# National Testing Agency

Question Paper Name :Capstone Project 26th March 2021 Shift 1Subject Name :Capstone ProjectCreation Date :2021-03-26 14:16:13Duration :180Number of Questions :100Total Marks :100Display Marks:Yes

## **Capstone Project**

**Group Number:** Group Id: 864351149 **Group Maximum Duration:** 0 **Group Minimum Duration:** 120 **Show Attended Group?:** No **Edit Attended Group?:** No **Break time:** 0 **Group Marks:** 100 Is this Group for Examiner?: No

## **Capstone Project 1**

Section Id: 864351579
Section Number: 1
Section type: Online
Mandatory or Optional: Mandatory
Number of Questions: 100

Number of Questions to be attempted:100Section Marks:100Mark As Answered Required?:YesSub-Section Number:1

**Sub-Section Id:** 864351646

**Question Shuffling Allowed:** Yes

Question Number: 1 Question Id: 86435112415 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

In a design process, analysis comes before

- 1. Prototyping and testing
- 2. Goal statement
- 3. Performance specification
- 4. Background research

#### **Options:**

86435141169. 1

86435141170. 2

86435141171.3

86435141172.4

Question Number: 2 Question Id: 86435112416 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

Currently, an integral part of design validation is

- 1. Ideation and invention
- 2. Goal statement
- 3. Simulation
- 4. Identification of need

### **Options:**

86435141173. 1 86435141174. 2 86435141175. 3

86435141176.4

Question Number: 3 Question Id: 86435112417 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

There are how many stages in design validation?

- 1. One
- 2. Two
- 3. Three
- 4. Four

#### **Options:**

86435141177. 1

86435141178. 2

86435141179. 3

86435141180.4

Question Number: 4 Question Id: 86435112418 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Product life cycle has how many clear stage/s?

- 1. One
- 2. Two
- 3. Three
- 4. Four

#### **Options:**

86435141181. 1

Question Number: 5 Question Id: 86435112419 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Cost of design error varies ...... with development phase.

- 1. Linearly
- 2. Quadratically
- 3. Cubically
- 4. None of the above

## **Options:**

86435141185. 1

86435141186. 2

86435141187.3

86435141188.4

Question Number: 6 Question Id: 86435112420 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

An example of a design error in Mechanical Engineering is

- 1. Using wrong dimension arrows
- 2. Using wrong weights
- 3. Error in design calculations
- 4. None of the above

#### **Options:**

86435141189. 1

86435141190.2

86435141191.3

Question Number: 7 Question Id: 86435112421 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

There are mainly how many components of any successful projects?

- 1. Three
- 2. Four
- 3. Five
- 4. Six

## **Options:**

86435141193.1

86435141194. 2

86435141195.3

86435141196.4

Question Number: 8 Question Id: 86435112422 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Fill in the blank

Quality of a project is measured by the deviation from the ...... point.

- 1. Start
- 2. Target
- 3. End
- 4. All of the above

## **Options:**

86435141197.1

86435141198. 2

86435141199.3

Question Number: 9 Question Id: 86435112423 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

Project life cycle refers to which one of the following?

- 1. Initiation phase to planning phase
- 2. Monitoring phase to completion phase
- 3. Initiation phase to completion phase
- 4. None of the above

#### **Options:**

86435141201.1

86435141202. 2

86435141203.3

86435141204.4

Question Number: 10 Question Id: 86435112424 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Specification of a project refers to

- 1. Objectives
- 2. Initiation point
- 3. Component
- 4. None of the above

## **Options:**

86435141205.1

86435141206. 2

86435141207.3

86435141208.4

Question Number: 11 Question Id: 86435112425 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Correct Marks: 1 Wrong Marks: 0

Performance specification should come under

- 1. Assumptions
- 2. Project descriptions
- 3. Scope
- 4. Objective

## **Options:**

86435141209. 1

86435141210. 2

86435141211. 3

86435141212. 4

Question Number: 12 Question Id: 86435112426 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Robustness of a system refers to the opposite of

- 1. Reliability
- 2. Efficiency
- 3. Sensitivity
- 4. All of the above

## **Options:**

86435141213. 1

86435141214.2

86435141215.3

86435141216.4

Question Number: 13 Question Id: 86435112427 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The numerical system that describes the position of an object by three numbers from a fixed point along three axis is called

- 1. Polar coordinate system
- 2. Cartesian coordinate system
- 3. Imperial system
- 4. Metric system

#### **Options:**

86435141217. 1

86435141218. 2

86435141219.3

86435141220.4

Question Number: 14 Question Id: 86435112428 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Fixed central point in the Cartesian coordinate system is called

- 1. Metric system
- 2. Central point
- 3. Origin
- 4. Home

## **Options:**

86435141221.1

86435141222. 2

86435141223.3

86435141224. 4

Question Number: 15 Question Id: 86435112429 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Alternative name of Cartesian coordinate system is

- 1. British coordinate system
- 2. Central point coordinate system
- 3. Rectangular coordinate system
- 4. None of the above

#### **Options:**

86435141225. 1

86435141226. 2

86435141227. 3

86435141228.4

Question Number: 16 Question Id: 86435112430 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

## Project baseline refers to

- 1. End point
- 2. Midpoint
- 3. Start point
- 4. None of the above

## **Options:**

86435141229. 1

86435141230. 2

86435141231.3

86435141232.4

Question Number: 17 Question Id: 86435112431 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Work plan of a project is generally

- 1. Short term
- 2. Long term
- 3. Medium term
- 4. None of the above

#### **Options:**

86435141233.1

86435141234. 2

86435141235.3

86435141236.4

Question Number: 18 Question Id: 86435112432 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

You have determined that a feed rate for a particular tool must be 5.0 inches per minute (or 5 millimeters per minute in the metric mode). The correct designation in the program would be:

- 1. F0.5
- 2. F5.0
- 3. S5.0
- 4. F0.005

## **Options:**

86435141237. 1

86435141238. 2

86435141239.3

86435141240.4

Question Number: 19 Question Id: 86435112433 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

What mode switch position allows a program to be run from within the CNC control?

- 1. Edit
- 2. Auto
- 3. Zero return
- 4. MDI (manual data Input)

## **Options:**

86435141241. 1

86435141242. 2

86435141243.3

86435141244. 4

Question Number: 20 Question Id: 86435112434 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Scheduling of a project refers to

- 1. Allotment of duties to each team
- 2. Sequencing of duties
- 3. Planning the duties
- 4. None of the above

## **Options:**

86435141245. 1

86435141246. 2

86435141247. 3

86435141248.4

Question Number: 21 Question Id: 86435112435 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Design error results in

- 1. An increase in part costs
- 2. An increase in resource costs
- 3. An increase in warranty costs
- 4. All of the above

## **Options:**

86435141249. 1

86435141250. 2

86435141251.3

86435141252.4

Question Number: 22 Question Id: 86435112436 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Analytical modelling of a physical system refers to development of a

- 1. Function
- 2. Prototype
- 3. Process
- 4. None of the above

## **Options:**

86435141253.1

86435141254. 2

86435141255.3

86435141256.4

Question Number: 23 Question Id: 86435112437 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Project modifications refer to

- 1. Budget modifications
- 2. Partnership modifications
- 3. Project time plan modifications
- 4. All of the above

#### **Options:**

86435141257. 1

86435141258. 2

86435141259. 3

86435141260.4

Question Number: 24 Question Id: 86435112438 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Main component of market surveying is to study the

- 1. Cost of the project
- 2. Return on investment
- 3. Study the reliability
- 4. None of the above

## **Options:**

86435141261.1

86435141262. 2

86435141263.3

86435141264. 4

Question Number: 25 Question Id: 86435112439 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Optimisation is a mathematical tool used to find out the \_\_\_\_\_ value of the function/functions.

- 1. Maximum
- 2. Minimum
- 3. Either maximum or minimum
- 4. Neither maximum nor minimum

#### **Options:**

86435141265. 1

86435141266, 2

86435141267.3

86435141268.4

 $Question\ Number: 26\ Question\ Id: 86435112440\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$ 

Correct Marks: 1 Wrong Marks: 0

An integral part of design validation refers to

- 1. Prototyping
- 2. Simulation
- 3. Physical Testing
- 4. None of the above

## **Options:**

86435141269. 1

 $86435141270.\ 2$ 

86435141271.3

86435141272.4

Question Number: 27 Question Id: 86435112441 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The main component of effective implementation of a capstone project is

- 1. Monitoring
- 2. Reliability
- 3. Feedback
- 4. None of the above

## **Options:**

86435141273. 1

86435141274. 2

86435141275. 3

86435141276.4

Question Number: 28 Question Id: 86435112442 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

#### Match List I with List II

List I	List II
A. Life cycle	I. Quadratically
B. Design error	II.Three
C. Performance specification	III. Sensitivity
D. Robustness	IV. Objective

Choose the correct answer from the options given below:

## **Options:**

86435141278. 2 86435141279. 3

86435141280.4

Question Number: 29 Question Id: 86435112443 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

#### Match List I with List II

List I	List II
A. Quality	I. Objectives
B. Design validation	II. Three stages
C. Specification format	III. Simulation
D. Product life cycle	IV. Target

Choose the **correct** answer from the options given below:

#### **Options:**

86435141281.1

86435141282. 2

86435141283.3

86435141284. 4

Question Number: 30 Question Id: 86435112444 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

For successful implementation of Capstone project, arrange the following in order of priority

- A. Designer
- B. Manufacturer
- C. Customer
- D. Product Quality

Choose the *correct* answer from the options given below

- 1. D, C, A, B
- 2. B, C, A, D
- 3. A, B, C, D
- 4. C, A, B, D

## **Options:**

86435141285. 1

86435141286. 2

86435141287. 3

86435141288. 4

Question Number: 31 Question Id: 86435112445 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Arrange the following in order of occurence

- A. Prototyping and Testing
- B. Background research
- C. Goal statement
- D. Performance specification

Choose the correct answer from the options given below

- 1. A, B, C, D
- 2. B, C, D, A
- 3. D, A, C, B
- 4. C, D, A, B

## **Options:**

86435141289. 1

86435141290. 2

86435141291.3

86435141292.4

Question Number: 32 Question Id: 86435112446 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The fundamental challenge of the Capstone project course is

- 1. Solving real-world problems by applying classroom experience
- 2. Analysing data for further research
- 3. Developing new knowledge and adding to the existing literature
- 4. Determining the pace of project completion

## **Options:**

86435141293. 1

86435141294. 2

86435141295.3

86435141296.4

Question Number: 33 Question Id: 86435112447 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Capstone signifies

A. Completion of a structure

B. Protection of a structure

C. Decoration of a structure

D. Culmination of achievement

Choose the correct answer from the options given below:

- 1. A and D only
- 2. A, B and D only
- 3. B and C only
- 4. A, B and C only

## **Options:**

86435141297. 1

86435141298. 2

86435141299.3

86435141300.4

Question Number: 34 Question Id: 86435112448 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

#### Match List I with List II

List I Purpose	List II Category
B. The Capstone course that is discipline specific and includes general education and co-curricular activities.	II. Career-planning course category
C. The Capstone course that includes job searching and development of professional relationships	III. In discipline- and department- based course category
D. The Capstone course that includes job searching procedure etc.	IV. Transition course category

Choose the correct answer from the options given below:

- 1. A II, B III, C IV, D I
- 2. A I, B III, C IV, D II
- 3. A III, B I, C IV, D II
- 4. A IV, B II, C I, D III

## **Options:**

86435141301. 1

86435141302. 2

86435141303.3

86435141304.4

Question Number: 35 Question Id: 86435112449 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Arrange the following first four tasks involved in a typical capstone project course sequentially

A. Forming a team.

B. Refining the topic and generating a project proposal that includes a specification, a task list or a work breakdown, and a schedule.

C. Identifying competitive products and services, performing a patent search, and identifying required resources.

D. Identifying a need for a product, service, process, or system.

Choose the correct answer from the options given below

1. A, B, C, D

2. B, D, A, C

3. C, A, B, D

4. D, A, C, B

## **Options:**

86435141305. 1

86435141306.2

86435141307. 3

86435141308.4

Question Number: 36 Question Id: 86435112450 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Project budget should reflect

- 1. exact value of the project
- 2. an estimate of the cost involved
- 3. a value higher than the costs involved
- 4. None of the above

#### **Options:**

86435141309. 1

86435141310. 2

86435141311.3

86435141312.4

Question Number: 37 Question Id: 86435112451 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Market research is

- 1. decision driven
- 2. output driven
- 3. cost driven
- 4. None of the above

## **Options:**

86435141313.1

86435141314. 2

86435141315.3

86435141316.4

Question Number: 38 Question Id: 86435112452 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## The first step in market research is

- 1. identifying the problem and opportunities in the market
- 2. determining the cost of the project or service
- 3. identifying the availability of the product
- 4. None of the above

## **Options:**

86435141317. 1

86435141318. 2

86435141319.3

86435141320.4

 $Question\ Number: 39\ Question\ Id: 86435112453\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$ 

**Correct Marks: 1 Wrong Marks: 0** 

To examine a product or service is to use

- 1. product comparison template
- 2. price comparison statement
- 3. performance comparison statement
- 4. None of the above

## **Options:**

86435141321. 1

86435141322. 2

86435141323.3

86435141324.4

Question Number: 40 Question Id: 86435112454 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Types of tasks under a Capstone Project can be classed into

- 1. two categories
- 2. three categories
- 3. four categories
- 4. None of the above

## **Options:**

86435141325. 1

86435141326. 2

86435141327. 3

86435141328.4

 $Question\ Number: 41\ Question\ Id: 86435112455\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$ 

**Correct Marks: 1 Wrong Marks: 0** 

Literature review is to be performed to

- 1. identify the gaps in the available information
- 2. know the level of present knowledge
- 3. Both 1 and 2
- 4. None of the above

## **Options:**

86435141329.1

86435141330. 2

86435141331.3

86435141332.4

Question Number: 42 Question Id: 86435112456 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Project budget should be based on

- 1. required equipment
- 2. required material
- 3. required services
- 4. All of the above

## **Options:**

86435141333.1

86435141334. 2

86435141335.3

86435141336.4

Question Number: 43 Question Id: 86435112457 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

Budget development is performed

- 1. at the initial stage of the project
- 2. after the initation of the project
- 3. before the completion of the project
- 4. None of the above

## **Options:**

86435141337. 1

86435141338. 2

86435141339.3

86435141340.4

Question Number: 44 Question Id: 86435112458 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Which one of the following fully and vitally justifies the role of the Capstone Project course in an Engineering Programme?

- Capstone project supports the consolidation and integration of discipline specific knowledge
- Through the Capstone project, students get a realistic experience in the practice of engineering design
- Capstone project provides a means of achieving all the program outcomes of the specific field of study
- 4. Capstone project helps students to establish themselves as independent researchers

#### **Options:**

86435141341.1

86435141342. 2

86435141343.3

86435141344. 4

Question Number: 45 Question Id: 86435112459 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

In a Capstone project, learners contribute new knowledge to the existing literature.

- 1. Statement is False
- 2. Statement is True
- 3. Statement is partially true
- 4. Not possible to determine whether True or False

#### **Options:**

86435141345. 1

86435141346. 2

86435141347. 3

 $Question\ Number: 46\ Question\ Id: 86435112460\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$ 

**Correct Marks: 1 Wrong Marks: 0** 

The primary parameter that differentiates a thesis and Capstone project is

- 1. Time frame
- 2. Guidance
- 3. Nature
- 4. Defence

#### **Options:**

86435141349.1

86435141350. 2

86435141351.3

86435141352.4

Question Number: 47 Question Id: 86435112461 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The basis of categorising the capstone project course for engineering education is

- 1. Development of job searching ability
- 2. Interdisciplinary work opportunity
- 3. Preparing students only for world of work
- 4. Skill development for linking academic learning with world of work

## **Options:**

86435141353. 1

86435141354. 2

86435141355.3

86435141356.4

 $Question\ Number: 48\ Question\ Id: 86435112462\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$ 

The common Causes of Conflict within a capstone project team are

- A. Disagreements in the approaches and Lack of trust
- B. Competition among the members for leading positions
- C. Differences in objectives and different understanding of tasks
- D. Lack of facilities, resources
- 1. A, B and D only
- 2. B, C and D only
- 3. A, C and D only
- 4. C and D only

#### **Options:**

86435141357. 1

86435141358. 2

86435141359.3

86435141360, 4

Question Number: 49 Question Id: 86435112463 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Learners will be able to design solutions for complex engineering problems with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations through the development of graduate attributes mentioned as

- 1. Problem analysis
- 2. Design/development of solutions
- 3. Engineering knowledge
- 4. Conduct investigations of complex problems

#### **Options:**

86435141362. 2

86435141363.3

86435141364.4

Question Number: 50 Question Id: 86435112464 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The number of activities to be performed with reference to time for successful capstone project course is

- 1. Ten
- 2. Seven
- 3. Eight
- 4. Five

#### **Options:**

86435141365.1

86435141366. 2

86435141367.3

86435141368.4

Question Number: 51 Question Id: 86435112465 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

A team is constructed when two or more individuals interacting primarily to share information and to make decisions to help each other

- 1. Statement is True
- 2. Statement is partially True
- 3. Statement is False
- 4. Not possible to determine

#### **Options:**

86435141369. 1

86435141371. 3 86435141372. 4

Question Number: 52 Question Id: 86435112466 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

For estimating the project budget the following costs are to be assessed

1. cost of employees

2. cost of the equipment

3. cost of materials, software and supplies

4. All of the above

## **Options:**

86435141373.1

86435141374. 2

86435141375.3

86435141376.4

Question Number: 53 Question Id: 86435112467 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The basic steps in budget preparation are

- 1. two in number
- 2. three in number
- 3. four in number
- 4. None of the above

#### **Options:**

86435141377.1

86435141378. 2

86435141379.3

Question Number: 54 Question Id: 86435112468 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

Project budget encompasses a number of steps to

1. identify the tasks involved

2. identify the resources needed

- 3. justify the cost involved to perform the project goals and objectives
- 4. All of the above

#### **Options:**

86435141381.1

86435141382. 2

86435141383.3

86435141384.4

Question Number: 55 Question Id: 86435112469 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The objectives of capstone project are to

- 1. apply engineering analysis and design principles to a real life project
- 2. to mimic engineering experiences students will face in future
- 3. to help intellectual and professional growth
- 4. All of the above

## **Options:**

86435141385. 1

86435141386. 2

86435141387. 3

86435141388.4

Question Number: 56 Question Id: 86435112470 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

A civil engineering project should deal with the following aspects

- 1. architectural and functional
- 2. mechanical and electrical
- 3. metallurgical
- 4. None of the above

## **Options:**

86435141389. 1

86435141390. 2

86435141391.3

86435141392.4

Question Number: 57 Question Id: 86435112471 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

For a civil engineering project software is needed for

- 1. modeling
- 2. analysis
- 3. design
- 4. All of the above

## **Options:**

86435141393.1

86435141394. 2

86435141395.3

86435141396.4

 $Question\ Number: 58\ Question\ Id: 86435112472\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$ 

## A civil engineering structure consists of

- 1. structural elements
- 2. non-structural elements
- 3. Both 1 and 2
- 4. None of the above

## **Options:**

86435141397. 1

86435141398. 2

86435141399. 3

86435141400.4

 $Question\ Number: 59\ Question\ Id: 86435112473\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$ 

Correct Marks: 1 Wrong Marks: 0

Item wise estimate of a structure consists of which of the following?

- 1. Items with quantity & rate
- 2. Plan of the structure
- 3. Structural drawing
- 4. None of the above

## **Options:**

86435141401.1

86435141402. 2

86435141403.3

86435141404. 4

Question Number: 60 Question Id: 86435112474 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

A civil engineering project requires input from the following discipline

- 1. architecture
- 2. mechanical
- 3. metallurgical
- 4. None of the above

## **Options:**

86435141405.1

86435141406. 2

86435141407. 3

86435141408.4

 $Question\ Number: 61\ Question\ Id: 86435112475\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$ 

Correct Marks: 1 Wrong Marks: 0

When a team requires significant modification of a project, the most essential element(s) to consider is/are

- 1. Requirement of new resources
- 2. Additional tasks to be performed
- 3. Impact on schedule and budget
- 4. New skill sets needed

## **Options:**

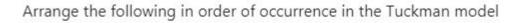
86435141409.1

86435141410. 2

86435141411.3

86435141412.4

Question Number: 62 Question Id: 86435112476 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No



- A. Norming
- B. Performing
- C. Forming
- D. Storming

Choose the *correct* answer from the options given below

- 1. A, B, C, D
- 2. B, D, C, A
- 3. D, C, A, B
- 4. C, D, A, B

## **Options:**

86435141413. 1

86435141414. 2

86435141415. 3

86435141416. 4

Question Number: 63 Question Id: 86435112477 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Which one of the following statements can be considered as the most important characteristics of a Capstone project Team?

- 1. Team members from different work areas come together to accomplish the project.
- 2. The team has flexibility to make changes and take responsibilities of the tasks.
- The team will be able to establish, track, and evaluate progress towards completing the work based on pre-decided performance goals.
- The team members meet regularly to discuss ways of improving quality of their work environment.

#### **Options:**

86435141417. 1

86435141418. 2

86435141419. 3

86435141420.4

Question Number: 64 Question Id: 86435112478 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

At the completion of which stage of team development in a Capstone project team, will a relatively clear hierarchy of leadership within the team emerge?

- 1. Adjourning
- 2. Norming
- 3. Storming
- 4. Performing

#### **Options:**

86435141421.1

86435141422. 2

86435141423.3

Question Number: 65 Question Id: 86435112479 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

The most powerful way of communication for the Capstone project team is through

- 1. Group discussions
- 2. Conducting meetings
- 3. Brainstorming
- 4. Effective presentation

# **Options:**

86435141425. 1

86435141426. 2

86435141427. 3

86435141428.4

Question Number: 66 Question Id: 86435112480 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

A perfect team communication means:

- A. Delivery of information and ideas
- B. Both, tranference and the understanding of the meaning
- C. Imparting meaning
- D. Transfer of thought to the other members

Choose the *correct* answer from the options given below

- 1. B and D only
- 2. B, C and D only
- 3. A and C only
- 4. A, B and D only

## **Options:**

86435141429. 1

86435141430. 2

86435141431.3

86435141432.4

Question Number: 67 Question Id: 86435112481 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Which one of the following statements represents the most suitable reason for why ethics is an essential component in Capstone Project Team?

- A successful Capstone project team requires open communication as lack of openness is one of the major causes of conflict.
- A successful Capstone project team must have an agreement on the approaches in carrying out the project.
- A successful Capstone project team must agree to the project objectives and have an understanding of the tasks involved.
- 4. A successful Capstone project team requires agreements in values, culture and attitudes.

#### **Options:**

86435141433.1

86435141434. 2

86435141435. 3

86435141436.4

Question Number: 68 Question Id: 86435112482 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The best way to resolve conflicts for a successful Capstone project is

- 1. Compromising
- 2. Confronting
- 3. Avoiding
- 4. Forcing

### **Options:**

86435141437. 1

86435141438. 2

86435141439.3

Question Number: 69 Question Id: 86435112483 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

The type of the team that can be formed for special situations or problems to provide possible solutions within a short period of time is called a

- 1. Self-directed Team
- 2. Skunkworks Team
- 3. Process Improvement Team
- 4. Cross-functional Team

#### **Options:**

86435141441.1

86435141442. 2

86435141443.3

86435141444. 4

Question Number: 70 Question Id: 86435112484 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

In context with the statement "poor communication in team can lead to interpersonal conflicts", the option that can best justify effective communication, is

- 1. Effective communication improves quality of problem solving
- 2. Effective communication increases member's participation in decision making
- 3. Effective communication helps understanding and managing emotions
- 4. Effective communication increases cooperation among team members

## **Options:**

86435141445.1

86435141446. 2

86435141447. 3

Question Number: 71 Question Id: 86435112485 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

For the assessment of improvement in team performance, the approach to be adopted should include

- 1. Individual level assessment
- 2. Team level assessment
- 3. Organizational level assessment
- 4. Multilevel assessment

## **Options:**

86435141449. 1

86435141450. 2

86435141451.3

86435141452.4

Question Number: 72 Question Id: 86435112486 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

### Match List I with List II

List I	List II
DEFINITION	NAME
A. Creates positive synergy through coordinated effort	I. Formal Group
B. Interact primarily for sharing information	II. Non formal Group
C. Formed within the organisation's structure	III. Work Team
D. Formed naturally in the work environment in response to the need for social contact	IV. Work Group

Choose the **correct** answer from the options given below:

1. A - IV, B - I, C - II, D - III

2. A - II, B - III, C - IV, D - I

3. A - III, B - IV, C - I, D - II

4. A - I, B - II, C - III, D - IV

### **Options:**

86435141453. 1

86435141454. 2

86435141455.3

86435141456. 4

Question Number: 73 Question Id: 86435112487 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

For the Capstone project team members to conduct effective and fruitful meetings, it is essential to

- 1. Decide guidelines for the team members
- 2. Select speakers as per requirement
- 3. Encourage members to participate.
- 4. Manage time as per plan

### **Options:**

86435141457. 1

86435141458. 2

86435141459. 3

86435141460.4

 $Question\ Number: 74\ Question\ Id: 86435112488\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$ 

Correct Marks: 1 Wrong Marks: 0

A Capstone project idea, based on direct use of low cost, decentralised and energyefficient technologies in place of conventional ones, is called a

- 1. Breakthrough
- 2. Piggyback
- 3. Leapfrog
- 4. Copycat

### **Options:**

86435141461.1

86435141462. 2

86435141463.3

86435141464. 4

 $Question\ Number: 75\ Question\ Id: 86435112489\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$ 

#### Match List I with List II

List I	List II
A. Literary, artistic and scientific works	I. Indian Trademark Act, 1999
B. New and useful process or product or both	II. Indian Patent Act, 1970
C. Essentially derived plant variety	III. Indian Copyright Act, 1957
D. <sup>TM</sup> in superscript is an unregistered	IV.The Protection of Plant Varieties and Farmer's
trademark	Right Act, 2001

Choose the correct answer from the options given below:

1. A - I, B - II, C - IV, D - III

2. A - III, B - II, C - IV, D - I

3. A - II, B - I, C - III, D - IV

4. A - I, B - II, C - III, D - IV

## **Options:**

86435141465. 1

86435141466. 2

86435141467. 3

86435141468. 4

Sub-Section Number:

**Sub-Section Id:** 864351647

**Question Shuffling Allowed:** Yes

Question Number: 76 Question Id: 86435112490 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

A Patentable invention as per Indian Patents Act, 1970, is novel, non-obvious, useful and has industrial applicability

1. True

2. False

## **Options:**

86435141469. 1 86435141470. 2

Sub-Section Number: 3

**Sub-Section Id:** 864351648

**Question Shuffling Allowed:** Yes

Question Number: 77 Question Id: 86435112491 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

#### Match List I with List II

List I	List II
A. The invention is new or novel	I. Patentable invention
B. The invention is related to atomic energy	II. Non-patentable invention
C. Software and algorithms	III. Non-patentable invention
D. Creation of Cinematograph films	IV. Copyright protection

Choose the correct answer from the options given below:

# **Options:**

86435141472. 2

86435141473.3

86435141474.4

Question Number: 78 Question Id: 86435112492 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Systematic literature review uses

 Explicit and rigorous criteria to identify, critically evaluate and synthesize all the literature on a particular topic

- The non-statistical technique to integrate, evaluate and interpret the findings of multiple qualitative research studies
- 3. Summarises results of a number of studies
- 4. None of the above

### **Options:**

86435141475. 1

86435141476. 2

86435141477.3

86435141478. 4

 $Question\ Number: 79\ Question\ Id: 86435112493\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$ 

Correct Marks: 1 Wrong Marks: 0

Which one of the following statements is inappropriate regarding Brainstorming techniques in a Capstone project selection?

- 1. Solicit quality ideas
- 2. Encourage every team member to participate
- 3. Encourage freewheeling and expression of different ideas
- 4. Discourage out of the box ideas

### **Options:**

86435141479.1

86435141480. 2

86435141481. 3

86435141482. 4

Question Number: 80 Question Id: 86435112494 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

The external factors in a Capstone project SWOT analysis are

- 1. Opportunities and Threat
- 2. Strengths and Weaknesses
- 3. Weakness and Threats
- 4. Strengths and Opportunities

### **Options:**

86435141483.1

86435141484. 2

86435141485.3

86435141486. 4

Question Number: 81 Question Id: 86435112495 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

In a SWOT analysis during selection of a Capstone project, the question "Does intellectual property that others control have a negative impact on the viability of the project idea?" refers to

- 1. Internal Strength
- 2. Internal Weakness
- 3. External Opportunities
- 4. External Threats

### **Options:**

86435141487. 1 86435141488. 2 86435141489. 3 86435141490. 4

Question Number: 82 Question Id: 86435112496 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

An opportunity in a Capstone project selection could be

- 1. What knowledge, skills and attitudes do team members have that can make this project succeed?
- 2. Does intellectual property that others control have a negative impact on the viability of the idea?
- 3. What emerging market trends can the team take advantage of?
- 4. Do industry policies affect the product or service?

### **Options:**

86435141491.1

86435141492. 2

86435141493.3

86435141494.4

Question Number: 83 Question Id: 86435112497 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

# A threat in Capstone project selection could be

- 1. What knowledge, skills and attitudes do team members have that can make this project succeed?
- 2. Does intellectual property that others control have a negative impact on the viability of the idea?
- 3. What emerging market trends can the team take advantage of ?
- 4. Do industry policies affect the product or service?

### **Options:**

86435141495. 1

86435141496. 2

86435141497. 3

86435141498.4

Question Number: 84 Question Id: 86435112498 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The Capstone project team uses the literature review because

A. It makes a valuable contribution to almost every operational step

B. It makes the project team up-to-date with current literature on the topic to set a project goal

C. It helps the project team identify strengths and weaknesses and to access the gap in the literature

D. All of the above

Choose the *correct* answer from the options given below:

- 1. A, B and D only
- 2. A and B only
- 3. A, B and C only
- 4. D only

# **Options:**

86435141499. 1

86435141500.2

86435141501.3

86435141502.4

Question Number: 85 Question Id: 86435112499 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## A Capstone project aims at

- 1. Original research work
- 2. A specific problem, issue or concern in the field of study
- 3. A simple innovative idea that can be implemented
- 4. Both 2 and 3

### **Options:**

86435141503.1

86435141504. 2

86435141505.3

86435141506.4

Question Number: 86 Question Id: 86435112500 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The distinctive feature of a narrative literature review is

- It comprehensively summarises the body of the literature and draws conclusions about the topic under study
- 2. It contains relevant studies and knowledge that address the topic under study
- 3. Both 1 and 2
- 4. None of the above

## **Options:**

86435141507.1

86435141508. 2

86435141509.3

86435141510.4

Question Number: 87 Question Id: 86435112501 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Distinctive feature of Meta-Analysis in literature review is

- 1. It appears in the form of a systematic literature review
- 2. It uses statistical methods
- 3. Both 1 and 2
- 4. None of the above

### **Options:**

86435141511. 1

86435141512. 2

86435141513.3

86435141514.4

Sub-Section Number:

**Sub-Section Id:** 864351649

Question Shuffling Allowed: Yes

Question Number: 88 Question Id: 86435112502 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

A company logo that has the same shape as its competitor but with a different colour is an example of Industrial design

- 1. True
- 2. False

# **Options:**

86435141515. 1 86435141516. 2

Sub-Section Number: 5

**Sub-Section Id:** 864351650

Question Shuffling Allowed: Yes

Question Number: 89 Question Id: 86435112503 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Which one of the following would NOT be regarded as "Intellectual Property" as per IPR Laws in India?

- 1. Original literary work
- 2. Industrial Design of Maruti car
- 3. Trademark of Tata Company
- 4. Embryonic stem cell

### **Options:**

86435141517. 1

86435141518. 2

86435141519.3

86435141520.4

Question Number: 90 Question Id: 86435112504 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

The Geographical Indication sign

- 1. Enables the holder to prevent someone from making a product using the same techniques as those set out in the standards for that indication.
- 2. Is a sign that identifies a product as originating in a given place.
- 3. Indicates the qualities, characteristics, speciality and reputation of the goods and products are due to the place of origin.
- 4. Both 2 and 3

## **Options:**

86435141521.1

86435141522. 2

86435141523. 3

Question Number: 91 Question Id: 86435112505 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

The copycat is a project idea that is a

1. Refinement on or improvement over the first-out-of-gate product of its competitors

- 2. Preparing a competitor's strawberry shortcake without stealing its recipe
- 3. Preparing a product, process or service by exactly copying from competitor's patent right
- 4. Both 1 and 2

#### **Options:**

86435141525. 1

86435141526. 2

86435141527.3

86435141528.4

Question Number: 92 Question Id: 86435112506 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

Capstone project idea based on two or more existing ideas to make a new one is called

- 1. Breakthrough
- 2. Leapfrog
- 3. Combined ideas
- 4. Copycat

### **Options:**

86435141529. 1

86435141530. 2

86435141531.3

86435141532.4

Question Number: 93 Question Id: 86435112507 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Primary literature review sources do NOT include

- 1. A report by the original researchers of studying in unfiltered forms
- 2. Letters/ correspondence etc of the original researcher
- 3. Description or summary by someone other than original researchers
- 4. None of the above

### **Options:**

86435141533.1

86435141534. 2

86435141535. 3

86435141536.4

Question Number: 94 Question Id: 86435112508 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The components of grading rubrics are

- 1. Descriptors, performance criteria and scales
- 2. Levels of performance, scales and criteria
- 3. Learning outcomes, criteria and scales
- 4. Descriptors, Levels of performance and scales

### **Options:**

86435141537. 1

86435141538. 2

86435141539.3

86435141540.4

Question Number: 95 Question Id: 86435112509 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The focus of assessment of team performance is to enable the team members to

- 1. Exchange ideas
- 2. Help in correcting behaviors
- 3. Share thoughts
- 4. Enhance learning

#### **Options:**

86435141541.1

86435141542. 2

86435141543. 3

86435141544. 4

Question Number: 96 Question Id: 86435112510 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

The main purpose of incorporating self-assessment in evaluation of the Capstone project team is that

- 1. It allows Capstone team members to assess each others' strengths and weaknesses
- 2. It reduces performance barriers for improving future learning
- 3. It enables the individuals to identify the areas where they can improve their contributions to the team
- 4. It enables the team to decide criteria needed for team performance

### **Options:**

86435141545.1

86435141546. 2

86435141547. 3

86435141548. 4

Question Number: 97 Question Id: 86435112511 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The students are mostly assessed through peer-assessment in

- 1. Phase 1 and Phase 2
- 2. Only Phase 1
- 3. Phase 3 and Phase 5
- 4. Only Phase 4

### **Options:**

86435141549.1

86435141550. 2

86435141551.3

86435141552. 4

Question Number: 98 Question Id: 86435112512 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

The assessment tool/tools used by the teachers for Capstone project assessment during phase 4 is/are

- 1. Portfolio and Rubrics
- 2. Only Rubrics
- 3. Checklist and Observation sheets
- 4. Only Portfolio

## **Options:**

86435141553. 1

86435141554. 2

86435141555.3

86435141556.4

Question Number: 99 Question Id: 86435112513 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## **Options:**

86435141557. 1

86435141558. 2

86435141559. 3

86435141560.4

Question Number: 100 Question Id: 86435112514 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

## **Options:**

86435141561. 1

86435141562. 2

86435141563.3