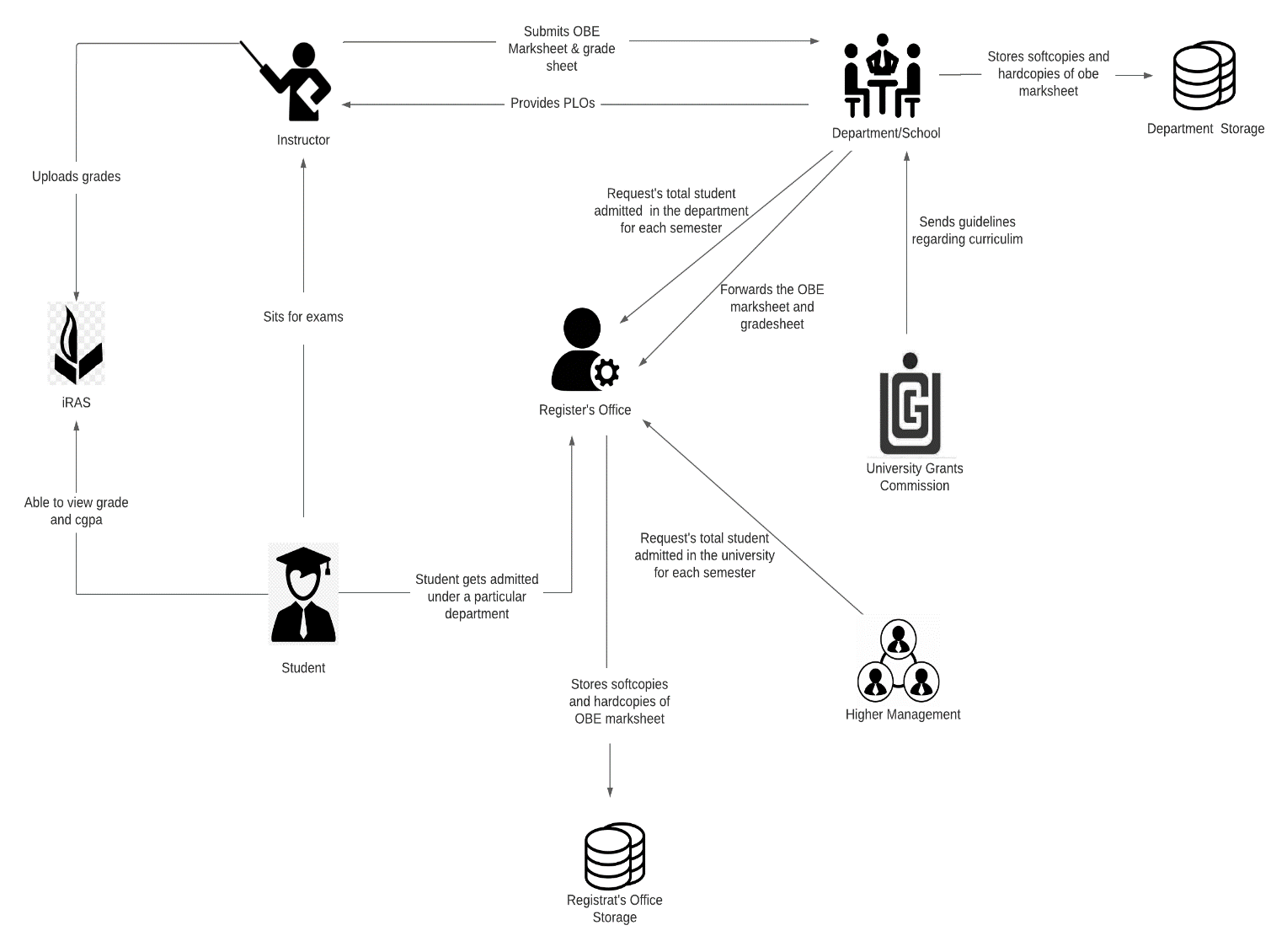


**Student Performance Monitoring System**

**Database Management**

**Group-4**

RICH PICTURE(AS-IS)



SIX ELEMENT(AS-IS)

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| **Process** | **System Roles** | | | | | |
| **Human** | **Non-Comp**  **Hardware** | **Computing**  **Hardware** | **Software** | **Database** | **Network &**  **Commination** |
| Student sits for exam | **Instructors**  1) Prepare question for the students  2) Give a particular time and date for the exam  3) Mange a classroom with chairs for all students  4) Prepare SODs and invigilators  **Students**  1) Attempt the examination | **Stationery**  1) Pen and paper for writing.  2) Compass, ruler and other stationery for drawing diagrams  **Chairs and Table**  1) For using during exam.  **Classroom**  1) A space for conducting the exams  **Stapler**  1) For attaching all the extra paper, rough work and answers | **Computer/**  **Laptop**  1) Some courses require a computer for coding or open book exam.  **Calculators**  1) Some exams require the use of calculators  **Printers & photocopy machine**  1) Instructors use it for printing question papers | **Microsoft Word**  1) Typing the question and generating a printable pdf.  **Operating System**  1) Any OS may be used. e.g. Windows, MacOS.  **Adobe Acrobat Reader**  1) For viewing the question paper in pdf format | **Microsoft Excel**  1) Used for storing exam marks and calculating final grade | **Internet**  1) Used by students during open book exam |

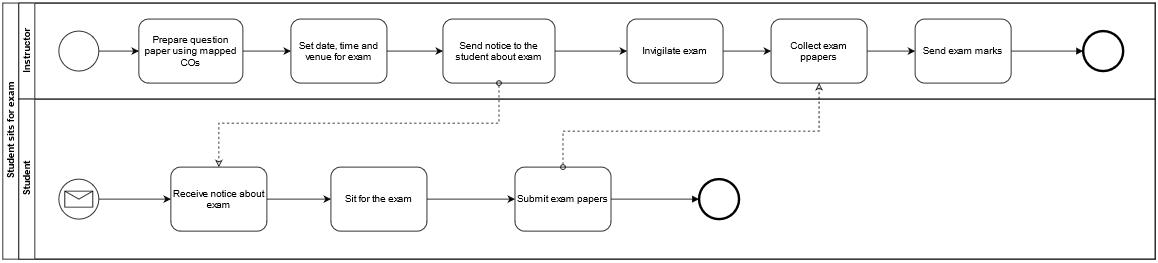
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| **Process** | **System Roles** | | | | | |
| **Human** | **Non-Comp**  **Hardware** | **Computing**  **Hardware** | **Software** | **Database** | **Network &**  **Commination** |
| Student are able to view grades, cgpa and download transcript | **Student**  1) Students have to login to iras by entering the student id and password  2) Select a specific semester  3) View grades for specific semester  4) Click on the transcript button to download a copy of transcript | **Paper**  1) Used for printing and keeping a hardcopy of transcript | **Computer/**  **Smart Phone**  1) Used for accessing iras.  **Printer**  1) For printing the transcript | **iRAS**  1) Provides user interface for view grades and download transcript.  **Browser**  1) Any browser an be used to access iras. e.g. edge, chrome, Firefox  **Adobe Acrobat Reader**  1) For viewing the transcript which is in pdf format.  **Operating System**  1) Any OS may be used. e.g. Windows, MacOS. | **iRAS database server**  1) iras database server is used for storing and receiving student grade information in iras | **Internet**  1) Internet is required for accessing iras |

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| **Process** | **System Roles** | | | | | |
| **Human** | **Non-Comp**  **Hardware** | **Computing**  **Hardware** | **Software** | **Database** | **Network &**  **Commination** |
| Instructors uploads grades to iras | **Instructors**  1) Instructors types in user id and password for logging into the system  2) The instructor clicks to the submit grade section and is taken into the grade submission page  3) The instructor selects grade for each of the student  4) Clicks on the submit button to submit the grades |  | **Computer/**  **Smart Phone**  1) Used for accessing iras and submitting the grade | **iRAS**  1) Provides user interface for submitting the grades  **Browser**  1) Any browser an be used to access iras. e.g. edge, chrome, firefox  **Operating System**  1) Any OS may be used. e.g. Windows, MacOS | **iRAS database server**  1) iras database server stores all the grades | **Internet**  1) Internet is required for accessing iras and submitting the grades |

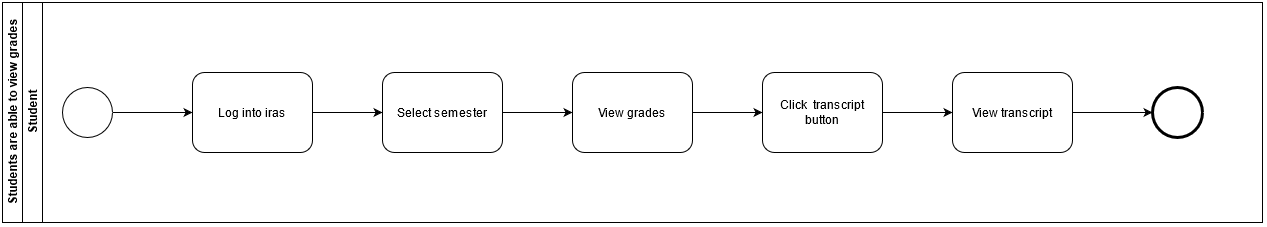
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| **Process** | | **System Roles** | | | | | | | | | | |
| **Human** | | **Non-Comp**  **Hardware** | | **Computing**  **Hardware** | **Software** | | **Database** | | **Network &**  **Commination** | |
| Instructors produce OBE marksheet and grades sheet and submits it to the department | | **Instructors**  1) Instructor takes quizzes and exam  2)Checks the exam script  3) Records the mark for each exam in an excel sheet  4) Calculates the final grades and    5) Calculate total marks received for each CO  6) Declare if a student has achieved a specific CO  7) Declare if a student has received a PLO for a related CO  8) Make a verdict and analysis of how many students were able to receive a certain CO and PLO  9) Sends the final version of OBE marksheet to department office  **Department**  1) Receives a copy of the OBE marksheet and grade sheet from the instructors  2) Stores a copy of the OBE marksheet and grade sheet in department storage  3) Sends a copy of the OBE marksheet to the register’s office  **Register’s Office**  1) Receives the OBE marksheet from department  2) Store the OBE marksheet in register’s office storage | | **Paper**  1) Used for storing hardcopies of OBE marksheet | | **Computer**  1) Computer is used for making softcopies of OBE marksheets  **Printer**  1) To print the hardcopies of the OBE marksheet and grade sheet | **Microsoft Excel**  1) Used by instructors to calculate the PLO and CO achievement | | **Department Storage**  1) A hardcopy of OBE marksheet and grade sheet is stored in the department storage  **Register’s Office Storage**  1) A hardcopy of OBE marksheet and grade sheet is stored in the register’s office storage | | **Internet**  1) Online platform such as- google sheets may be used for producing OBE marksheet | |
| **Process** | | **System Roles** | | | | | | | | | | | | |
| **Human** | | **Non-Comp**  **Hardware** | | **Computing**  **Hardware** | | | **Software** | | **Database** | | **Network &**  **Commination** | |
| Map Course Outcomes  (COs) to Program Learning Outcomes  (PLOs) | | **UGC**  1) Provides guide line to the department about the curriculum  **Department**  1) Comes with the PLOs  2) Sends the PLOs to the instructor  **Instructor**  1) List the course content and course outcome  2) Maps the course content to the COs  3)Maps the PLOs  4)Prepares question paper according to the COs | | **Pen and Paper**  1) Used for brainstorming and rough works | | **Computer/Smart devices**  1) Course coordinators use computers to make softcopies of course outcomes (COs)  **Printers**  1) Used for print hardcopies of course outcomes (COs) | | | **Microsoft Word**  1) Course coordinators use MS word for making course outline and course assessment report with COs mapping to the PLOs | |  | | **Internet**  1) Internet is used to communicate with ugc and other stakeholders to discuss topics related mapping COs and PLOs | |

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| **Process** | **System Roles** | | | | | |
| **Human** | **Non-Comp**  **Hardware** | **Computing**  **Hardware** | **Software** | **Database** | **Network &**  **Commination** |
| Student gets admitted under a particular department | **Student**  1) Fills up the admission form for taking admission under a particular department  2) Receive an email regarding successful admission form submission  **Register’s Office**  1) Receives the admission form  2) Analyze the admission  3) Check if the student fulfills all the requirements for getting admitted  4) If the student fulfills all the requirements then admit the student under the requested department.  6) Generate a student id number  5) Sends the total number of students enrolled in a semester under a particular department to the department.  6) Send the total number of students enrolled in the university to the higher management.  **Department**  1) Request total student enrolled in the department  2) Receive information about total student enrolled in department  **Register’s Office**  1) Request total student enrolled in the university  2) Receive information about total student enrolled in department. | **Paper**  1) Register’s office keeps a hardcopy of student information. e.g. student blood group, emergence contact number, address | **Computer**  1) Used for accessing iras and filling admission form  **Printers**  1) For printing hardcopies of student information | **iRAS**  1) Provides user interface for filling the admission form  **Browser**  1) Any browser an be used to access iras. e.g. edge, chrome, Firefox  **Operating System**  1) Any OS may be used. e.g. Windows, MacOS. | **iRAS database server**  1) iras database server is used for storing all the admission information. | **Internet**  1) Internet is required for accessing the online admission form. |

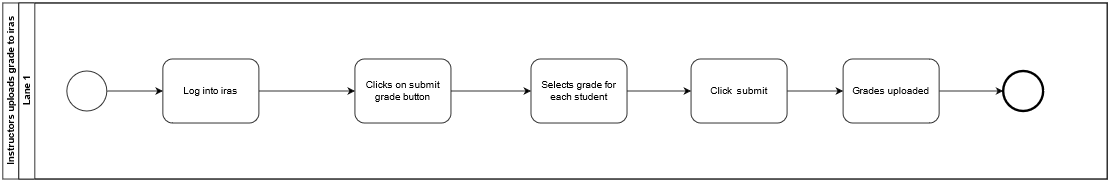
PROCESS DIAGRAM(AS-IS)



**FIGURE 2.1 Process Diagram for Student Sits for exam**

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**FIGURE 2.1 Process Diagram for Student are able to view grades and CGPA**

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**FIGURE 2.1 Process Diagram for Instructor uploading grade to iras**