FUNCTION POINT ANALYSIS

INPUTS :

- Screen 1
  - HOD of each department selects the courses and course faculty(can be multiple in number).
  - DOAA makes changes and gives suggestions.
  - HOD reassigns course faculties and teachers.
  - Course list is submitted. complex
- Screen 2
  - Students enroll in courses. simple
- Screen 1
  - Courses with less than 10 students are discarded and exceptions are only recommended by DOAA.
  - Final list is locked. simple
- Screen 3
  - Students register in final courses. simple
  - Lock and submit courses.
- Screen 4
  - Students enter their credentials to make fee payment by debit card or net banking (any bank). average
- Screen 5
  - Marks and grades are entered by course faculty of each course for enrolled students, update and lock the grades. simple

OUTPUT :

- Screen 1
  - Message -”Course list is submitted” is displayed. simple
- Screen 2
  - Message -”You are enrolled in <n> courses” is displayed. simple
- Screen 1
  - Message -”Final Course list is submitted” is displayed. simple
- Screen 3
  - Message-”You have registered in <n> courses is displayed” and they are redirected to fee payment portal. simple
- Screen 4

    - Message - “Fee payment is successful.” or “Fee payment is not successful, try again.” is displayed. simple
- Screen 5
    - Message -”You have updated marks successfully.” and “ You have submitted marks for <course> <year> successfully.” is displayed. Simple
- Screen B1
    - Timetable will be displayed. complex
- Screen B2
    - View list of students enrolled in his/her course. average
- Screen B3
    - Updated Mark list of students in his/her course. average
- Screen D1
    - Final course list for enrollment. average
- Screen D2
    - List of students enrolled in all courses of a department. average
- Screen S8
    - They can view their result for registered courses in summer term and they can also view their final updated result. complex
- Screen S7
    - Previous records of courses which they have taken in summer term will be displayed and previous results. average
- Screen S6
    - Registration slip will be generated. average
- Screen S5
    - fee receipt will be generated. complex
- Screen S4
    - Timetable will be displayed. average
- Screen S1
    - Student details - Name, Roll number, etc. are displayed. complex
- Screen S3
    - Students can view their enrolled courses average
- Screen S2
    - Course list for enrollment is displayed to students. average

DATA STORES :

- Academic student details complex
- List of courses available for summer term average
- Details of fee payment average
- Time table simple

- Details of course faculty complex

PROCESSING INQUIRIES:
All these queries are there on screen as icons whenever a student clicks on one of them, then corresponding query will be solved and result will be shown on another screen.

- SCREEN S1:
  - Student clicks on tab - " Student details" to view his/her academic details. average
- SCREEN S2:
  - Student clicks on tab - " available courses" to view the list of courses he/ she can enroll in. average
- SCREEN S3.
  - Student clicks on tab -"Registered Courses" to register in final courses. average
- SCREEN S4
  - Student clicks on tab -"View Timetable" to view time table. simple
- SCREEN S5
  - Student clicks on tab -"Fee receipt" to generate fee receipts. complex
- SCREEN S6
  - Student clicks on tab -"Course registration receipt" to generate course registration receipt. complex
- SCREEN S7
  - Student clicks on tab-"Student History" to view previous they can view their previous records of courses which they have taken in summer term. average
- SCREEN S8
  - Student clicks on tab-"Results" to view results. complex
- SCREEN B1
  - Faculty clicks on tab- "Timetable" to view details. simple
- SCREEN B2
  - Faculty clicks on tab- "enrolled students" to view list of students enrolled in his/her course. simple
- SCREEN B3
  - Faculty clicks on tab-Updated Mark list. complex
- SCREEN D1
  - HOD clicks on tab-"Course list". simple
- SCREEN D2
  - HOD clicks on tab-List of students enrolled in all courses of a department. average

PROCESSING UPDATES: Screen E1:

    - Final Course list Updation-As DOAA finalises the list it has been updated into database . average
- Screen E2:
    - Student Enrollment-When students enroll then their details and courses in which they have enrolled are updated into database. average
- Screen E3:
    - Fee details-As students pay their fee then they are eligible for summer course and completely enrolled for course. complex
- Screen E4:
    - Timetable updation-When timetable is made then it is also updated . complex
- Screen E5:
    - Result Updation - Grades will be updated and new grade sheet will be generated. average

EXTERNAL INTERFACES:

- Grade sheet generation module average
- Time table generation module simple
- Student data maintenance module complex
- Faculty data maintenance module complex
- Marks and grade processing average

TABLE FOR FUNCTION POINT ANALYSIS :

	SIMPLE	AVERAGE	COMPLEX
INPUTS	4	1	1
OUTPUTS	6	9	4
DATASTORES	1	2	2
PROCESSING INQUIRIES	4	5	4

PROCESSING UPDATES	0	3	2
EXTERNAL INTERFACES	1	2	2

FUNCTION POINT ANALYSIS WEIGHTS :

	SIMPLE	AVERAGE	COMPLEX
INPUTS	2	4	6
OUTPUTS	3	5	7
DATA STORES	5	10	15
PROCESSING INQUIRIES	2	4	8
PROCESSING UPDATES	4	8	12
EXTERNAL INTERFACES	4	6	8

INPUTS :

- 4 simple x 2 = 8
- 1 average x 4 = 4
- 1 complex x 6 = 6

OUTPUTS :

- 6 simple x 3 = 18
- 9 average x 5 = 45
- 4 complex x 7 = 28

DATA STORES :

- 1 simple x 5 = 5
- 2 average x 10 = 20
- 2 complex x 15 = 30

PROCESSING INQUIRIES :

- 4 simple x 2 = 8
- 5 average x 4 =20

- 4 complex x 8 =32

PROCESSING UPDATES :

- 0 simple x 4 = 0
- 3 average x 8 =24
- 2 complex x 12 =24

EXTERNAL INTERFACES :

- 1 simple x 4 = 4
- 2 average x 6 = 12
- 2 complex x 8 = 16

UNADJUSTED FUNCTION POINTS = 304

S. No.	General System Characteristic	Brief Description	Score
1	Data communications	How many communication facilities are there to aid in the transfer or exchange of information with the application or system?	4
2	Distributed data processing	Performance Was response time or throughput required by the user?	4
3	Performance	Was response time or throughput required by the user?	4
4	Heavily used configuration	How heavily used is the current hardware platform where the application will be executed?	3
5	Transaction rate	How frequently are transactions executed daily, weekly, monthly, etc.?	4
6	On-Line data entry	What percentage of the information is entered On-Line?	5

7	End-user efficiency	Was the application designed for end-user efficiency?	5
8	On-Line update	How many ILF's are updated by On-Line transaction?	5
9	Complex processing	Does the application have extensive logical or mathematical processing?	2
10	Reusability	Was the application developed to meet one or many user's needs?	5
11	Installation ease	How difficult is conversion and installation?	4
12	Operational ease	How effective and/or automated are start-up, back-up, and recovery procedures?	3
13	Multiple sites	Was the application specifically designed, developed, and supported to be installed at multiple sites for multiple organizations?	1
14	Facilitate change	Was the application specifically designed, developed, and supported to facilitate change?	3
	TOTAL		52

ADJUSTMENT INFLUENCE =52

CAF = 0.65 + 0.01 * 52
= 1.17

ADJ-FP = UNADJ-FP * CAF
=304*1.17
=355.68

355.68 ADJ-FP divided by 10 = ~36 person-months