

Online Assessment and Evaluation System (OAES) Business Requirements Document

OAES is a system that can be used to conduct online examinations. Core functionality supports the entire life cycle of an examination drive.

Data Dictionary

| Data Item | Description |
|--------------------------------|---|
| Assessment Drive | A collection of assessments conducted across multiple sessions at multiple centers as part of a single examination drive (e.g., JEE Main) |
| Hall Ticket | Personal details, Session details |
| Session | Drive, Subject, Center, Date, Time |
| Item | Question in an examination |
| Item Metadata | Subject, Topic, Difficulty Level, Status |
| MCQ Item | Multiple choice question |
| Descriptive Item | Essay type / descriptive answer item |
| Assessment Instrument | Question paper containing multiple Items |
| Assessment Instrument Metadata | Question paper meta data such as subject, number of questions, duration, total marks, etc. |
| Assessment Inbound Pack | A package sent to exam center for conducting an exam. It contains (a) Hall ticket of examinees (b) Question paper |
| Assessment | Conducting exam by assigning question paper and collecting responses from examinees |
| Assessment Response | Answer book containing responses from one examinee to one question paper |
| Item Response | Answer given by an examinee to a given question |
| Assessment Outbound Pack | A package sent from exam center AFTER conducting an exam. It contains (a) Collection of Assessment Response (b) Attendance list |
| Item Evaluation | Marks obtained after evaluating an answer to a question |
| Assessment Evaluation | Report of marks obtained after evaluating an answer book |
| Assessment Result | Marksheet after grading a SINGLE assessment response |
| Assessment Drive Result | Collection of Assessment Results of all Assessment Responses belonging to an Assessment Drive |

OAES-001: Item Bank Management

- CRUD operations of **ITEM** authors
- CRUD operations of **ITEM** reviewers
- CRUD operations on **ITEM** and **ITEM METADATA**
- Review and Approval of ITEM

OAES-002: Assessment Instrument Management

- CRUD operations on **Assessment Instrument**
- Review and Approval of **Assessment Instrument**
- ADD/REMOVE of items to **Assessment Instrument**
- **ITEM** types can MCQ and Fill-In

OAES-003: Assessment Management

- Receive **Assessment Inbound Pack**
- Invoke hall ticket verification for all examinees as per **Inbound Pack**
- Invoke **Assessment** for all verified examinees
- Generate **Assessment Outbound Pack**

OAES-004: Assessment

- Receive **Assessment Instrument**
- Display all items in the instrument and collect **response** from **examinees**
- Generate **Assessment Response pack**

OAES-005: Item Evaluation

- Manual evaluation of Essay Type **Item Responses** and assign grade
- Automated evaluation of MCQ **Item Responses** and assign grade

OAES-006: Assessment Evaluation

- Invoke **Item Evaluation** against all responses in **Assessment Response**
- Generate **Assessment Evaluation**

OAES-007: Assessment Drive Management

- CRUD operations on **Assessment Drive**
- CRUD operations on **Assessment Drive** components (sessions, hall tickets, etc.)
- Allocation of **Assessment Instrument** to sessions
- Generate **Assessment Inbound Pack** for all sessions
- Invoking **Assessment Management** for all sessions in **Assessment Drive**
- Collect **Assessment Outbound Pack**
- Invoke **Assessment Results Management** on **Assessment Outbound Pack**

OAES-008: Assessment Results Management

- Invoke **Assessment Evaluation** for all **Assessment Responses** for a given **Assessment Drive**
- Generate **Assessment Drive Result**