**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, November 2022**

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|  | **2BT3104** | Roll No. | Total Printed Pages: 2 |
| **2BT3104** |  |
| B. Tech. II Year III- Semester (Main/Back) End Semester Examination, November 2022  **(CV)** | |
| **BCVCCV3104 : Building Technology** | | | |

# Time: **3** Hours. Total Marks: **60**

Min. Passing Marks: **21**

Attempt **five** questions selecting one question from each Unit. There is internal choice from Unit I to Unit V. Marks of each question or its parts are indicated against each question / parts. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

Use of following supporting material is permitted during examination for this subject.

# **A-3 Size Drawing Sheet (1Nos.)** **2.------------------Nil-----------------------**

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|  |  | **UNIT-I (CO1)** | **Marks** | **Bloom Level** |
| **Q.1** | **(a)** | Give classification of buildings based on occupancy according to National Building Codeof India*,* 1970*.* | **(6)** | **Remembering** |
|  |  |  |  |  |
|  | **(b)** | Write short notes on followings-  (i) Site plan and its detail (ii) Sun shading devices | **(6)** | **Remembering** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
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| **Q.2** | **(a)** | Discuss criteria for location and site selection for different types of building. | **(6)** | **Evaluating** |
|  |  |  |  |  |
|  | **(b)** | Write short notes on followings-   1. Energy conservation in buildings 2. Passive solar cooling and heating of buildings | **(6)** | **Remembering** |
|  |  |  |  |  |
|  |  | **UNIT-II (CO2)** |  |  |
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| **Q.3** | **(a)** | What do you understand by Building Bye Laws and NBC Regulations and what are the application of Building Bye Laws and NBC Regulations. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Write short notes on followings (**any three**)-  (i) Lines of building frontages (ii) Floor area ratio  (iii) Open spaces around buildings (iv) Height & sizes of rooms | **(6)** | **Remembering** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
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| **Q.4** | **(a)** | Discuss importance and various objectives of building by-laws | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Discuss various principles of building by-laws. | **(6)** | **Understanding** |
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|  |  | **UNIT-III (CO3)** |  |  |
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| **Q.5** | **(a)** | What do you mean by planning of a building? Explain general scope of a building with example. | **(6)** | **Remembering** |
|  |  |  |  |  |
|  | **(b)** | Give detail comparison of various aspects of a residential building as given in Vastu-shastra and modern building science. | **(6)** | **Evaluating** |
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|  |  | **OR** |  |  |
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| **Q.6** |  | Discuss factors affecting principles of planning in detail. | **(12)** | **Remembering** |
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|  |  | **UNIT-IV (CO4)** |  |  |
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| **Q.7** | **(a)** | Define Anthropometry, what are the uses of Anthropometrics in design of buildings? | **(4)** | **Remembering** |
|  |  |  |  |  |
|  | **(b)** | Design and draw a primary health center, include its basic requirements. | **(8)** | **Creating** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
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| **Q.8** | **(a)** | Discuss about Bubble diagram showing sequence of arrangement of different units of a buildings. | **(4)** | **Remembering** |
|  |  |  |  |  |
|  | **(b)** | Design and draw a detailed plan of a college library showing its furniture detail and complete layout. | **(8)** | **Creating** |
|  |  |  |  |  |
|  |  | **UNIT V (CO5)** |  |  |
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| **Q.9** | **(a)** | Define Doors, give name of different types of doors used in building. Explain door with ventilator with the help of neat diagram. | **(6)** | **Remembering** |
|  |  |  |  |  |
|  | **(b)** | Discuss about sound insulation and noise control in buildings. | **(6)** | **Remembering** |
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|  |  | **OR** |  |  |
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| **Q.10** | **(a)** | Define windows; give name of different types of windows used in building. Explain Bay window with the help of neat diagram. | **(6)** | **Remembering** |
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|  | **(b)** | Write about Lighting and ventilation in buildings. | **(6)** | **Remembering** |