

**MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATIONS,
MUMBAI-400 051.**

1	Name of Syllabus	C. C In Road Construction (304107)																																														
2	Max .No of Student	25 Student																																														
3	Duration	6 Month																																														
4	Type	Part Time																																														
5	No Of Days / Week	6 Days																																														
6	No Of Hours /Days	4 Hrs																																														
7	Space Required	Open space = 800 Sq feet Class Room = 200 Sq feet TOTAL = 1000 Sq feet																																														
8	Entry Qualification	S.S.C. pass																																														
9	Objective Of Syllabus/ introduction	To know construction stages of Road. To have knowledge of construction of culvert small bridge. To knowledge of Road Survey.																																														
10	Employment Opportunity	1) Self Employment :- Work as Deputy. Contractor for Road or village Road. 2) Site Supervisor or Road work for construction /Maintenance.																																														
11	Teacher's Qualification	I.T.I. Passed in Experienced & skilled person in road construction with H.S.C. Vocational in Bldg. Maint.																																														
12	Training System	Training System Per Week																																														
		Theory	Practical	Total																																												
		6 Hours	18 Hours	24 Hours																																												
13	Exam. System	<table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Paper Code</th> <th>Name of Subject</th> <th>TH/PR</th> <th>Hours</th> <th>Max. Marks</th> <th>Min. Marks</th> </tr> </thead> <tbody> <tr> <td align="center">1</td> <td align="center">30410711</td> <td>Road Engineering</td> <td align="center">TH-1</td> <td align="center">3 hrs</td> <td align="center">100</td> <td align="center">35</td> </tr> <tr> <td align="center">2</td> <td align="center">30410712</td> <td>Road Construction</td> <td align="center">TH-2</td> <td align="center">3 hrs</td> <td align="center">100</td> <td align="center">35</td> </tr> <tr> <td align="center">3</td> <td align="center">30410721</td> <td>Road Engineering</td> <td align="center">PR-1</td> <td align="center">3 hrs</td> <td align="center">100</td> <td align="center">50</td> </tr> <tr> <td align="center">4</td> <td align="center">30410722</td> <td>Road Construction</td> <td align="center">PR-2</td> <td align="center">3 hrs</td> <td align="center">100</td> <td align="center">50</td> </tr> <tr> <td></td> <td></td> <td align="center">Total</td> <td></td> <td></td> <td align="center">400</td> <td align="center">170</td> </tr> </tbody> </table>					Sr. No.	Paper Code	Name of Subject	TH/PR	Hours	Max. Marks	Min. Marks	1	30410711	Road Engineering	TH-1	3 hrs	100	35	2	30410712	Road Construction	TH-2	3 hrs	100	35	3	30410721	Road Engineering	PR-1	3 hrs	100	50	4	30410722	Road Construction	PR-2	3 hrs	100	50			Total			400	170
Sr. No.	Paper Code	Name of Subject	TH/PR	Hours	Max. Marks	Min. Marks																																										
1	30410711	Road Engineering	TH-1	3 hrs	100	35																																										
2	30410712	Road Construction	TH-2	3 hrs	100	35																																										
3	30410721	Road Engineering	PR-1	3 hrs	100	50																																										
4	30410722	Road Construction	PR-2	3 hrs	100	50																																										
		Total			400	170																																										

Sr. No.	Theory –I – ROAD ENGINEERING
1)	Road Engg. –Types of roads , types of highways, classification based on traffic volume cross section of Highway .
2)	Material used in road construction , such as grill, gravel , boulder , course aggregates bitumen , concrete etc. precaution to be taken in handling of materials .
3)	Surveying & leveling for road , the instruments used & their opportunities the modes of measurement & recording the measurement contour map
4)	Alignment of road preparation of plan cross section ,profile & other types of drawing necessary for locating road components.
5)	Traffic Volume study of traffic volume controlling tools, signs & signals used in road engineering.
Theory -II - ROAD CONSTRUCTION	
Construction of Roads –Stages involved in construction of various types of roads, materials equipments & other resources of road.	
Drainage of Road – Study of Profile of road surface nature of subsoil ,foundation conditions , types of terrain through which road traverses cross drains various types of drainage system for hill side wads .	
Maintenance & repair of roads.	
Construction of bridges. Location of Bridges ,importance of hydraulic data ,water way , Free board values for different types of bridges types of bridges commonly used in road construction .	
Misc.culvert & their types, causeways & their classifications, inspection of road.	
Application of computer for data collection & record .	

Practical -I - ROAD ENGINEERING
Practical regarding of the various types of roads , highways. Exercises involving cross section of Highway .
Detail study of materials manufacturing , availability material handling .
Practical regarding of the surveying & leveling taken reading measurement , practical of contour map.
Preparation road plan , cross section , types of drawing.
Study of traffic volume , use of tools signs in road Engg.

Sr. No.	Practical –II ROAD CONSTRUCTION
1)	Study of various types of roads ,materials equipments.
2)	Study of profile of road surface , type of drainage system, types of subsoil foundation .
3)	Preventive Maintenance of the roads & repairs.
4)	Practical regarding the Construction of bridge, importance of hydraulic data, waterway , free board , study of types of bridges in road construction.
5)	Study of culvert & their types , inspection of roads.
6)	Study of collection of roads data & record.
