| Written Answers to |               | [20 November, 2019]                               | Unstarred Questions 192       |  |
|--------------------|---------------|---|-------------------------------|--|
| 1                  | 2             |   | 3                             |  |
|                    |               | <ol> <li>4. Tiruppur</li> <li>5. Salem</li> </ol> |                               |  |
|                    |               |   |                               |  |
|                    |               | 6. Vellore  |                               |  |
|                    |               | 7. Coimbatore                                     |                               |  |
|                    |               | 8. Madurai  |                               |  |
|                    |               | 9. Thoothukudi                                    |                               |  |
|                    |               | 10. Chennai                                       |                               |  |
|                    |               | 11. E   | Erode                         |  |
| 32.                | Telangana     | 1. Ka   | rimnagar                      |  |
|                    |               | 2. Gr   | reater Warangal               |  |
| 33.                | Tripura       | 1. Agartala                                       |                               |  |
| 34.                | Uttar Pradesh | 1. Al   | 1. Aligarh                    |  |
|                    |               | 2. Jh   | ansi                          |  |
|                    |               | 3. Ka   | anpur                         |  |
|                    |               | 4. Pr   | ayagraj (erstwhile Allahabad) |  |
|                    |               | 5. Lu   | 5. Lucknow                    |  |
|                    |               | 6. Va   | 6. Varanasi                   |  |
|                    |               | 7. Aş   | gra                           |  |
|                    |               | 8. Ba   | reilly                        |  |
|                    |               | 9. M  | 9. Moradabad                  |  |
|                    |               | 10. S   | Saharanpur                    |  |
| 35.                | Uttarakhand   | 1. De   | ehradun                       |  |
| 36.                | West Bengal   | 1. Ne   | 1. New Town Kolkata           |  |
|                    | Total         | 100   |                               |  |

## Earthquake-resistant housing

409. SHRI SASMIT PATRA: Will the Minister of HOUSING AND URBAN AFFAIRS be pleased to state:

(a) the measures undertaken to bring about earthquake-resistant housing in the country;

(b) the degree of progress/achievement in realizing earthquake-resistant housing across the country; and

(c) whether Government is proposing to bring about a legislation to ensure earthquake-resistant housing in the country?

THE MINISTER OF STATE OF THE MINISTRY OF HOUSING AND URBAN AFFAIRS (SHRI HARDEEP SINGH PURI): (a) to (c) The Bureau of Indian Standards (BIS) has brought out a series of Indian Standards for earthquake resistant design and construction of buildings. The National Building Code (NBC) of India, through its various sections also provides provisions for disaster resistant planning and construction of buildings. The NBC of India 2016 has necessary administrative and technical provisions for safety of structures against earthquakes and other hazards. Earthquake resistant codes and relevant provisions of NBC are required to be followed mandatorily for safety against earthquake hazards.

Further, Pradhan Mantri Awas Yojana - Housing for All (Urban) Mission scheme guidelines stipulates that the houses under the Mission should be designed and constructed to meet the requirements of structural safety against earthquake, flood, cyclone, landslides etc. conforming to NBC and other relevant BIS codes. Besides the above, the Vulnerability Atlas of India that gives State-wise hazard maps with respect to different types of hazards based on the materials used for walling and roofing of the building is periodically revised and guidelines, manuals on earthquake resistant design and construction of housing are brought out.

In order to create awareness and educate the various stakeholders, Building Materials and Technology Promotion Council (BMTPC), an autonomous organization under the aegis of Ministry of Housing and Urban Affairs has recently started e-learning course on Vulnerability Atlas of India.

A National Disaster Management Plan has already been drawn by National Disaster Management Authority (NDMA), Ministry of Home Affairs in 2016 with the vision "Make India disaster resilient, achieve substantial disaster risk reduction, and significantly decrease the losses of life, livelihoods and assets - economic, physical, social, cultural, and environmental - by maximizing the ability to cope with disasters at all levels of administration as well as among communities".