Program: Civil Engineering

Curriculum Scheme: Revised 2016

Examination: Fourth Year Semester: VIII

Course Code: CEC802   Course Name: CM

1.1. The number of principles of management from Henry Fayol are
a) 14
b) 8
c) 22
d) 5

1.2. Identification of activities, classification and grouping of activities and assignment of duties comes under _____
a) Staffing
b) Organizing
c) Planning
d) Controlling

1.3. The part of managerial function which leads which leads the organizational methods to work efficiently for achievement of organizational purpose is known as
a) Controlling
b) Planning
c) Organizing
d) Directing

1.4. Fayol grouped the activities of industrial expertise into how many categories?
a) Six
b) Eight
c) Ten
d) Two

1.5. Who emphasized the need for developing mutuality of interest between management and labour, "Harmonious co-operation"
a) Louis Allen
b) Henry Gantt
c) Henry Fayol
d) John F. Mee

1.6. The primary task of management is _____
a) Decision making
b) Factor of production

c) Working with and through the people
d) Achievement of goals

1.7. The function of management which includes forecasting and decision making
a) Organising
b) Planning
c) Staffing
d) Controlling

1.8. The function of management which include delegating is known as
a) Planning
b) Directing
c) Organising
d) Staffing

1.9 Management process which includes manpower planning, recruitment and selection, training and development is referred as
a) Controlling
b) Directing
c) Staffing
d) Organising

1.10. The primary function of management is known as
a) Organising
b) Planning
c) Directing
d) Controlling

1.11. The last but very critical function of management is?
a) Planning
b) Organising
c) Staffing
d) Controlling

1.12. The time horizon for top level of management is?
a) 20-30 years
b) 1-2 years
c) 5- 10 years
d) 30-40 years

2.1 Which of the following statement is/are correct?
   a) Each project is temporary
   b) Every project is not bound to have unique deliverable or service.
   c) Project does not comprise of any resources.
   d) During project progression, only single activity takes place at a time.

2.2 Which of the following statement is wrong?
   a) Each Structure is unique.
   b) Every structure possesses same purpose and built in situ.
   c) Every structure is complex in nature and mandatorily requires skilled labors.
   d) Each structure is commissioned.

2.3 Which of the following statement is correct?
   a) All new constructions are categorized as original work and repair work are categorized as old work
   b) Light construction is the one in which huge workforce is required.
   c) Every construction project is categorized in major work.
   d) Tunneling work and atomic power plant can be classified under light construction project.

2.4 Which of the following are referred as phases of project life cycle?
   a) Planning, Closure, Execution
   b) Co-ordiating and Communicating
   c) Closure and Communication
   d) Scheduling, Organizing and funding

2.5 Rearrange the stages of project life cycle in correct sequence: Scheduling, Conceptualization, Organizing, delivery, implementation.
   a) Organizing, Conceptualization, Scheduling, Implementation, Delivery
   b) Conceptualization, Organizing, Scheduling, Implementation, Delivery
   c) Conceptualization, Scheduling, Implementation, Organizing, Delivery
   d) Conceptualization, Scheduling, Organizing, Implementation, Delivery

2.6 Project goal set up, recommended solutions, financial analysis, Project manager appointments are the activities from _____ phase.
   a) Initiation
   b) Planning and scheduling
   c) Organizing
   d) Execution

2.7 Which of these is not a sub type of rate of return method?

   a) Minimum rate of return

b) maximum rate of return
c) Internal rate of return
d) Increamental rate of return

2.8 Closure phase of construction projects does not include…

a) Handing over project documentation to the business
b) Termination of supplier contracts
c) Releasing project resources
d) measurement of progress and performance

2.9 Planning phase of construction project include…

a) Development of the project in detail to meet the project's objective
b) Releasing project resources
c) Communicate the closure of the project to all stakeholders.
d) Termination of supplier contract

2.10 A project is considered to be a short term project if it could be concluded
a) Within a year
b) within 2 year
c) within 3 year
d) within 5 year

2.11 During the construction period, price variation clause in contracts caters to

a) Increase in rates of only important materials
b) Variation in cost in materials element, labour element and petrol-oil-lubricant element
c) Variation in total cost of the project on an ad hoc basis
d) Rate of inflation

2.12 Railway projects are treated as

a) Light construction
b) Heavy construction
c) Industrial construction
d) medium construction

3.1   If t_o, t_p and t_m are the optimistic, pessimistic and most likely time estimates of an activity respectively, the expected time t of the activity will be
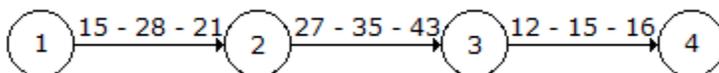
a) $$\frac{t_o + 3t_m + t_p}{2}$$

b) $$\frac{t_o + 3t_m + t_p}{3}$$

c) $$\frac{t_o + 4t_m + t_p}{4}$$

d) $$\frac{t_o + 4t_m + t_p}{6}$$

3.2 Optimistic time, most likely time and pessimistic times for the activities of a network in the given figure are written above their arrows. If the contractual obligation time for the project is 75, the latest occurrence time for the event 2, is

1 —15 - 28 - 21→ 2 —27 - 35 - 43→ 3 —12 - 15 - 16→ 4

a.   20   b. 25   c.35   d.15

3.3 The independent float affects only

a) preceding activities

b) succeeding activities

c) the particular activity involved

d) none of the above

3.4The time corresponding to minimum total project cost is

a) crash time

b) normal time

c) optimistic time

d) between normal time and crash time

3.5 Economic saving of time results by crashing

a) cheapest critical activity

b) cheapest non-critical activity

c) costliestcritícal activity

d) costliest non-critical activity

3.6 The reduction in project time normally results in

a) decreasing the direct cost and increasing indirect cost

b) increasing the direct cost and decreasing the indirect cost

c) increasing the direct cost and indirect cost both

d) decreasing the direct cost and indirect cost both

3.7The technique for establishing and maintaining priorities among the various jobs of a project, is known

    a) Event flow scheduling technique

    b) Critical ratio scheduling

    c) Slotting technique for scheduling

    d) Short interval scheduling

3.8 The first method invented for planning projects, was

    a) Bar chart method

    b) Milestone chart

    c) Critical path method (CPM)

    d) Programme Evaluation and Review Technique (PERT)

3.9 If the total float and duration of an activity are 5 and 10 days respectively, the particular activity can be
   a) started 5 days later
   b) started 10 days later
   c) Completed 10 days later
   d) performed 10 dats later

3.10 The time which results in the leasi, possible construction cost of an activity, is known
   a) Normal time
   b) slow time
   c) crash time
   d) Standard time

3.11 The estimated time required to perform an activity, is known as
   a) Event
   b) dummy
   c) duration
   d) Float

3.12 The difference between the time avail-to do a job and the time required to do the job, is known as
   a) Event
   b) Float
   c) Duration
   d) Constraint

3.13 Scheduling techniques used for large repetitive project
   a)CPM, B)Bar Chart, c) PERT, d)Gantt Chart

3.14 LFT-EFT =?
   a)Free Float ,b)Total Float , c)Independent Float, d) Interfearing Float

3.15 Activity A follows a activity B, then activity B is known as
   a) Immediate successor, b)Immediate predecessor, c) Follower ,d)Dummy

3.16 For network techniques, TL-TE =?
   a) Slack, b) Free float , c) Total Float, d)Dummy

3.17 Early finish time for an activity is
   a) EST +duration, b) LST+ duration, c)LFT +duration d)0

3.18 Latest start time for an activity is
   a) EST +EFT, b) LFT –duration, c) EST-duration ,d)EFT-duration

3.19 early start time of an activity is

a) TE + duration, b) TL-duration, c)TL +duration, d)TE-duration

3.20) The process in which Project is divided into various components , elements is called as

a)Work Breakdown Structure, b)Bar chart, c) Milestone chart, d) update chart

3.22 Diagram which consist of arrows and nodes linked together is called as

a)Network, b)bar chart, c) milestone chart, d) update chart

3.23 For complex project following scheduling technique is used

a)Bar chart, b)Network, c)Milestone chart, d) Update chart

4.1 Which of this is not a method of inventory control?

    A. ABC analysis

    B. MEP analysis

    C. FSN analysis

    D. VED analysis

4.2. In material management EOQ stands for

    A. Economic Option Quantity

    B. Economic Order Quality

    C. Early Order Quantity

    D. Economic Order Quantity

4. 3 ABC analysis is -----------

    A. At Best Control

    B. Always Better Control

    C. Average Better Control

    D. All Best Control

4.4. _____ and control system should be altered to support the strategic human resource function.

    A. Appointment.

    B. Reward.

    C. Job allotment.

    D. Incentives.

4. 5 _____ is considered as strategic activity.

      A. Recruitment.

      B. Planning.

      C. Productivity.

      D. Incentives/Bonus.

4.6. What are the factors responsible for the growth of HRM**?**

      A. Development of scientific management and awakened sense of social responsibility.

      B. The problem of how the available human resource could effectively minimize the cost and maximize the production.

      C. Technical factors, awakening amongst workers, attitude of the government, cultural and social system.

      D. Overall development of an individual, in correspondence to achieve the goal the organization.

4.7. Which of the following is a method of collection of information for job analysis?

      A. Questionnaire method.

      B. Ratio analysis.

      C. Optimisation models.

      D. Trend analysis.

4.8. Resource levelling will often

      A. Increase the most likely project cost.

      B. Increase the most likely duration of the project.

      C. Have little or no effect on individual activity durations

      D. Have little or no effect on the overall project duration

4.9. "A technique in which start and finish dates are adjusted based on resource constraints with the goal of balancing the demand for resources with the available supply" is defined as;

      A. Resource Levelling

      B. Resource Smoothening

      C. Resource Allocation

      D. Resource Management

4.10. Approaches to even out of the peaks of resource requirements so that a fixed amount of resources can be employed over time is

A. Resource Loading

B. Resource Leveling

C. Resource Prioritizing

D. Resource Generation

4.11. Approaches the even out the peaks of resource requirements so that a fixed amount of resources can be employed over time, is known as;

A. Resource Management

B. Resource levelling

C. Resource prioritizing

D. Resource generation

4.12. What are the impacts of Resource-Constrained scheduling?

A. Reduces Slack

B. Increases flexibility

C. Increases slack

D. Reduces Flexibility

4.13 Job analysis, HR planning, recruitment, selection, placement, inductions, and internal mobility are few important functions which come under the heading of_____of HRM.
   a) Integration function.
   b) Development.
   c) Maintenance.

   d) Procurement function

4.14   Job evaluation essentially seeks to _____
   a) Determine the relative worth of various jobs in an organization in monetary terms.
   b) Evaluate the performance of employees on their respective jobs.
   c) Evaluate the importance of various jobs in the organization.
   d) Establish a hierarchy of various jobs in the organization.
4.15   Rewards that one gets from employer, usually money, a promotion or benefits is called_____   .
   a) Intrinsic reward.

b)Extrinsic reward.

c)Self-motivated reward.

d)Organization reward.

4.16 Consider the following statements.

Resource leveling means,

i) Economical utilization of resources

ii) Gradual increase in resources

iii) Adjustments of resources to have the least variations

iv) Complete revamping of resources to suits the requirements

v) Validating network depending on resource constraints

a) (i) & (ii) are correct

b) (ii), (iii) & (iv) are correct

c) (iii) & (v) are correct

d) (i), (ii) and (iii)

4.17 In VED, control over storage of items is possible, while in ABC, it is not possible

a) Only (ii) is correct

b) (ii), (iii), (iv) are correct

c) (iii) and (iv) are correct

d) Only (iii) is correct

4.18 ABC analysis is based upon the principle that

a) There are usually a few critical items, and many items which are less critical

b) All items in inventory must be monitored very closely

c) An item is critical if its usage is high

d) The safety stock in terms of volume should be higher for A items than for C items

4.19 Which of the following statement is/are correct?

i) VED is always better than ABC

ii) Both VED and ABC analysis are material management techniques and are same

iii) ABC analysis are based on principle, "vital few and trivial many"

iv) In VED , control over storage of items is possible, while in ABC, it is not possible

a)Only (ii) is correct

b)(ii), (iii), (iv) are correct

c)(iii) and (iv) are correct

d)Only (iii) is correct

5.1. The reduction in project time normally results in

A) Decreasing the direct cost and increasing indirect cost

B) Increasing the direct cost and decreasing the indirect cost

C) Increasing the direct cost and indirect cost both

D) Decreasing the direct cost and indirect cost both

5.2. Crash project duration is obtained by summing the

A) Normal durations for all the activities

B) Crash durations for all activities

C) Crash durations for all the activities along the critical path obtained by taking into account the normal duration for all the activities

D) Crash durations for all the activities along the critical path obtained by taking into account the crash duration for all the activities

5.3. In cost time optimization of a project , the project can be crashed by expediting

a) All activities on critical path

b) Critical activities having minimum cost slope

c) Activities on sub critical path

d) all activities of the network

5.4. Which of the following represent the reduction in duration ?

a) Crashing b) Negative slack c) Positive Slack d) Varience

5.5. Consider the following statement

Crashing a project in terms of its duration would result in

i. An increase in the indirect cost

ii. A decrease in the indirect cost

iii. A decrease in the direct cost

iv. An increase in the direct cost

a) ii & iv b) ii &iii c) i &iii d)i & ii

5.6. The cost slope is define as

a) [(Crash cost -Normal cost)/(Crash time)]

b) [(Crash cost)/(Normal time - Crash time)]

c) [(Crash cost -Normal cost)/(Normal time)]

d) [(Crash cost -Normal cost)/(Normal time - Crash time)]

5.7. Total project cost versus item curve is a/an

a) S-shaped curve

b) Parabola

c) U-shaped curve

d) Straight line

5.8. In mass housing project , break even point indicates the

a) Amount of total money to be spent

b) Number of huoses to be built

c) Number of huoses to be built for the best cost/benefit ratio

d) frequency of houses to be built for maximum price

5.9. When a CPM network is to be updated one consider

a) Only completed jobs to be outside the purview

b) Ongoing works to be outside the purview

c) Only substituted items

d) Onging works and any other substitution

5.10. Which of the following are possible changes during the updating of the project network?

a) Change in the duration of an activity

b) Addition or deletion of an activity

c) Change in the logical relationship

d) Change in duration of event

5.11. Updating may result in

1. Change of critical path

2. Increase Cost

3. Increses Resources

4. Increase time constraint

5.12. The CPM network is updated

a) At regular intervals

b) At fixed times

c) At any time

d) Whenever there is a difference in the planed and actual performance

5.13. The optimum duration of project corresponding to which of the following ?

a) Indirect project cost

b) direct project cost

c) Crash project cost

d) Total project cost

5.14. What does the direct cost of project includes

a. Labour, material and Equipment cost

b. Sales Tax

c. Insurance

d. Penalty

5.15 Find the cost slope of an activity, given data Tn=2, Tc=1, Cn=100 ,

Cc=150

a) 100   b) 60   c) 30   d) 50

6.1. Part 380 Occupational Noise Exposure sets an Action Level for noise at:

 a) 80 dBA
 b) 85 dBA
 c) 90 dBA
 d) 95 dBA

6.2. A safety sign which tells you that you must NOT do something is which colour?

 a) Red
 b) Yellow
 c) Blue
 d) Green

6.3. What does a yellow sign with a skull and crossbones mean?
 a) There is a risk of toxic hazard.
 b) There is a risk from pirates.
 c) There is a risk from motorcyclists.
 d) There is a risk from fire

6.4. Which of these often causes injuries on construction sites?
 a) Being late for work
 b) Falling from height
 c) Not having your correct ID
 d) Arguing with labour

6.5. _____of every year is celebrated as National Safety Day

a) March 4

b) April 4

c) March 14

d) April 14

6.6. The legislation in construction industry is necessary for

a) Fixing the terms of employment and working conditions

b) Quality control

c) Social benefits

d) Providing mental stability

6.7. Cancer of the skin mostly affects which personnel?

a) Carpenters

b) Brick layers

c) Painters

d) Concrete workers

6.8. Silicosis is the ailment affecting

a) Brick layers

b) Welders

c) Reinforcement benders

d) painters

6.9. The Contract Labour Act (1970,1986) deals with

A. Contractors

B. Improving conditions of contract labours

C. Ventilation and lighting

D. Canteen facilities

6.10 Sampling is a process of determining the quality of

A. Large group from a small part
B. The small part from large group
C. Small group from small part
D. Small group at random

6.11 Which of the following is correct?

A. Reliability number = 100 - $\frac{number\ of\ defective\ units}{number\ of\ units\ treated}$ * **100**

B. Reliability number = 100 - $\frac{number\ of\ units\ treated}{number\ of\ defective\ units}$ * 100

C. Reliability number = 50 - $\frac{number\ of\ defective\ units}{number\ of\ units\ treated}$ * 100

D. Reliability number = 50 - $\frac{number\ of\ units\ treated}{number\ of\ defective\ units}$ * 100

6.12 The major quality control method does not include
A. Inspection
B. Testing
C. Sampling
D. Transporting

6.13 Payment of Wages Act was amended in the year
A. 1982
B. 1984
C. 1986
D. 1988

6.14 Which of the following option involves material and component control?
a) Development of standards
b) Development of specification
c) Quality control
d) Feedback

6.15 Which of the following is an example of QA?
a) Verification
b) Software testing
c) Validation
d) Documentation

6.16 Quality control means _____.
a) Implementing rules and regulation of safety
b) Implementing policy for accountability
c) Performing activities to ensure quality
d) Generating revenue through inspection

6.17 Statutory Minimum wage is fixed under
a) Payment of Wages Act, 1936
b) Equal Remuneration Act, 1976
c) Workmen's Compensation Act, 1923
d) Minimum Wages Act, 1948

6.18 Which of the following statements relating to the Employees' Compensation Act is not correct?

a) This Act has a link with the Workmen's Compensation Act

b) This act is the outcome of the amendment that was made to the Workmen's Compensation Act

c)This act does not have any provision relating to temporary disablement of workmen

d) This act has a provision relating to permanent partial disablement

6.19 Under the Payment of Wages Act, 1936 the maximum limit on deductions should not ordinarily cross

a)50 percent generally and 65 percent in case of payments due to the cooperatives

b) 60 percent generally and 75 percent in case of payments due to the cooperatives

c)50 percent generally and 75 percent in case of payments due to the cooperatives

d)40 percent generally and 75 percent in case of payments due to the cooperatives