

<b>RGPV (DIPLOMA WING) BHOPAL</b>		<b>OBE CURRICULUM FOR THE COURSE</b>		<b>FORMAT 3</b>	<b>Sheet No. 1/2</b>
<b>Branch</b>	<b>ARCHITECTURAL ASSISTANTSHIP</b>			<b>Semester</b>	<b>FIRST</b>
<b>Course Code</b>	102	<b>Course Name</b>	<b>BUILDING MATERIALS</b>		
<b>Course Outcome1</b>	<b>Student will be able to select natural building materials for a given architectural or interior work</b>			<b>Teach Hrs</b>	<b>Marks</b>
<b>Learning Outcome 1</b>	<b>Student will be able to classify natural stones and select an appropriate stone for construction</b>			9	10
<b>Contents</b>	1. Geological (igneous, sedimentary and metamorphic) & physical (stratified, unstratified and foliated) classification of stones with a minimum of two examples from each class 2. Common building stones - their uses, selection for masonry, pavements, flooring, stone facing/ cladding.				
<b>Method of Assessment</b>	Written test				
<b>Learning Outcome 2</b>	<b>Students will be able to select appropriate timber, industrial timber, available in different market forms suitable for construction or interior works.</b>			9	10
<b>Contents</b>	1. Timber species, their uses, the section of a wooden log, defects, preservation, and seasoning of wood 2. Industrial timber; plywood, particle or chipboard, hardboard, fiberboard, blockboard, flush door shutters, veneers, and laminates with types, uses, merits, and demerits of each				
<b>Method of Assessment</b>	Written test				
<b>Course Outcome 2</b>	<b>Student will be able to describe and select clay product for construction</b>				
<b>Learning Outcome1</b>	<b>Student will be able to classify and select bricks with their qualities</b>			5	10
<b>Contents</b>	Brief description of clay, classifications, characteristics, and the standard dimensions of bricks, testing of bricks on-site, and selection of good bricks.				
<b>Method of Assessment</b>	Written test				
<b>Learning Outcome2</b>	<b>Student will be able to select ceramic and vitrified tiles for construction and interior works</b>			5	10
<b>Contents</b>	Classification of ceramic and vitrified tiles with their types, sizes, uses, merits, and demerits.				
<b>Course Outcome 3</b>	<b>Student will be able to identify, describe and select cement and its products</b>				
<b>Learning Outcome 1</b>	<b>Student will be able to describe cement; cement mortar, cement concrete with its ingredients, and the process of concreting</b>			15	15
<b>Contents</b>	1. Properties, chemical composition, use of ordinary Portland cement, setting, storage, and testing of cement on site. 2. Cement mortars; ingredients, proportions, preparation, use, and curing 3. Types and properties of cement concrete. Proportions and qualities of ingredients in cement concrete. Water- cement ratio, mixing, placing, and curing of cement concrete.				
<b>Method of Assessment</b>	Written test				
<b>Learning Outcome 2</b>	<b>Student will be able to enlist and identify different types of concrete blocks with their application</b>			4	5
<b>Contents</b>	Concrete Blocks; Classifications, dimension, utility, and application				

<b>Method of Assessment</b>	Written test		
<b>Course Outcome 4</b>	<b>Student will be able to describe and differentiate between cast iron, steel, and aluminum</b>		
<b>Learning Outcome 1</b>	<b>Student will be able to describe and identify different market forms of cast iron, steel, and aluminum with uses and examples from each</b>	9	10
<b>Contents</b>	<ol style="list-style-type: none"> <li>1. Different types of Steel products available for construction and their uses; rolled steel section, reinforced steel bars, hollow sections, and Stainless Steel products</li> <li>2. Cast iron and wrought iron; uses and limitations</li> <li>3. Different types of aluminum products used in construction; aluminum sections, aluminum composite panel (A.C.P), aluminum roofing sheets, and fittings.</li> </ol>		
<b>Method of Assessment</b>	Written test		
<b>Course Outcome5</b>	<b>Student will be able to identify finishing and miscellaneous materials with their uses</b>		
<b>Learning Outcome 1</b>	<b>Student will be able to enlist and identify different types of paints, distempers, varnishes, and wallpapers for the required purpose</b>	10	5
<b>Contents</b>	<ol style="list-style-type: none"> <li>1. Types, ingredients, uses, and method of application of paints and varnishes on different surfaces</li> <li>2. Wallpaper; types, uses, method of application with merits and demerits</li> </ol>		
<b>Method of Assessment</b>	Written test		
<b>Learning Outcome 2</b>	<b>Student will be able to describe and identify glass, adhesives, sealing, waterproofing, and lightweight roofing materials with their uses</b>	12	10
<b>Contents</b>	<ol style="list-style-type: none"> <li>1. Classification, uses, characteristics, performance of glass</li> <li>2. List different types, properties, uses, and application of adhesives, sealing compounds, and waterproofing materials used for different purposes</li> <li>3. Properties, uses, and application of gypsum, rubber, and lightweight roofing materials</li> </ol>		
<b>Method of Assessment</b>	Written test		
<b>Course Outcome 6</b>	<b>Student will be able to collect and present information on the latest building materials for construction and interior work</b>		
<b>Learning Outcome 1</b>	<b>Student will be able to collect information on the latest building materials through market survey, site visits and present compiled information</b>	12	15
<b>Contents</b>	<ol style="list-style-type: none"> <li>1. Construction site visits, market survey, desktop survey for natural building materials, clay products, cement products, metal products, and finishing materials</li> <li>2. Market and desktop survey for alternate, local and sustainable building materials</li> </ol>		
<b>Method of Assessment</b>	Report and Seminar presentation		





<b>RGPV (Diploma Wing ) Bhopal</b>		<b>SCHEME FOR LEARNING OUTCOME</b>				Branch Code			Course Code		CO Code	LO Code	<b>Format No. 4</b>
						A	0	6	1	0	2	1	
<b>COURSE NAME</b>	<b>BUILDING MATERIALS</b>												
<b>CO Description</b>	<b>Student will be able to select natural building materials for a given architectural or interior work</b>												
<b>LO Description</b>	<b>Student will be able to classify natural stones and select the appropriate stone for construction</b>												
<b>SCHEME OF STUDY</b>													
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks						
1.1.1	Geological (igneous, sedimentary and metamorphic) & physical (stratified, un- stratified and foliated) classification of stones with a minimum of two examples from each class	<ul style="list-style-type: none"> <li>Lecture</li> </ul>	<ul style="list-style-type: none"> <li>Teacher will explain the contents and provide handouts to students, show samples in the material bureau, and guide for desktop study.</li> <li>The student will submit a descriptive or comparative study on the classification of stone.</li> </ul>	5	-	<ul style="list-style-type: none"> <li>Blackboard</li> <li>Chalk</li> <li>Handouts</li> <li>Smart Classroom / similar facility</li> <li>Reference books</li> </ul>							
1.1.2	Common building stones - their uses, selection for masonry, pavements, flooring, stone facing/ cladding.	<ul style="list-style-type: none"> <li>Lecture</li> <li>Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>Teacher will explain the contents and provide handouts to students, show samples in the material bureau, and guide them to study the material on the internet</li> <li>The student will submit an analysis of common building stones with uses.</li> </ul>	4	-								

**SCHEME OF ASSESSMENT**

<b>S. No.</b>	<b>Method of Assessment</b>	<b>Description of Assessment</b>	<b>Maximum Marks</b>	<b>Resources Required</b>	<b>External / Internal</b>
1	Written test	• Objective, short answer, and descriptive questions	10	• Test paper	External

**ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY  
(IF ANY)****NIL**

<b>RGPV (Diploma Wing ) Bhopal</b>	<b>SCHEME FOR LEARNING OUTCOME</b>	Branch Code			Course Code			CO Code	LO Code	<b>Format No. 4</b>
		<i>A</i>	<i>0</i>	<i>6</i>	<i>1</i>	<i>0</i>	<i>2</i>	<i>1</i>	<i>2</i>	

<b>COURSE NAME</b>	<b>BUILDING MATERIALS</b>
<b>CO Description</b>	<b>Student will be able to select natural building materials for given architectural and interior work</b>
<b>LO Description</b>	<b>Students will be able to select appropriate timber, industrial timber, available in different market forms suitable for construction or interior works.</b>

**SCHEME OF STUDY**

<b>S. No.</b>	<b>Learning Content</b>	<b>Teaching – Learning Method</b>	<b>Description of T-L Process</b>	<b>Teach Hrs.</b>	<b>Pract. /Tut Hrs.</b>	<b>LRs Required</b>	<b>Remarks</b>
1.2.1	Timber species, their uses, the section of a wooden log, defects, preservation, and seasoning of wood	• Lecture	<ul style="list-style-type: none"> <li>• Teacher will explain the contents and provide handouts to students, and guide for study material on the internet</li> <li>• The student will submit a descriptive or comparative study on timber species.</li> </ul>	4	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Handouts</li> <li>• Smart Classroom / similar facility</li> <li>• Reference books</li> </ul>	
1.2.2	Industrial timber; plywood, particle or chipboard, hardboard fiberboard, blockboard, flush door shutters, veneers, and laminates with types, uses, merits, and demerits of each	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher will explain the contents and provide handouts to students, show samples in the material bureau, and guide them to study the material on the internet</li> <li>• The student will submit a descriptive or comparative study.</li> </ul>	5	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Handouts</li> <li>• Smart Classroom / similar facility</li> </ul>	

**SCHEME OF ASSESSMENT**

<b>S. No.</b>	<b>Method of Assessment</b>	<b>Description of Assessment</b>	<b>Maximum Marks</b>	<b>Resources Required</b>	<b>External / Internal</b>
1	Written test	• Objective, short answers, and descriptive questions	10	• Test paper	External

**ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF  
ANY)**

Student will be encouraged to explore the latest industrial timber available in the market.

<b>RGPV (Diploma Wing ) Bhopal</b>	<b>SCHEME FOR LEARNING OUTCOME</b>	Branch Code			Course Code			CO Code	LO Code	<b>Format No. 4</b>
		A	0	6	1	0	2	2	1	

<b>COURSE NAME</b>	<b>BUILDING MATERIALS</b>
<b>CO Description</b>	<b>Student will be able to describe and select clay product for construction</b>
<b>LO Description</b>	<b>Student will be able to classify and select bricks with their qualities</b>

**SCHEME OF STUDY**

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teaching Hrs.	Practical /Tut Hrs.	LRs Required	Remarks
2.1.1	Brief description of clay, classifications, characteristics, and the standard dimensions of bricks, testing of bricks on-site, and selection of good bricks.	<ul style="list-style-type: none"> <li>Lecture</li> <li>Group activity</li> <li>Educational site visit</li> </ul>	<ul style="list-style-type: none"> <li>Teacher will explain the contents and provide handouts to students, show samples in the material bureau, guide them for desktop study and site visit.</li> <li>The student will submit a descriptive or comparative study, conduct site tests, and prepare the report in a given format.</li> </ul>	5	-	<ul style="list-style-type: none"> <li>Blackboard</li> <li>Chalk</li> <li>Handouts</li> <li>Material bureau</li> <li>Smart Classroom / similar facility</li> <li>Reference books</li> </ul>	Teacher will prepare an observation format

**SCHEME OF ASSESSMENT**

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal
1	Written test	• Quiz, Objective, Short Answer ,and Descriptive questions	10	• Test paper	Internal

**ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)**

NIL

<b>RGPV (Diploma Wing ) Bhopal</b>	<b>SCHEME FOR LEARNING OUTCOME</b>	Branch Code			Course Code			CO Code	LO Code	<b>Format No. 4</b>
		A	0	6	1	0	2	2	2	

<b>COURSE NAME</b>	<b>BUILDING MATERIALS</b>
<b>CO Description</b>	<b>Student will be able to describe and select clay product for construction</b>
<b>LO Description</b>	<b>Student will be able to select ceramic and vitrified tiles for construction and interior works</b>

**SCHEME OF STUDY**

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teaching Hrs.	Practical /Tut Hrs.	LRs Required	Remarks
2.2.1	Classification of ceramic and vitrified tiles with their types, sizes, uses, merits, and demerits.	• Lecture	<ul style="list-style-type: none"> <li>• Teacher will explain the contents and provide handouts to students, show samples in the material bureau, guide them for desktop study.</li> <li>• The student will submit a descriptive or comparative study.</li> </ul>	5	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Handouts</li> <li>• Smart Classroom / similar facility</li> </ul>	

**SCHEME OF ASSESSMENT**

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal
1	Written test	• Objective, short answer, and descriptive questions	10	• Test paper	External

**ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY  
(IF ANY)**

**NIL**

<b>RGPV (Diploma Wing ) Bhopal</b>	<b>SCHEME FOR LEARNING OUTCOME</b>	<i>Branch Code</i>			<i>Course Code</i>			<i>CO Code</i>	<i>LO Code</i>	<b>Format No. 4</b>
		<i>A</i>	<i>0</i>	<i>6</i>	<i>1</i>	<i>0</i>	<i>2</i>	<i>3</i>	<i>1</i>	

<b>COURSE NAME</b>	<b>BUILDING MATERIALS</b>
<b>CO Description</b>	<b>Student will be able to identify, describe and select cement and its products</b>
<b>LO Description</b>	<b>Student will be able to describe cement; cement mortar, cement concrete with its ingredients, and the process of concreting</b>

**SCHEME OF STUDY**

<b>S. No.</b>	<b>Learning Content</b>	<b>Teaching – Learning Method</b>	<b>Description of T-L Process</b>	<b>Teaching Hrs.</b>	<b>Practical /Tut Hrs.</b>	<b>LRs Required</b>	<b>Remarks</b>
3.1.1	Properties, chemical composition, use of ordinary Portland cement, setting, storage, and testing of cement on-site.	<ul style="list-style-type: none"> <li>•Lecture</li> <li>• Educational site visit</li> <li>• Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher will explain the contents and provide handouts to students, guide them to study material on the internet</li> <li>• The student will submit a descriptive or comparative study, conduct site tests, and prepare a report in the given format.</li> </ul>	<b>5</b>	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Handouts</li> <li>• Smart Classroom / similar facility</li> <li>• Reference books</li> </ul>	Teacher will prepare an observation format
3.1.2	Cement mortars; ingredients, proportions, preparation, uses, and curing	<ul style="list-style-type: none"> <li>•Lecture</li> <li>• Educational site visit</li> <li>• Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher will explain the contents and provide handouts to students, guide them to study the material on the internet</li> <li>• The student will submit a descriptive or comparative study and prepare a report in the format.</li> </ul>	<b>5</b>	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Handouts</li> <li>• Smart Classroom / similar facility</li> <li>• Reference books</li> </ul>	Teacher will prepare an observation format

3.1.3	Types and properties of cement concrete. Proportions and qualities of ingredients in cement concrete. Water- cement ratio, mixing, placing, and curing of cement concrete.	<ul style="list-style-type: none"> <li>•Lecture</li> <li>• Educational site visit</li> <li>• Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher will explain the contents and provide handouts to students, them to study the material on the internet</li> <li>• The student will submit the descriptive or comparative study and prepare the report in a given format.</li> </ul>	5	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Handouts</li> <li>• Smart Classroom / similar facility</li> <li>• Reference books</li> </ul>	Teacher will prepare a format
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**SCHEME OF ASSESSMENT**

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal
1	Written test	<ul style="list-style-type: none"> <li>• Objective, short answer, and descriptive questions</li> </ul>	15	<ul style="list-style-type: none"> <li>• Test paper</li> </ul>	External

**ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY  
(IF ANY)**

Educational visits will be conducted for storage and testing of cement on construction site where concreting/masonry/plastering work is in progress

<b>RGPV (Diploma Wing ) Bhopal</b>		<b>SCHEME FOR LEARNING OUTCOME</b>				Branch Code			Course Code			CO Code	LO Code	<b>Format No. 4</b>
						A	0	6	1	0	2	3	2	
<b>COURSE NAME</b>		<b>BUILDING MATERIALS</b>												
<b>CO Description</b>		<b>Student will be able to identify, describe and select cement and its products</b>												
<b>LO Description</b>		<b>Student will be able to enlist and identify different types of concrete blocks with their application</b>												
<b>SCHEME OF STUDY</b>														
<b>S. No.</b>	<b>Learning Content</b>	<b>Teaching – Learning Method</b>	<b>Description of T-L Process</b>	<b>Teaching Hrs.</b>	<b>Practical /Tut Hrs.</b>	<b>LRs Required</b>	<b>Remarks</b>							
3.2.1	Concrete Blocks; Classifications, dimension, utility, and application	•Lecture	<ul style="list-style-type: none"> <li>• Teacher will explain the contents and provide handouts to students, guide them for desktop study.</li> <li>• The student will submit a descriptive or comparative study.</li> </ul>	4	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Handouts</li> <li>• Smart Classroom / similar facility</li> <li>• Reference books</li> </ul>								
<b>SCHEME OF ASSESSMENT</b>														
<b>S. No.</b>	<b>Method of Assessment</b>	<b>Description of Assessment</b>			<b>Maximum Marks</b>	<b>Resources Required</b>			<b>External / Internal</b>					
1	Written test	• Objective, short answers, and descriptive questions			5	• Test paper			External					
<b>ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)</b>														
NIL														

<b>RGPV (Diploma Wing ) Bhopal</b>	<b>SCHEME FOR LEARNING OUTCOME</b>	Branch Code			Course Code			CO Cod e	LO Cod e	<b>Format No. 4</b>
		<i>A</i>	<i>0</i>	<i>6</i>	<i>1</i>	<i>0</i>	<i>2</i>	<i>4</i>	<i>1</i>	

<b>COURSE NAME</b>	<b>BUILDING MATERIALS</b>
<b>CO Description</b>	<b>Student will be able to describe and differentiate between cast iron, steel, and aluminum</b>
<b>LO Description</b>	<b>Student will be able to describe and identify different market forms of cast iron, steel, and aluminum with uses and examples from each</b>

**SCHEME OF STUDY**

<b>S. No.</b>	<b>Learning Content</b>	<b>Teaching – Learning Method</b>	<b>Description of T-L Process</b>	<b>Teach Hrs.</b>	<b>Pract. /Tut Hrs.</b>	<b>LRs Required</b>	<b>Remarks</b>
4.1.1	Different types of steel products available for construction and their uses; rolled steel section, reinforced steel bars, hollow sections, and stainless steel products	• Lecture	<ul style="list-style-type: none"> <li>• Teacher will explain the contents and provide handouts to students, show samples in the material bureau and guide them to study the material on the internet</li> <li>• The student will submit a descriptive or comparative study.</li> </ul>	3	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Handouts</li> <li>• Smart Classroom / similar facility</li> <li>• Reference books</li> <li>• Material bureau</li> </ul>	
4.1.2	Cast iron and wrought iron; uses and limitations	• Lecture	<ul style="list-style-type: none"> <li>• Teacher will explain the contents and provide handouts to students, show samples in the material bureau and guide them to study the material on the internet</li> <li>• The student will submit a descriptive or comparative</li> </ul>	3	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Handouts</li> <li>• Smart Classroom / similar facility</li> <li>• Reference books</li> <li>• Internet</li> <li>• Material bureau</li> </ul>	

			study.				
4.1.3	Different types of aluminum products used in construction; aluminum sections, aluminum composite panel (A.C.P), aluminum roofing sheets, and fittings.	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher will explain the contents and provide handouts to students, show samples in the material bureau, and guide for study material on the internet.</li> <li>• The student will submit a descriptive or comparative study.</li> </ul>	3	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Handouts</li> <li>• Smart Classroom / similar facility</li> <li>• Reference books</li> <li>• Material bureau</li> </ul>	

**SCHEME OF ASSESSMENT**

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal
1	Written test	<ul style="list-style-type: none"> <li>• Objective, short answer, and descriptive questions</li> </ul>	10	<ul style="list-style-type: none"> <li>• Test paper</li> </ul>	External

**ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY  
(IF ANY)**

Students will be motivated to explore and collect various catalogues and samples for the standard dimension of steel and aluminum products

<b>RGPV (Diploma Wing ) Bhopal</b>	<b>SCHEME FOR LEARNING OUTCOME</b>	Branch Code			Course Code			CO Cod e	LO Cod e	<b>Format No. 4</b>
		<i>A</i>	<i>0</i>	<i>6</i>	<i>1</i>	<i>0</i>	<i>2</i>	<i>5</i>	<i>1</i>	

<b>COURSE NAME</b>	<b>BUILDING MATERIALS</b>
<b>CO Description</b>	<b>Student will be able to identify finishing and miscellaneous materials with their uses</b>
<b>LO Description</b>	<b>Student will be able to enlist and identify different types of paints, distempers, varnishes, and wallpapers for the required purpose</b>

**SCHEME OF STUDY**

<b>S. No.</b>	<b>Learning Content</b>	<b>Teaching – Learning Method</b>	<b>Description of T-L Process</b>	<b>Teach Hrs.</b>	<b>Pract. /Tut Hrs.</b>	<b>LRs Required</b>	<b>Remarks</b>
5.1.1	Types, ingredients, uses, and method of application of paints and varnishes on different surfaces	<ul style="list-style-type: none"> <li>Lecture</li> <li>Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>Teacher will explain the contents and provide handouts to students and guide for desktop study.</li> <li>The student will submit a descriptive or comparative study.</li> </ul>	5	-	<ul style="list-style-type: none"> <li>Blackboard</li> <li>Chalk</li> <li>Handouts</li> <li>Smart Classroom / similar facility</li> <li>Reference books</li> </ul>	
5.1.2	Wallpaper; Types, uses, method of application with merits and demerits	<ul style="list-style-type: none"> <li>Lecture</li> <li>Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>Teacher will explain the contents and provide handouts to students and guide for desktop study.</li> <li>The student will submit a descriptive or comparative study.</li> </ul>	5	-	<ul style="list-style-type: none"> <li>Blackboard</li> <li>Chalk</li> <li>Handouts</li> <li>Smart Classroom / similar facility</li> <li>Reference books</li> </ul>	

**SCHEME OF ASSESSMENT**

<b>S. No.</b>	<b>Method of Assessment</b>	<b>Description of Assessment</b>	<b>Maximum Marks</b>	<b>Resources Required</b>	<b>External / Internal</b>
1	Written test	<ul style="list-style-type: none"> <li>Quiz, Objective, short answer, and descriptive questions</li> </ul>	5	<ul style="list-style-type: none"> <li>Test paper</li> </ul>	Internal

**ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY  
(IF ANY)**

**NIL**

<b>RGPV (Diploma Wing ) Bhopal</b>	<b>SCHEME FOR LEARNING OUTCOME</b>	Branch Code			Course Code			CO Code	LO Code	<b>Format No. 4</b>
		A	0	6	1	0	2	5	2	

<b>COURSE NAME</b>	<b>BUILDING MATERIALS</b>
<b>CO Description</b>	<b>Student will be able to identify finishing and miscellaneous materials with their uses</b>
<b>LO Description</b>	<b>Student will be able to describe and identify glass, adhesives, sealing, waterproofing, and lightweight roofing materials with their uses</b>

#### SCHEME OF STUDY

<b>S. No.</b>	<b>Learning Content</b>	<b>Teaching – Learning Method</b>	<b>Description of T-L Process</b>	<b>Teach Hrs.</b>	<b>Pract. /Tut Hrs.</b>	<b>LRs Required</b>	<b>Remarks</b>
5.2.1	Classification, uses, characteristics, performance of glass	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher will explain the contents and provide handouts to students, show samples in material bureau and guide for desktop study</li> <li>• The student will submit a descriptive or comparative study.</li> </ul>	4	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Handouts</li> <li>• Material bureau</li> <li>• Smart Classroom / similar facility</li> <li>• Reference books</li> </ul>	
5.2.2	List different types, properties, and application of adhesives, sealing compounds, and waterproofing materials used for different purposes	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher will explain the contents and provide handouts to students and guide for desktop study</li> <li>• The student will submit a descriptive or comparative study</li> </ul>	4	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Handouts</li> <li>• Smart Classroom / similar facility</li> <li>• Reference books</li> </ul>	
5.2.3	Properties, uses, and application of gypsum, rubber, and lightweight roofing materials	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher will explain the contents and provide handouts to students and guide them for desktop study.</li> <li>• The student will submit a descriptive or comparative study.</li> </ul>	4	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Handouts</li> <li>• Smart Classroom / similar facility</li> <li>• Reference books</li> </ul>	

**SCHEME OF ASSESSMENT**

<b>S. No.</b>	<b>Method of Assessment</b>	<b>Description of Assessment</b>	<b>Maximum Marks</b>	<b>Resources Required</b>	<b>External / Internal</b>
1	Written test	• Objective, short answer, descriptive questions	10	• Test paper	External
<b>ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)</b>					
NIL					

<b>RGPV (Diploma Wing ) Bhopal</b>	<b>SCHEME FOR LEARNING OUTCOME</b>	Branch Code			Course Code			CO Cod e	LO Cod e	<b>Format No. 4</b>
		A	0	6	1	0	2	6	1	

<b>COURSE NAME</b>	<b>BUILDING MATERIALS</b>
<b>CO Description</b>	<b>Student will be able to collect and present information on the latest building materials for construction and interior work</b>
<b>LO Description</b>	<b>Student will be able to collect information on the latest building materials through market survey, site visits and present compiled information</b>

**SCHEME OF STUDY**

<b>S. No.</b>	<b>Learning Content</b>	<b>Teaching – Learning Method</b>	<b>Description of T-L Process</b>	<b>Teach Hrs.</b>	<b>Pract. /Tut Hrs.</b>	<b>LRs Required</b>	<b>Remarks</b>
6.1.1	Construction site visits, market survey, desktop survey for natural building materials, clay products, cement products, metal, products and finishing materials	<ul style="list-style-type: none"> <li>• Collective discussion</li> <li>• Market survey</li> <li>• Group activity</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher will guide the students through the or site visit, market, and desktop survey.</li> <li>• Students will conduct a market survey, collect sample/ data, and make a report or presentation on any one building material.</li> </ul>	8	-	<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Smart Classroom/ similar facility</li> </ul>	Teacher will prepare a checklist, formats for effective market survey, report writing, display, and presentation.
6.1.2	Market and desktop survey for alternate, local and sustainable building materials	<ul style="list-style-type: none"> <li>• Collective discussion</li> <li>• Market survey</li> <li>• Group activity</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher will guide the students for case studies, local practices, and researches in building materials</li> <li>• Student will collect data from research institutes, the internet, other sources and make a report in a given format</li> </ul>	4		<ul style="list-style-type: none"> <li>• Blackboard</li> <li>• Chalk</li> <li>• Smart Classroom/ similar facility</li> </ul>	Teacher will prepare checklists, formats for effective report writing.

**SCHEME OF ASSESSMENT**

<b>S. No.</b>	<b>Method of Assessment</b>	<b>Description of Assessment</b>	<b>Maximum Marks</b>	<b>Resources Required</b>	<b>External / Internal</b>
1 2	Report Seminar presentation	<ul style="list-style-type: none"><li>• Student will prepare report on survey and site visits</li><li>• PPT / Showcase by students on the desired topic</li></ul>	15	<ul style="list-style-type: none"><li>• Smart classroom</li><li>• Display facility</li></ul>	Internal

**ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY  
(IF ANY)**

1. Student will be instructed to survey local/ alternate/ sustainable building materials highlighting their advantages
2. Expert lectures will be conducted on the desired topic
3. Teacher will encourage students to explore the latest trends in materials and construction practices adopted by architects, professionals, and research organizations like CBRI, AMPRI, HUDCO, etc.