### Department of Economics University of Delhi, Delhi

### Minutes of Meeting

Subject : Common Pool of DSE ECON035

Semester : III/V

Course : Digital Economics – ECON035

Date & Time: 15-May at 11.30 AM

Venue : Department of Economics

Chair : Dibyendu Maiti and Sandip Datta

The meeting was attended by the following teachers

| S.NO. | NAME              | COLLEGE                     |
|-------|-------------------|-----------------------------|
| 1     | Aakriti Saini     | Daulat Ram College          |
| 2     | Abhash Kumar      | ARSD college                |
| 3     |                   | Atma Ram Sanatan Dharma     |
|       | Dr D Appala Naidu | College University of Delhi |
| 4     | Neha Verma        | Kirori Mal College          |

# **Learning Objectives**

The Learning Objectives of this course are as follows:

- The analysis of the impact of information and communication technologies (ICTs) on economies and societies is a growing field.
- This course will cover the role of ICT on productivity, market structure, information and network effects, and its differential impact across groups and regions (digital divide).
- This theoretical and methodological stance has inspired a rather inter-disciplinary approach to the study of the digital economy.

### **Learning outcomes**

The Learning Outcomes of this course are as follows:

• The students would be able to get an idea how the information technology is changing the life and livelihood of individuals and economy

# **Outline of Syllabus:**

- UNIT I: Functions of ICTs using productivity function approach and productivity (9 hours)
  - Introduction to Digital Economics
  - Why it is important to study digital economics: Changing dynamics of the New Economy; GoI Digital India Programme; Ways ahead
- UNIT II: The transformation of management practices; work and employment; social networks, trust and social capital in the digital economy; cultural and motivational aspects (09 hours)
- UNIT III: ICTs, competition, intellectual property right and market (8 hours)
- UNIT IV: ICTs and the political economy of inequality etc. (8 hours)
- UNIT V: Automation and Jobs (7 hours)
- UNIT VI: Digital India (5 hours)

### References/Reading List

- Unit 1:
  - Maiti, D., Castellacci, F., & Melchior, A. (2020). Digitalisation and development: Issues for India and beyond (pp. 3-29). Springer Singapore, Ch-1, till Page 18
  - o Goldfarb, A., & Tucker, C. (2019). Digital Economics. *Journal of Economic Literature*, 57(1), 3-43.
  - o pib.gov.in/PressReleaseIframePage.aspx?PRID=1565669#:~:text=The Digital India program%2C launched in July 2015%2C,opportunity to further scale up its digital economy. GoI Report (outdated report)
- Unit 2:
  - Maiti, D., & Awasthi, A. (2020). ICT Exposure and the Level of Wellbeing and Progress: A Cross Country Analysis. *Social Indicators Research*, 147(1), 311-343. (Mathematical equations and econometric results can be ignored)
  - Report: The impact of Digital technologies on Human wellbeing: Evidence from the sciences of mind and brain, by Paul Howard-Jones.
- Unit 3:
  - o Castellacci, F. (2006). Innovation, diffusion and catching up in the fifth long wave. *Futures*, 38(7), 841-863.
- Unit 4:

ICTs and Effectiveness of Governance: A Cross-Country Study Anubha Agarwal and Dibyendu Maiti, Only pages: 321-332, 339-341, In Maiti, D., Castellacci, F., & Melchior, A. (2020). *Digitalisation and development: Issues for India and beyond*. Springer Singapore.

#### • Unit 5:

Agrawal, A., Gans, J. S., & Goldfarb, A. (2019). Artificial Intelligence: The ambiguous labor market impact of automating prediction. *Journal of Economic Perspectives*, 33(2), 31-50.

#### • Unit 6

- Singh, N. (2015). Information technology and its role in India's economic development: A review. *Development in India: Micro and Macro Perspectives*, 283-312.
- o Report: Digital India: India Inequality Report 2022, Oxfam India
- o Digital India

### **Continuous Assessment (40 Marks):**

Attendance: 5 Marks

· One test: 10 Marks

- One presentation on the basis of the additional readings given below, in consultation with the faculty. Students may choose any other paper related to Economics of Digitalization and Development, after consulting with the faculty. Econometrics to be de-emphasized: 15 Marks
- One write-up on the basis of the presentation in students' own words: 10 Marks

### **Internal Assessment (30 Marks):**

Attendance: 6 Marks

· 2 tests: 12 marks each

#### **End-Sem Examination (90 Marks):**

There would be 3 sections with varying difficulty levels. Questions can be asked across units and readings. There would be internal choices in each of the sections.

· 1<sup>st</sup> Section: 40 Marks (5 questions of 10 marks each, students have to attempt 4)

- · 2<sup>nd</sup> Section: 30 Marks (3 questions of 15 marks each, students have to attempt 2)
- · 3<sup>rd</sup> Section: 20 Marks (2 questions of 20 marks each, students have to attempt 1)

# **Additional Readings\*:**

- Cowgill, B. and Tucker, Catherine E. (2019), "Economics, Fairness and Algorithmic Bias." In preparation for The Journal of Economic Perspectives
- Heymann, E., & KK, M. S. (2017). Digital economics: How AI and robotics are changing our work and our lives. *Deutsche Bank Research*.
- Maiti, D., & Awasthi, A. (2020). ICT exposure and the level of wellbeing and progress: a cross country analysis. *Social Indicators Research*, *147*(1), 311-330 (Mathematical equations can be ignored) (375-383)
- Greenstein, S (2020) The Economics of Internet Infrastructure
- Hilbert, M. R. (2001). From industrial economics to digital economics: an introduction to the transition. ECLAC. (Only few initial pages, Ch-1)
- Economics of Information Technology Hal R. Varian, till Ch 5
- Ihm, J., & Hsieh, Y. P. (2015). The implications of information and communication technology use for the social well-being of older adults. *Information, Communication & Society*, 18(10), 1123-1138.