## CHAPTER 4. THE GAINS FROM THE DIVISION OF LABOR

- 1. The division of labor is a system of production in which the labor required to support human life and well-being is broken down into separate, distinct occupations.
- 2. In a division-of-labor society, the individual lives by producing, or helping to produce, just one thing or at most a very few things, which are consumed overwhelmingly by others, and is supplied by the labor of others for the far greater part of his needs.
  - \_\_\_\_3. The multiplication of knowledge
  - a. exists to the extent that labor is divided into separate occupations and suboccupations, because each of these has its own specialized body of knowledge
  - b. makes possible the production of products that would otherwise be impossible because of the inability of any given individual or small group of individuals to hold the necessary knowledge
  - c. both (a) and (b)
- 4. Compared with division-of-labor societies, non-division-of-labor societies, such as those comprised of large numbers of essentially self-sufficient farm families, entail a wasteful duplication of the mental contents of the human brain.
- 5. The division of labor makes it possible for geniuses to specialize in science, invention, and the organization and direction of the productive activity of others, thereby further and progressively increasing the knowledge used in production.
- 6. An important advantage of the division of labor is that individuals at all levels of ability can concentrate on the kind of work for which they are best suited on the basis of differences in their intellectual and bodily endowments.
- 7. The geographical gains from the division of labor refer to the fact that under a system of division of labor, each area tends to concentrate to an important extent on the exploitation of any advantages it may possess in terms of natural resources and climate conditions, with the result that each territory that participates in the division of labor is able to gain the benefit of the special advantages of every other such territory.
- 8. In producing more iron than is required by its inhabitants, Minnesota
  - a. wastes a scarce, precious natural resource for the benefit of outsiders
  - b. obtains the ability to obtain a wide variety of natural resources, agricultural commodities, and manufactured products that it itself either cannot produce at all or cannot produce very efficiently
- 9. Participation in the division of labor is essential to the ability of any geographical area to exploit its natural resources effectively, in that, for

- example, the ability to produce iron and steel from the iron ore of Minnesota depends on the availability of coal from West Virginia or Wyoming, and the ability to mine coal depends on the use of steel drills and steel structural supports in coal mines.
- 10. The division of labor increases the efficiency and effectiveness of the processes of learning that are entailed in production by
  - a. making possible, through constant repetition of the same tasks, a subconscious automatizing of knowledge and a corresponding increase in the efficiency with which it is applied
  - b. increasing the ratio of the time spent in applying knowledge to the time that must be spent in acquiring it, thereby making the acquisition of knowledge more worthwhile
  - c. making education and communications—all the activities concerned with storing and transmitting knowledge—into specializations, which, like all other specializations, tend to be carried on by those best suited for them
  - d. all of the above
- \_\_\_\_\_11. The division of labor increases the degree to which knowledge of production is assimilated and therefore the efficiency with which it is used, the yield to the time spent in acquiring it, and the efficiency with which it is disseminated.
- 12. The division of labor increases the efficiency of the processes of motion that are entailed in production by
  - a. concentrating work of the same type in the same place
  - b. breaking work down into the simplest possible steps, consisting of the smallest possible number of separate motions
  - c. eliminating the time that would otherwise be lost in walking back and forth from one place to another to do different kinds of work, in constantly picking up and putting down different types of tools, and in constantly having to finish up and perhaps clean up what one has been doing and warm up to what one is about to do
  - d. all of the above
- \_\_\_\_13. The division of labor underlies the use of machinery in production by means of
  - a. providing, through its multiplication of knowledge, a sufficient fund of knowledge in a society to make the production of machinery possible
  - b. providing, through its geographical aspect, the extensive and widely scattered range of materials necessary for the production and use of most machines
  - c. making science and invention into specializations carried on by geniuses, which greatly facilitates the invention of machinery

- d. reducing jobs wherever possible to a small number of distinct motions repeated over and over again, as a result of which it enormously simplifies the problems of designing a machine or special tool to help do the work
- e. concentrating a large volume of work of the same type in the same hands, the division of labor makes the use of machinery and specialized tools economically worthwhile
- f. all of the above
- \_\_\_\_\_14. Knowledge of the gains derived from the division of labor fails to explain why 18th Century England was the first country to experience the Industrial Revolution.
- \_\_\_\_\_15. A division-of-labor society represents the organization of the same total sum of human brain power in a way that enables it to store and use vastly more knowledge than would otherwise be possible.
- 16. The effect of a division-of-labor society is not only to increase the total of the knowledge that the same amount of human brain power can store and use, but also to bring that knowledge up to a progressively rising standard set by the most intelligent members of the society.
- 17. While man always possesses the faculty of reason, a division-of-labor society is necessary if he is to use his rationality efficiently in production.
- 18. The division of labor increases the efficiency with which man is able to apply his mind, his body, and his nature-given environment to production.
- 19. The division of labor is an essential precondition for the achievement of a high and steadily rising productivity of labor.
- 20. The division of labor is the essential framework for the ongoing solution of the economic problem.
- 21. Whoever, in the words of von Mises, prefers wealth to poverty, and life and health to sickness and death, is logically obliged to value the existence of a division-of-labor society and all that it depends on.
- 22. The widely held notion that life in society requires the sacrifice of the individual's self-interest is
  - a. confirmed
  - b. refuted

in regard to a division-of-labor society.

- 23. In a division-of-labor society, the individual's material self-interest is served to the extent that others are secure in their persons and property from the initiation of force, because they are thereby enabled to produce more goods which are sold on the market and available for the individual to buy.
- 24. In the light of knowledge of the gains from the division of labor, the ethical principle of respect for the persons and property of others has a basis

in the requirements of the individual serving his own material self-interest.

- 25. The division of labor has raised the productivity of labor so high that today the average member of a division-of-labor society has
  - a. both substantial real wealth at his disposal and substantial leisure in which to enjoy it
  - b. open to him in no small measure precisely the kind of life that the ancient Greeks thought could be enjoyed only by a slave-owning aristocracy
  - c. both (a) and (b)
- 26. The claim that a division-of-labor society is incompatible with the well-rounded development of the individual, in accordance with the ideals of the Renaissance, is contradicted by the fact that it is precisely in a division-of-labor society that the average worker, for the first time in all of human history, has the opportunity of actually becoming something of a Renaissance man.
- 27. A dull job performed for money is less dull than one performed merely for the sake of a given physical result, to the extent that the earning of money makes possible a wide range of choice in what the work will accomplish for the individual.
- 28. Even the otherwise most monotonous, repetitious types of factory work might be given an important measure of challenge and excitement if it were possible to perform the work as piecework.
- 29. The proportion of interesting and challenging jobs in the economic system has steadily declined with the progress of the division of labor.
- 30. While it is true that alienation—a sense of lack of belonging and lack of control in one's life—is a growing problem in present-day society, the wealth and leisure and the resulting education and level of knowledge that a division-of-labor society makes possible are powerful forces working against such feelings.
- 31. Alienation is a growing problem in present-day society
  - a. because of
  - b. in spite of

the existence of the division of labor.

- \_32. In the physical sense,
- a. production is man's alteration of matter in form or location, in accordance with conscious design, in order to make the matter thus altered serve a further purpose
- b. a producer is one who effects such alterations
- c. a product is matter that has been altered in one or more of the above ways
- d. a product can also be an alteration of matter that we perceive as essentially unchanged
- e. all of the above
- 33. Labor is

- a. the means by which man's mind transmits his designs and purposes to matter
- b. man's application of his bodily and mental faculties for the purpose of altering matter and thereby making it serve a further end
- c. both (a) and (b)
- \_\_\_\_\_34. All production entails the presence of preexisting matter, which is to be altered, and whose ultimate source is always nature.
  - 35. "Land"
  - a. is the name which economists have traditionally given to nature's contribution to production b. as the term is used by economists, includes land as we normally think of it, namely, pieces of ground, *plus* all the natural resources within it and all the trees and plants and animals that are naturally present upon it—i.e., present without man's intervention
  - c. embraces bodies of water and their contents, air, and, eventually no doubt, even outer space, insofar as these things are employed in production
  - d. all of the above
- 36. Land and labor together are sometimes referred to as the original factors of production.
- \_\_\_\_37. The description of land as an original factor of production can be misleading insofar as man is responsible for whatever wealth-character it possesses.
- 38. Products produced are continuously used up, worn out, or simply deteriorate through the action of nature, as when they rust or rot.
- \_\_\_\_39. "Consumption," in its physical sense means the using up, wearing out, or deterioration both of products and nature-given goods (such as mineral deposits).
- 40. A consumer in the physical sense is one who uses goods up, wears them out, or in whose possession they deteriorate.
  - \_41. Every product produced
  - a. is subsequently consumed
  - b. reflects a prior consumption in the process of its own production
  - c. both (a) and (b)
- 42. Recognition that consumption is entailed in the very process of production itself, led the classical economists to distinguish between two, and sometimes three, very different kinds of physical consumption, which they called, respectively, productive, unproductive, and reproductive consumption.
- 43. Productive consumption means consumption for the purpose of production.
  - 44. Examples of productive consumption are a. the consumption of flour and ovens for the pur
    - a. the consumption of flour and ovens for the pur pose of baking bread
    - b. the consumption of steel and stamping equipment for the purpose of producing automobiles

- c. the consumption of cloth and sewing machines for the purpose of making clothing
- d. all of the above
- 45. Unproductive consumption is consumption not for the purpose of production. For example, the eating of bread, the driving of an automobile for pleasure, the wearing of clothes.
- 46. Reproductive consumption means that variety of productive consumption in which the product produced can play the same role in further production as the goods consumed in its own production, or can be employed in the production of such products.
  - 47. Examples of reproductive consumption
    - a. the consumption of seed in the production of wheat
    - b. the wearing out of trucks in making deliveries to truck factories
    - c. the wearing out of oxcarts in the construction of a railroad
    - d. the using up of steel in the manufacture of iron mining equipment and the subsequent wearing out of the iron mining equipment
    - e. all of the above
- 48. The wearing out of oxcarts in the construction of a railroad is reproductive consumption in that oxcarts and railroads play the same role in production, insofar as both are means of transport.
- 49. In the context of a division-of-labor, monetary economy, in which anything that is used in the production of a product to be sold can make possible its own replacement by way of exchange—that is, by using the sales proceeds its products bring in, to purchase its replacement—the concepts productive consumption and reproductive consumption become synonymous.
- 50. Capital goods in the physical sense are goods productively or reproductively physically consumed. For example, the flour and ovens, steel and stamping equipment, cloth and sewing machines, and the seed, trucks, oxcarts, and steel and iron mining equipment, mentioned above.
- \_\_\_\_\_51. The aggregate of the capital goods in the possession of an individual can be described as his capital. And capital can be defined as *wealth reproductively employed*—that is, as wealth employed in the production of wealth.
- \_\_\_\_\_52. In the context of a division-of-labor economy,
  - a. the concepts capital goods and capital come to be inseparably connected with the question of whether or not the goods are purchased, or the sums of money are expended, for the purpose of bringing in subsequent sales revenues
  - b. capital is wealth employed in the earning of money

- c. both (a) and (b)
- \_\_\_\_\_53. The supply of capital goods is of vital significance to production because it is a major determinant of the productivity of labor—i.e., the output per unit of labor. A larger supply of capital goods per capita operates to raise the productivity of labor, and a smaller supply to reduce it.
- 54. More capital goods make it possible to produce not only more of various products, but products whose production would otherwise be completely impossible. For example, while a plow enables a farmer to grow more food than he could grow without it, a furnace of some sort is necessary in order to produce any steel at all.
- \_\_\_\_\_55. A growing or improving supply of capital goods is indispensable to the adoption of more advanced technologies and to the continuing rise in the productivity of labor.
- 56. Because capital goods undergo productive consumption, it follows that in order to
  - a. maintain the supply of capital goods, a proportion of production must be devoted to their production at least sufficient to offset their productive consumption, which proportion can be termed the maintenance proportion
  - b. have capital accumulation, the proportion of production devoted to the production of capital goods must be greater than the maintenance proportion
  - c. both (a) and (b)
- 57. The existence of division of labor operates to raise the productivity of labor in large measure by virtue of increasing the supply of capital goods per capita.
- 58. The increase in the supply of capital goods is the effect of division of labor in all the ways that it serves to increase production and insofar as the products are capital goods.
  - \_\_59. Capital accumulation depends on
  - a. the proportion of total production in which capital goods are produced
  - b. the general efficiency with which labor and existing capital goods are used in production
  - c. both (a) and (b)
- 60. Greater efficiency in the utilization of labor and existing capital goods serves to increase the supply of capital goods because it
  - a. results in a larger total product, including a larger supply of capital goods for any given proportion of productive effort devoted to the production of capital goods
  - b. serves to reduce the proportion of production required for the replacement of capital goods and to make possible capital accumulation with a rela-

- tive concentration on the production of capital goods that was previously sufficient only to maintain the supply of capital goods,
- c. serves increase the rate of capital accumulation to whatever extent an economic system was already devoting to the production of capital goods a larger proportion of its efforts than was required for the mere replacement of capital goods
- d. all of the above

## The following is a six-part question.

A self-sufficient farmer must consume 1 bushel of seed in order to grow 2 bushels of crop, from which he obtains replacement seed.

- \_\_\_\_61. Calculate the farmer's maintenance proportion.
- 62. Calculate the supply of capital goods (seed) that the farmer will produce if he devotes 50 percent of his productive effort to the production of seed.
- 63. Calculate the supply of capital goods (seed) that the farmer will produce if he devotes 60 percent of his productive effort to the production of seed.
- 64. Calculate the farmer's maintenance proportion if he increases his efficiency and can now produce 3 bushels of crop instead of 2, with the same labor and seed.
- 65. Calculate the supply of capital goods (seed) that the farmer will *now* produce if he devotes 50 percent of his productive effort to the production of seed.
- 66. Production with capital goods always represents an indirect, more time-consuming process of production as compared to production without capital goods because labor must first be applied to the production of the capital goods and only then to the production of consumers' goods.
- 67. The greater lapse of time between the performance of labor and the achievement of its ultimate result, when capital goods must first be produced, is well compensated for by the larger size of the product and by the fact that in many cases products of the same kind could simply not be obtained otherwise.
- \_\_\_\_\_68. The division of labor is intimately bound up with the question of the time factor involved in production insofar as one group of workers begins its production with capital goods produced by previous groups of workers. Such temporal succession in the stages of division of labor can be described as the division of labor in its vertical aspect.

	Correct		Correct
Question #	Answer	Question #	Answer
1	Т	35	d
2	Т	36	Т
3	С	37	Ţ
4	Т	38	Т
5	Т	39	Т
6	Т	40	Ţ
7	Т	41	С
8	b	42	Т
9	Т	43	Т
10	d	44	d
11	Т	45	Т
12	d	46	Т
13	f	47	е
14	F	48	Ţ
15	Т	49	T
16	Т	50	Ţ
17	Т	51	T
18	Т	52	С
19	Т	53	T
20	T	54	Т
21	Т	55	T
22	b	56	С
23	T	57	Т
24	T	58	Т
25	С	59	С
26	Т	60	d
27	T	61	50%
28	T	62	1 bu.
29	F	63	1.2 bu
30	T	64	33.33%
31	b	65	1.5 bu.
32	е	66	T
33	С	67	T
34	Т	68	T