Report on Webinar on Outcome based Education: Setting Program Objectives and Course Objectives

1. **Background:** As per NAAC documentation requirements on Outcome Based Education (OBE), under Criteria 1 and 2, Program and Course objectives need to be developed for all IUJ programs.

2. **Event:** An online training webinar for all faculty members of IUJ was conducted on 4th Feb, 2022 for two hours 3-5 PM, under the aegis of the IQAC, IUJ. Resource person was Prof. (Dr.) Bhagwan Jagwani, Campus Director, Allen House Group of Institutions, Kanpur.

3. **Inaugural:** The event began by formal welcome of guest speaker, dignitaries and participants by Dr. Priyanka Jain, Director, IQAC. She highlighted the importance of Objective based Education in developing documentation for NAAC, as well as mapping of academic program to NEP 2020. In his opening remarks Prof Dr H P Singh, VSM, the Hon'ble President, IUJ appreciated the efforts of the IQAC in enabling the University to develop its academic competence and also to meet requirements of bodies like the NAAC. He motivated the faculty members by mentioning that while traditional educational approach focused on teacher-centric methodologies, OBE has shifted the focus towards all-round development of the student, in not only the knowledge domain but also in terms of skills, attitudes, careers and their contribution at local, regional, national and global levels.

4. **Proceeding:** Prof Bhagwan Jagwani, guest speaker for the session, began the webinar by introducing the participants to the NAAC process requirements, scope and grading systems for various academic institutions. He explained that quality assurance, as mandated by NAAC, relies on setting realistic objectives and benchmarks, based on vision and mission of the Institution. He explained that overall vision and mission of the Institution can be further divided into mission statements of its constituent schools or departments. These statements of intent are central to setting each program's objectives, which in turn should guide individual course objectives, which constitute the program.

Using example of objective setting done by a University, he showed to the participants how elements like focus on knowledge creation through research, developing cutting edge technologies based understanding, skill development, societal and national benefit with

ethical concerns can be incorporated in strategic vision and mission statements, both at Institutional and departmental levels.

He further elaborated at the program objectives can also be divided into long term, Program Education Objectives (PEOs), shorter term program objectives (POs) and program specific objectives (PSOs).

PEOs are what students pursuing a program are expected to achieve within 3-5 years of completion of their program of study – career, further studies, entrepreneurship, qualifying professional exams, awards and recognition, social development, sports achievements etc. POs and PSOs are shorter term, where expectations from a student upon passing a program are specified – placement, knowledge, skills and attitude development.

He took the example of B.Tech. programs, wherein he explained that while there may be a wider PO setting of for the program, it can also be done specifically for various specializations offered uner the B.Tech. program. In other words, there can be a set of POs developed for B.Tech. and a separate set of PSOs developed for specializations like B.Tech (CSE), B.Tech (CE) and so on. However, there has to be a correlation and match between such POs and PSOs.

Each set of POs or PSOs, are achieved through individual COs, where the bouquet of courses offered under the program, together would contribute to achieve the POs/PSOs. COs for each course are bases for defining measurable course outcomes, which explain to what extent COs were achieved by a certain delivery of a course.

Prof Jagwani then explained the cross-mapping through correlation matrix for mission statements with PEOs, PEOs with POs/PSOs and POs/PSOs with COs.

Finally, he used Bloom's taxonomy key-words as references to show framing of POs and COs and Course outcomes to distinguish between knowledge, skill and attitude components. He focused on the mapping of these key-words while framing course outcomes and their relevance in setting evaluation rubrics and question papers to show measurement of achievement of each course outcome.

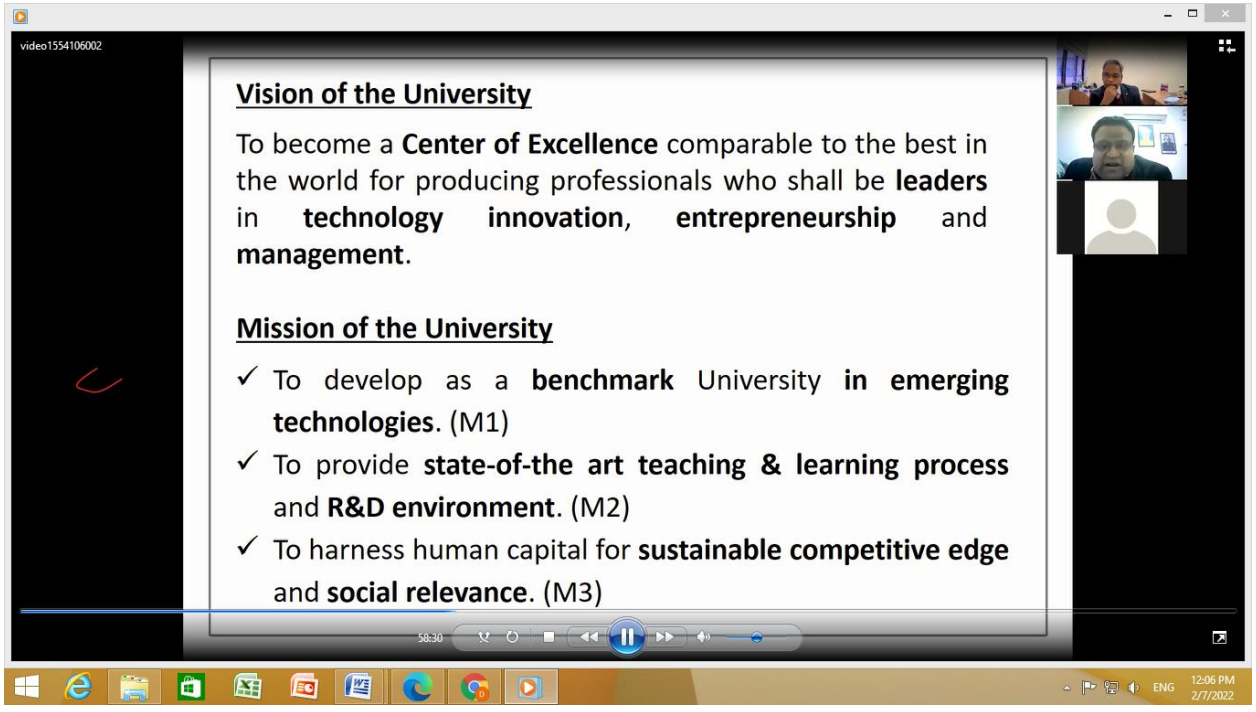
Towards the conclusion, faculty participants presented their queries to the guest speaker, which were deftly answered to the satisfaction of the participants.

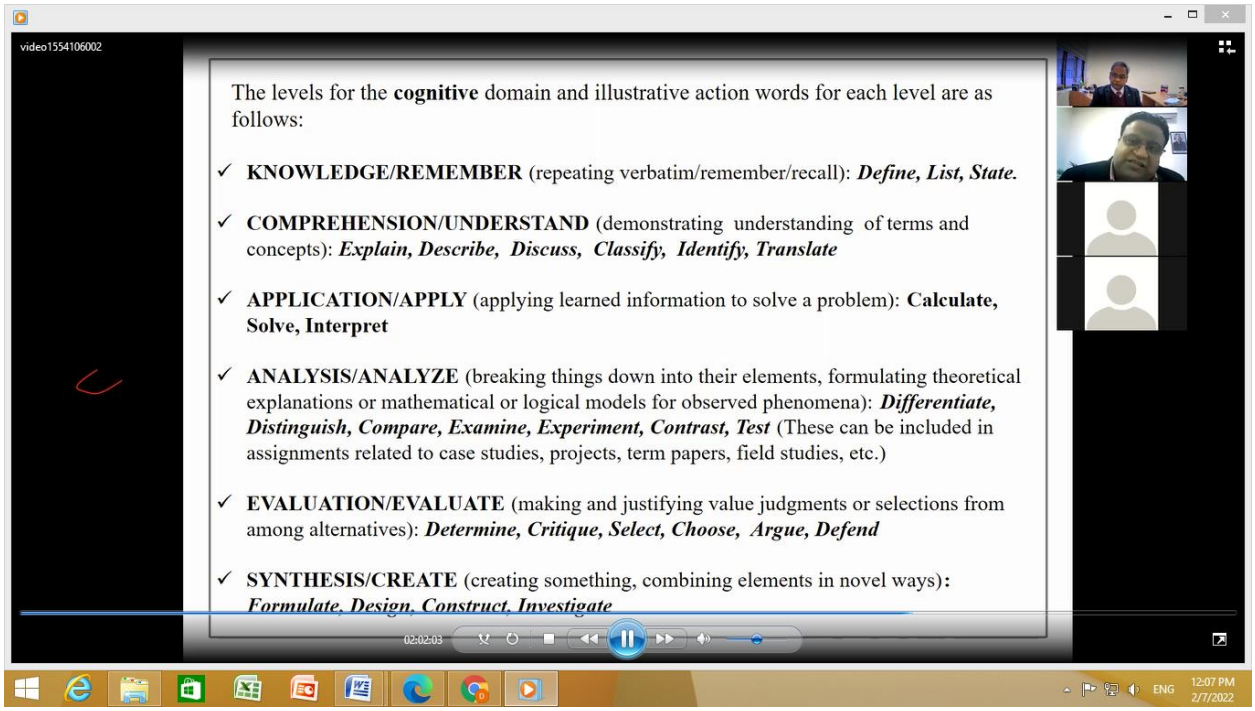
Vote of Thanks: Dr. Vidhu K. Mathur, faculty in-charge, Criteria 1, presented the vote of thanks to the guest speaker for outlining the key points of the OBE and its implementation. He expressed thanks on behalf of the participants to the Hon'ble President for his guidance and motivation in granting permission for holding this much needed event. He also offered gratitude to all the colleagues for their participative attendance. The event was concluded in two hours and thirty minutes.

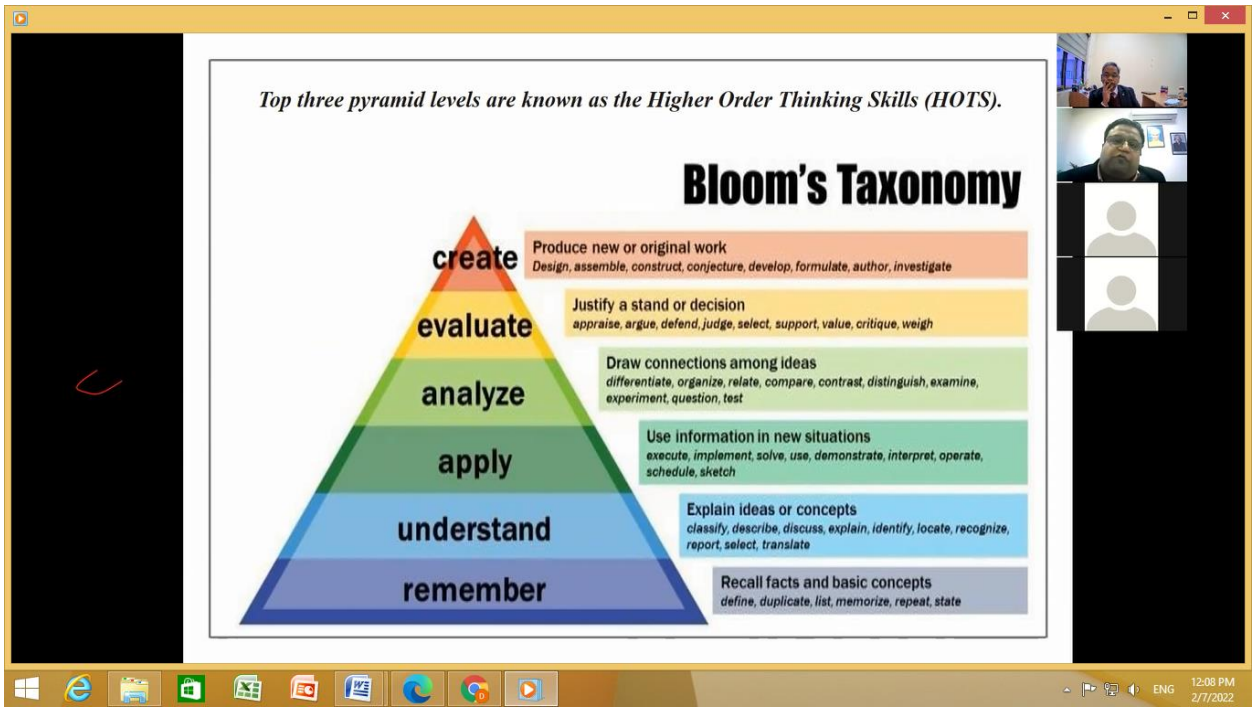
Annexure

Event poster

Screenshots




video1554106002
The levels for the **cognitive** domain and illustrative action words for each level are as follows:
✓ **KNOWLEDGE/REMEMBER** (repeating verbatim/remember/recall): ***Define, List, State.***
✓ **COMPREHENSION/UNDERSTAND** (demonstrating understanding of terms and concepts): ***Explain, Describe, Discuss, Classify, Identify, Translate***
✓ **APPLICATION/APPLY** (applying learned information to solve a problem): **Calculate, Solve, Interpret**
✓ **ANALYSIS/ANALYZE** (breaking things down into their elements, formulating theoretical explanations or mathematical or logical models for observed phenomena): ***Differentiate, Distinguish, Compare, Examine, Experiment, Contrast, Test*** (These can be included in assignments related to case studies, projects, term papers, field studies, etc.)
✓ **EVALUATION/EVALUATE** (making and justifying value judgments or selections from among alternatives): ***Determine, Critique, Select, Choose, Argue, Defend***
✓ **SYNTHESIS/CREATE** (creating something, combining elements in novel ways)**:** ***Formulate, Design, Construct, Investigate***
02:02:03
ENG
12:07 PM
2/7/2022


Top three pyramid levels are known as the Higher Order Thinking Skills (HOTS).
Bloom's Taxonomy
create
Produce new or original work
Design, assemble, construct, conjecture, develop, formulate, author, investigate
evaluate
Justify a stand or decision
appraise, argue, defend, judge, select, support, value, critique, weigh
analyze
Draw connections among ideas
differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test
apply
Use information in new situations
execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch
understand
Explain ideas or concepts
classify, describe, discuss, explain, identify, locate, recognize, report, select, translate
remember
Recall facts and basic concepts
define, duplicate, list, memorize, repeat, state
ENG
12:08 PM
2/7/2022