

Scholarships Information System

- * This project is developed for scholarships department of IIT Indore. By this system, Institute can very well sort out eligible students for various types of scholarships.
- * This project is a software package developed for managing student's scholarship details, which will be based on his/her marks, caste, and income.
- * There will be three type of scholarships :

A) Merit - Cum - Means (MCM) Scholarship.

Eligibility Criteria : ① Given to 1st year B-Tech and 1st year MSc students, as fresh-type and to 2nd, 3rd and 4th year B-Tech and 2nd year MSc students as renewal type.

- ② Open to all categories, whose parental gross income is not more than Rs 6,00,000 per annum.
- ③ Apart from 1st years, student must have secured a minimum CPI of 6.0 along with passing all courses.

Documents Required : ① Income certificate signed by Tehsildar / SDO / BDO / MRO / chairman or Income Tax Return issued by government organisation.

Benefits : ① For Gen & OBC-NCL → Tuition fee exemption along with Rs 100 per month will be provided.

- ② For SC, ST, PWD → Tuition fee exemption along with free Dinning and Rs 250 per month allowance.

B) Remission of Tuition Fee:

Eligibility Criteria: ① Open for all students whose parental gross income is less than Rs 1 Lakh per annum or between Rs 1 Lakh and Rs 5 Lakh.

Documents Required: Same as MCM.

Benefits: ① For students having family income less than Rs 1 Lakh, full remission of tuition fee is provided.

- ② For students with family income between Rs 1 Lakh and Rs 5 Lakh, $\frac{2}{3}$ rd of tuition fee is remitted.

PWD

C) SC - ST Quota Based Scholarship:

Eligibility Criteria: ① Given to students of SC-ST caste.

Documents Required: ① Caste certificate (latest) issued by government organizations.

Benefits: ① Full exemption from tuition fee.

* The duration of MCM and Remission of Tuition fee scholarships is 1 year.

⇒ After a year, student has to again apply for scholarship renewal.

⇒ PWD candidates have to submit the disability certificates issued / signed by government officials.

How to Apply ?

1. First , student had to fill the form provided at institute website by signing in their AROL account .
2. Fill the details of form along with bank account details.
3. Uploading Income certificate (if student is not submitting ITR) on institutes website .
4. Now , students have to submit the hand copy of the following document at academic office :
 - i) Above filled form .
 - ii) Income Certificate / Income Tax Return (ITR)
 - iii) Bank passbook photocopy .
 - iv) Caste Certificate (for 1st year) .

Scholarship processing -

1. After collecting the scholarship forms from students , academic officers verifies the authentication , validity of the submitted documents .
2. If they encounter some problems during verification process , students are contacted on the same .

- (3) After final verification, the sorted list of students is submitted to a committee which decides how many students will be given MCM.
- (4) According to policy, MCM is provided to :
- i) Maximum of top 10% of B-Tech students whose parental income is below 1 Lakh Rs.
 - ii) Maximum of top 5% of B-Tech students whose parental income is between Rs 1 Lakh to Rs 5 Lakh.
- (5) The remaining students are awarded fee remission according to their parental incomes

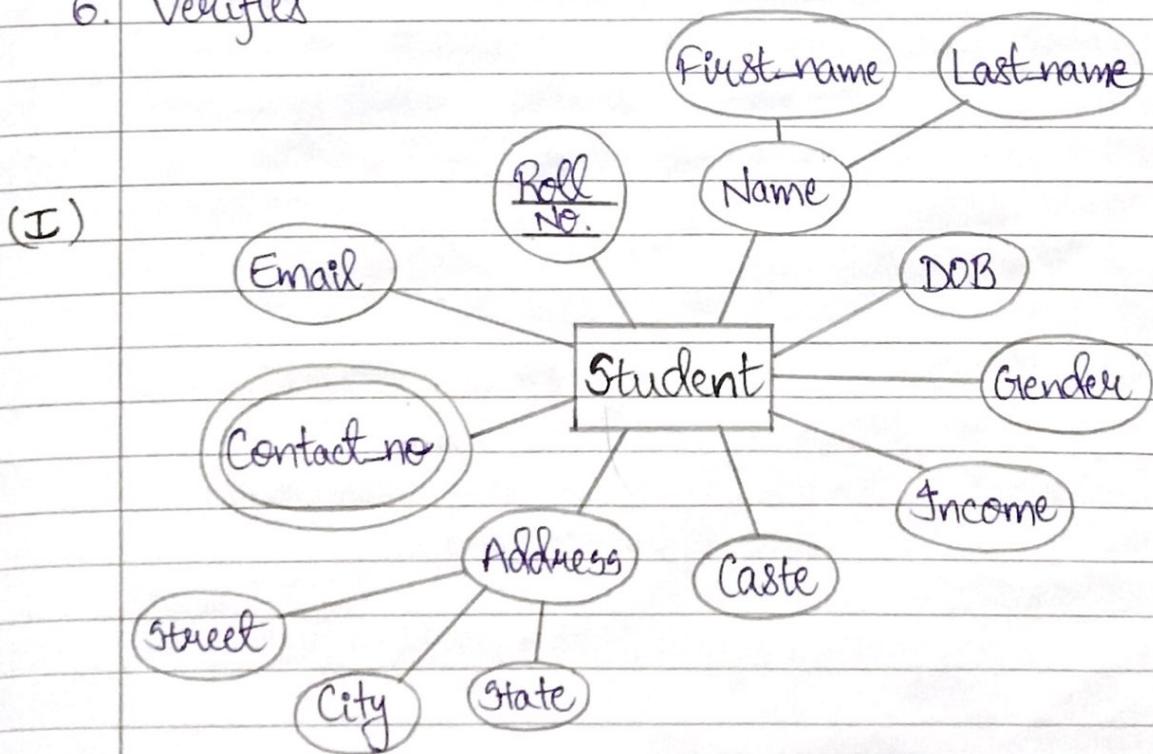
* According to final list of students, scholarship amount is credited to their respective accounts from Institute's fund, but the main body which provides scholarships is Ministry of Human Resource Development (MHRD).

Entity Sets.

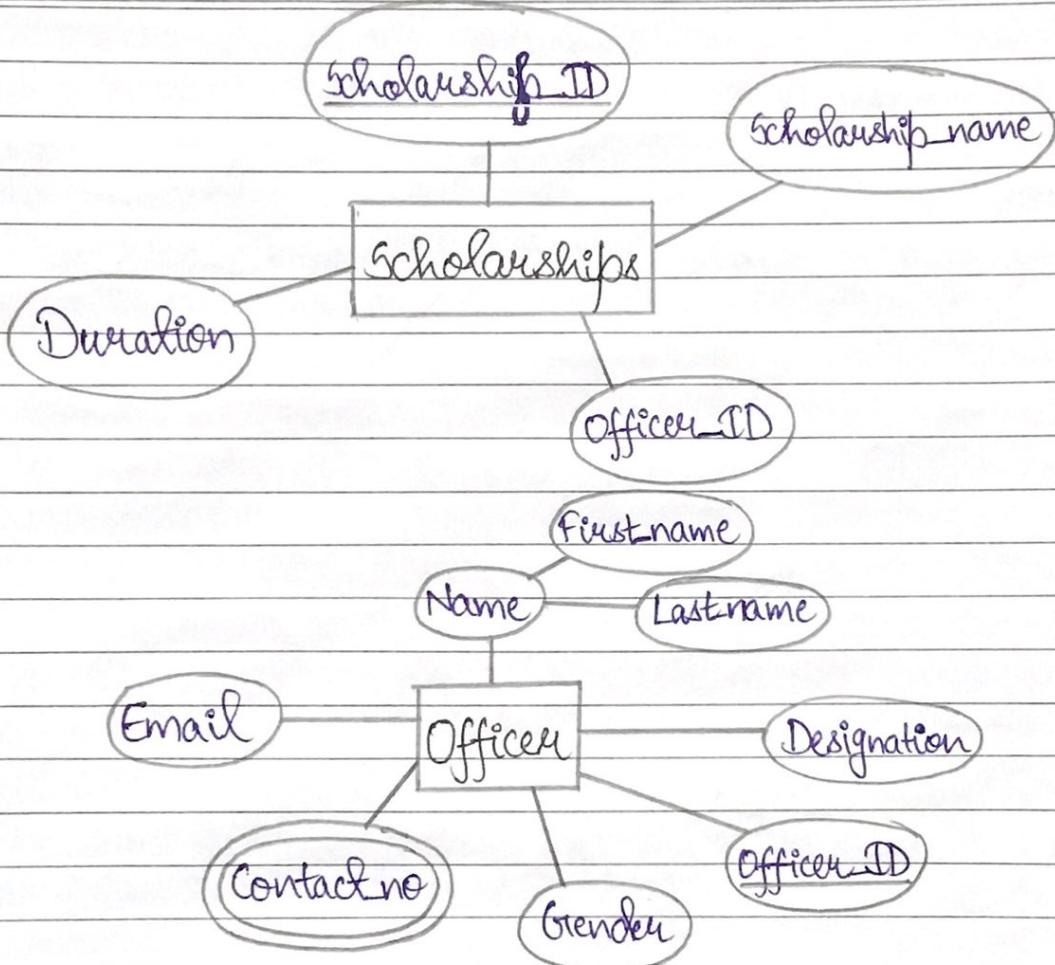
1. Students
2. Scholarships
3. Officers.
4. Payments.
5. Scholarship types.

Relationship Sets. (Refer E-R Diagram).

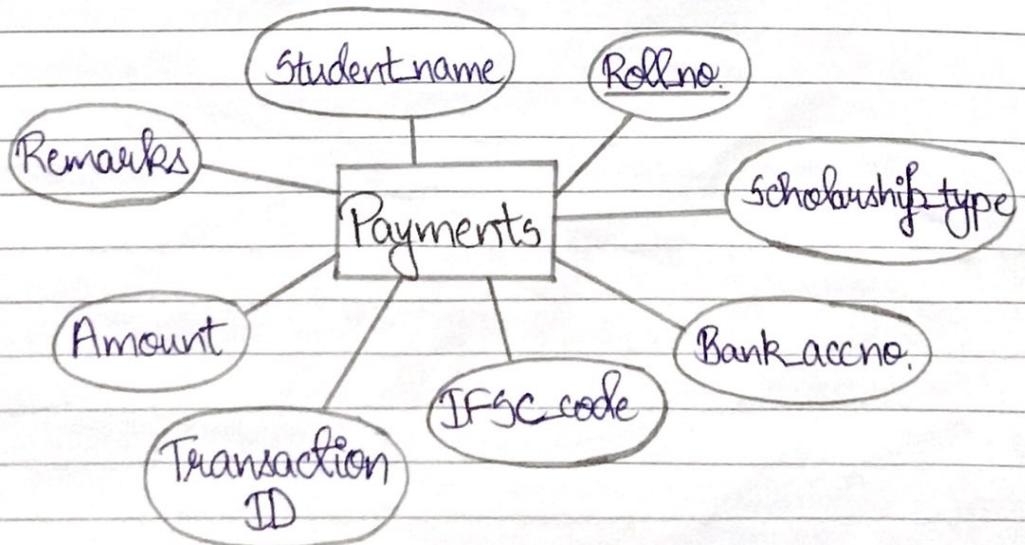
1. Awarded
2. Eligible (Applies)
3. Gets
4. Advisor
5. Amount
6. Verifies



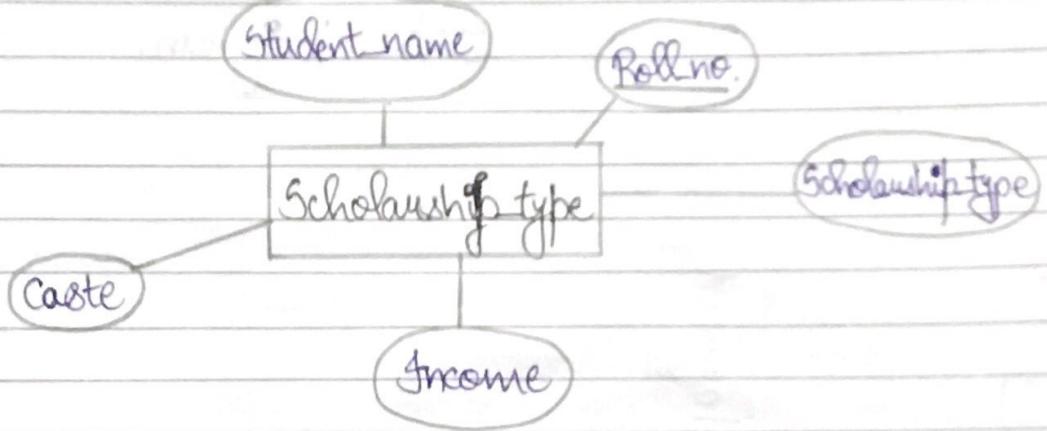
(II)



(III)



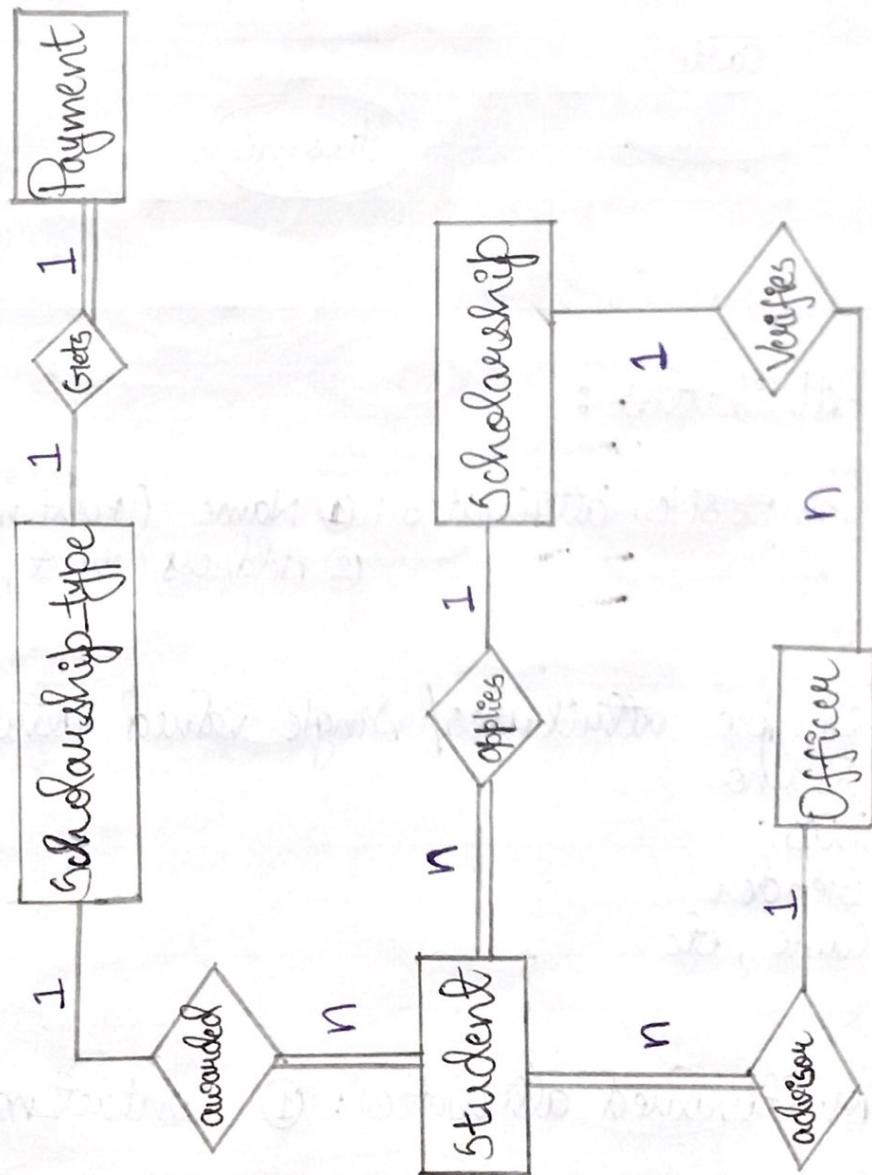
(IV)



Attributes :

- A. Composite attributes : ① Name (First name, last name)
② Address (street, city, state)
- B. Simple attributes/ Single valued attributes :
 - 1. Roll no.
 - 2. DOB
 - 3. Gender
 - 4. Caste, etc.
- C. Multivalued attributes : ① Contact no.
- D. Key attributes : ① Roll no.
② Scholarship ID
③ Officer ID

E-R Diagram



After Normalising tables:

(A) Table : 1
Scholarship

| <u>S.ID</u> | SCHOLARSHIP NAME | DURATION MONTH | BENEFIT AMT | MIN INCOME | MAX INCOME |
|------------------|------------------|----------------|-------------|------------|------------|
| ↑ Primary Key | ↑ NOT NULL | | | | |

(B) Table : 2
Payment

| <u>PAYMENT ID</u> | Roll_no | Transaction ID | Amount | S.ID |
|-------------------|---------------|----------------|---------------|---------------|
| ↑ Primary Key | ↑ NOT NULL | ↑ NOT NULL | ↑ NOT NULL | ↑ NOT NULL |

(C) Table : 3
Student

| <u>Roll_no</u> | Name | S.ID | Gender | Income | Caste | Email | Bank | IFSC | Payment ID | Remarks |
|------------------|---------------|---|--------|--------|-------|-------|------|------|---|---------|
| ↑ Primary Key | ↑ NOT NULL | ↑ Foreign Key References Scholarship(S.ID) | | | | | | | ↑ Foreign Key References Payment(Payment ID) | |

④

Table : 4
Officers

| Officer ID | Officer name | S.ID | Designation | Email |
|-------------|--------------|--|-------------|-------|
| Primary Key | NOT NULL | Foreign Key References Scholarship(S.ID) | | |

Triggers Used :

(A) To automatically assign one of the three scholarships to student according to eligibility.

DELIMITER //

CREATE TRIGGER giveScholarship1

BEFORE INSERT ON student

FOR EACH ROW

BEGIN

IF (New.Caste = 'GC') THEN

SET New.S.ID = 3;

ELSE

IF (New.Income < 50000) AND (New.Income > 10000) AND
(New.Caste <> 'GC') THEN

SET New.S.ID = 2;

ELSE

```
IF (New.Income < 100000) AND (New.Caste <> 'SC') THEN  
    SET New.SID = 1;  
IF (New.Income > 500000) AND (New.Caste <> 'SC') THEN  
    SET New.SID = NULL;  
END IF;  
END IF;  
END IF;  
END IF;  
END //  
DELIMITER;
```

(B)

To assign Remark as 'Approved' in student table whenever a new payment information is added for a student. Also update the payment ID in student table.

DELIMITER //

```
CREATE TRIGGER remarkUpdate,  
AFTER INSERT ON payment  
FOR EACH ROW
```

BEGIN

UPDATE Student

SET PAYMENT_ID = NEW.PAYMENT_ID;

Remarks = 'Approved', SID = NEW.SID

WHERE ROLL_NO = NEW.ROLLNO;

END //

DELIMITER ;

- C) If a scholarship is removed from database , then all the entries from student and officers table related to that scholarship will be deleted / removed.

DELIMITER //

```
CREATE TRIGGER deleteEntry1
BEFORE DELETE ON scholarship
FROM EACH ROW
BEGIN
DELETE FROM student
WHERE SID = OLD.SID ;
```

```
DELETE FROM officers
WHERE SID = OLD.SID ;
END //
DELIMITER ;
```

Procedure

- A) To display table informations:

```
DELIMITER //
CREATE PROCEDURE display_student()
BEGIN
SELECT * FROM officers ;
END //
DELIMITER ;
```