## **Question Paper Code: 98764**

## B.E. / B.Tech. DEGREE EXAMINATION, NOV 2024

One credit course

Mechanical Engineering

## 19UME864 - WORK STUDY

(Regulation 2019)

| Duration: 1.30 nours |   |  | Ma                      | Maximum: 30 Marks                |  |  |  |
|----------------------|---|--|-------------------------|----------------------------------|--|--|--|
|                      |   | Answer A   | LL Questions            |                                  |  |  |  |
|                      |   | PART A - (10   | 0x 1 = 10 Marks)        |                                  |  |  |  |
| 1.                   | A work study applic   | ation is/are   |                         | (CO1-U)                          |  |  |  |
|                      | (a) Industries  | (b) Design   | (c) Material Handling   | (d) All the above                |  |  |  |
| 2.                   | are used to des   | scribe the basic eleme   | ents of movements or fu | nctional hand motions of (CO1-U) |  |  |  |
|                      | (a) Work Study  | (b) Motion Study   | (c) Time Study          | (d) Therbligs                    |  |  |  |
| 3.                   |   | ycle repetitive jobs, High<br>nt assembly, packaging,<br>(CO1-U) |                         |                                  |  |  |  |
|                      | (a) Flow Diagram  | (b) Process chart  | (c) S.I.M.O chart       | (d) Therbligs                    |  |  |  |
| 4.                   | Process layout is also  | o called as  |                         | (CO2-U)                          |  |  |  |
|                      | (a) Functional Layout   |  | (b) Production layout   |                                  |  |  |  |
|                      | (c) Plant Layout  |  | (d) All of the above    | ve                               |  |  |  |
| 5.                   | are added to the normal time in order to arrive at standard time. (CO1-U) |  |                         |                                  |  |  |  |
|                      | (a) Performance Rat   | ing (b) Work sampl   | ing (c) Allowance       | (d) Motion study                 |  |  |  |

(c) Labour

(CO2-U)

(d) All of the above

The costs which decide the locational economy are those of......

(b) Building/Rent

(a) Land

|     | (a) I  | Ergonomics   | (b) Motion econom                       | y (c) S.I.M.O ch      | art (d        | l) Therbligs |       |  |  |  |
|-----|--|--|---|-----------------------|---------------|--------------|-------|--|--|--|
| 8.  | 8. An Alternate between the Urban and Rural areas is the which being a cobetween the two is probably the most suitable. It possesses the good points of b and Rural locations. |  |   |                       |               |              |       |  |  |  |
|     | (a) U  | Urban Site   | (b) Suburban site                       | (c) Metro Site        | (d) All       | of the above | e     |  |  |  |
| 9.  | Goo  | d plant layout o                                     | objectives is/are                       |                       |               | (Co          | )2-U) |  |  |  |
|     | (a) Material handling and transportation is minimized and efficiently controlled.  |  |   |                       |               |              |       |  |  |  |
|     | (b) Work stations are designed suitably and properly.  |  |   |                       |               |              |       |  |  |  |
|     | (c) The movements made by the workers are minimized  |  |   |                       |               |              |       |  |  |  |
|     | (d) A  | (d) All the above                                    |   |                       |               |              |       |  |  |  |
| 10. | Factors affecting plant layout is/are (CO2-U)  |  |   |                       |               |              |       |  |  |  |
|     | (a) The components/products to be manufactured.  |  |   |                       |               |              |       |  |  |  |
|     | (b) The volume of production and hence the volume of raw material and in process inventory to be handled.  |  |   |                       |               |              |       |  |  |  |
|     | (c) T  | (c) The operation needed to be done on each product. |   |                       |               |              |       |  |  |  |
|     | (d) All the above.   |  |   |                       |               |              |       |  |  |  |
|     |  |  | PART – B (1                             | x 20= 20 Marks)       |               |              |       |  |  |  |
| 31. | (a)  | •  | ails of Process charts symetexample.    | nbols and Flow pro    | ocess charts  | s CO1-U      | (20)  |  |  |  |
|     | Or   |  |   |                       |               |              |       |  |  |  |
|     | (b)  | Explain the Adin rural and ur                        | dvantages and Disadvanta ban locations. | ages of Selecting the | he plant site | e CO2-U      | (20)  |  |  |  |
|     |  |  |   |                       |               |              |       |  |  |  |
|     |  |  |   |                       |               |              |       |  |  |  |
|     |  |  |   |                       |               |              |       |  |  |  |
|     |  |  |   |                       |               |              |       |  |  |  |

The objectives of the study of...... is to optimize the integration of man and machine in

Order to increase work rate and accuracy.

(CO1-U)