

INTERNSHIP REPORT
ON
“CONSTRUCTION PLANNING AND MANAGEMENT”

MADHAV INSTITUTE OF TECHNOLOGY AND SCIENCE GWALIOR
(A govt. Aided Autonomous Institute under RGPV, Bhopal (M.P) Established in 1957)

**IN PARTIAL FULFILLMENT FOR REQUIREMENT FOR THE AWARD OF THE
DEGREE OF**

BACHELOR of TECHNOLOGY
In
CIVIL ENGINEERING



2018-2022

Submitted By–

ABHISHEK MISHRA– (0901CE181004)

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INDUSTRY MENTOR-

Er SAIF KHAN
Chief Engineer
“SHILPI INFRA PROJECT PRIVATE LIMITED”



Madhav Institute of Technology & Science, Gwalior
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to R.G.P.V. Bhopal)

CERTIFICATE

SHILPI INFRA PROJECTS
PRIVATE LIMITED



SIPPL/574

Date 11-05-2022

To Whomsoever It May Concern

This is in reference to the ongoing internship of Mr. Abhishek Mishra at Shilpi infra Projects Pvt. Lt from **21 Jan 2022 to 21 May 2022**

We found him sincere, hardworking, and technically sound and result oriented. He worked well as a part of the team during his tenure We take this opportunity to thank him and wish him all the best for his future

As a part of grading, we would like to grade him as Excellent during these courses of 4 months

For; Shilpi Infra Projects Private Limited

Authorised Signatory



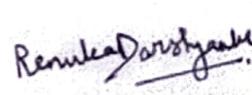
Corporate Office: B-Block, 3rd Floor, Shilpi Park, Dhusy (M.P.) 486001 Phone: 0761-221111 Fax: 0761-221111 Website: www.shilpiinfra.com

RECOMMENDATION

It is here by recommended that the internship report entitled—construction planning and management which is being submitted by ABHISHEK MISHRA completed under the guidance of RENUKA DARSHYAMKAR may be accepted in the partial fulfillment of the award of the degree of Bachelor of Engineering in Civil Engineering.



Prof. and Head
Civil Engineering Department
MITS ,Gwalior



Guided by
Prof. Renuka Darshyamkar
Civil Engineering Department
MITS, Gwalior

ACKNOWLEDGEMENT

When it comes to properly acknowledging someone's support and assistance, it may be a challenging undertaking, chiefly when the support offered is so fullhearted and unshevering.

I am extremely grateful to my guide, **RENUKA DARSHYAMKAR**, Assistant Professor of Civil Engineering Department, MITS Gwalior.

Also, I would like to thank Civil Engineering Department, MITS Gwalior, and all other academics and staff members of MITS Gwalior's Civil Engineering Department for their unwavering support throughout the project.

I am really grateful to **Dr. R. K. Pandit**, Director of MITS Gwalior, for establishing an outstanding institutional environment and for giving all facilities and assistance in the preparation of my dissertation. I also acknowledge with gratitude to our supporting **Mr. VIKRAM** for providing the facilities needed for the accomplishment of this project.

I take great pleasure for SHILPI INFRA PROJECTS PVT. LTD. REWA for providing the opportunities.

The environment of company has been valuable experience for me. It has provided an opportunity to learn at our own pace in discipline of interest. I would like to thank all those who helped me during different stages of completion of this project.

ABHISHEK MISHRA

(0901CE181004)

DEPARTMENT OF CIVIL ENGINEERING

MITS GWALIOR (M.P.)

ABSTRACT

Construction, is the most important aspect of modern world. It is the base of urbanization. Construction includes building up of roads, dams, bridges, high rise buildings, etc. Anything which relates to infrastructure leads to it's construction hence construction plays an impeccable role in human development.

As construction plays an important role so does it's planning. Planning involves recognizing most efficient way to complete a task. Construction planning involves planning of leveling, surveying, blueprints, budgeting, maintenance of construction site, etc. of project.

As we know, culture changes from place to place so does the work culture. Work culture at construction site involves testing of material, construction practices, availability of raw materials, man power. Hence, construction, planning and management plays vital role in proper functioning of construction.

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CHAPTER 1

INTRODUCTION

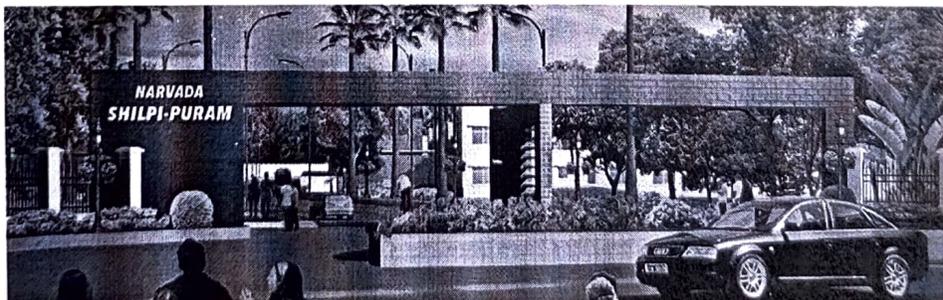
1.1 General

Shilpi Infra are a firm of youthful business people from grouped fields directed by a typical vision of changing visionary project into living reality. Working in close cooperation with driving draftsmen, engineers and Managers, the gathering expects to unite top notch aptitude to accomplish greatest consumer loyalty.

Shilpi Constructons has prompted formation of different milestone projects. The pioneers and gifted experts of the organization have pursued jump starting out of the association tasks and take the land area to a higher level. Shilpi Constructons is the trailblazer to send off the idea of blended use advancement and to concoct promising Commercial foundations in Rewa City.

1.2 MISSION

Partner with our clients in creating framework offices by offering absolute monetary arrangements. Make long haul an incentive for our clients through predominant item organizing by exploiting our insight pool. Be an association that advances constant learning and development by cultivating a pioneering work culture. Be an esteemed accomplice in the monetary local area by setting new guidelines.



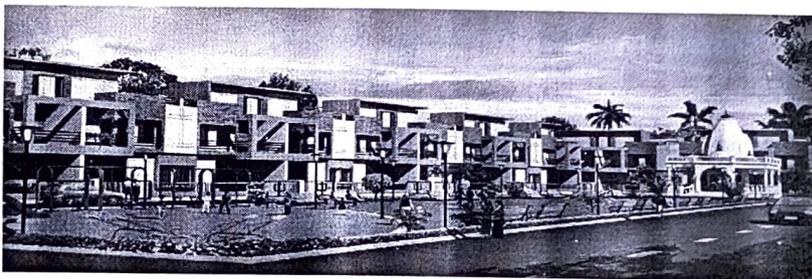
CHAPTER 2

OBJECTIVE

Narvada Shilpi Puram which has Row Houses at Duari, Rewa is the most sought after area for the ones who wants to put resources into future viewpoints as well. Duari, Rewa is in closeness to significant work environments. In Rewa, the interest for land is ceaselessly scaling. Likewise numerous business foundations alongside notable schools, universities, clinical focuses, shopping centers and places of amusement is in close area to Narvada Shilpi Puram . Narvada Shilpi Puram is decisively planned remembering even the minutest subtleties. It contains all top notch conveniences, for example, 24Hrs Water Supply, 24Hrs Backup Electricity, CCTV Cameras, Club House, Covered Car Parking, Jogging Track, Landscaped Garden, Play Area, Pucca Road, Rain Water Harvesting, Security Personnel, Street Light and Temple.

Area Advantages:

The Narvada Shilpi Puram is decisively situated with nearness to all municipal conveniences, for example, schools, universities, emergency clinics, shopping centers, supermarkets, cafés, sporting focuses and so on. The total location of Narvada Shilpi Puram is Duari, Rewa, Madhya Pradesh, INDIA.



NARVADA SHILPI PURAM RESIDENTIAL AREA

CHAPTER 3

3.1 SITE PREPARATION AND LEVELLING

The first step of any construction project is site preparation i.e. Clean the place from undesirable grass, boulder, etc. It entails in case of any hill clearance of extra earth, if there is a pit filling up of it. Site guidance involves various steps like destruction of old existing construction, of building sites, underground service, and wire mapping, site surveying, and formwork and anti-termite treatment earlier than beginning construction work. Sometimes, construction site preparation requires blasting, test drilling, landfill, leveling, earth-transferring, excavating, land drainage, and other land instruction

Types of site preparation

Following are the kinds of site preparation for advent,

1. Soil check and evaluation of record
2. Destruction of vintage structure
3. Underground service and cord Mapping
4. Surveying and layout
- five. site Clearance
6. site online Excavation and Earthwork
7. Compaction of construction challenge



fig. Site preparation

3.2 EXCAVATION

The fundamental works accomplished earlier than, at the same time as and after excavation are as follows,

1. setting of corner benchmarks.
2. Surveying of floor levels.
3. Survey for pinnacle stages
- four. Excavation of extended depth.
- five. Dressing of unfastened soil.
6. Making up to lessen off degree
7. Making of de-watering wells and interconnection of trenches.
8. Constructing protection bunds and drains of centre line and excavation drawings, setting out of plan on ground, excavation of soil and removal of extra soil. pleasant tests along



Fig. Excavation

3.3 PLINTH BEAM AND SLAB

The Plinth beam is the strengthened concreted beam built among the walls and its foundation. The Plinth beam is supplied to save you the extension or propagation of cracks from the foundation into the wall above while the foundation suffering from settlements. The Plinth beams distribute the weight of the wall over the base evenly.



Fig. Plinth beam construction

3.4 SUPERSTRUCTURE-COLUMN

The superstructure is the part of a building that is built above the floor stage and it serves the cause of structure's intended use. It consists of columns, beams, slab upwards collectively with all finishes, door and window schedules, flooring, roofing, lintels, and parapets.

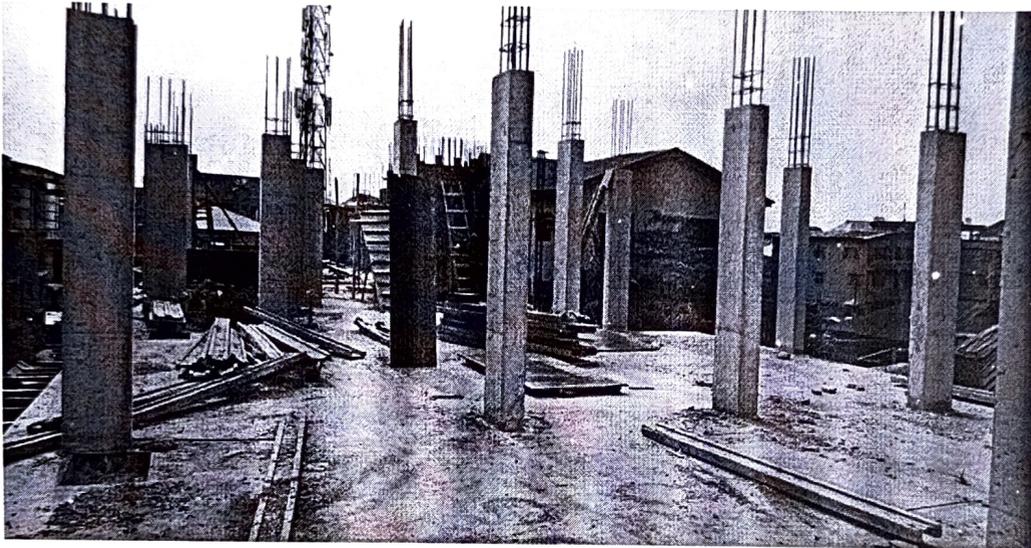


Fig. Column

The components of the superstructure are a great deal lengthier than the elements of the substructure. This shouldn't be sudden because the superstructure is plenty large than the substructure.

3.5 BRICK AND MASONRY

It is a completely pretty long lasting form of production. It is constructed by means of putting a brick in mortar in this kind of systematic manner to assemble a strong shape, that withstands applied burdens. There are many one of a kind types of bricks and mortars, which can be used in brick masonry



Fig. Brick work

3.6 THE LINTEL OVER DOOR WINDOW GAPS

It is a totally quite long lasting form of manufacturing. It is built via putting a brick in mortar in this sort of systematic way to bring together a strong form, that withstands applied burdens. There are many one in all a type styles of bricks and mortars, which may be used in brick masonry artwork..

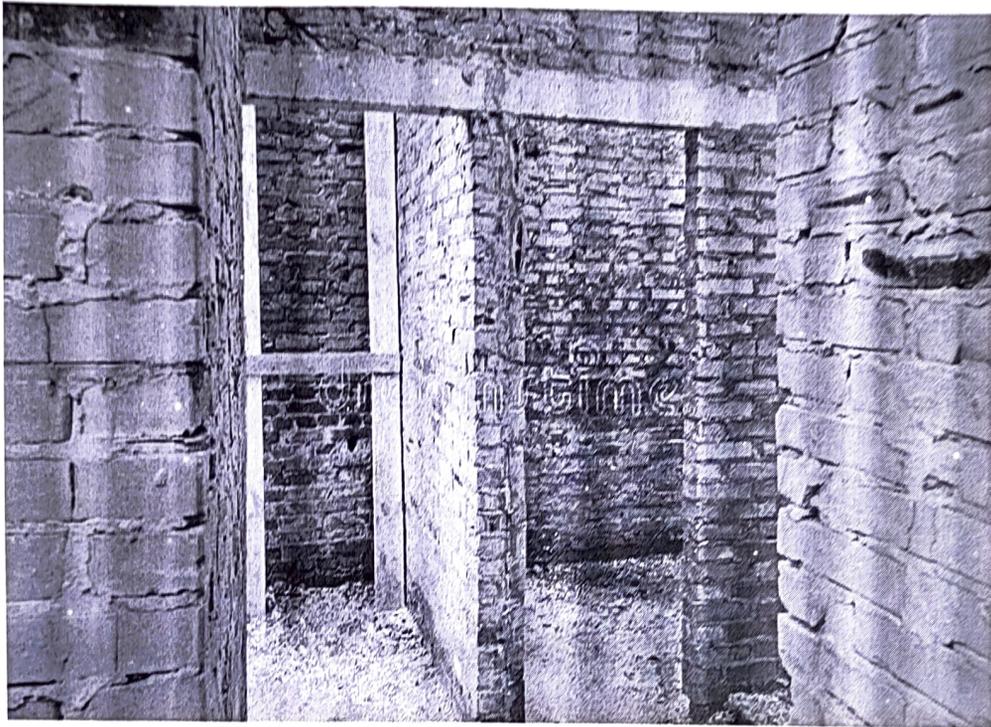


Fig. Over head beam or lintels

TYPES OF LINTELS

- Timber lintel
- Stone lintel
- Reinforced concrete lintel
- Brick lintel
- Reinforced brick lintel
- Steel lintel

3.7 ROOFING

Over the centuries, roof-constructing strategies have been delicate to yield roofs of enormous strength and sturdiness. A extensive variety of substances has been developed a good way to closing a few years—in a few instances, so long as the residence. And owners have a full-size choice of substances, colors, charges, and other features from which to pick.

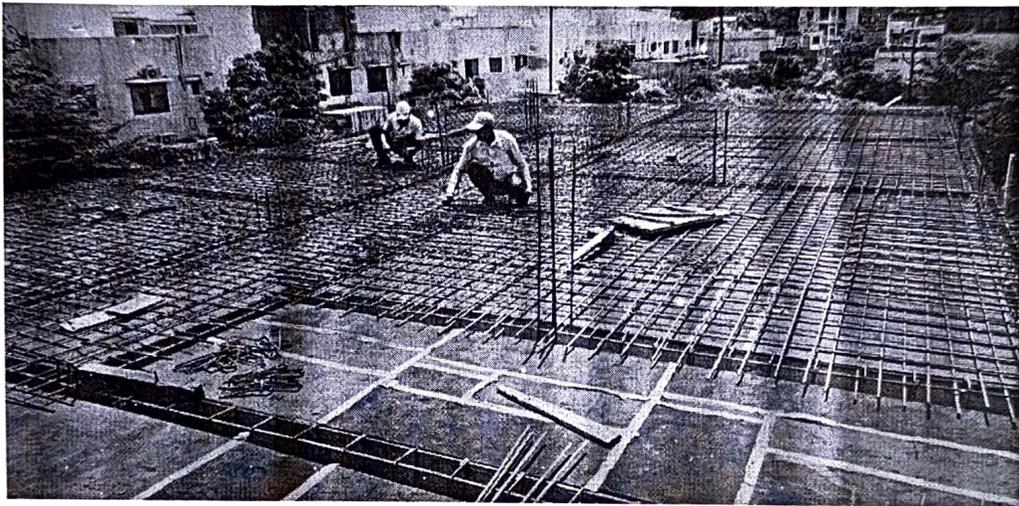


Fig. Steel mesh formation for roof work

PROCESS IN ROOFING

- Shuttering
- Steel mesh formation
- Concrete pouring

3.8 PLAIN CEMENT CONCRETE (PCC) ROAD

Plain cement concrete is the combination of fine aggregate(sand) and coarse total without steel and cement. PCC is a significant part of a structure which is laid on the dirt surface to keep away from direct contact of support of cement with soil and water.

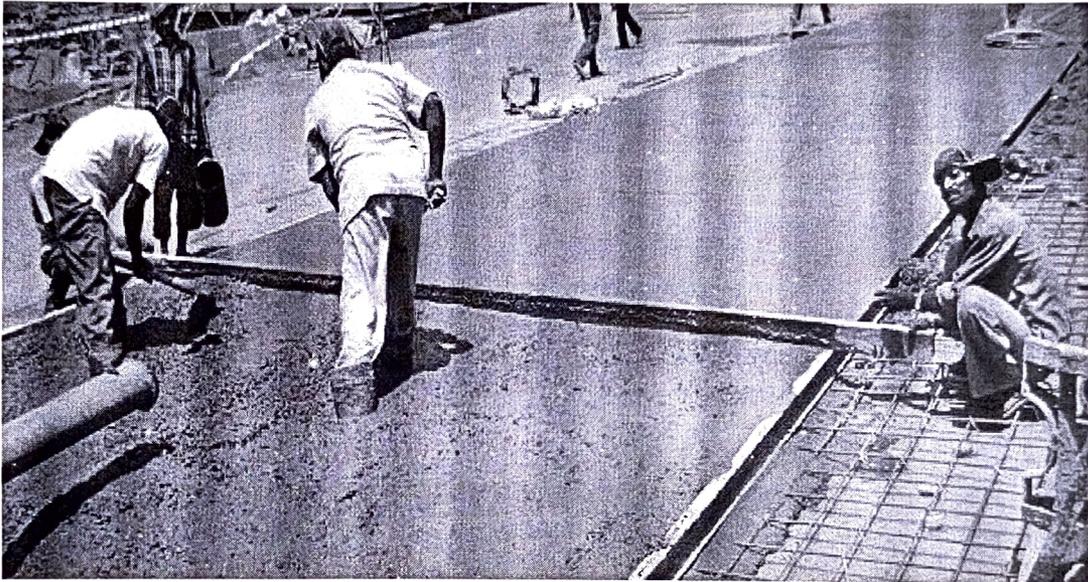


Fig. Plain cement concrete road construction

- The proportioning is done in light of the prerequisite or given determination. For the most part 1:2:4 or 1:3:6 blend is utilized.
- The estimation of material should be by weight or volume .
- Sand should be estimated based on its dry volume.

CHAPTER 5

FIGURES



Fig. Duplexes under construction

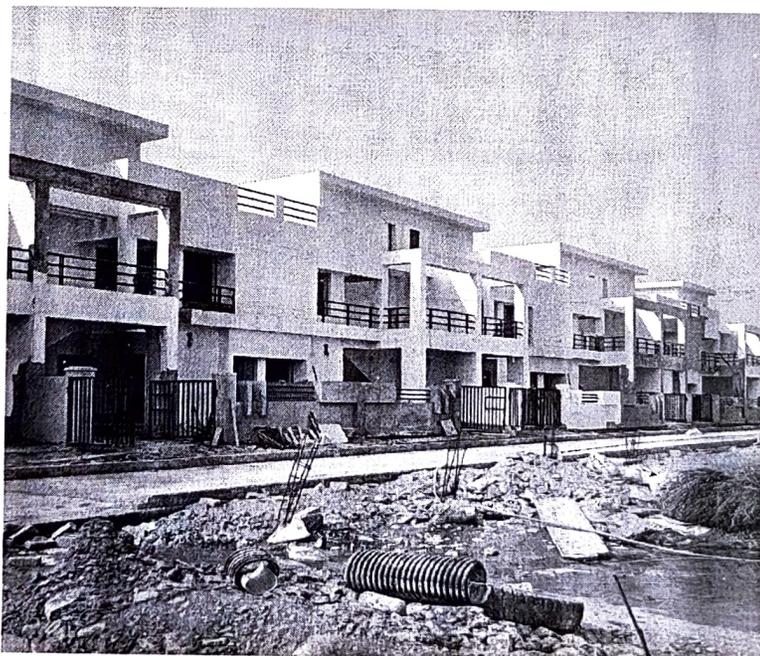


Fig. Closer view of residential buildings



Fig. Construction of PCC road

CHAPTER 6
WORK DESCRIPTION

S.NO.	MONTHS	WORK DESCRIPTION
1	JAN2022-FEB 2022	FOUDATION, PLINTH BEAM,CURING OF CONCRETE
2	FEB 2022-MAR 2022	BRICK MASONRY WORK ,COLUMN FILLING ,SHUTTERING AND ROOFING .
3	MAR 2022 - APR 2022	BRICK MASONRY WORK AND COLUMN FILLING OF FIRST FLOOR .
4	APR 2022-MAY 2022	SHUTTERING, ELECTRICAL WORK,ROOFING OF FIRST FLOOR.

CHAPTER 7

CONCLUSION

Under Shilpi infra project pvt. Ltd. Rewa, (M.P.), I Was assigned an internship from 21th jan'22 ,which was successfully completed by me on 21th may'22.

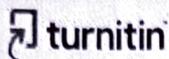
I have enthusiastically and successfully stood out at all major duties during my assigned schedule which included training, orientation and developing new skills by gaining deeper understanding.

The brief learning and training of assignment included construction of building, building materials, labour work culture and management.

The internship and project has bipolar development ,that is on practical skill development and soft skill development which includes teamwork, time management and adaptation in any environment.

I further look forward to continuously have such experience and skill development.

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- The similarity in my Internship Report is found to be 18% (which is within the specified limit of 20%)

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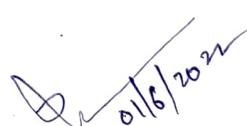
Roll No.: 0901CE181004

for:  01/06/22
Guide name: RENUKA DARSHYAMKAR

Designation: Professor

Civil Engineering Department


Professor & Head of
Civil Engg. Deptt.

 01/06/2022
(Turnitin Administrator)

FORMAT

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Name of student	Abhishek Mishra		Department	Civil	
Industry/Organization	Shilpi Infra		Date/Duration	DD/MM/YR -DD/MM/YR 21/01/22 - 05/02/22	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				✓	
Learning capacity/Knowledge up gradation					✓
Performance/Quality of work				✓	
Behaviour/Discipline/Team work				✓	
Sincerity/Hard work					✓
Comment on nature of work done/Area/Topic	1. Leveling 2. Beam construction				
<u>OVERALL GRADE (Any one)</u>	<u>POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT</u>				
<u>Name of Industry Mentor</u>	SAIF KHAN				
<u>Signature of Industry Mentor</u>					

Receiving Date	xxxx	Name of Faculty Mentor	Renuka Darshyamkar ^{for}	Sign	
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FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Abhishek Mishra		Department	Civil	
Industry/Organization	Shree Infra		Date/Duration	DD/MM/YR - DD/MM/YR 06/2/22 - 21/02/22	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				✓	
Learning capacity/Knowledge up gradation				✓	
Performance/Quality of work					✓
Behaviour/Discipline/Team work				✓	
Sincerity/Hard work					✓
Comment on nature of work done/Area/Topic	1. Excavation 2. Brick work				
<u>OVERALL GRADE (Any one)</u>	<u>POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT</u>				
<u>Name of Industry Mentor</u>	SAIF KHAN				
<u>Signature of Industry Mentor</u>	Saif				

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Name of student	Abhishek Mishra		Department	Civil	
Industry/Organization	Shilpi Infra		Date/Duration	DD/MM/YR - DD/MM/YR 22/02/22 - 10/03/22	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				✓	
Learning capacity/Knowledge up gradation				✓	
Performance/Quality of work					✓
Behaviour/Discipline/Team work					✓
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	1. brickwork 2. column				
<u>OVERALL GRADE (Any one)</u>	<u>POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT</u>				
<u>Name of Industry Mentor</u>	SAIF KHAN				
<u>Signature of Industry Mentor</u>					

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Name of student	Abhishek Mishra		Department	Civil	
Industry/Organization	Shree Infra		Date/Duration	DD/MM/YR -DD/MM/YR 11/3/22 - 25/3/22	
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Learning capacity/Knowledge up gradation				✓	
Performance/Quality of work					✓
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Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	1. Steel work 2. Lintel				
<u>OVERALL GRADE (Any one)</u>	<u>POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT</u>				
<u>Name of Industry Mentor</u>	SAIF KHAN				
<u>Signature of Industry Mentor</u>	Saif				

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Industry/Organization	Shreeji Infra	Date/Duration	DD/MM/YR -DD/MM/YR 26/03/22 - 10/04/22		
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				✓	
Learning capacity/Knowledge up gradation				✓	
Performance/Quality of work					✓
Behaviour/Discipline/Team work					✓
Sincerity/Hard work					✓
Comment on nature of work done/Area/Topic	1. Aggregate Mixing 2. Stair case casting				
<u>OVERALL GRADE (Any one)</u>	<u>POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT</u>				
<u>Name of Industry Mentor</u>	SAIF KHAN				
<u>Signature of Industry Mentor</u>	Saif				

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Name of student	Abhishek Mishra		Department	Civil	
Industry/Organization	Shilpi Inpa		Date/Duration	DD/MM/YR -DD/MM/YR 11/4/22 - 25/4/22	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				✓	
Learning capacity/Knowledge up gradation					✓
Performance/Quality of work					✓
Behaviour/Discipline/Team work				✓	
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	1. Shutting				
<u>OVERALL GRADE (Any one)</u>	<u>POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT</u>				
<u>Name of Industry Mentor</u>	SAIF KHAN				
<u>Signature of Industry Mentor</u>					

Receiving Date	xxxx	Name of Faculty Mentor	for. Renuka Darshyamkar	Sign	
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Name of student	Abhishek Mishra		Department	Civil	
Industry/Organization	Shree Infra		Date/Duration	DD/MM/YR -DD/MM/YR 26/4/22 - 10/05/22	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				✓	
Learning capacity/Knowledge up gradation				✓	
Performance/Quality of work					✓
Behaviour/Discipline/Team work					✓
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	1. Roofing 2. Steel work 3. Concrete Mixture				
<u>OVERALL GRADE (Any one)</u>	<u>POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT</u>				
<u>Name of Industry Mentor</u>	SAIF KHAN				
<u>Signature of Industry Mentor</u>					

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Name of student	Abhishek Mishra		Department	Civil	
Industry/Organization	Shilpi Infra		Date/Duration	DD/MM/YR -DD/MM/YR 11/05/22-21/05/22	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				✓	
Learning capacity/Knowledge up gradation				✓	
Performance/Quality of work					✓
Behaviour/Discipline/Team work					✓
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	1. PCC road construction 2. Sewage				
<u>OVERALL GRADE (Any one)</u>	<u>POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT</u>				
<u>Name of Industry Mentor</u>	SAIF KHAN				
<u>Signature of Industry Mentor</u>					

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