At CMRIT, for each and every course, subject videos are recorded, e-contents are shared, and assignments are given. Computer programming labs are being done on-line and other labs are introduced and procedures being discussed. Both faculty and students have now adapted to this new mode of pedagogy.

Online Platforms used for conducting classes at CMRIT

- Google Class room

- TEDEd

- YouTube Live Streaming

- Zoom Live e-Teaching

Google classroom Links and Codes for all subjects

Instruction to students to join Google classroom

Instruction to faculty to create and join Google classroom

Summary of Online Tools and Best Practices followed by Few Faculty

#	Faculty Name	Designation	Online Tool	Use of the Tool	Best Practices	Description of the Best Practice
1	M.S.Kokila	Assistant Prof, Dept.of MBA	Wacom digital pad for teaching numericals	Yes it becomes very easy to teach numericals using Wacom digital pad as the subject demands the teacher to solve numericals replacing traditional black board, and here we can use attractive color, fonts, images can be drawn, cut and copy paste the content from anywhere to paint plat form. Hence this device simplifies the job of teacher and make the class interesting.	1. On the spot questioning randomly 2. On the spot test 3. Randomly calling any student to repeat the concept or problem solved. 4. Surprise quiz before starting any new topic	The best practices mentioned above, make the student alert, and keep them active as hand pick candidate is made by hit and miss.
2	K. Santosh	Assistant Prof, Dept.of MBA	JAMBOARD BYGOOGLE and Mentimeter	Jamboard used for explanation and Mentimeter for opinion or polls	1. Case study Method 2. Flip Class 3. Work book	1. The outcome of case study method gives more insights on the topic and understanding the problem. 2. Flip class conducted for engaging the session interactively 3. Workbook shared for application of theoretical knowledge into practical way.

3	Manikandan H	Assistant Prof, Dept.of Mech	XP Deco 01 V2 Digital pad for teaching along with GOODNOTES software as well as Microsoft One note Software which I purchased	Very interactive sessions at par with board teaching. Recording session become effective. I am using good notes app on which I can write using digitizer and save the work as PDF and circulate to students.	1. Digitizing tablet for interactive teaching 2. Flip Class 3. Tutorial classes for practicing numericals and solving VTU questions	1. Sessions became very interactive after usage of this tool. 2. Some self-learning theory topics are assigned as flip classes and notes are shared with students. 3. Some hours are assigned as tutorial hour where VTU problems are solved and on the spot doubts were cleared for better understanding.
4	Prasad B S	Assistant Prof, Dept.of ISE	1.OpenBoard with XP Pen 2.AutomataTutor	1. Effective utilization of Graphic Pen tablet for live classes 2. Subject specific tool for problem solving exercises and assignments	1. Interactive Live Teaching 2. Problem solving challenges	1. Breaks the monotony of online classes, 2. Keeps the student engaging 3. Fair and auto assessment of assignment 4. Opportunity to familiarize more variety of problems
5	Poonam Tijare	Assistant Prof, Dept. of CSE	Short animated videos, jam board, previous class summary in the beginning	1. Short videos for better understanding 2. Jamboard, use it as a classroom board to support explanation 3. Summary of previous class in the beginning	1. Show short video related to subject 2. start class by repetition of previous class contents in short 3. Jamboard will be helpful while explaining a concept that needs classroom board	1. Inspirational videos, animated short videos will create the interest of students. I wanted to tell the students how they can build careers in software testing by choosing appropriate electives. This will give them an early understanding of careers options that they should look at. It also explains the importance of electives. 3. Revision of previous class establishes connectivity between concepts 3. Jamboard helps while explaining concepts where we need to write and explain, gives classroom like experience

6	Ravi Kant Talluri	Assistant Prof, Dept. of CIVIL	Short Videos made by me, Digital pad	1. Short Videos are shown to students to have practical exposure. 2. Solving the problems on digital board gives the physical classroom feeling to the student.	1. Asking the student to show his class notes by his camera. 2. While taking attendance the student should tell any keyword or a concept or formula that he/she learned in the session. 3. Showing them subject-related cartoons in between the sessions.	1. This will make the student be attentive in class. 2. Showing them subject-related cartoons in between the sessions: will wake them up and attract them to the screen.
7	Anju Das	Assistant Prof, Dept. of EEE	1. Wacom PTZ631W Intuos3 6x11 Wide-format USB tablet for with pen 2. Jamboard for every class 3. Kahoot quiz	1. Because of the writing pad students have the same feel as blackboard 2. The jam board link is shared initially in the class so that if the student is slow or late joined can pick up the concepts 3. With prepared power point presentation also writing can be done using board 4. Animated videos which shows the applications	1. Switch the camera on for students 2. Second login using mobile	1. Since the subject is completely numerical after illustrating the problem, students are asked to switch on video and asked to show the problem solved by them by which they alert in class 2. students' entry and exit simultaneous login through mobile

| 8 | Sagarika Behera | Asst. Prof, Dept. of CSE | 1. Paint
2. JFLAP Simulation tool | 1. Since this ATC subject requires explanation of problem with diagram, using paint it became easy for explaining the problems. Also it gave the feeling like explaining in blackboard.
2. Using the JFLAP simulation tool, students were able to visualize the concept of whatever they learned. | 1. Explaining the problems on the board.
2. Interactive session with the students during explanation by asking the questions.
3. Students will share their screen after solving the problem and they will explain it to other students.
4. Showing some application videos of the concept explained in the class
5. Flip class
6. Second login using mobile | 1. Few classes had taken by focusing the camera on the whiteboard.
2. After that paint is used for solving the problems by drawing the diagram.   3. JFLAP simulation tool is used to visualize the concept and assignments are given on that for practice.
4. To keep track of the students and to see their messages second login is used through mobile.
5. Google form used for quizzes. |

| 9 | Dhanya Viswanath | Assistant Professor, Dept.of ISE | 1.Graphical tablet(Veikk/Wacom) 2.OpenBoard software 3.Kami browser extension 4. Kahoot quiz | 1. Graphical tablet - Blackboard- like experience & step by step explanation of problems/numerical is possible. 2. Open Board software - Has options to write using different pen tips and colors. Slide materials created can be imported from PDF materials, duplicated, saved, and exported in PDF format. 3. Kami browser extension - Allows writing over PDFs. This allows giving feedback to individual answers to each student, instead of providing a consolidated comment in the individual comments section. 4. Kahoot quiz - Time-bound questions can be framed to be taken real time during a Google Meet session or within a set limited time. Students do not get the time to switch tabs or check answers in google or any other platform without compromising on time. | 1. Graphical tablet for lectures. 2. Sharing live class lecture materials with the students in PDF format. 3. Quick recap sessions in the beginning of every class. 4. Individual viva after every IAT. | 1. Since all ADE theory and lab classes involve a lot of writing and drawing, tablets will help in giving a better explanation of each topic. Since the step-by-step explanation of problems/numerical is possible, students also find this easy to understand. 2. All live class lecture materials are shared module-wise with the students in PDF format. So problems solved in the class can be easily revised by students, especially before exams. 3. Quick recap sessions at the beginning of every class to ensure all students are on the same page before starting a new class. 4. Individual viva is taken after every IAT to test the understanding of students. |

| 10 | Dr.Soundarya | Associate Professor, Dept.of CIVIL | 1. wheelofnames.com 2. Mentimeter for polls, 3. YouTube videos made by me 4. Animated videos online | 1. Wheelofnames.com for Game/Quiz session. This can be customized for our students' names or even questions. I spin the wheel for the lucky winner and that student gets to answer a question. Another time I used it for making students themselves ask each other questions and marks were considered assignment marks. It is fun to see whose name comes on the screen and keeps students glued to the screen & attentive to all questions. I do it before IAT to have a revision. 2. Mentimeter for polls -I take polls using this 3. YouTube videos made by me 4. Animated videos online | 1. Talking one on one 2. Making them show notes 3. My own feedback 4. Examples 5. Not boring them with a full 1 hrs. Session. 6. Scope of module | 1. I keep the class list with me in Hand and make sure to talk to every student once in three days. I try to make sure everyone are spoken to, and students like it when they are given attention. 2. I ask them to turn their camera on randomly and show their notes. 3. I take my own feedback asking them what they want me to change. Thereby they have a feeling that they are being given importance. 4. I give lots of real-life examples for topics. 5. I take a class for a maximum of 40 mins and the other 20 mins are for one on one doubt clearance, talking to them about the syllabus, talking about how they are maintaining notes, etc. That way they don't get bored. |
| 11 | Harsha B K | Assistant Professor, Dept. of ECE | 1. ZOOM 2. PPT with little animations 3. Vevox | 1. Zoom's Gallery view can display up to 49 participants on a single screen a. Recordings has the option of pause/rec b. Participants window & Chat window on the share screen c. Partial sharing of screen/ annotation by students | 1. Monitoring the class notes 2. Connectivity with a recap 3. Applications of contents | 1. Calculator and Class notebook are a must for all classes. 2. Giving ample time to the students to complete the numerical during class and show the same once completed, many copies will be checked for completeness and correctness. 3. Spinning wheel and perks |

| | | | | d. Built in white board
2. Sober colorful animations
3. Add in with PPT, no need for any app for students | | for active participants |

| 12 | Ashwini Patil | Assistant Professor, Dept.of MCA | 1.video conferencing tool (Zoom, webex, google meet) 2.Jamboard by google with stylus pen 3.Online web animations 4.FlashBack Express 5.google classroom | 1. Polling feature of video conferencing tool allows ask question in-between of class to test students attention and understanding 2. Jamboard used as a class board to draw, sketch, to solve mathematical problems. Drag and drop images and webpages. Share it with students and also add collaborators. 3. Animations by Y. Daniel Liang used to explain concepts of Algorithms and Data Structures for better understanding 4. Flashback express for screen recording. Add images, text, and sound and create videos with less storage size. Easy to edit videos and share in YouTube. 5. google classroom for assignments, quizzes, IAT , announcements and discussion board | 1. 15 min discussion on the previous class. 2. Keep PPT interesting. Keep the class interactive 3. Conduct polls 4. Using a jam board make students solve problems or draw during class. 5. Create discussion board 6. Do the revision and Solve VTU QP, share notes or required materials | 1. At the beginning of each module give the overall idea of topics to be learned and their importance. Also, discuss the topic taught in the previous class. 2. Use sketches, funny images, or graphs to make PPT interesting. Including animations if required to keep students focused. 3. Conduct polls in between to check students' concentration and understanding. 4. Using a jam board make students solve certain problems or draw during class. 5.Create a discussion board to make students explore certain topics own and discuss them with their classmates. 6. Do the revision at the end of the module and Solve the VTU QP at the end of each module, give them notes or required materials |