



Manuscript Template for submission to Gyanyog **GYANYOG** □ □ □ □ □ □ □ □, the **Journal of Universal Engineering and Science College**

*Please use the following text to prepare your manuscript by overwriting corresponding sections of your manuscript onto the respective ones.*

---

**Title of the paper in bold Times New Roman font 12, maximum 20 words and three lines**

Author One<sup>1</sup>, Author Two<sup>1,\*</sup>, Author Three<sup>2</sup>

<sup>1</sup> *Name of the Institution where Author(s) affiliated, Details of the Institution, Address*

*\*Corresponding author email: author@gmail.com*

---

### **Abstract**

Abstracts commonly have these parts: introduction, study's context, objectives, methodology, key findings, conclusions, implications and replication potential of your research and application in practical problem solving. Your abstract should be written in maximum 250 words in one or two paragraphs, and usually should not include any reference.

**Keywords:** *Please include up to five keywords that are specific to your research and describe your research scope, methodology and results. Be as specific as possible; avoid more general words, which may be included in many searches. The keywords should be in their basic form e.g. singular nouns or infinitive verbs or in phrases. All keywords should be written in italics with a colon, followed by the keywords or phrases separated by commas. After the last keyword, no punctuation is used.*

---

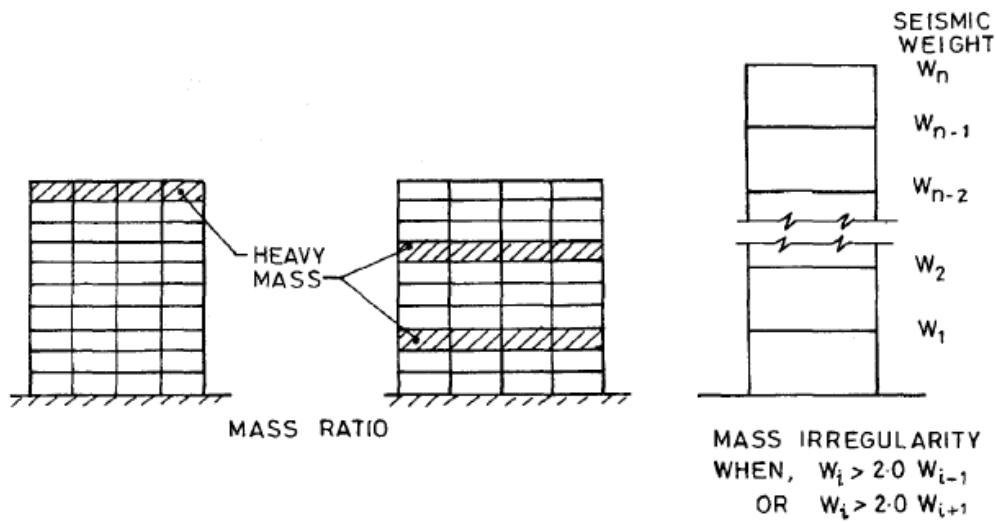
### **1. Heading one**

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

## 2. Heading one

### 2.1 Heading two

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. (Sadashiva et al. 2009).



**Figure 1:**Representation of mass irregular structure.

$$K_i = \sum_{j=1}^{n_c} \frac{12E_j I_j}{L_j^3} + \sum_{m=1}^{n_{strut}} \frac{A_m E_m}{L_m} \cos^2 \theta_m \quad \dots (1)$$

Where,

$N_c$  total number of continuum columns in the  $i^{\text{th}}$  story

$N_{strut}$  the total number of struts in  $i^{\text{th}}$  story

$E_j$ , modulus of elasticity of materials

$I_j$  moment of inertia of the member

- L<sub>j</sub>, length of column
- I direction of interest
- E<sub>m</sub> elastic modulus
- A<sub>m</sub> axial area
- L<sub>m</sub> Length
- Θ<sub>m</sub> angle of inclination with respect to the horizontal axis of strut



(a)



(b)

**Figure 2:** a) Vertical geometric irregularity, b) horizontal irregularity.

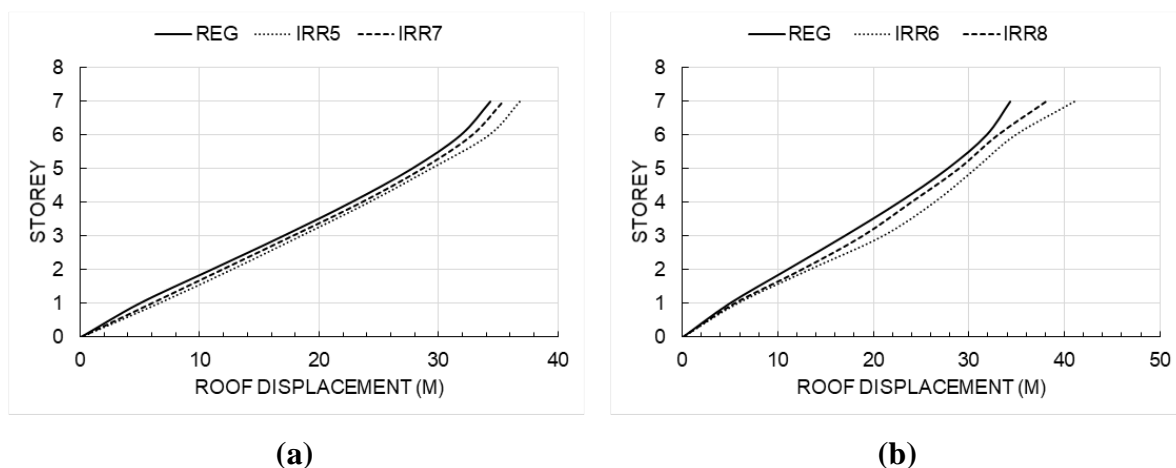
**Table 1:** Irregularity limits prescribed by IS 1893:2016 (Part 1), EC8:2004, UBC 97, NBCC 2005

| Type of irregularity      | IS 1893:2016               | EC8 2004                                                                    | UBC 97                     | NBCC 2005                  |
|---------------------------|----------------------------|-----------------------------------------------------------------------------|----------------------------|----------------------------|
| <b>Horizontal</b>         |                            |                                                                             |                            |                            |
| a) Re-entrant corners     | $R_i \leq 15\%$ (Fig.2)    | $R_i \leq 5\%$                                                              | $R_i \leq 15\%$            |                            |
| b) Torsional irregularity | $d_{max} \leq 1.2 d_{avg}$ | $r_x > 3.33 e_{ox}$<br>$r_y > 3.33 e_{oy}$<br>$r_x \text{ and } r_y > l_s,$ | $d_{max} \leq 1.2 d_{avg}$ | $d_{max} \leq 1.7 d_{avg}$ |
| c) Diaphragm              | $O_a > 50\%$               | $r_x^2 > l_s^2 + e_{ox}^2$                                                  | $O_d > 50\%$               |                            |

|               |               |                               |                                 |
|---------------|---------------|-------------------------------|---------------------------------|
| discontinuity | $S_d > 50\%$  | $R_y 2 > I_s 2 +$<br>eoy2     | $S_d > 50\%$                    |
| Vertical      |               |                               |                                 |
| a) Mass       | $M_i < 2 M_a$ | Should not<br>reduce abruptly | $M_i < 1.5 M_a$ $M_i < 1.5 M_a$ |

**Table 2: Irregularity limits prescribed by IBC 2003, Tec 2007 and ASCE – 7.05**

| Irregularity limits prescribed by IBC 2003, TEC 2007 And ASCE – 7.05 |          |                            |                                                          |
|----------------------------------------------------------------------|----------|----------------------------|----------------------------------------------------------|
| Type of irregularity                                                 | IBC 2003 | TEC 2007                   | ASCE – 7.05                                              |
| Horizontal                                                           |          |                            |                                                          |
| a) Re-entrant corners                                                |          | $R_i \leq 20\%$            | $R_i \leq 15\%$                                          |
| b) Torsional irregularity                                            |          | $d_{max} \leq 1.2 d_{avg}$ | $d_{max} \leq 1.2 d_{avg}$<br>$d_{max} \leq 1.4 d_{avg}$ |
| c) Diaphragm discontinuity                                           |          | $O_a > 33\%$               | $O_a > 50\%$ $S > 50\%$                                  |



**Figure 14:** Comparison of storey vs storey displacement in regular and irregular building model

**Acknowledgements**

The authors would like to thank the ?????? for providing the platform to conduct this research.

**References** (*The following are the references, yet not sorted alphabetically, reproduced from APA <https://apastyle.apa.org/style-grammar-guidelines/references/examples/published-dissertation-references> as examples of citation for a variety of publications. The authors should consult APA for your work.*)

- Grady, J. S., Her, M., Moreno, G., Perez, C., & Yelinek, J. (2019). Emotions in storybooks: A comparison of storybooks that represent ethnic and racial groups in the United States. *Psychology of Popular Media Culture*, 8(3), 207–217. <https://doi.org/10.1037/ppm0000185>
- Jerrentrup, A., Mueller, T., Glowalla, U., Herder, M., Henrichs, N., Neubauer, A., & Schaefer, J. R. (2018). Teaching medicine with the help of “Dr. House.” *PLoS ONE*, 13(3), Article e0193972. <https://doi.org/10.1371/journal.pone.0193972>
- Lipscomb, A. Y. (2021, Winter). Addressing trauma in the college essay writing process. *The Journal of College Admission*, (249), 30–33. [https://www.catholiccollegesonline.org/pdf/national\\_ccaa\\_in\\_the\\_news\\_-\\_nacac\\_journal\\_of\\_college\\_admission\\_winter\\_2021.pdf](https://www.catholiccollegesonline.org/pdf/national_ccaa_in_the_news_-_nacac_journal_of_college_admission_winter_2021.pdf)
- Sanchiz, M., Chevalier, A., & Amadiou, F. (2017). How do older and young adults start searching for information? Impact of age, domain knowledge and problem complexity on the different steps of information searching. *Computers in Human Behavior*, 72, 67–78. <https://doi.org/10.1016/j.chb.2017.02.038>
- Butler, J. (2017). Where access meets multimodality: The case of ASL music videos. *Kairos: A Journal of Rhetoric, Technology, and Pedagogy*, 21(1). <http://technorhetoric.net/21.1/topoi/butler/index.html>
- Jackson, L. M. (2019). *The psychology of prejudice: From attitudes to social action* (2nd ed.). American Psychological Association. <https://doi.org/10.1037/0000168-000>
- Sapolsky, R. M. (2017). *Behave: The biology of humans at our best and worst*. Penguin Books.
- Svendsen, S., & Løber, L. (2020). *The big picture/Academic writing: The one-hour guide* (3rd digital ed.). Hans Reitzel Forlag. <https://thebigpicture-academicwriting.digi.hansreitzel.dk/>
- Hygum, E., & Pedersen, P. M. (Eds.). (2010). *Early childhood education: Values and practices in Denmark*. Hans Reitzels Forlag. <https://earlychildhoodeducation.digi.hansreitzel.dk/>

- Kesharwani, P. (Ed.). (2020). *Nanotechnology based approaches for tuberculosis treatment*. Academic Press.
- Torino, G. C., Rivera, D. P., Capodilupo, C. M., Nadal, K. L., & Sue, D. W. (Eds.). (2019). *Microaggression theory: Influence and implications*. John Wiley & Sons. <https://doi.org/10.1002/9781119466642>
- Harris, K. R., Graham, S., & Urdan T. (Eds.). (2012). *APA educational psychology handbook* (Vols. 1–3). American Psychological Association.
- Aron, L., Botella, M., & Lubart, T. (2019). Culinary arts: Talent and their development. In R. F. Subotnik, P. Olszewski-Kubilius, & F. C. Worrell (Eds.), *The psychology of high performance: Developing human potential into domain-specific talent* (pp. 345–359). American Psychological Association. <https://doi.org/10.1037/0000120-016>
- Dillard, J. P. (2020). Currents in the study of persuasion. In M. B. Oliver, A. A. Raney, & J. Bryant (Eds.), *Media effects: Advances in theory and research* (4th ed., pp. 115–129). Routledge.
- Thestrup, K. (2010). To transform, to communicate, to play—The experimenting community in action. In E. Hygum & P. M. Pedersen (Eds.), *Early childhood education: Values and practices in Denmark*. Hans Reitzels Forlag. <https://earlychildhoodeducation.digi.hansreitzel.dk/?id=192>
- Bronfenbrenner, U. (2005). The social ecology of human development: A retrospective conclusion. In U. Bronfenbrenner (Ed.), *Making human beings human: Bioecological perspectives on human development* (pp. 27–40). SAGE Publications. (Reprinted from *Brain and intelligence: The ecology of child development*, pp. 113–123, by F. Richardson, Ed., 1973, National Educational Press)
- National Cancer Institute. (2019). *Taking time: Support for people with cancer* (NIH Publication No. 18-2059). U.S. Department of Health and Human Services, National Institutes of Health. <https://www.cancer.gov/publications/patient-education/takingtime.pdf>
- Kabir, J. M. (2016). *Factors influencing customer satisfaction at a fast food hamburger chain: The relationship between customer satisfaction and customer loyalty* (Publication No. 10169573) [Doctoral dissertation, Wilmington University]. ProQuest Dissertations & Theses Global.
- Miranda, C. (2019). *Exploring the lived experiences of foster youth who obtained graduate level degrees: Self-efficacy, resilience, and the impact on identity development* (Publication No. 27542827) [Doctoral dissertation, Pepperdine University]. PQDT Open. <https://pqdtopen.proquest.com/doc/2309521814.html?FMT=AI>

Zambrano-Vazquez, L. (2016). *The interaction of state and trait worry on response monitoring in those with worry and obsessive-compulsive symptoms* [Doctoral dissertation, University of Arizona]. UA Campus Repository. <https://repository.arizona.edu/handle/10150/620615>

## DECLARATIONS BY THE CORRESPONDING AUTHOR

(The Corresponding author should use the following template to make the following statements on behalf of all authors)

### Scope Statement (*Please fill in as appropriate*)

Dear Editor: We submit our original research article entitled “.....” to GYANYOG □□□□□□□□ for publication. We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. We believe this manuscript is appropriate for publication by GYANYOG because it is a comprehensive study of ..... All authors have seen the manuscript and approved it to submit to your journal. Thank you very much for your attention and consideration.

### Conflict of interest statement

The authors declare **NO** potential conflict of interest / a **YES** potential conflict of interest and state it below

The author(s) declared that they .... .... .... at the time of submission. This had no impact on the peer review process and the final decision

### CRedit Author Statement

Author 1 Name: Funding acquisition, Methodology, Project administration, Supervision, Writing – review & editing.

Author 2: Methodology, Supervision, Writing – review & editing.

Author 3: Data curation, Formal Analysis, Software, Writing – original draft, Writing – review & editing.

### Keywords

Keyword 1, Keyword 2, Keyword 3, Keyword 4, Keyword 5

### Abstract

Word count: 343

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum  
damage on accessibility to emergency shelters and the complexity of evacuation in earthquake scenarios. In general.

### Funding information

This study receives funds from the ?????? (Grant No. 42074064 ), and ??????? (Grant No. ??????).

### Funding statement

The author(s) declare financial support was received for the research, authorship, and/or publication of this article.

### Ethics statements

### Studies involving animal subjects

No animal studies are presented in this manuscript.

### Studies involving human subjects



No human studies are presented in the manuscript.

**Inclusion of identifiable human data**

No potentially identifiable images or data are presented in this study.

Data availability statement

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla; further inquiries can be directed to the corresponding author/s