PGDM - 2014-16

PRODUCTIVITY MANAGEMENT:

PGDM - 443/IB-445

TRIMESTER - IV, END TERM EXAMINATION, September 2015

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: Differentiate and compare the three different approaches, viz:
 - I. Aggregate Production Function Approach
- II. Aggregate Production Possibility Frontier Approach
- III. Direct Aggregation to Industry-Level Estimates
- **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: Explains the "KLEMS FRAMEWORK" for Productivity Measurement.
- **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:** Name the five types of Energy inputs (used in the measurement of 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:** In the methodology for construction of Intermediate Input Series, two approaches viz. the Current Price Series and Constant Price Series are used. Write detailed note on the two approaches, along with their strengths and weaknesses.
- **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.

Do you think this classification is enough for an objective assessment of productivity. Explain your answer with justification.

B3: For improving productivity at micro level, Work Study has been recommended by the ILO. The Work Study has two major components viz: (i) Method Study and (ii) Work measurement

What are the seven steps of conducting a Method Study?

C: Case Study Marks: 15

The Table below depicts Growth Rate of Real Gross Value Added for 26 sectors of the Indian economy. The individual trend gross value added growth for 26 industries for the period 1980-2008 have been estimated using the exponential model for growth estimation.

From the table, it may be seen that for the manufacturing sector, there is a slight fall in value added share from 1980 to 2008. Though agriculture has been the second largest contributor (after the services sector) to India's GDP over the years, its share has sharply declined from 36 per cent in 1980 to 18 per cent in 2008. The share of value added of construction increased sharply from 4.6 per cent in 1980 to 8.1 per cent in 2008, while that of the services sector increased from 40 per cent in 1980 to 54 per cent in 2008.

Questions: (Each question carries 5 marks.

Using the data in table above, Analyse and write your assessment of the reasons and causative factors for;

- a- Decline of Agriculture sector from 36 per cent in 1980 to 18 per cent in 2008
- b- The share of value added of construction sector increase sharply from 4.6 per cent in 1980 to 8.1 per cent in 2008, and
- c- Increase in value added of the services sector from 40 per cent in 1980 to 54 per cent in 2008.

Gross value added Shares and Trend Growth Rates of Real Value Added

Industry	Industry Description	1980	1995	2008	1980 - 1999	2000 - 2008	1980 - 2008	
No.		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Gross value added Shares (in per cent)			Growth rate in real value added(per cent per annum)		
		The same of the sa						
1	Agriculture, Hunting, Forestry & Fishing	35.68	26.49	17.91	3.08	2.61	2.96	
2	Mining & Quarrying	1.75	2.35	2.70	5.90	3.49	5.30	
3	Food products, Beverages & Tobacco	2.21	2.12	2.12	5.45	6.35	5.68	
4	Textiles & Leather products	3.78	2.86	1.68	5.03	6.07	5.29	
5	Wood & products	0.95	0.51	0.22	1.95	-1.81	-1.91	
6	Pulp, Paper and products, Printing & Publishing	0.55	0.68	0.41	4.98	5.35	5.07	
7	Coke, Refined petroleum products & Nuclear fuel	0.26	0.58	1.16	8.32	6.48	7.86	
8	Chemicals & products	1.52	2.49	2.57	9.04	7.74	8.72	
9	Rubber & Plastic products	0.45	0.53	0.55	8.19	6.82	7.84	
10	Other Non-metallic mineral products	0.70	0.96	0.98	6.98	6.95	6.97	
10	Basic metals and Fabricated metal products	2.09	2.62	2.40	5.75	9.48	6.68	
12	Machinery, nec.	1.28	1.18	0.92	3.15	6.06	3.88	
13	Electrical & Optical equipment	1.09	1.34	1.55	6.82	10.70	7.80	
14	Transport equipment	0.85	1.16	0.74	6.27	9.63	7.11	
15	Manufacturing, nec	1.04	0.85	0.76	7.59	4.93	6.92	
16	Electricity, Gas & Water Supply	1.64	2.70	1.57	7.59	4.70	6.86	
17	Construction	4.57	4.90	8.13	4.70	9.99	6.03	
18	Trade	10.81	12.79	15.37	6.36	9.04	7.04	
19	Hotels & Restaurants	0.79	1.06	1.50	7.64	10.85	8.44	
20	Transport & Storage	3.87	5.41	6.28	5.81	8.40	6.46	
	Post & Telecommunications	0.60	1.45	1.60	9.92	25.86	13.93	
21	Financial services	3.04	5.49	5.72	9.70	9.33	9.61	
	Public administrative & Defence	5.27	5.55	5.96	5.80	5.13	5.63	
23	Education	2.48	3.03	3.53	7.17	7.57	7.27	
24	Health & Social work	1.02	1.30	1.56	7.48	8.33	7.69	
25		11.71	9.61	12.12	6.04	7.28	6.35	
26	Other services				6.26	7.59	6.60	
Industry Mean Industry Median					6.32	7.12	6.89	