

MAH M Arch CET Settlement Design and Planning

Sample Paper – 8

Total Questions	Total Marks	Duration	Exam Mode
10	20	12 Minutes	CBT (Online)

Instructions

- This paper contains 10 Multiple Choice Questions (Single Correct Answer), modelled on the Settlement Design and Planning portion of MAH M Arch CET entrance.
- Each correct answer carries +2 marks. There is no negative marking for incorrect or unattempted answers.
- Only one option is correct. Choose carefully.
- Syllabus: Urban sustainability, participatory planning, accessibility norms, industrial estates, green building ratings, heritage conservation, social infrastructure standards, coastal regulation, municipal finance, and land pooling policy.
- Use of mobile phones, calculators, or electronic gadgets is strictly prohibited.

Section D | Settlement Design and Planning
10 Questions × 2 Marks = 20 Marks

Q1. The concept of *urban metabolism* treats a city as a living organism that consumes resources and generates waste. In the context of sustainable city planning, applying **circular economy** principles to urban metabolism primarily aims to:

- (A) Maximise the extraction and throughput of virgin natural resources to fuel continuous urban economic growth.
- (B) Strictly contain urban growth within existing city boundaries by prohibiting any new greenfield development.
- (C) Minimise resource throughput by closing material and energy loops, converting waste streams back into productive inputs at every stage of the urban cycle.



(D) Transfer all waste-processing and recycling functions outside the city limits to reduce visible pollution within the urban core.

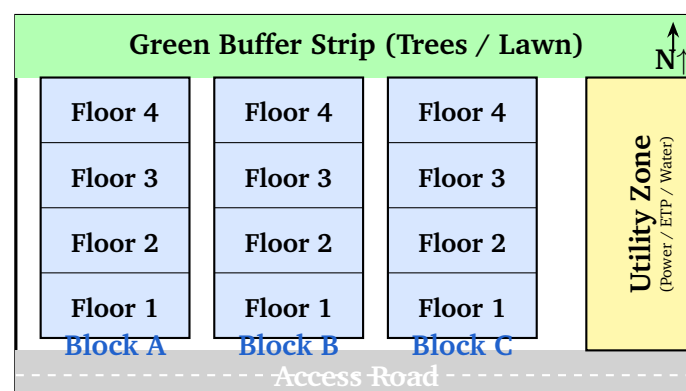
Q2. Participatory GIS (PGIS) and community-based mapping are widely used in informal settlement upgrading programmes. Which of the following **most accurately** describes the primary purpose of participatory mapping as a planning tool?

- (A) To integrate local spatial knowledge and community priorities into the planning process, empowering residents as co-producers of spatial data.
- (B) To replace statutory cadastral surveys with crowd-sourced data for formal legal land-titling and property registration.
- (C) To generate revenue for urban local bodies by commercialising community-produced geospatial datasets to private developers.
- (D) To fulfil mandatory Environmental Impact Assessment (EIA) requirements for development projects in informal urban areas.

Q3. As per the **National Building Code of India 2016, Part 8** (Accessible Environment), the maximum permissible gradient (slope) of a ramp provided for wheelchair users in a public building is:

- (A) 1 : 6
- (B) 1 : 8
- (C) 1 : 10
- (D) 1 : 12

Q4. Study the schematic layout of an industrial estate shown below and answer the question.



The layout above, featuring **multi-storey production blocks** designed to accommodate small-scale and micro industries in land-scarce urban areas with shared common infrastructure (loading, power, ETP), is characteristic of which type of industrial estate?

- (A) Growth Centre
- (B) Flatted Factory Complex
- (C) Export Processing Zone (EPZ)
- (D) Special Economic Zone (SEZ)

Q5. GRIHA (Green Rating for Integrated Habitat Assessment) is India's national green building rating system. Which organisation **developed** GRIHA and what is the **maximum star rating** achievable under this system?

- (A) Bureau of Energy Efficiency (BEE) — maximum 5 stars
- (B) Indian Green Building Council (IGBC) — maximum Platinum rating
- (C) The Energy and Resources Institute (TERI) — maximum 5 stars
- (D) Ministry of New and Renewable Energy (MNRE) — maximum 7 stars

Q6. In urban heritage conservation and adaptive reuse practice, the principle of '**minimum intervention**' is emphasised by the Venice Charter (1964), the Burra Charter (1979), and the INTACH Charter (2004). Which of the following statements **best captures** the meaning of this principle?

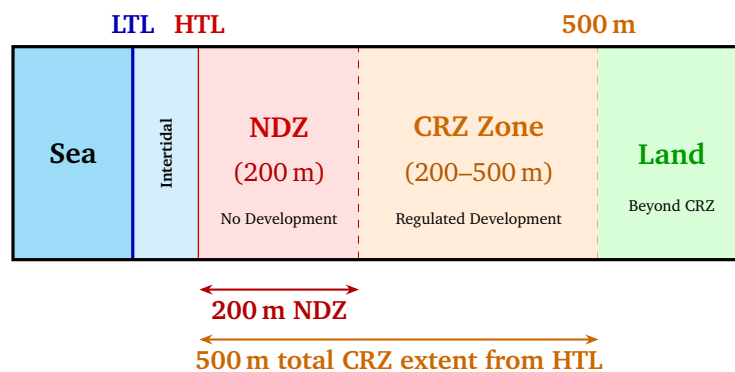
- (A) Only essential interventions are made to ensure structural safety and functional viability, preserving as much original historic fabric as possible while keeping interventions reversible.
- (B) All later additions and modifications are removed to restore the building precisely to its earliest documented historical state.
- (C) Deteriorated historic materials should be completely replaced with modern equivalent materials to ensure long-term structural durability.
- (D) All conservation interventions must be visually indistinguishable from the original construction so as not to alter the building's historic appearance.



Q7. As per the **Urban Development Plans Formulation and Implementation (UDPFI) Guidelines, 1996**, issued by the Ministry of Urban Development, Government of India, the recommended provision norm for a **General Hospital (200 beds)** in an urban settlement is:

- (A) 1 per 25,000 population
- (B) 1 per 50,000 population
- (C) 1 per 75,000 population
- (D) 1 per 1,00,000 population

Q8. Study the coastal cross-section diagram below and answer the question.



As per the **Coastal Regulation Zone (CRZ) Notification 2011**, for **CRZ-III** areas (rural and semi-urban coastal areas), the extent of the **No Development Zone (NDZ)** measured landward from the **High Tide Line (HTL)** is:

- (A) 100 metres
- (B) 200 metres
- (C) 300 metres
- (D) 500 metres



Q9. In the context of **municipal finance reforms** in India, the **Local Body Tax (LBT)** was introduced by several state governments as a reform measure to replace which of the following levies?

- (A) Property tax
- (B) Professional tax
- (C) Octroi
- (D) Entertainment tax

Q10. The **Delhi Development Authority (DDA) Land Pooling Policy**, notified under the Master Plan for Delhi 2021, represents a paradigm shift from traditional state-led land acquisition. The **primary objective** of this policy is to:

- (A) Enable private sector-led planned development by having landowners voluntarily pool their land with DDA, which develops trunk infrastructure and returns a serviced, developed portion to the landowner/developer entity.
- (B) Acquire agricultural land through compulsory acquisition under the Right to Fair Compensation and Transparency in Land Acquisition Act, 2013, at minimum statutory compensation.
- (C) Convert urban villages within Delhi into commercial zones and relocate all village residents to peripheral government-built resettlement colonies.
- (D) Establish large-scale ecological green buffers and biodiversity parks on the outskirts of Delhi to prevent further urban sprawl.



Detailed Solutions

Sol. 1.

Solution

Difficulty: Intermediate • Chapter: Urban Sustainability & Circular Economy

Quick Solution: Urban metabolism uses the organism analogy to advocate closing material loops — minimising waste by converting outputs back into productive inputs. **Answer: (C).**

Concept — Urban Metabolism and Circular Economy: The term *urban metabolism*, popularised by Abel Wolman (1965) and later developed by Herbert Girardet and others, likens a city to a biological organism that ingests resources (food, water, energy, raw materials), processes them through economic and social functions, and excretes waste and emissions. A *linear* metabolism follows the pattern: Extract → Consume → Dispose. This is resource-intensive and waste-generating. A *circular* metabolism — drawing on circular economy principles rooted in Cradle-to-Cradle (McDonough & Braungart) and Industrial Ecology — seeks to **close material and energy loops**: organic waste becomes compost for urban agriculture, treated wastewater is reused for irrigation, construction debris is recycled into new building materials, waste heat from industrial processes feeds district heating networks, and renewable energy replaces fossil fuel inputs. The goal is to progressively eliminate waste by design, reducing the total throughput of virgin resources while maintaining urban economic vitality.

Analysis of each option:

- **(A) Maximise extraction of virgin resources:** This is the antithesis of the circular economy. Linear industrial economies maximise virgin resource extraction; circular approaches reduce it by reuse and recycling. Incorrect.
- **(B) Restrict growth within existing boundaries:** Urban containment is a land-use planning strategy. While compact cities reduce per-capita resource demand, containment alone does not close material or energy loops. This confuses spatial form with metabolic flow. Incorrect.
- **(C) Minimise resource throughput by closing loops:** This precisely captures the circular economy goal applied to urban metabolism. Urban mining, waste-to-energy plants, industrial symbiosis zones, and circular water management are all practical urban applications of this principle. Correct.
- **(D) Transfer waste-processing outside city limits:** Exporting waste simply displaces the problem geographically; it does not close any material



loop. This remains a linear strategy with a spatial redistribution of its terminal end-point. Incorrect.

Final Answer: Circular economy in urban metabolism = closing resource and energy loops ⇒

Answer: (C) [Go Back to Q1](#)

Sol. 2.

Solution

Difficulty: Beginner • Chapter: Community-Based Planning Tools

Quick Solution: PGIS integrates community-held spatial knowledge into planning, positioning residents as active co-producers of data rather than passive subjects of plans. **Answer: (A).**

Concept — Participatory GIS (PGIS): PGIS combines participatory learning and action (PLA) methods with geospatial tools (sketching, digitising, GPS, mobile mapping). Communities map their own lived experience of space — marking flood-prone lanes, unsafe corridors, water sources, livelihood locations, community assets, and social hazards — capturing information that is systematically absent from official cadastral or topographic maps. In slum upgrading under schemes like JNNURM (Jawaharlal Nehru National Urban Renewal Mission), PMAY (Pradhan Mantri Awas Yojana), and UN-Habitat's Participatory Slum Upgrading Programme (PSUP), PGIS has been used to co-produce base maps with residents, identify priority infrastructure gaps (drainage, sanitation, road access), negotiate resettlement options, and document informal tenure. The defining feature of PGIS is **community empowerment**: residents are knowledge producers, not merely informants or beneficiaries, making the resulting plans more contextually accurate and socially legitimate.

Analysis of each option:

- **(A) Integrate local spatial knowledge, empower residents as co-producers:** This is the textbook definition of PGIS and its primary purpose in planning practice. Correct.
- **(B) Replace cadastral surveys for legal land-titling:** PGIS can contribute to tenure documentation processes, but it cannot replace legally mandated cadastral surveys conducted by licensed surveyors using prescribed instruments and procedures. The two serve different legal and technical functions. Incorrect.



- **(C) Generate revenue by selling community datasets to developers:** This would violate the foundational ethical principles of participatory practice — free, prior, and informed consent; data sovereignty; and community benefit. Commercialising community data without community control is exploitative, not participatory. Incorrect.
- **(D) Satisfy EIA statutory requirements:** Environmental Impact Assessments have their own legally prescribed methodology under the EIA Notification. PGIS may supplement community consultation components but cannot fulfil EIA obligations as a substitute. Incorrect.

Final Answer: PGIS = integrating local knowledge + empowering residents as co-producers ⇒ A

Answer: (A) [Go Back to Q2](#)

Sol. 3.

Solution

Difficulty: Beginner • Chapter: Accessibility Norms (NBC 2016 Part 8)

Quick Solution: NBC 2016 Part 8 specifies a maximum ramp gradient of 1:12 for wheelchair users — any steeper slope compromises safe, unassisted mobility.
Answer: (D).

Concept — Accessible Ramp Design (NBC 2016 Part 8): A ramp gradient is expressed as the ratio of rise (vertical) to horizontal run. A gentler slope (larger denominator) is easier and safer to negotiate in a wheelchair. The **National Building Code of India 2016, Part 8** on Accessible Environment (aligned with the Rights of Persons with Disabilities Act, 2016) mandates that ramps for wheelchair users must **not exceed a gradient of 1:12** (approximately 4.8° or 8.33% grade). This is consistent with IS 4963, ADA Standards for Accessible Design (USA), and BS 8300 (UK). Additional NBC requirements for accessible ramps include: minimum clear width 1500 mm, handrails on both sides at 760–900 mm height, non-slip surface treatment, level landing of at least 1500 mm × 1500 mm at the top, bottom, and at each intermediate turn, and edge protection to prevent wheelchair wheels from slipping off.

Analysis of each option:

- **(A) 1 : 6:** A slope of 1:6 ($\approx 9.5^\circ$) is extremely steep — equivalent in effort to climbing a staircase — and would be entirely unsafe for wheelchair users. Completely impermissible. Incorrect.



- (B) 1 : 8: At approximately 7°, this is still too steep for unassisted wheelchair propulsion and significantly exceeds the NBC limit. Incorrect.
- (C) 1 : 10: While easier than 1:8, this still exceeds the maximum NBC-specified gradient of 1:12. Incorrect.
- (D) 1 : 12: This is the maximum permissible gradient per NBC 2016 Part 8. Flatter slopes (1:15, 1:20) are also acceptable and preferred where space permits, but 1:12 is the steepest allowed under the code. Correct.

Final Answer: NBC 2016 Part 8 maximum ramp gradient for wheelchair access = 1 : 12 ⇒

Answer: (D) [Go Back to Q3](#)

Sol. 4.

Solution

Difficulty: Intermediate • Chapter: Industrial Estate Planning

Quick Solution: Multi-storey production blocks with shared common infrastructure serving small-scale industries on scarce urban land is the defining characteristic of a Flatted Factory Complex. **Answer: (B).**

Concept — Flatted Factory Complex (FFC): A *Flatted Factory Complex* (FFC) is a vertically organised industrial estate concept in which manufacturing, assembly, or workshop activities of small and micro-scale industries are stacked floor-by-floor in a multi-storey reinforced concrete building. Each floor or unit is allotted or leased to an individual industrial unit. Shared infrastructure — freight lifts, loading docks and goods-handling ramps at ground level, high-capacity electrical sub-station, effluent treatment plant (ETP), water storage, fire-fighting system, canteen, and parking — is provided communally, significantly reducing the per-unit capital cost of infrastructure.

FFCs are specifically planned for **dense urban and peri-urban areas** where land values are prohibitively high for horizontal industrial spread, yet the city needs to accommodate its small-scale manufacturing sector. They are typically promoted and built by State Industrial Development Corporations (SIDCs), Municipal Industrial Estates, and the National Small Industries Corporation (NSIC). The layout in the question illustrates the key FFC elements: multi-storey blocks (4 floors) in the central zone, a shared access road at the perimeter, a green buffer strip for pollution/noise mitigation, and a segregated utility zone.



Analysis of each option:

- **(A) Growth Centre:** Growth Centres are large integrated industrial nodes (typically 100–500 ha) designated in backward or underdeveloped regions to catalyse regional industrial and economic development. They are sprawling, low-rise, and located in peripheral or rural areas — the opposite of a compact multi-storey urban FFC. Incorrect.
- **(B) Flatted Factory Complex:** Precisely matches the diagram — multi-storey (4-floor) production blocks, urban land-scarce setting, small-scale industrial units, shared services. Correct.
- **(C) Export Processing Zone (EPZ):** EPZs are large customs-bonded industrial enclaves established specifically to facilitate export-oriented manufacturing. They cover hundreds of hectares, are single-storey or low-rise factory sheds, and are not characterised by multi-storey block typology. Incorrect.
- **(D) Special Economic Zone (SEZ):** SEZs under the SEZ Act, 2005, are large multi-sector, multi-use zones with tax and regulatory exemptions to attract investment. They are defined by their legal and fiscal framework, not by a multi-storey building typology, and typically cover very large areas. Incorrect.

Final Answer: Multi-storey urban industrial estate for small-scale industries = Flatted Factory Complex ⇒ **B**

Answer: (B) [Go Back to Q4](#)

Sol. 5.**Solution**

Difficulty: Beginner • Chapter: Green Building Rating Systems

Quick Solution: GRIHA was developed jointly by TERI and the Ministry of New and Renewable Energy; it uses a 1-to-5-star scale. **Answer: (C).**

Concept — GRIHA Rating System: GRIHA (Green Rating for Integrated Habitat Assessment) is India's *national* green building rating tool, developed jointly by **TERI (The Energy and Resources Institute)** and the **Ministry of New and Renewable Energy (MNRE)**, Government of India, and formally launched in 2007. It is specifically designed for the Indian climate, construction practices, and regulatory framework. GRIHA evaluates buildings across approximately 34 criteria grouped under four sections:



- (a) Site Planning & Construction Management
- (b) Building Performance (energy efficiency, water conservation, material selection)
- (c) Outdoor Environment Quality
- (d) Innovation and Social Aspects

Points are scored on a 100-point scale, and star ratings are awarded as follows: ≥ 50 points = 1 Star; ≥ 60 = 2 Stars; ≥ 70 = 3 Stars; ≥ 80 = 4 Stars; ≥ 90 points = **5 Stars** (maximum). GRIHA is mandatory for Central Government-funded buildings above 500 m² built-up area.

Analysis of each option:

- **(A) BEE — 5 stars:** BEE (Bureau of Energy Efficiency, under the Ministry of Power) administers the Energy Conservation Building Code (ECBC) and the Star Labelling Programme for energy appliances. BEE does not operate GRIHA. BEE's building energy performance rating is a separate instrument. Incorrect.
- **(B) IGBC — Platinum:** IGBC (Indian Green Building Council, a body under the Confederation of Indian Industry) administers the IGBC Green Homes, IGBC Green Buildings, and IGBC Green Factory ratings, which are adapted from the US LEED framework using Certified/Silver/Gold/Platinum levels. IGBC is entirely distinct from GRIHA. Incorrect.
- **(C) TERI — 5 stars:** GRIHA was developed by TERI (with MNRE co-sponsorship) and uses a 1-to-5-star scale. This is the correct and complete answer. Correct.
- **(D) MNRE — 7 stars:** While MNRE co-sponsors GRIHA, TERI is the developing organisation. Moreover, the scale extends to 5 stars, not 7. Incorrect.

Final Answer: GRIHA = TERI-developed, 1-to-5 star scale, maximum 5 stars

⇒ C

Answer: (C) [Go Back to Q5](#)



Sol. 6.

Solution

Difficulty: Intermediate • Chapter: Heritage Conservation & Adaptive Reuse

Quick Solution: “Minimum intervention” means doing only what is strictly necessary for safety and new function, leaving the maximum amount of original historic fabric undisturbed and intact. **Answer: (A).**

Concept — Minimum Intervention in Conservation Practice: The principle of *minimum intervention* is a cornerstone of international and Indian conservation ethics. It is enshrined in the **Venice Charter** (ICOMOS, 1964), which established that the aim of conservation is to preserve historic fabric as found; the **Burra Charter** (Australia ICOMOS, 1979, revised 1999), which specifies that ‘the amount of change to a place should be kept to a minimum’; and the **INTACH Built Heritage Charter** (India, 2004). The principle rests on four supporting conservation values:

- (a) **Authenticity of fabric:** Original material carries irreplaceable historic and cultural information.
- (b) **Reversibility:** Interventions should, wherever possible, be undoable, so that future generations can remove or revise them without damaging original fabric.
- (c) **Distinguishability:** New interventions should be identifiable as such (not indistinguishable from original work) so that the historic record remains legible.
- (d) **Compatibility:** New materials and techniques should be physically and chemically compatible with the original.

In adaptive reuse, minimum intervention allows a heritage building to function in its new role (as an office, museum, hotel, educational institution, or community centre) while retaining historic spatial sequences, surfaces, and construction details.

Analysis of each option:

- **(A) Only essential interventions, preserving maximum original fabric, reversible:** This is the correct and complete definition of minimum intervention. Structural stabilisation, waterproofing, fire safety upgrades, and accessibility improvements are made only to the extent strictly required. Correct.
- **(B) Remove all later additions to restore the earliest known state:** This describes the discredited 19th-century practice of *stylistic restoration* (associated with Viollet-le-Duc), which modern conservation theory



explicitly rejects. Removing later additions destroys historical layers, is irreversible, and may itself damage the structure. Incorrect.

- **(C) Modern materials completely replace deteriorated historic materials:** This is replacement, which should be a last resort only after all conservation options are exhausted. It directly violates the authenticity and minimum intervention principles. Incorrect.
- **(D) Interventions indistinguishable from original construction:** Conservation ethics require precisely the *opposite* — interventions should be *distinguishable* (though not jarring), so that the original fabric and the conservation work can be read separately. Indistinguishable work is considered a form of falsification of the historic record. Incorrect.

Final Answer: Minimum intervention = essential changes only, maximum original fabric preserved, interventions reversible and distinguishable ⇒ **A**

Answer: (A) [Go Back to Q6](#)

Sol. 7.

Solution

Difficulty: Intermediate • Chapter: Social Infrastructure Norms (UDPFI 1996)

Quick Solution: UDPFI guidelines specify a General Hospital (200 beds) at the rate of 1 per 1,00,000 population in the urban hierarchy. **Answer: (D).**

Concept — UDPFI Social Infrastructure Hierarchy for Healthcare: The *Urban Development Plans Formulation and Implementation* (UDPFI) Guidelines, 1996, prepared by the Ministry of Urban Development, provide a hierarchical framework for planning social infrastructure in Indian urban settlements. The health facility hierarchy under UDPFI is structured to match service catchment with facility complexity:

Health Facility Type	Population Norm	Planning Level
Dispensary / Local Clinic	1 per 15,000	Neighbourhood
Nursing Home / Polyclinic	1 per 45,000	Community
General Hospital (200 beds)	1 per 1,00,000	City / Sub-District

This hierarchy ensures that preventive and primary health care is accessible within walking distance at the neighbourhood level, while secondary-level hospital services are planned at the city scale where they can operate at viable



patient volumes. The 200-bed General Hospital norm at 1,00,000 population is also consistent with the National Urban Health Mission (NUHM) framework.

Analysis of each option:

- **(A) 1 per 25,000:** This is approximately the neighbourhood or mohalla level catchment, appropriate for a dispensary or small clinic. A 200-bed hospital cannot operate economically at this population threshold. Incorrect.
- **(B) 1 per 50,000:** This is close to the community-level polyclinic or nursing home norm. Still insufficient catchment for a full general hospital. Incorrect.
- **(C) 1 per 75,000:** Not a standard UDPFI threshold for any healthcare facility type. Incorrect.
- **(D) 1 per 1,00,000:** The UDPFI norm for a General Hospital with 200 beds is 1 per 1 lakh population. This is the correct figure. Correct.

Final Answer: UDPFI General Hospital (200 beds) norm = 1 per 1,00,000 population ⇒

[Go Back to Q7](#)

Sol. 8.

Solution

Difficulty: Intermediate • Chapter: Coastal Regulation Zone Notification

Quick Solution: Under the CRZ Notification 2011, the No Development Zone for CRZ-III (rural/semi-urban) areas is 200 metres landward from the High Tide Line. **Answer: (B).**

Concept — CRZ Notification 2011 and Zone Classification: The *Coastal Regulation Zone (CRZ) Notification, 2011*, issued under the Environment Protection Act, 1986, regulates development along India's coastline to protect coastal ecology, fishermen's livelihoods, and public safety. The notification classifies coastal areas into four zones based on ecological sensitivity and development status:

- **CRZ-I:** Ecologically sensitive areas (mangroves, coral reefs, salt marshes, turtle nesting grounds) and the inter-tidal zone between LTL and HTL. Most restrictive — no development permitted.
- **CRZ-II:** Urbanised areas that were already substantially built up before the original 1991 notification, with a developed road on or close to the



shore. Development on the seaward side of the existing road is regulated.

- **CRZ-III:** Rural and semi-urban areas that are not substantially developed — the most spatially extensive category on India's coast. NDZ of **200 m** from HTL applies.
- **CRZ-IV:** Andaman & Nicobar Islands and Lakshadweep — special norms apply.

For **CRZ-III**, the total regulated coastal stretch extends **500 m** landward from the HTL. Within this 500 m band, the innermost **200 m** is designated the **No Development Zone (NDZ)**: no construction of any kind is permitted. Between 200 m and 500 m from the HTL, development is *regulated* — permitted subject to approvals, specified uses (fishing villages, tourism, public utilities), and prescribed floor space limits. The 2011 notification reduced the NDZ from the 500 m applied to sparsely populated areas under the 1991 notification, standardising it at 200 m for CRZ-III.

Analysis of each option:

- **(A) 100 metres:** A 100 m NDZ applied under the CRZ Notification 2011 only in specific congested urban areas within the Greater Mumbai Municipal Corporation limits — a special provision, not the general CRZ-III norm. Incorrect.
- **(B) 200 metres:** This is the correct NDZ for CRZ-III areas under the CRZ Notification 2011. Confirmed in the diagram. Correct.
- **(C) 300 metres:** Not a standard CRZ distance threshold under the 2011 notification. Incorrect.
- **(D) 500 metres:** 500 m is the *outer limit* of the entire CRZ-III regulated zone from the HTL — not the NDZ. The 500 m NDZ was a feature of the 1991 notification for sparsely populated areas and was revised to 200 m in the 2011 notification. Confusing the NDZ with the total CRZ extent is a common error. Incorrect.

Final Answer: CRZ-III NDZ from HTL = 200 metres (CRZ Notification 2011)

⇒ **B**

Answer: (B) [Go Back to Q8](#)



Sol. 9.

Solution

Difficulty: Beginner • Chapter: Municipal Finance & Urban Governance

Quick Solution: Local Body Tax (LBT) was introduced — most prominently in Maharashtra — to replace Octroi, the tax on goods entering a city's municipal limits. **Answer: (C).**

Concept — Octroi and Its Replacement by LBT: *Octroi* is a tax levied by a municipality on goods when they physically enter the municipal area, collected at check-posts at city entry points. It was historically one of the most significant own-revenue sources for Urban Local Bodies (ULBs) in Maharashtra and some other states. However, octroi attracted sustained criticism on multiple grounds:

- (a) **Congestion:** Physical check-posts caused severe traffic bottlenecks at city entry points, especially for commercial vehicles.
- (b) **Corruption:** The check-post system was widely regarded as a site of extortion and unofficial payments.
- (c) **Administrative cost:** Maintaining check-posts, staff, and weighbridges was expensive relative to net revenue collected.
- (d) **Trade barrier:** Octroi functioned as an internal trade barrier, impeding the free movement of goods within the country.

The *Local Body Tax (LBT)*, introduced by Maharashtra in 2013, was designed to retain a similar revenue stream for ULBs while eliminating check-posts. Under LBT, traders and businesses declared and paid tax on goods purchased and brought into the city based on purchase receipts, replacing physical inspection with a self-declaration system. However, LBT itself faced opposition from traders, and Maharashtra abolished LBT for most cities in 2015, with the state agreeing to compensate ULBs from its own revenue. Subsequently, the introduction of **GST (Goods and Services Tax)** in 2017 subsumed both octroi and LBT-like levies, with provisions made for compensating ULBs.

Analysis of each option:

- **(A) Property tax:** Property tax is a direct, asset-based municipal levy on the annual or capital value of land and buildings. It is the largest own-revenue source for most ULBs and has nothing to do with LBT. Incorrect.
- **(B) Professional tax:** Professional tax is levied on income from employment or professions under state legislation. It has its own legislative framework and administrative channel, unrelated to LBT. Incorrect.



- **(C) Octroi:** LBT was explicitly and directly designed to replace octroi, addressing its structural inefficiencies while preserving the revenue stream for municipal bodies. Correct.
- **(D) Entertainment tax:** Entertainment tax is levied on cinema admissions, amusement parks, cable TV services, etc. It is a separate, smaller levy with no connection to the goods-tax chain that octroi and LBT represent. Incorrect.

Final Answer: LBT replaced Octroi as a municipal goods-entry revenue source

⇒

Answer: (C) [Go Back to Q9](#)

Sol. 10.

Solution

Difficulty: Intermediate • Chapter: Land Management & Pooling Schemes

Quick Solution: The DDA Land Pooling Policy enables voluntary land pooling by private landowners, with DDA developing trunk infrastructure and returning a serviced developed plot portion to each landowner/developer entity. **Answer: (A).**

Concept — DDA Land Pooling Policy (LPP): The *Land Pooling Policy (LPP)*, notified by the Delhi Development Authority under the *Master Plan for Delhi 2021*, represents a fundamental paradigm shift from the traditional model of *compulsory land acquisition* under which DDA would acquire private land at statutory compensation rates, develop it fully, and then allot plots or flats. That model had become increasingly expensive, legally contested (under the RFCT-LARR Act, 2013, compensation multipliers made acquisition costs prohibitive), and slow. Under LPP:

- (a) Landowners within designated development sectors voluntarily pool their land by handing it over to DDA.
- (b) DDA develops **trunk infrastructure**: sector-level roads, water supply, sewerage, storm water drains, and power distribution.
- (c) A portion of developed, serviced land — called the *Developer Entity (DE) plot* — is returned to the participating landowner/developer entity. The return ratio is approximately **48%** for pooled areas between 2 ha and 20 ha, and **60%** for areas of 20 ha and above.
- (d) The landowner/DE then independently develops the returned plot as per



the prescribed land use and Floor Area Ratio (FAR) in the MPD 2021.

- (e) DDA retains the remaining land for public purposes (parks, schools, community facilities, affordable housing, and roads).

This model substantially reduces DDA's financial burden for land acquisition while incentivising private landowners to participate through the guarantee of receiving a serviced, legally clear, development-ready plot with higher market value than their original agricultural land.

Analysis of each option:

- **(A) Voluntary pooling + DDA trunk infrastructure + return of developed plots:** Accurately describes the LPP mechanism in its entirety. Correct.
- **(B) Compulsory acquisition under RFCTLARR at minimum compensation:** This describes the *old* DDA model that the LPP was specifically designed to move away from. The LPP is voluntary, not compulsory. Incorrect.
- **(C) Convert urban villages to commercial zones, relocate residents:** The LPP applies to agricultural/rural land within the urbanisable zone of the MPD. It is designed to preserve the rights of landowners and does not specifically target or displace existing urban village (lal dora) communities. Incorrect.
- **(D) Establish green buffers on outskirts:** While MPD 2021 designates green belts and recreational zones, these are separate land-use instruments. LPP is a land management and development facilitation tool, not a greenbelt instrument. Incorrect.

Final Answer: DDA LPP = voluntary pooling + DDA trunk infrastructure + return of developed plots to landowners $\Rightarrow$ **A**

Answer: (A) [Go Back to Q10](#)

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	C	2	A	3	D	4	B	5	C
6	A	7	D	8	B	9	C	10	A

