Annexure 2: Self Assessment (Questions 7and 8)

				Answer to question no. 7		Answer to question no. 8	
A	**B**	**C**	**D**	**H**	**I**	**J**	**K**
	Feature	**Definition**	**Applicable scenario**	**Self-assessment for the full city with regard to each feature**	**Basis for assessment and/or quantitative indicator (Optional - only if data exists)**	**Projection of 'where the city wants to be' with regard to the feature/indicator based on the city vision and strategic blueprint**	**Input/Initiative that would move the city from its current status to Advanced status (Scenario 4: Column G)**
1	**Citizen participation**	**A smart city constantly shapes and changes course of its strategies incorporating views of its citizen to bring maximum benefit for all. (Guideline 3.1.6)**	City conducts citizen engagement at city level and local area level with most stakeholders and in most areas. The findings are compiled and incorporated in projects or programs.	Scenario3: (i)Frequent citizen consultation and outreach (ii) Periodic meetings of the Stakeholder Committee to integrate citizens' views on various initiatives and issues (iii) Important information online (iv) fortnightly e-newsletter	(i) Council Resolution to formalize Stakeholder Committee (ii) Citizen Report Card (iii) Report on Minutes and Action Taken at Ward meetings (iv) Grievances / Organized Protests (v) Registry of citizens' engaged with during public hours - Mayor/Commissioner	(i) The city aspires to be citizen responsive and institutionalize participatory planning , budgeting and monitoring - achieve 25% engagement through ward and city level meetings . (ii) The city administration wants to gain the confidence and trust of the citizens and integrate their views in all aspects of governance	(i) Institutionalizing participatory planning , budgeting and monitoring (ii) Interactive e-governance platforms, online apps for service monitoring and complaint redressal, face to face interactions with citizens (iii)Citizen interaction through Monthly "Call your Mayor/Commissioner"
2	**Identity and culture**	**A Smart City has a unique identity, which distinguishes it from all other cities, based on some key aspect: its location or climate; its leading industry, its cultural heritage, its local culture or cuisine, or other factors. This identity allows an easy answer to the question "why in this city and not somewhere else?" A Smart City celebrates and promotes its unique identity and culture. (Guideline 3.1.7)**	Historic and cultural heritage resources are preserved and utilised and their surroundings are well-maintained. Public spaces, public buildings and amenities reflect the cultural identity of the city;	Scenario 3: (i)Built , natural heritage and culture preserved and promoted (ii) Public spaces reflect culture and vibrance of city (iii) Periodic cultural fests and events organized (iv)Spatial information on related plans available online (v) Determined and preserved heritage conservation zone in the city	(i) Budget allocation for heritage culture and natural environment preservation (ii) Masterplan integrates relevant action (iii)Number of festivals, cultural and promotional events organized (iv) Number of domestic, national & international participants in events/festivals (v)Revenue from tourism and hospitality industry (vi)Number of organizations involved in related activities	(i)The city aspires to preserve, promote and celebrate its unique historical identity and culture (ii)The city aspires to improve maintenance and promotion of its heritage and culture through all means including digital fora	(i) Rejuvenation of public spaces/town squares, gardens, parks, springs and cultural centres. (ii) Ease of access for persons with special needs (iii) Pedestrianization to increase footfalls (iv) Digital signages (information, caution, direction), interactive digital maps in kiosks, web-based applications (v) Establishment of a center for arts, artisans and culture (vi) Upgradation of conservation zone and comprehensive heritage conservation guidelines/bye-laws (vi) Set-up of a heritage cell in CCP

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3	**Economy and employment**	**A smart city has a robust and resilient economic base and growth strategy that creates large-scale employment and increases opportunities for the majority of its citizens. (Guideline 2.6 & 3.1.7 & 6.2)**	There is a range of job opportunities in the city for many sections of the population. The city attempts to integrate informal economic activities with formal parts of the city and its economy.	Scenario 2: (i)Tourism and hospitality industry contribute 33% to state GDP and 1500 crore in taxes (ii) Over 50% GDP is from tertiary sector (iii) Increasing work participation rate (iv)Appx. 12000 large, small and medium enterprises	(i)%employment rate (ii) Number of expos/trade fairs and trade and commercial events (iii) Investment in tourism (iv) Number of new hotels and guest houses/tourist facilities	The city aspires to: (i) provide designated commercial, trade centres, (ii) expand basic infrastructure and services and (iii) be a knowledge hub (iv) Increase income from tourism through encouragement and provision of world class tourist facilities focused on sustainability	(i) Economic improvement and increase in employment through provision of sustainable tourism services - parking, public transport, pedestrianization and public bike share programme
4	**Education**	**A Smart City offers schooling and educational opportunities for all children in the city (Guideline 2.5.10)**	City provides adequate primary education facilities within easily reachable distance of 15 minutes walking for most residential areas of the city. The city also provides some secondary education facilities.	Scenario 2: (i) 87% literacy rate (ii) Adequate educational institutions and infrastructure per URDPFI norms(iii)Inadequate professional education centres per norms	(i) Pre-primary, 1 for 2500 (ii) Primary school 1 for 5000 (iii)Senior secondary school 1 for 7500 (iv)Integrated school (with hostel facility) 1 for 90000 to 1 lakh (v) School for physically challenged 1 for 45000 (vi) School for mentally challenged 1 for 10 lakh (vii) Higher education (viii)College 1 for 1.25 lakh (ix) Technical education 1 for 10 lakh (x) Engineering, Medical , Nursing college 1 for 10 lakh	(i)The city aspires to provide market oriented education and skills for all its citizens and provide adequate and affordable educational services	(i) Establishment of professional institutes for higher learning and R&D institutions

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5	**Health**	**A Smart City provides access to healthcare for all its citizens. (Guideline 2.5.10)**	. City provides adequate health facilities within easily reachable distance for all the residential areas and job centers of the city. It has an emergency response system that connects with ambulance services.	Scenario 3: (i) Progressive Human Development Index well above national average (ii) Adequate health facilities and medical institutes (iii) Inadequate dispensaries, polyclinics and veterinary hospitals	(i)0.38% contribution of health dept to total investment (ii) one dispensary for every 15000 population (ii) 2 Child welfare and Maternity Nursing Home for 45000-100000 population (iii) I polyclinic per 100000 population (iv)1 GH per 250000 population (v) 1 UHC per 0.5 lakh population	The city aspires to: (i) Provide affordable and accessible health care services to all its citizens (ii) Provide adequate infrastructure to improve air quality and ensure total sanitation (iii) Ensure adequate investments in health infrastructure and facilities maintenance and development (iv) Coordination between CCP and Line Dept for better monitoring	(i) Strengthening presence and access to community health centers (ii) Improving basic services for better public and environmental health - specifically reducing transport related pollution and ensuring sanitation through appropriate treatment of solid waste and waste water
6	**Mixed use**	**A Smart City has different kinds of land uses in the same places; such as offices, housing, and shops, clustered together. (Guidelines 3.1.2 and 3.1.2)**	In some parts of the city , there is a mixture of land uses that would allow someone to live, work, and shop in close proximity. However, in most areas, there are only small retail stores with basic supplies near housing. Most residents must drive or use public transportation to access a shop for food and basic daily needs. Land use rules support segregating housing, retail, and office uses, but exceptions are made when requested.	Scenario 2: (i) Residential, commercial, public and semi public facilities are adequate and exceed national norms (ii) Recreational, industrial and transportation facilities fall short of national norms and are to be improved (iii) Dedicated institutional area (Patto) H26	(i) 40-45% land for recreational use (ii) 3-4% commercial use (iii) 8-10% industrial use (iv) 10-12% semi public and public use (v) 18-20% for recreational use (vi)12-14% for transportation.	The city aspires to: (i) Improve and promote mixed use of land for transportation, marketplaces, open public spaces and social infrastructure (ii) Improve its green cover to match the benchmarks (iii) Preserve and promote open community spaces, blue-green infrastructure and water bodies (iv) Conserve, promote and revitalise heritage areas	(i) Amendment of the Town and Country Planning Act to allow for incentives to preserve heritage areas and allow for mixed use in the institutional area (ii) Initiatives to control development along banks of the river (ii) Enhancing green cover and Biodiversity, linking biodiversity and citizens through People's Biodiversity Register
7	**Compact**	**A Smart City encourages development to be compact and dense, where buildings are located close to one another and are ideally within a 10-minute walk**	The city has one or two high density areas - such as the city center, or historic areas, where buildings are concentrated together and where people can walk easily from building	Scenario 2: (i)Compact settlement and good interconnectivity overall with the exception of certain pockets (ii) Even density	(i) Trip time (ii) Pedestrian movement in the CBD (iii) Parking policy and availability of parking spaces (iv) Population weighted density	The city aspires for: (1) Public transit system is well developed, incentivising citizens to limit use of private transport (ii) Sufficient parking lots are available, (iii) Infrastructure to promote	(i) Provision of pay and use parking facilities located conveniently to reduce tourist influx in private transport (ii) Provision of public bus facilities to transport tourists and residents, specifically connecting parking bays to the

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		of public transportation, forming concentrated neighborhoods. (Guidelines 2.3 and 5.2)	to building and feel as though they are in center of activity. Most of the city consists of areas where buildings are spread out and difficult to walk between, sometimes with low-density per hectare. Regulations tend to favor buildings that are separated from one another, with lots of parking at the base and set-back from the streets. The city likely has some pockets of under-utilized land in the center. New formal developments at the periphery tend to be large-scale residential developments, often enclosed with a gate and oriented to the automobile.			walking and cycling (iv) Well connected areas within the city through a well networked public transport system. (v) Variable Messaging System (IT enabled)	core area, heritage areas and areas of tourist importance (iii) Implementation of parking policy (iv) Pedestrianization and cycling facilities (v) Amendment in Town and Country Planning Act
8	**Public open spaces**	**A Smart City has sufficient and usable public open spaces, many of which are green, that promote exercise and outdoor recreation for all age groups. Public open spaces of a range of sizes are dispersed throughout the City so all citizens can have access. (Guidelines 3.1.4 & 6.2)**	Most areas of the city have some sort of public open space. There is some variety in the types of public spaces in the city. However, public spaces are sometimes not within easy reach or access of more vulnerable populations and are more restricted in poorer neighbourhoods.	Scenario 3: (1) Adequate public and open spaces in housing area parks, neighbourhood parks and community parks (ii) falls short of URDPFI norms - currently 14.55 % land is available for recreational purpose (iii) Good utilization of open spaces during holidays and evenings	(i)18%-20% land to be used for recreational spaces	The city aspires to: (i) Connect existing green spaces with walkways and cycle tracks. (ii) Provide green and clean spaces for community cohesion and recreation, accessible to all its citizens (iii) Sports facilities and open air gyms	(i) Rejuvenation and revitalization of open public spaces for recreation , celebration of heritage and culture (ii) Interventions to promote pedestrianization, promenade development and improving fountains, parks and gardens (iii) Use of ICT to enhance footfalls in open areas by organizing festivals, events and (iv)create infrastructure to increase accessibility to all including citizens with special needs (v) Promote Non-motorized Zones and pedestrian friendly zones

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9	**Housing and inclusiveness**	**A Smart City has sufficient housing for all income groups and promotes integration among social groups. (Guidelines 3.1.2)**	Housing is available at all income levels, but is segregated across income levels. The growth of supply of housing almost meets the rate of population growth. Increasingly, lower and middle-income people can find housing in areas that are conveniently located.	Of the total housing stock 79% housing classified as 'Good' , 20% as 'Liveable' and 1% as 'Dilapidated'. This represents an increase of 43.2% good quality and 18.9% liveable quality housing from 2001. Retrofit slum-like areas with common conduits for basic services i.e. water, sewerage, drainage and electricity.	(i)% good housing stock (ii) Ward level surveys (ii) Property tax assessment and collection (iii) coverage of municipal services and infrastructure provision	The city aspires for: (i) Affordable housing for all (ii) Provision of municipal services at par with specified standards, irrespective of economic status of the resident population	(i) Upgradation of basic amenities in slum like areas (ii) Common conduits for service provision, delinked from tenure (iii) GIS based mapping to manage service provision, revenue collection and facilitate citizen complaint readdressal (iv) All housing to be linked to public water supply, sewage treatment, piped gas supply, 100% power supply
10	**Transport**	**A Smart City does not require an automobile to get around; distances are short, buildings are accessible from the sidewalk, and transit options are plentiful and attractive to people of all income levels. (Guidelines 3.1.5 & 6.2)**	The street network system is elaborate but public transport choices are restricted. Public transport can be too expensive or unafforadable for the poor. Pedestrian infrastructure is only available in select areas. Tha majority of investments focus on reducing traffic congestion through the creation of more roads.	Scenario 2: (i)3.6% of area covered by road network; to be increased (ii)3 to 4 m. width single to four lanes (iii)The share of total energy consumption in the city by transport sector is 64.8% which accounts for 38.3% of GHG emissions (iv) Mode share of transit: 14% public transit and 1% bi-cycling	(i) Increase in mode share of public transit, cycling and walking (ii) Modeshift from private transport to public transport - buses and ferries (iii) Provision of public transport connected parking facilities (iv) Intermediate Private Transport (IPT) modes of travel (autos, taxis) are easily accessible to citizens	The city aspires for: (i) effective and enhanced multi-modal public transport network, (ii) Easy access to IPT modes (autos, taxis, motor bike taxis, called pilots) (iii) Pedestrian and cycling friendly roads (iii) Disincentivize private vehicles through parking charges	(i) Promotion of public transportation, non motorized transport , pedestrianization, dedicated cycling lanes , bike sharing, ferry system (ii) Better signage (iii) implementation of parking policy
11	**Walkable**	**A Smart City's roads are designed equally for pedestrians, cyclists and vehicles; and road safety and sidewalks are paramount to street design. Traffic signals are sufficient and traffic**	Older areas of the city see a mix of pedestrians, cyclists, and vehicles but newer areas are focused mainly on the automobile. In the new areas, there are few pavements and main entrances to new buildings are not	Scenario 2: Potential for enhanced pedestrian movements in core business district	(i) Pedestrian Accessible buildings (ii) Pedestrian friendly walkways (iii) On-street parking not allowed	(i) The city aspires for a scenario wherein the entire city is walkable. With well maintained pavements on each street, along with trees lining the sidewalks to provide shade to the pedestrians. (ii) The buildings in the city	(i) Pedestrianization of CBD (ii) promotion of non-motorized transport - walking and public bike share programme

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		rules are enforced. Shops, restaurants, building entrances and trees line the sidewalk to encourage walking and there is ample lighting so the pedestrian feels safe day and night. (Guidelines 3.1.3 & 6.2)	accessible from the front of the street. large driveways or parking lots often separating them from the street, and sometimes are are enclosed by gates. In these areas, traffic signals are disobeyed.			should be more easily accessible from the sidewalk (iii) There should be existence of a network of bike lanes within the city along with increased man power in the traffic department for effective enforcement of traffic regulations.	
12	**IT connectivity**	**A Smart City has a robust internet network allowing high-speed connections to all offices and dwellings as desired. (Guideline 6.2)**	. The city has made plans to provide high speed internet connectivity through the existing framework.	Scenario 2: (i) Over 10000 subscriber based for broadband , smartphones connections (ii) Fibre to home services to be rolled out (iii) Free wi-fi not available	(i) Data from service providers on smart phone penetration and broadband connections in homes and institutions (ii) Increase in citizen apps to enhance utility of IT connectivity for municipal service improvement	City aspires to: (i) Have 100% wifi connectivity and high speed connectivity (ii) Enhance service provision through use of IT connectivity	Setting up of wi-fi hot spots , internet kiosks and improved overall connectivity
13	**ICT-enabled government services**	**A Smart City enables easy interaction (including through online and telephone services) with its citizens, eliminating delays and frustrations in interactions with government. (Guidelines 2.4.7 & 3.1.6 & 5.1.4 & 6.2)**	Some of the public services are provided online and infrastructure for total digitalization is not in place. Service delays occur regularly in some sectors. Responses to citizen inquiries or complaints are often delayed. No integration between services and billing.	Scenario 2: (i) Spatial information on surveys and plans available (ii)Property tax can be paid online (iii)Web portal of CCP , e - newsletter (v) biometric attendance (vi) DPR for E Governance (v) ITES for transportation and solid waste management	(i) All citizen services (GtoC) are available online and accessible to citizens through citizen service kiosks (ii) All municipal service related information is displayed realtime on the CCP website (integration with para statal systems)	(i) All major services/service requests are both online and offline and accessible to all (ii) Sensor based real time data for decision making - mobility, water supply, waste management, street lighting (iii) Service provision data and planning information is accessible to citizens in real time	Implementation of E Governance solutions (i) Smart Metering (ii) Sensor based street lighting (iii) Real time monitoring of waste movement and treatment (iv) Citizen Facilitation Centres (v) Real time transportation data through a web enabled tourist information app (vi) web enabled app for citizen monitoring of solid waste management services

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14	**Energy supply**	**A Smart City has reliable, 24/7 electricity supply with no delays in requested hookups. (Guildeline 2.4)**	Electricity supply and loads are managed as per demand and priority for various functions with clear scheduling, with electricity being available in many areas for most hours of the day.	Scenario 2: Electricity: • 2013-14: 91.8 Mn. kWh (77,498 tonnes of CO2e) • Per-capita: 2,231 kWh • Commercial/Institutional (57%); Residential (42%) • No scheduled outages. 6 hours unscheduled outage/ month. Energy Use : • Total: 1,195,018GJ	(i) Reduction in T&D losses	(i) Uninterrupted power supply (iii) Reduction in T&D losses	(i) Implementation of Smart Grid will reduce T&D losses and ensure uninterrupted power supply (ii) Reduction in energy demand through LED street lighting and energy efficient municipal market
15	**Energy source**	**A Smart City has at least 10% of its electricity generated by renewables. (Guideline 6.2)**	The city is preparing plans for ensuring that it gets more energy from renewable sources and is in the process of making commitments in this regard.	Scenario 2: Top sources in order of consumption are petrol, electricity and diesel. Transport sector uses 68%.	(i) Increase in share of renewable energy in total energy mix (ii) Reduction in GHG emissions due to decreased energy use per person (ii) Reduction in energy intensity of municipal service provision (iii) Increase in use of CNG for transport and PNG for cooking purposes	(i) The city aspires to meet 10% of its energy consumption from renewable sources and carry out energy reduction measures (ii) 10% reduction in energy consumption through RE and EE measures, leading to a 14% reduction in GHG emissions by 2019-20 (from 2013-14 baseline) (ii) Commercial outlets provided for sale of CNG for transport (iii) PNG supply and network ensured to cover 100% city	(i) Implementation of Solar Master Plan (ii) Implementation of initiatives mentioned in Low Emission Development strategies - energy efficient street lighting, waste to energy, solar water heaters, efficient water pumping systems, energy efficient appliances, ecomobility (iii) Introduction of Clean Fuels (iv) Green Building certification as per GRIHA rating (v) Implementation of ECBC guidelines (vi) 2 MW solar power installation - sanctioned by MNRE

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16	**Water supply**	**A Smart City has a reliable, 24/7 supply of water that meets national and global health standards. (Guidelines 2.4 & 6.2)**	The city has intermittent water supply and availability. However it is setting targets and processes in place to try to improve its water supply. Unaccounted water loss is less than 30%.	Scenario 2: (i) 100% network coverage (ii) 198 lpcd (iii) 100% metering, (iv) average daily supply: 6 hours (v) collection efficiency 75% (vi) NRW 35% (ii) Implementation: New intake structure at Opa headworks, 50 MLD Water Treatment Plant at Curti	(i) % network coverage (ii) lpcd (iii)% metering (iv) continuity of supply (v) Revenue collection efficiency (vi) NRW%	(i) Maintain 100% coverage of quality water as per national standards (ii) 24 x 7 water supply (iii) Water supply maintained at 198 lpcd (iv) NRW below 20% (v) 100% revenue collection	(i) Network rehabilitation & additional provision, asset management, leak detection, cost recovery, increased connections as per demand (ii) Monitoring of continuous water supply with smart metering and SCADA based management (iii) E-governance linked to revenue collection and (iv) Real time monitoring of service quality and quantity available to citizens through SCADA linked to MIS systems (created under E-governance platforms)
17	**Water management**	**A Smart City has advanced water management programs, including smart meters, rain water harvesting, and green infrastructure to manage storm water runoff. (Guideline 6.2)**	The city has meters for all its water supply but lacks mechanisms to monitor. Water wasteage is very high. Some, but not much, rainwater harvesting exists.	Scenario 2: (1) Water management and conservation practices inadequate (ii) Training for functionaries on water management and water quality	Current practices inadequate	The city aspires to institutionalize practices and codes for water conservation and integrated water management	Enhancement of green cover and rainwater harvesting programme. Rehabilitation of storm, sewer and water supply networks, leak detection and smart metering
18	**Waste water management**	**A Smart City treats all of its sewage to prevent the polluting of water bodies and aquifers. (Guideline 2.4)**	The city is unable to treat all its sewage. Many local sewer lines open on to water bodies and open ground and pollute the environment.	Scenario 1: (i)85% sewage network coverage (ii) 67% sewage collection efficiency (iii) Inadequate treatment capacity	% sewerage connections	(i) 85% connectivity of all properties to the sewage network (ii) The city aspires for a scenario where all wastewater is safely treated to reuseable standards	**(i) Vacuum sewers in unconnected/ poor network condition areas** **(ii) Rehabilitation of sewer and drain networks** **(iii) Increase in property connectivity to sewage network through new lines** **(iv) Upgrading to tertiary treatment to facilitate reuse**

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19	**Air quality**	**A Smart City has air quality that always meets international safety standards. (Guideline 2.4.8)**	City has programs and projects to monitor air quality and spatialising the data to ascertain reasons for degrees of pollution in the air. A few strategies to decrease air pollution have been implemented.	Scenario 2: (i) Plans to mitigate air pollution and improve air quality standards and introduce monitoring (ii) GHG emission in city (2013-2014) 144,599 tonnes of carbon dioxide equivalent (CO2e)	(i) Reduction in GHG emissions in transport, waste and municipal service provision (ii) Switch to cleaner fuels in transport (iii) Promotion of community based measures for reduced energy use translating to lower emissions	(i) The city aspires for a scenario where air quality standards meet international norms (ii) The city aspires to reduce GHG emissions by close to 20% by 2019-20	(i) Implementation of Low Emission Development strategies covering all municipal sectors and community based interventions - focus on waste disposal, transport, renewable energy and energy efficiency (ii) Increased green cover (iii) Real time monitoring and display of air quality
20	**Energy efficiency**	**A Smart City government uses state-of-the-art energy efficiency practices in buildings, street lights, and transit systems. (Guideline 6.2)**	The city promotes energy efficiency and some new buildings install energy efficiency systems that track and monitor energy use and savings.	Scenario 2: Energy saving target for 5 years - Renewable energy 42 MU and Energy Efficiency measures 15.25 MU	(i) Energy savings from reduction in demand for conventional energy (ii) Energy savings from undertaking energy efficiency measures	(i) Reduction in energy consumption: 9.5% (over 2013-14 values) by 2019-20 (ii) Reduced expenditure on power and (iii) 100% LED street lighting	(i) Implementation of Energy efficiency measures in Panaji Low Emission Development strategy (2015) and solar master plan (ii) Smart Grid to reduce T&D losses and ensure uninterrupted supply (iii) Energy efficient street lighting and public space lighting (iv) Energy Efficient lighting and distribution of power in municipal market
21	**Underground electric wiring**	**A Smart City has an underground electric wiring system to reduce blackouts due to storms and eliminate unsightliness. (Guideline 6.2)**	More than 90% of the city has underground electric wiring system.	Scenario 4: Over 90 per cent of the city covered by underground electric cabling	% underground electric cabling	The city aspires for 100 per cent coverage.	NA

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22	**Sanitation**	**A Smart City has no open defecation, and a full supply of toilets based on the population. (Guidelines 2.4.3 & 6.2)**	Sanitation facilities are available to 70% of the city's population.	Scenario 2: High coverage of individual toilets but better public facilities required (ii) 16 public toilets with only 5 having bathing facility (iii) only 34 seats for women (iv) Community toilet facilities inadequate(iv) limited carrying capacity of sewer (v) Improved maintenance required	(i) Public Toilet On roads and for open areas: @ every 1 Km Toilets shall be disabled-friendly and in 50-50 ratio (M/F). (ii)Signage , Helpline number (iii). The toilet should have both men and women attendants. Alternatively automatic cleaning cycle	The city aspires for upgradation of the public toilets and look beyond the Sulabh model.	Upgradation and construction of gender friendly disabled friendly and accessible public toilets per norms well maintained .K22
23	**Waste management**	**A Smart City has a waste management system that removes household and commercial garbage, and disposes of it in an environmentally and economically sound manner. (Guidelines 2.4.3 & 6.2)**	Waste generated is usually collected but not segregated. Recycling is attempted by difficult to implement.	Scenario 2: (i) 100% coverage and collection efficiency and two-way segregation. (ii) 70% treatment. (iii) 17.2 % cost recovery. (iv) Biodegradable waste processed in composting facility and OCWs. Dry waste recycled/sold. (v)Bin free and Land fill free city.	(i)% coverage (ii) % collection efficiency (iii)% segregation (iv) extent of scientific treatment and disposal	(i) 100% segregated collection from door-step (ii) Paper, plastic, cardboard fractions, metal, glass, styrofoam, tetrapak, cloth: 100% recycling, (iii) High calorific value waste not amenable to recycling : 100% transfer for co-processing in cement plant , (iv) treatment of biodegradable waste (100%) through biomethanation	(i) Route optimization (ii) 2 way segregation to 4-way segregation; 4 - way segregation to 8 way segregation: enforced in all areas (iii) More litter bins (iv) Upgraded treatment systems (v) 10% increase in cost recovery (vi) ITES MIS: Smart applications through ICT proposed for service monitoring and complaint readresal

				Answer to question no. 7		Answer to question no. 8	
A	**B**	**C**	**D**	**H**	**I**	**J**	**K**
	Feature	**Definition**	**Applicable scenario**	**Self-assessment for the full city with regard to each feature**	**Basis for assessment and/or quantitative indicator (Optional - only if data exists)**	**Projection of 'where the city wants to be' with regard to the feature/indicator based on the city vision and strategic blueprint**	**Input/Initiative that would move the city from its current status to Advanced status (Scenario 4: Column G)**
24	**Safety and security**	**A Smart City has high levels of public safety, especially focused on women, children and the elderly; men and women of all ages feel safe on the streets at all hours. (Guideline 6.2)**	The city has high levels of public safety - all citizens including women, children and the elderly feel secure in most parts of the city during most time in the day.	Scenario 3: (i) Helpline for Women's Safety by Goa Police and Kadamba Transport Corporation (ii) Cab services for Women (iii) CC TV camera surveillance at vantage point (iv) Special tourist police force formed (v) Regular police patrol in all areas (vi) Rationalizing size level of pavements to ensure pedestrian safety (vii) Citizen patrol For road safety	(i) Helpline services turnaround (ii) Technologies used to assist crime prevention CCTV (live streaming), video surveillance, predictive crime prevention applications, (iii) Community policing and citizen apps (iv) % coverage of street lighting at night (v) Crime - Incidents per annum	(i) All residents and visitors/tourists are safe during all hours of the day (ii) Crime prevention technologies In place including citizen apps enablement (iii) Effective community policing (iv) women commuters and pedestrians feel safe and comfortable (v) Effective safe and comfortable public transportation systems (v) 24 hour interactive helplines in place	(i) CCTV surveillance (ii) Centralized control rooms and increased police patrolling (