

PGDM – 2015-17

PRODUCTIVITY MANAGEMENT:

PGDM - 443/IB-414 443

TRIMESTER – IV, END TERM EXAMINATION, September 2016

TIME ALLOWED : 2 Hrs. 30 Min

MAX. MARKS: 50

Instruction: Students are required to write Roll No. on each page of the Answer Paper. Writing anything except the Roll No. will be treated as **Unfair Means**. In case of rough work, please use answer sheet.

Section A: Short Questions

Marks: 15

Answer any three out of the five questions in this section. Each question carries 5 marks.

- A1:** Define the terms “Productivity”, Partial Productivity and Total Productivity with one example each.
- A2:** What were the major drawbacks/constraints (at least two) in Productivity measurement at national level before the ICRIER study and what were the major attempted improvements (at least two) in the RBI study report of 2014.
- A3:** Name the six broad sectors used in the 26-industry classification.
- A4:** What are the full names of the NAS, EUS, NSSO, IOTT and ASI used as the source of data sets for productivity measurement.
- A5:** Mention any 5 industry types out of the 26-industry group used for measuring Productivity at national level.

Section B: Long Questions

Marks: 20

Answer any two out of the three questions in this section. Each question carries 10 marks.

- B1:** Which are the five components of a process that should be critically analysed for developing a better way of doing things. Explain the process of Critical Analysis.
- B2:** The educational categories in the 38th and 43rd round of NSSO did not have a separate classification for Higher Secondary (Hr. Sec.). Hence, the middle, secondary and higher secondary categories have been combined into a category of middle to higher secondary and the entire workforce is put into three educational groups viz: Up to primary, Middle to higher secondary and Above higher secondary.
- B3:** Define Method Study and explain the seven steps of Method Study with an example.

Section C: Case Study (Compulsory)

Marks: 15

Case Study:

In the Report on "Estimates of Productivity Growth for the Indian Economy", funded by the Reserve Bank and undertaken by the Indian Council for Research on International Economic Relations (ICRIER) on productivity measurement following the EU-KLEMS (Capital, Labour, Energy, Material and Services) methodology. Growth accounting allows a decomposition of output growth into the contribution of the different inputs and total factor productivity. The period covered is from 1980-81 (1980) to 2008-09 (2008). The industrial classification used for the study is along the lines of EU KLEMS1 so as to ensure comparability with other studies under the KLEMS project, where each economy is divided into 26 industries, as shown below.

Industry No.	Industry Description	1980	1995	2008
		Gross value added Shares (in per cent)		
1	Agriculture, Hunting, Forestry & Fishing	35.68	26.49	17.91
2	Mining & Quarrying	1.75	2.35	2.70
3	Food products, Beverages & Tobacco	2.21	2.12	2.12
4	Textiles & Leather products	3.78	2.86	1.68
5	Wood & products	0.95	0.51	0.22
6	Pulp, Paper and products, Printing & Publishing	0.55	0.68	0.41
7	Coke, Refined petroleum products & Nuclear fuel	0.26	0.58	1.16
8	Chemicals & products	1.52	2.49	2.57
9	Rubber & Plastic products	0.45	0.53	0.55
10	Other Non-metallic mineral products	0.70	0.96	0.98
11	Basic metals and Fabricated metal products	2.09	2.62	2.40
12	Machinery, nec.	1.28	1.18	0.92
13	Electrical & Optical equipment	1.09	1.34	1.55
14	Transport equipment	0.85	1.16	0.74
15	Manufacturing, nec	1.04	0.85	0.76
16	Electricity, Gas & Water Supply	1.64	2.70	1.57
17	Construction	4.57	4.90	8.13
18	Trade	10.81	12.79	15.37

19	Hotels & Restaurants	0.79	1.06	1.50
20	Transport & Storage	3.87	5.41	6.28
21	Post & Telecommunications	0.60	1.45	1.60
22	Financial services	3.04	5.49	5.72
23	Public administrative & Defence	5.27	5.55	5.96
24	Education	2.48	3.03	3.53
25	Health & Social work	1.02	1.30	1.56
26	Other services	11.71	9.61	12.12
Industry Mean				
Industry Median				

Some of the major findings of the Report are outlined below:

1. The Indian economy registered a TFP growth rate of 1.4 per cent during 1980-2008. There has been an improvement in productivity growth during 2000-2008 (2.3 per cent) over the period 1980-1999 (1.1 per cent).
2. Sector-wise, productivity growth in agriculture and the mining sector came down in the 2000s vis-à-vis the earlier period 1980-1999. In the case of construction, the steep fall in TFP growth during 1980-99 was largely arrested in the 2000s. Manufacturing, electricity and the services sector experienced an increase in the rate of TFP growth in the 2000s. Productivity growth in manufacturing was not a narrow phenomenon; rather, 8 of the 14 industries showed faster productivity growth during 2000-08.
3. Industry-wise, most high-performing industries with regard to productivity growth are from the service industries. In particular, post & telecommunications and public administration & defence make the largest TFP contributions to output growth. As regards labour productivity, the median growth for the economy as a whole was observed to be 4.1 per cent during 1980-2008, with higher growth rates in manufacturing industries, the electricity sector and certain services.

Questions: (Each industry explanation carries 5 marks)

From the above analysis and interpretations of the data in the table, **identify three industries** which have been performing adversely with either negative gross value added or very marginal improvement in value added.

Suggest appropriate policy initiatives which, as per you, will help improve the value addition in the three sectors.