

**KADI SARVA VISHWAVIDYALAYA**  
**B.E. SEMESTER-IV OCTOBER-2015 EXAMINATION**

Subject Code:CV402

Date: 27/10/2015

Subject Name: Building Construction

TIME: 10:30 a.m. To 1:30 p.m.

Total marks: 70

Instruction:

1. Answer each section in separate Answer Sheet.
2. Use of scientific calculator is permitted.
3. All questions are compulsory.
4. Indicate **clearly** the options you attempted along with its respective question number
5. Use the last page of supplementary for rough work.

**Section-1**

- Q.1 (A) Define the following terms with figure [05]  
(1) Stretcher (2) Header (3) King Closer (4) Queen Closer (5) Frog
- (B) What is the requirement of good plaster? [05]
- (C) State the purposes of soil exploration. [05]
- OR
- (C) Explain plate load test for determining the bearing capacity of soil with neat sketch. [05]
- Q.2 (A) Explain cavity wall with sketch. [05]
- (B) Explain with sketch following: [05]
1. Flush Door
  2. Ledged, Battened and Braced door
- OR
- Q.2 (A) Discuss Flemish Bond for Brick Masonry in detail. [05]
- (B) Explain Grades of concrete and Curing of concrete. [05]
- Q.3 (A) Which factors are considered during selection of flooring material? Discuss them. [05]
- (B) Describe advantages and disadvantages of timber flooring. [05]
- OR
- Q.3 (A) Explain with sketch: [05]
1. Bay Window
  2. Corner Window
- (B) Explain difference between stone masonry and brick masonry. [05]

**Section-2**

- Q.4 (A) Define shoring, underpinning and scaffolding. [05]
- (B) Discuss the role of water-cement ratio in strength and workability of concrete. [05]
- (C) Compare Steel roof trusses and Timber roof trusses [05]
- OR
- (C) What precautions are taken during foundation construction in Black Cotton Soil? [05]

- Q.5 (A) Draw sketch of Double flying shores. [05]  
(B) Draw single flight staircase and label various components of stair on it. [05]  
OR
- Q.5 (A) Enlist various materials used in roof covering. Describe them. [05]  
(B) Describe the various types of pointing with sketch. [05]
- Q.6 (A) Classify various types of windows based on nature of operation or opening. [05]  
(B) Describe various types of steps with sketch. [05]  
OR
- Q.6 (A) Explain anti termite treatment with details. [05]  
(B) What is sound insulation? What are various effective measures adopted to achieve sound insulation in a building. [05]

-----All the Best-----



**KADI SARVA VISHWAVIDYALAYA**  
**B.E. SEMESTER-IV EXAMINATION (MAY-2014)**

Subject Code:CV402

Subject Name: Building Construction

Date: 13/05/2014

TIME: 10:30am To 1:30pm

Total marks: 70

**Instruction:**

1. Answer each section in separate Answer Sheet.
2. Use of scientific calculator is permitted.
3. All questions are compulsory.
4. Indicate **clearly** the options you attempted along with its respective question number
5. Use the last page of supplementary for rough work.

**Section-1**

Q.1 (A) What are the objects of soil exploration? State various methods of site exploration and discuss any one method with sketch. 05

(B) Draw single flight staircase and label various components of stair on it. 05

(C) Enlist types of bonds in brickwork. Sketch English bond for 1.5 brick thick wall. 05

OR

(C) What is meant by a combined footing? Describe with sketch. 05

Q.2 Answer the following Questions.

(A) Explain the reinforced brick lintel with sketch. 05

(B) What do you understand by Ashlar Masonry? Draw various types of Ashlar Masonry. 05

OR

(A) Define the following terms in relation to roof: 05

(1) Span (2) Rise of Roof (3) Eaves (4) Gable (5) Common Rafter

(B) Give merits and demerits of flat and pitched roof. 05

Q.3 Answer the following Questions.

(A) Enumerate various types of materials used for construction of floor base and flooring. Explain factors that affect the selection of flooring materials. 05

(B) What are the factors affecting the selection of size, location and number of window. Enlist various types of window. 05

OR



- (A) Explain method of construction for jack arch floor of bricks 05
- (B) Draw the sketch of following (any two) 05
1. Battened, ledged and braced door
  2. Clerestorey window
  3. Glazed and Sash door
  4. Gable and dormer window

### Section-2

- Q.4 (A) Differentiate between English Bond and Flemish Bond. 05
- (B) Differentiate between pre-cast and cast-in situ construction. Write advantages and disadvantages of pre-cast construction. 05
- (C) What is cavity wall? Write advantages of cavity wall. 05

OR

- (C) Which precautions are taken during construction of foundation in black cotton soil? 05

Q.5 Answer the following Questions.

- (A) What is the difference between plastering and pointing? Discuss different types of pointing. 05
- (B) Describe with sketch Dog-legged stair and Bifurcated stair. 05

OR

- (A) Plan a staircase for a residential building in which the vertical distance between floors is 3.74m. The size of the stair hall is limited to 5.00m x 2.40m. 05
- (B) What are the requirements of good plaster. 05

Q.6 Answer the following Questions.

- (A) Define Shoring? Explain Raking Shores with sketch. 05
- (B) When underpinning is required? Explain the pit method for the same. 05
- OR
- (A) Explain anti-termite treatment with detail. 05
- (B) Discuss in brief various types of thermal insulating materials. 05

-----All the Best-----



# KADI SARVA VISHWAVIDYALAYA

B.E. Civil SEMESTER-IV EXAMINATION NOVEMBER-2014

Subject Code:CV402

Subject Name: Building Construction

Date: 05/11/2014

TIME: 10:30am To 1:30pm

Total marks: 70

## Instruction:

1. Answer each section in separate Answer Sheet.
2. Use of scientific calculator is permitted.
3. All questions are compulsory.
4. Indicate **clearly** the options you attempted along with its respective question number
5. Use the last page of supplementary for rough work.

### Section-1

Q.1 (A) What is cavity wall? Write advantages of cavity walls. What precautions to be taken during cavity wall construction? [05]

(B) Differentiate between pre-cast and cast-in situ construction. [05]

(C) What are the factors affecting the selection of size, location and number of window. Enlist various types of window. [05]

OR

(C) Explain relieving arch and horse shoe arch. Discuss different causes of failures of arches. [05]

Q.2 Answer the following Questions.

(A) Explain the purposes of sub-surface investigations and discuss wash boring in detail. [05]

(B) Write various factors affecting the selection of site exploration method. [05]

OR

(A) Discuss the problems of foundation in black-cotton soils. Describe their preventive measures. [05]

(B) What do you understand by a 'strap footing'? Describe it brief with sketch. [05]

Q.3 Answer the following Questions.

(A) Discuss briefly the requirement of good stair. [05]

(B) Differentiate between: [05]

(1) Dog legged stair and Open-well stair.

(2) Helical stair and Spiral stair.

OR

(A) Explain cement concrete flooring with advantages and disadvantages of it. [05]

- (B) Draw the sketch of following (any two) [05]
1. Framed and braced door
  2. Corner window
  3. Glazed and Sash door
  4. Half turn stair

### Section-2

- Q.4 (A) Define the following terms with figure [05]  
(1) King closer (2) Queen closer (3) Frog (4) Jambs (5) Reveals

- (B) Explain the methods of mixing, placing compacting and curing of concrete. [05]

- (C) What is composite masonry? Write various types of it. Explain any one in detail. [05]

OR

- (C) Compare Steel roof trusses and Timber roof trusses [05]

- Q.5 Answer the following Questions.

- (A) Draw the plan and isometric view of building roof, label and define various parts. [05]

- (B) Describe with sketch the Queen Post roof truss. [05]

OR

- (A) What is the difference between plastering and pointing? Discuss different types of pointing. [05]

- (B) What is underpinning? Explain Pit method for the same. [05]

- Q.6 Answer the following Questions.

- (A) What are the basic characteristics of an ideal paint? [05]

- (B) What is meant by scaffolding? Discuss the essential requirements of it. [05]

OR

- (A) What is sound insulation? What are the various effective measures adopted to achieve sound insulation in a building. [05]

- (B) Explain fire resisting properties of common building materials. [05]

-----All the Best-----



# **KADI SARVA VISHWAVIDYALAYA**

B.E. SEMESTER- IV EXAMINATION(April/2015)

SUBJECT CODE : CV 402 SUBJECT NAME : Building Construction.

DATE : 02/05/2015 TIME :10:30a.m. to 1:00p.m. TOTAL MARKS : 70

## **Instructions:**

1. Answer each section in separate Answer Sheet.
2. Use of scientific Calculator is permitted.
3. All questions are compulsory.
4. Indicate clearly, the options you attempted along with its respective question number.
5. Use the last page of main supplementary for rough work.

## **SECTION I**

- Q:1 (All compulsory)
- (A) Enlist different methods of site exploration. Explain seismic refraction method. 05
- (B) Explain in brief :Method of Improving Bearing capacity. 05
- (C) What are the causes of failure of foundation ? What remedial measures would you like to adopt? 05
- OR**
- (C) Distinguish between disturbed soil sample and undisturbed soil sample. 05
- Q:2 (All compulsory)
- (A) What is bond? State different types of bonds in brick masonry and explain stretcher bond. 05
- (B) What is cavity wall? Write advantages of cavity wall. 05
- OR**
- (A) Explain reinforced brick lintel with sketch. 05
- (B) Classify the arches based on material and workmanship. 05
- Q:3 (All compulsory)
- (A) Describe segregation and bleeding of concrete. 05
- (B) Explain Grade of concrete. 05
- OR**
- (A) Describe cast in-situ and pre- cast construction. 05
- (B) Explain the methods of mixing, placing, transporting and curing of concrete. 05

## **SECTION II**

- Q:4 (All compulsory)
- (A) What factors should consider for selecting type, shape and size of Windows? 05
- (B) List various types of doors and explain flush door and collapsible steel with sketches. 05
- (C) Differentiate between Panelled doors and glazed doors 05



OR

- (C) Draw a single flight staircase and label various components of stair case on it. 05

Q:5

(All compulsory)

- (A) Explain essential requirements of floor and describe the Reinforced brick flooring. 05

- (B) Write short note on Timber flooring. 05

OR

- (A) Draw a neat sketch of Lean to roof and explain it. 05

- (B) Compare merits and demerits of flat and pitched roof. 05

Q:6

(All compulsory)

- (A) What is purpose of plastering? What are the requirements of ideal plastering? 05

- (B) What are the special treatment for buildings? Explain any one in detail. 05

OR

- (A) Describe various types of pointing. 05

- (B) Explain general fire safety requirements for building. 05