establishment of Ocean Technology based incubating centre at NIOT, Chennai (Yes/No)	Yes	10. Promoting Entrepreneurship in India in the field of Ocean Technology	10.1 Creating the frame work and installing Technology Incubation Cell MAGIC (Yes/No)	Yes
	11. Multi Institutional Arabian sea studies	11.1 Multi Institutional Arabian sea studies conducted (Yes/No)	Yes	11. To provide technical support to other institutes to undertake the studies.	11.1 To develop expertise and capacity building. (Yes/No)	Yes

4. Atmosphere & Climate Research - Modelling Observing Systems & Services (ACROSS) (CS)

FINANCIAL OUTLAY 2022-23 (Rs in Cr)	Output 2022-23	Indicators	Target 2022-23	Outcome 2022-23	Indicators	Target 2022-23
460	1. Setting up of District Agro meteorological Field Units	1.1 Number of District Agro meteorological Field Units (DAMU) established 1.2 Number of Agromet AWS installed	25 150	1.Issuance of Weather, Climate and Agro meteorological advisories.	1.1 Additional Number of farmers who receive the Agro-meteorological advisories (in lakhs) 1.2 Additional number of Agromet observatories for observations meant for farmers	30 150
	2. Augmentation of the Observation System Network	2.1 Establishment of Aviation Weather Observing Systems at Airports and Heliports	10	2.1 Improved Aviation Services	2.1 Development of State-of-the Art support system at Airports and Heliports for aviation (in number)	10
		2.2 Installation & commissioning of Doppler Weather Radars	5	2.2 Better forecasting capability for NW Himalayan region	2.2 Increase in Now casting Stations	50
		2.3 Installation of Automatic Weather Stations (AWS)	250	2.3 Monitoring of City weather/ forecasting	2.3Additional no. of cities/towns covered for rainfall monitoring	125
	3.Climate Services	3.1 Establishment of state-of the-art climate data centre with integrated advanced climate data services portal for rendering	10%	3. Expansion of Climate Services	3.1 Increase in number of users of data, especially researchers and scientists (in %) 3.2 Increase in volume of data being supplied to all users	50%

		national and regional climate services (in %)			through the Climate Data Service Portal (in %)	50%
	4. Development of Multi-Hazard Early Warning system for natural disasters	4.1 Commissioning of Decision Support System (in %)	20%	4. Issuance of accurate warnings for natural disasters	4.1No: of natural disasters for which Impact based forecasting will be issued	1
	5. Double the Resolution of Short-Range Forecast model	5.1 Increase the resolution of short-range prediction model (6 kms from 12 kms) (in %) 5.2 Make ensemble prediction system at 6 km resolution (Number of Ensemble members)	70% 11	5. Generating weather forecasts at a higher spatial resolution (~from 6 kms)for generating forecasts at block level	5.1 Additional No: of blocks where, block-level short-range weather forecast will be initiated (from 2000 to 3000) 5.2 Reduction in the cyclone track landfall error (in percentage) 5.3 Enhancing the skill of extreme rain with higher lead time (days)	500 5 % 5

	6. Implement next generation of coupled model for seasonal and extended range forecasts	6.1 Implementation of the next generation model with weakly coupled Data assimilation after thorough testing (% of work)	70%	6.Utilization of coupled model forecasts at Extended (up to 4 weeks) and Seasonal (next 3 months) time scales by IMD for various sectors	6.1 Number of homogenous regions for which Seasonal forecasts will be provided 6.2 Issue the experimental extended range forecasts at district level (No. of districts)	4 70
	7. To improve the initial conditions of the operational NWP model	7.1 Assimilation of radar reflectivity in real-time to initialize the operational meso-scale regional models. (No: of Indian Doppler Weather radars) 7.2 Assimilation of Aeolus wind profile data in Global model assimilation system (No: of observations per day) 7.3 Development of weakly coupled global data assimilation system (% of work)	3 1 lakh 20%	7.1 Improvement in the quality of initial condition for regional models resulting in better prediction of regional severe weather. 7.2 The quality of initial condition for global model will be improved and will be useful for global forecasting. 7.3 The quality of initial condition for global coupled model will be improved and will be useful for global forecasting	7.1 Real-time use of regional meso-scale model output for normal and severe weather by IMD for various sectors (Yes/No) 7.2 Real-time use of global model output for medium range weather forecasts by IMD for various sectors. (Yes/No) 7.3 Real-time use of global coupled model output for medium range weather forecasts by IMD for various sectors. (Yes/No)	Yes Yes No
	8. Development of Earth System model	8.1 No. of Coordinated Climate model experiments under Coupled Model Inter comparison	2	8.CMIP model simulations are assessed as part of	8.1 Number of years of projections using the high resolution ESM	50

		Project (CMIP) of the World Climate Research Programme (WCRP)		the IPCC Climate Assessment Reports and various national assessments		
	9. .Procurement of High Performance Computing system – V3.0	9.1 Install and Commission the HPC system at NCMRWF and IITM (% of work)	100%	9. Augmentation of the existing High Performance Computing system	9.1 Number of dynamical models with enhanced resolution made available for issuing forecasts (in numbers)	3
	10. Setting up of Atmospheric Research Data Center	10.1 Populating the Atmospheric Research Data center with atmospheric data sets (in Giga Bytes)	100,000	10. Easier Accessibility to observed and modeling data to researchers on a single platform	10.1 Percentage of the data populated to be released to general public after extensive QC/QA (in %)	30%
	11.Establishment of Atmospheric Research Testbed in Central India (ART-CI)	11.1 Progress of work (in %) (development of Physical Infrastructure: 20%; commissioning of 1st phase of instrumentation: 30%; commissioning of 2nd phase of instrumentation: 30%; commissioning of finalphase of instrumentation: 20%)	50%	11. Improving the understanding of Climate and Monsoon related processes in Central India	11.1 No: of instruments Commissioned in the 1st phase of instrumentation to conduct monsoon observational campaign 11.2 Data processing, quality control and preparation of first level of campaign data (in %)	7 50%
	12. Establishment of weather radar network over Mumbai	12.1 Number of X-band radars installed/commissioned	4	12. Providing information to public and to improve nowcasting	12.1 Develop mosaic of real-time rainfall distribution maps at 500 m resolution from radar	100%

	Metropolitan region			capabilities of operational agencies	network for nowcasting and flood warning systems (in %)	
	13.Integrated Meteorological Services for North-East (NE)	13.1 Establishment of Doppler Weather Radars over NE Region 13.2 Increase in AWS network	1 100	13. Improving weather and climate services over the region	13.1 Increase in Nowcast stations 13.2 Additional no. of cities/towns covered for rainfall monitoring	10 90
	14. Establishment of a Thunderstorm Testbed	14.1 Establishment of basic observational network including acquisition of land (in %)	20%	14. Improvement in understanding of physical process of Thunderstorm (in %)	14.1 Quantitative identification of process of thunderstorm over the site (in %)	0 %
	15. Research Output	15.1 No. of publications emanated under the scheme	250	15. No. of papers published in SCI journals	15.1 No. of papers	225
	16. Training in operational Meteorology & Capacity Building	16.1 Establishment of training web e-portal, Virtual Class room Facility (in %)	25%	16. Enhanced outreach of Training Programs	16.1 No. of Trainings/ refresher courses/ capacity building programs conducted 16.2 Number of people trained	12 700
	17. Establish National Calibration facility for meteorological sensors at IMD, Pune	17.1 Establishment/ operationalization of National Calibration facility for meteorological sensors (at IMD, Pune with NABL accreditation (in %)	50%	17. Operationalization of Regional Calibration facilities for Meteorological sensors	17.1 No. of regions (RMCs)	2

5. Polar Sciences Cryosphere (PACER) (CS)

Financial Outlay (Rs in Cr)	OUTPUTS 2022-23			OUTCOME 2022-23		
2022-2023	**Output**	**Indicator**	**Targets**	**Outcome**	**Indicator**	**Targets**
140.24	1. Scientific Expeditions	1.1 Launching of 15th Scientific expedition to the Arctic. (Yes/No)	Yes	1.1 Improved understanding of polar regions	1.1 No of parameters recorded in Antarctica, Arctic, and Himalayas	25
		1.2 Operational days of station Himadri in the Arctic	180 days		1.2 No of Publications related to tropic- polar region teleconnections	7
		1.3 Launching of 42nd scientific expedition to the Antarctic (Yes/No)	Yes			
		1.4 Operational days of station in Antarctica	365 days			
		1.5 Launching of Scientific expedition to the Southern Ocean in the alternative years (Yes/No)	Yes			
		1.6 Launching of scientific expedition to the Himalayas (Yes/No)	Yes	1.2 Improved understanding of glacier dynamics	1.3No of glaciers continuously being monitored in the Himalayas	6
		1.7 Operational days of station Himansh in Himalaya	120 days			

	2. Initiation of scientific projects in cryospheric, atmospheric and geosciences domain	2.1 No. of scientific projects launched in polar region	50	2. Improved contributions of India to International polar research arena	2.1 No. of scientific research publications with the findings from the cryospheric, atmospheric and geosciences domain related projects in polar region	55
	3. Acquisition of Polar research vessel	3.1 Polar Research Vessel - % of work related to preparation of tender documents	100%	3. Enhance scientific capability to conduct polar research	3.1 Number of expeditions to polar regions using the newly acquired PRV	Nil
	4. Indian Antarctic Law	Introduction of Indian Antarctic Bill in Parliament (Yes/No)	Yes	4. Indian Antarctic Law	4.1Enactment of Indian Antarctic Law (Yes/No)	Yes

6. Seismological & Geosciences (SAGE) (CS)

Financial Outlay (Rs in Cr) 2022-2023	**OUTPUTS 2022-23**			**OUTCOME 2022-23**		
	Output	**Indicator**	**Targets**	**Outcome**	**Indicator**	**Targets**
100		1.1 Procurement of broadband seismographs (BBS) systems with software	10	1. Improvement in the earthquake	1.1 Maintaining the minimum threshold magnitude of 3.0	Yes

Financial Outlay (Rs in Cr) 2022-2023	OUTPUTS 2022-23			OUTCOME 2022-23		
	Output	**Indicator**	**Targets**	**Outcome**	**Indicator**	**Targets**
	1. Strengthening of seismological observations	1.2 Site preparation to enable installation of BBS systems	10	detection capabilities with increased accuracy in earthquake parameters	earthquake in most part of the country (Yes/No)	
		1.3 Procurement of GPS systems	15			
		1.4 Site preparation to enable installation of GPS systems	15			
	2.Establishment of Earthquake Early Warning System (EEWS) with 100 stations on pilot basis	2.1 Identification of pilot area, siting of equipments, finalization of specifications and tendering	25	2.Testing of EEWS on pilot test basis for fool-proof implementation before making it to Public	2.1 Capacity to deliver earthquake early warning for specific earthquake prone region for the pilot area in the country	25
	3. Seismic Hazard Microzonation of selected seismically vulnerable cities (12 nos.)	3.1 Generation of large scale multi-thematic maps for 4 cities.	4	3. Estimation of ground motion at specific sites to help in planning the future construction / structures.	3.1 Generation of final risk index map for risk resilient cities	Yes
	4. Creation of geochronology facility	4.1 Setting up of a national facility for geochronology i.e., creation of required infrastructure to set up the Lab and procure ancillary equipment in % terms.	20%	4.Quality data generation of specific sample	4.1No. of papers/ publication/ findings	10

Financial Outlay (Rs in Cr) 2022-2023	OUTPUTS 2022-23			OUTCOME 2022-23		
	Output	**Indicator**	**Targets**	**Outcome**	**Indicator**	**Targets**
	5. Setting up of borehole observatory in Koyna region	5.1 Site characterization through integration of geological, geophysical and rock mechanical datasets in % terms. 5.2 Instrumentation of pilot borehole and operation of broadband seismic stations (nos.) 5.3 Planning of main borehole (Yes/No) (Depending upon the site clearance)	40% 5 Yes	5. Improved understanding of earthquake processes in Koyna region	5.1 No. of reports/ publications/ findings	4
	6.Creation of National Geoscience & seismological Data repository	6.1 Populating the National Geoscience data repository (in Tera Bytes) 6.2 Establishment of seismological data repository (in %)	50 50%	6. Quality geoscience and seismological data generation	6.1 Data availability to Scientific community (in Tera Bytes)	4
	7. Research Output	7.1 No. of publications emanated under the scheme	40	7. No. of papers published in SCI journals	7.1 No. of papers	30

7. Research Education & Training Outreach (REACHOUT) (CS)

Financial outlay (Rs in Cr) 2022-23	OUTPUTS 2022-23			OUTCOME 2022-23		
	Output	**Indicators**	**Targets**	**Outcome**	**Indicators**	**Targets**
65	1. Extramural funding	1.1 Number of proposals funded for undertaking R&D activities in various academic and research institutes of the country	25	1. Nurturing the R&D activities in Earth Sciences being undertaken in the various academic and research institutes of the country	1.1 No. of publications based on research conducted through extramural funding	50
	2. Outreach and awareness	2.1 No. of conferences/ seminars/and symposium to be organized for improving the awareness about the activities of the Ministry	20	2. Providing support for seminars, conferences, workshops, field programmes, training activities etc. in the area of Earth System Science	2.1 No. of people participating in the conferences, workshops, field programs etc.	400
					2.2 No of schools where the outreach and awareness events are held	35
		2.2 Number of International Earth Science Olympiad (IESO) conducted annually	1		2.3 Number of students appearing for the all India level Entrance Test for IESO.	2000

	3. Training courses conducted at MoES Institutes {BIMSTEC centre for Weather and climate (BCWC), Noida; UNESCO Category-2 centre of ITCOcean at Hyderabad; Development of Skilled Manpower in Earth System Sciences (DESK), IITM Pune}	3.1 No. of courses conducted in Earth Sciences (Atmospheric Sciences, Oceanography, Geosciences etc.) in 3 training centres	12	3. Develop skilled and trained manpower in Earth Sciences with the support of academic institutions in the country and abroad.	3.1 No. of people who attended the training programmes	300
	4. KRC Net portal	4.1 Integrating 3 MoES Institutes in the KRCNet portal (in %)	100%	4. KRC Net portal usage	4.1 Visitor counts	10000
	5. DERCON	5.1 Subscription to e-resources (journals and databases)	135	5. DERCON usage	5.1 No of e-resources accessed	120000