

1. In CVP analysis, which of the following assumption is typically made?
 - (A) The firm can change its product mix at will
 - (B) Variable costs per unit change as productions increases
 - (C) The company sells only one product
 - (D) Fixed cost are proportional to output
 - (E) Answer not known

2. If a firm has high fixed costs and low variable costs, it is considered to have a
 - (A) High operating leverage
 - (B) Low operating leverage
 - (C) High break-even point
 - (D) Low break-even point
 - (E) Answer not known

3. Which of the following is NOT considered a component of explicit costs?
 - (A) Wage paid to employees
 - (B) Interest on loans
 - (C) Foregone wages of the owner
 - (D) Rent for office space
 - (E) Answer not known

4. Which of the following is the definition of economic profit?
 - (A) Total revenue minus total explicit costs
 - (B) Total revenue minus total implicit costs
 - (C) Total revenue minus total costs
 - (D) Total revenue minus total fixed costs
 - (E) Answer not known

5. If the Marginal Propensity to Consume (MPC) is 0.75 then the fiscal multiplier will be
- (A) 0.75 (B) 4
(C) 3 (D) 5
(E) Answer not known
6. Overall costs are generally lower where output is stable and constant over a period of time
- (A) output stability (B) level of output
(C) price of input factors (D) size of plant
(E) Answer not known
7. Which of the following pricing strategies is most suitable when a company is aiming to capture a large market share quickly by setting prices lower than competitors?
- (A) Price skimming (B) Penetration pricing
(C) Psychological pricing (D) Price discrimination
(E) Answer not known
8. Each seller knows his competitors individually in each market
- (A) Duopoly (B) Oligopoly
(C) Monopoly (D) Perfect competition
(E) Answer not known

9. The cost which can conveniently be identified with a particular job, process or production
- (A) Prime cost (B) Overhead cost
(C) Indirect cost (D) Absorption cost
(E) Answer not known
10. Arrange the following stages of production in chronological order.
- (1) Increases at a diminishing rate till it reaches maximum.
(2) Starts declining
(3) Increases at a increasing rate and later at decreasing rate
- (A) (1), (3), (2)
(B) (3), (1), (2)
(C) (2), (3), (1)
(D) (3), (2), (1)
(E) Answer not known
11. In Economics, we use the term scarcity to mean
- (A) Absolute scarcity and lack of resource inter developed countries
(B) Relative scarcity in scarcity in relation to wants of the society
(C) Scarcity during times of business failure and natural calamities
(D) Scarcity caused on account of excessive consumption by the rich
(E) Answer not known

12. In game theory, a Nash equilibrium occurs when
- (A) All players in the game cooperate to maximize their combined profits
 - (B) Each player makes the best decision given the decisions of the other players
 - (C) One player dominates the others in the game
 - (D) The market is in perfect competition
 - (E) Answer not known
13. A government imposed price ceiling on a good generally leads to
- (A) A shortage of the good
 - (B) A surplus of the good
 - (C) Increased production of the good
 - (D) A market equilibrium
 - (E) Answer not known
14. If the demand for a product is significantly affected by income levels, what kind of relationship does demand estimation involve?
- (A) Causal relationship
 - (B) Temporal relationship
 - (C) Correlation relationship
 - (D) Linear relationship
 - (E) Answer not known

15. A company uses a model to combine various factors such as consumer income, prices of substitutes and marketing expenditures to determine demand. This is an example of
- (A) Econometric modelling (B) Time series analysis
 (C) Judgemental forecasting (D) Delphi method
 (E) Answer not known
16. Match the forecast error metrics with their formula :
- | Forecast Error Metric | Formula |
|-------------------------------|--|
| (a) Mean Absolute Error (MAE) | 1. Square of forecast errors averaged |
| (b) Mean Squared Error (MSE) | 2. Cumulative forecast errors divided by the average forecast errors |
| (c) Bias | 3. Average of absolute forecast error |
| (d) Tracking Signal | 4. The sum of forecast errors |
- (a) (b) (c) (d)
- (A) 2 1 3 4
 (B) 3 4 2 1
 (C) 3 1 4 2
 (D) 1 2 3 4
 (E) Answer not known
17. What is the main focus of corporate strategy?
- (A) Marketing and sales tactics
 (B) How to compete in a specific market
 (C) The overall scope and direction of the company
 (D) Daily operational efficiency
 (E) Answer not known

18. In the context of business strategy, what does SWOT stand for?
- (A) Strengths, Weaknesses, Opportunities, Threats
 - (B) Strength, Weaknesses, Objectives, Trends
 - (C) Strategies, Weaknesses, Opportunities, Techniques
 - (D) Systems, Wealth, Objectives, Tactics
 - (E) Answer not known
19. In a Competitive Market, what is the primary factor that influences a firm's pricing strategy?
- (A) Market demand
 - (B) Fixed costs
 - (C) Labor costs
 - (D) Government regulations
 - (E) Answer not known
20. The unemployment rate is calculated as
- (A) The number of unemployed individuals divided by the total labor force
 - (B) The number of unemployed individuals divided by the total population
 - (C) The total number of jobs created in a year
 - (D) The total number of individuals seeking jobs
 - (E) Answer not known

21. What is the primary goal of surveillance in facility security?
- (A) To monitor employee productivity
 - (B) To ensure compliance with company policies
 - (C) To detect and prevent unauthorised access or activities
 - (D) To collect data for marketing purposes
 - (E) Answer not known
22. The financial management of facility management includes
- (A) Managing marketing budgets for the company
 - (B) Overseeing the costs associated with the building and operational services
 - (C) Selling assets for immediate cash flow
 - (D) Conducting annual shareholder meeting's
 - (E) Answer not known
23. Facility management supports business functions by
- (A) Providing a safe and functional work environment
 - (B) Running sales campaigns
 - (C) Designing products
 - (D) Creating customer services policies
 - (E) Answer not known
24. When is it most appropriate to start space forecasting for a growing?
- (A) When the company is reducing its workforce
 - (B) When space utilization exceeds 80%
 - (C) When the company has reached its maximum space capacity
 - (D) Before any expansion occurs, based on projected growth
 - (E) Answer not known

25. What is a critical outcome of effective space planning and forecasting in facility management?
- (A) Decreased space utilization
 - (B) maximized use of available space while minimizing costs
 - (C) Increased construction of new office spaces
 - (D) High employee dissatisfaction
 - (E) Answer not known
26. Which of the following best defines autonomous maintenance?
- (A) maintenance performed by external contactors
 - (B) operations are trained to perform routine maintenance and small repairs on machines
 - (C) only Engineers perform maintenance
 - (D) maintenance is not required until a break down occurs
 - (E) Answer not known
27. What is the first step in the TPM implementation process?
- (A) Identify equipment failures
 - (B) Develop a maintenances strategy
 - (C) Train operators to perform maintenance
 - (D) Implement a new maintenance development
 - (E) Answer not known

28. Which of the following is a major objective of material handling?
- (A) Speed at the transportation of finished goods
 - (B) Minimize the handling cost of materials
 - (C) Increase the number of suppliers
 - (D) Reduce customer service
 - (E) Answer not known
29. What is the 'Kanban' system used for in materials management?
- (A) To ensure smooth flow of materials in production through visual signals
 - (B) To track customer orders
 - (C) To increase the number of suppliers
 - (D) To automate production process
 - (E) Answer not known
30. The Just-in-Time (JIT) purchasing method emphasizes
- (A) Operating materials in large quantities
 - (B) Maintaining high inventory levels
 - (C) Receiving materials only when they are needed in the production process
 - (D) Purchasing raw material from a variety of suppliers
 - (E) Answer not known

31. Which the following is a common indicator of productivity?
- (A) Employee turnover rate
 - (B) Market expenses
 - (C) Output per labour hour
 - (D) Number of product designs
 - (E) Answer not known
32. What is the impact of lead time variability on supply chain performance?
- (A) It can decrease inventory costs
 - (B) It can lead to stockouts and excess inventory
 - (C) It has no effect on performance
 - (D) It improves customer satisfaction
 - (E) Answer not known
33. In Operations Management, what does 'Capacity Planning' refer to?
- (A) Assessing financial performance
 - (B) Scheduling employee shifts
 - (C) Determining the production capacity needed
 - (D) Forecasting sales trends
 - (E) Answer not known
34. What is a significant trend in modern operations management?
- (A) Globalization of supply chains
 - (B) Decreased focus on quality
 - (C) Increased lead times
 - (D) Isolation of production teams
 - (E) Answer not known

35. What is the primary purpose of warehousing in the supply chain?
- (A) To increase production speed
 - (B) To eliminate transportation costs
 - (C) To store products until needed
 - (D) To enhance marketing efforts
 - (E) Answer not known
36. Assertion [A] : ISO 9000 series certifications applies only to manufacturing companies.
- Reason [R] : ISO 9000 series is a standard for quality management that is applicable to all industries.
- (A) Both [A] and [R] are true and [R] is the correct explanation of [A]
 - (B) Both [A] and [R] are true; but [R] is not the correct explanation of [A]
 - (C) [A] is true but [R] is false
 - (D) [A] is false but [R] is true
 - (E) Answer not known
37. Which of the following is NOT a benefit of ISO 9000 certification?
- (A) Improved product quality
 - (B) Enhanced customer satisfaction
 - (C) Guaranteed lower production costs
 - (D) Improved company reputation
 - (E) Answer not known

38. Which of the following is not a part of Deming's Philosophy?
- (a) Constancy of purpose
 - (b) Drive fear
 - (c) Management by objectives
 - (d) Abolish quotas
 - (A) (a), (b), (c), (d)
 - (B) (a), (b), (c) only
 - (C) (a), (b), (d) only
 - (D) (a), (c), (d) only
 - (E) Answer not known
39. Which of the following is NOT a key element of the Malcolm Baldrige National Quality Award criteria?
- (A) Leadership
 - (B) Strategic planning
 - (C) Cost reduction
 - (D) Results
 - (E) Answer not known
40. "Quality is defined by the customer" is
- (a) An unrealistic definition of quality
 - (b) A user-based definition of quality
 - (c) A manufacturing-based definition of quality
 - (d) A product based definition of quality
 - (A) (a) and (b) only
 - (B) (a) and (c) only
 - (C) (b) only
 - (D) (d) only
 - (E) Answer not known

41. The hardness of an abrasive is measured roughly by
- (i) Moh's scale
 - (ii) Vicker's scale
 - (iii) Omh's scale
 - (iv) EDTA scale
 - (A) (i) and (ii) only
 - (B) (iii) and (iv) only
 - (C) (i) and (iii) only
 - (D) (i) and (iv) only
 - (E) Answer not known
42. Which of the following statement is true about neutral refractories?
- (i) They are made from weakly acid/basic material
 - (ii) They are made from strongly acid/basic material
 - (iii) Important members of this group are zirconia and chromate
 - (iv) Important members of this group are alumina and silica
 - (A) (i) and (ii) are correct
 - (B) (i) and (iii) are correct
 - (C) (ii) and (iv) are correct
 - (D) (iii) and (iv) are correct
 - (E) Answer not known

43. Which of the following wrong about cement?

- (i) The cement have property of setting and hardening under water.
- (ii) The properties of setting and hardening under the water called as hydraulic covalent
- (iii) Setting means gel formation after hardening
- (iv) Hardening means development of strength before setting
- (A) (i) only
- (B) (i) and (ii) only
- (C) (iii) and (iv) only
- (D) (iv) only
- (E) Answer not known

44. Match correctly the various lime with their composition.

- | | |
|--------------------|--------------------------|
| (a) Fat lime | 1. 70–80% CaO+5% MgO |
| (b) Lean lime | 2. 95–98% CaO |
| (c) Hydraulic lime | 3. 70–80% CaO + 30% clay |
| (d) Slaked lime | 4. Ca(OH) ₂ |

- | | (a) | (b) | (c) | (d) |
|-----|------------------|-----|-----|-----|
| (A) | 1 | 2 | 3 | 4 |
| (B) | 2 | 1 | 3 | 4 |
| (C) | 2 | 1 | 4 | 3 |
| (D) | 3 | 4 | 1 | 2 |
| (E) | Answer not known | | | |

45. Which of the following statement are true about Galvanic series?
- (i) It predicts the relative corrosion tendency
 - (ii) This series comprises of metal and alloys
 - (iii) It predicts the relative displacement tendency
 - (iv) This series comprises of metals and non-metal
- (A) (i) and (ii) only
(B) (i) only
(C) (iii) and (iv) only
(D) (i) and (iii) only
(E) Answer not known
46. The mechanical dispersion mixture of one or more pigments in vehicle is termed as
- (A) Varnish (B) Abrasive
(C) Paints (D) Lime
(E) Answer not known

47. Choose the wrong statement about internal treatment of water.
- (i) This involves adding of certain chemical directly to the water for remove the scale forming salts.
 - (ii) Method to adopted for internal treatment is ion exchange process.
 - (iii) The adding chemical converting these salt into soluble complexes.
 - (iv) This method is also called as sequestration.
- (A) (i) and (ii) only
(B) (ii) only
(C) (iii) and (iv) only
(D) (i), (ii) and (iv) only
(E) Answer not known
48. Break point chlorination involves in addition of sufficient amount of chlorine to oxidise
- (1) reducing substance
 - (2) organic matter
 - (3) inorganic matter
 - (4) oxidising substance
- (A) (1) only
(B) (3) and (4) only
(C) (1) and (2) only
(D) (2) and (4) only
(E) Answer not known

49. Which of the following wrong about plastic?
- (i) Lightness in weight
 - (ii) Good thermal and electrical insulation
 - (iii) High thermal expansion coefficient
 - (iv) Tough moulding
- (A) (i) and (ii) only
(B) (iii) and (iv) only
(C) (i) and (iii) only
(D) (ii) and (iv) only
(E) Answer not known
50. Which of the following is the natural polymers?
- (A) Polyvinyl chloride (B) Polypropylene
(C) Cellulose (D) Bakelite
(E) Answer not known
51. When Ultrasonic wave passing through liquid which induces
- (A) Only compression of the liquid
(B) Only rare faction of the liquid
(C) Both the compression and rare faction of the liquid
(D) Does not create any changes of the liquid
(E) Answer not known

52. An Ultrasonic source generating waves of frequency 800 kHz is used to find the depth of the sea. The velocity v of sound in sea water is 1440 m/s and the time ' t ' taken by the sound to reach the source after reflection from the sea bed is 0.95 sec. Calculate the depth of the sea
- (A) 684 m
 - (B) 684 km
 - (C) 652 m
 - (D) 652 km
 - (E) Answer not known
53. In a movie theatre has a total volume of 8000m³. The acoustics of the theater needs to be designed to give a reverberation time of 2 sec. Calculate the magnitude of total absorption with in the theatre.
- (A) 650 sabine
 - (B) 600 sabine
 - (C) 560 sabine
 - (D) 660 sabine
 - (E) Answer not known
54. What mass should be hung on a spiral spring, having a stiffness constant of 89.2 N/m. So that it vibrates with a periodic time of one second?
- (A) 2.50 kg
 - (B) 2.26 kg
 - (C) 3.26 kg
 - (D) 3.50 kg
 - (E) Answer not known

55. The Schrodinger's equation in terms of the Hamiltonian operator ' $H\psi$ ' is

(A) $\left(\frac{\hbar^2}{4m}\nabla^2 + v\right)\psi$

(B) $\left(\frac{h^2}{2m}\nabla^2 + v\right)\psi$

(C) $\left(\frac{\hbar^2}{2m}\nabla^2 + v\right)\psi$

(D) $\left(-\frac{\hbar^2}{2m}\nabla^2 + v\right)\psi$

(E) Answer not known

56. If we measure the position of a bacterium to an accuracy of 10^{-5} meter and its mass is 10^{-12} kg, then the minimum uncertainty in its velocity will be

(A) 10^{-5} m/s

(B) 10^{-7} m/s

(C) 10^{-17} m/s

(D) $1 \text{ } \overset{\circ}{A}$

(E) Answer not known

57. The energy required to remove an electron from sodium is 2.3 eV. Does sodium show photo-electron effect for orange light with wave length 680 nm
- (A) $5397 \text{ \AA}$
 - (B) $5490 \text{ \AA}$
 - (C) $5320 \text{ \AA}$
 - (D) $5297 \text{ \AA}$
 - (E) Answer not known
58. Hooke's law is obeyed by metals upto
- (A) Breaking point
 - (B) Elastic limit
 - (C) Plastic limit
 - (D) Yielding point
 - (E) Answer not known
59. A man lifts a 2.0 kg stone vertically with his hand at a constant upward velocity of 1.5 m/s. What is the magnitude of the total force of the man's hand on the stone?
- (A) 23 kN
 - (B) 25 N
 - (C) 23 N
 - (D) 25 kN
 - (E) Answer not known

60. A piston moves from rest to speed of 5 m/s in 0.04 second. What is its average velocity?
- (A) 2.5×10^3 m/s
 - (B) 2.0 m/s
 - (C) 2.5 m/s
 - (D) 3.5×10^3 m/s
 - (E) Answer not known
61. Identify the type of flood severity from the characteristics and impacts listed below
- (i) Large scale inundation – 1–2 times per year
 - (ii) Widespread disruption and damage affecting community and business
 - (iii) Cause erosion and instability of soils
 - (iv) Urban infrastructure gets affected
- (A) Minor
 - (B) Moderate
 - (C) Major
 - (D) Extreme
 - (E) Answer not known

62. Which of the following softwares are being used/identified as a GIS softwares/packages
- (1) ArcGIS, AutoCAD, MapInfo, Erdas
 - (2) GeoMedia, MapInfo, AutoCAD, Erdas
 - (3) ArcGIS, MapInfo, GeoMedia, Erdas
 - (4) AutoCAD, GeoMedia, ArcGIS, Erdas
- (A) (3) (B) (2)
(C) (1) (D) (4)
(E) Answer not known
63. Identify the false statement from the following
- (1) Equipment rooms for Air Handling units shall be located as centrally as possible.
 - (2) Exhaust air from any dwelling unit shall be circulated directly or indirectly to any other dwelling unit
 - (3) Supply/return air duct serving other areas shall not be taken through fire exist
 - (4) Structural design should avoid beam obstruction to the passage of supply and return air duct
- (A) (1)
(B) (2)
(C) (3)
(D) (4)
(E) Answer not known

64. _____ is an area where persons unable to use stairways can remain temporarily to await instruction or assistance during emergency evacuation.
- (A) Mezzanine floor
 - (B) Stair case
 - (C) Refuge area
 - (D) Protected shaft
 - (E) Answer not known
65. Which one of the following causes 'Class D' fires?
- (A) Oil
 - (B) Gasoline
 - (C) Combustible metals
 - (D) Wood
 - (E) Answer not known
66. As per the National Building Code of India (NBC) 2016, the maximum size of fire compartment in basements with sprinkless and other than car parking is
- (A) 3000 m²
 - (B) 2000 m²
 - (C) 1000 m²
 - (D) 500 m²
 - (E) Answer not known

67. In 3D surface overlap, a function joins two surfaces using a tangential transition in the space between and maintain the initial surfaces in their original form. Identify the function
- (A) Filletting
 - (B) Chamfering
 - (C) Blending
 - (D) Tapering
 - (E) Answer not known
68. The determining quality criterion of a pixel-based graphic is
- (A) Resolution
 - (B) Scale factor
 - (C) Screening factor
 - (D) Optimizing factor
 - (E) Answer not known
69. Identify the projection system in which the projectors or sightlines radiate from a central point that represents a single eye of the observer
- (A) Orthographic projections
 - (B) Isometric projections
 - (C) Axonometric projections
 - (D) Perspective projections
 - (E) Answer not known

70. Identify the coordinate system which is used in most of the CADD programs consisting of perpendicular axes (x,y,z) that meets in a common origin and create three dimensional space
- (A) Cartesian co-ordinate system
 - (B) Polar co-ordinate system
 - (C) Absolute co-ordinate system
 - (D) Relative co-ordinate system
 - (E) Answer not known
71. In a barrier free environment, the minimum illumination level at the finished floor level along the centre line of the passage way in the ground floor entrance lobby and lift is
- (A) 100 Lux
 - (B) 110 Lux
 - (C) 120 Lux
 - (D) 145 Lux
 - (E) Answer not known
72. The international symbol of accessibility for the common loading/unloading area in the parking space is marked with
- (A) Blue hatched markings
 - (B) Yellow hatched markings
 - (C) Red hatched markings
 - (D) White hatched markings
 - (E) Answer not known

73. The first meteorological satellites TIROS-1 was launched in April 1960, by which country
- (A) Russia (B) USA
(C) UK (D) France
(E) Answer not known
74. The angle of inclination of an escalator in a barrier free environment should not exceed
- (A) 20°
(B) 30°
(C) 40°
(D) 45°
(E) Answer not known
75. The clear width of an access route of a building shall be not less than
- (A) 1000 mm
(B) 1100 mm
(C) 1200 mm
(D) 1300 mm
(E) Answer not known
76. Which of the following colour scheme offers most visual contrast in a painting?
- (A) Complementary colour scheme
(B) Analogous colour scheme
(C) Split-complementary colour scheme
(D) Tetradic colour scheme
(E) Answer not known

77. A line, plane or volume that, by its continuity and regularity, serves to gather, measure and organize a pattern of elements
- (A) Symmetry
 - (B) Axis
 - (C) Datum
 - (D) Hierarchy
 - (E) Answer not known
78. A unifying movement characterized by a patterned repetition of formal elements or motifs at regular or irregular intervals.
- (A) Hierarchy
 - (B) Rhythm
 - (C) Datum
 - (D) Axis
 - (E) Answer not known
79. An applied science that has developed from a concern with human factors that coordinates the design of devices, systems and environment with our physiological and psychological capacities and requirements.
- (A) Anthropometry
 - (B) Geometry
 - (C) Economics
 - (D) Ergonomics
 - (E) Answer not known

80. A solid form generated by the revolution of a rectangle about one of its sides.
- (A) Sphere
 - (B) Cylinder
 - (C) Cone
 - (D) Cube
 - (E) Answer not known
81. As per CPHEEO manual _____ of water supply may be expected to reach the sewer's.
- (A) 90 %
 - (B) 80 %
 - (C) 70 %
 - (D) 100 %
 - (E) Answer not known
82. Identify the proper ECS equivalent car space values for the following :
- (1) Car – 1.0, 2 wheeler – 0.3, Autorickshaw – 0.5, Bicycle – 0.10
 - (2) Car – 1.0, 2 wheeler – 0.5, Autorickshaw – 0.75, Bicycle – 0.15
 - (3) Car – 2.0, 2 wheeler – 0.4, Autorickshaw – 0.5, Bicycle – 0.2
 - (4) Car – 1.0, 2 wheeler – 0.25, Autorickshaw – 0.5, Bicycle – 0.10
- (A) (3)
 - (B) (4)
 - (C) (2)
 - (D) (1)
 - (E) Answer not known

83. Assertion [A] : The amount of water consumption is directly dependent upon the economic status of the consumer.

Reason [R] : Upper class and rich communities generally consume more water, middle class consume average amounts, poor slums dwellers consume very less amount

- (A) [A] is true but [R] is false
- (B) [A] and [R] are true
- (C) [A] is false but [R] is true
- (D) Both [A] and [R] are false
- (E) Answer not known

84. The mixture of water and waste products are called as

- (A) Solid waste
- (B) Sewage
- (C) Storm water
- (D) Treated water
- (E) Answer not known

85. Which of the following statement is true about express way?

- (1) It is allowed for fast movement of urban traffic
- (2) It allows more traffic speedily and safely
- (3) It includes sharp gradients
- (4) It have reverse and complex curves
- (A) (1) only correct
- (B) (1) and (2) are correct
- (C) (2) and (3) are correct
- (D) (3) and (4) are correct
- (E) Answer not known

86. Traffic survey are important because

- (1) It enable a town planner to prepare town planning schemes
- (2) The details collected in traffic surveys are used to decide the location of traffic signals
- (3) The movement of vehicles are allowed in the conflicting direction
- (4) To allow haphazard parking of vehicle
- (A) (1) and (2) are correct
- (B) (2) and (3) are correct
- (C) (3) and (4) are correct
- (D) (4) and (1) are correct
- (E) Answer not known

87. Which of the following are correct?

- (1) The efficiency of traffic handling is decreased to due to traffic island
- (2) They serve as guide to the drives
- (3) The traffic island serve as stopping space/refuge for pedestrian
- (4) The vehicles are allowed to more in any direction
- (A) (1) and (2) are correct
- (B) (2) and (3) are correct
- (C) (1) and (3) are correct
- (D) (2) and (4) are correct
- (E) Answer not known

88. Which of following statement is correct the main objective of traffic management?

- (1) To achieve smooth and easy flow of traffic at intersection
- (2) To improve the speed of vehicles
- (3) To decrease the traffic carrying capacity of road
- (4) To increase delays in road journey
- (A) (1) and (2) are correct
- (B) (2) and (3) are correct
- (C) (3) and (4) are correct
- (D) (1) and (4) are correct
- (E) Answer not known

89. Identify the principle's of Transit Oriented Development (TOD) as per National Transit Oriented Development (TOD) policy from the following
- (i) Multi modal integration
 - (ii) Last Mile connectivity
 - (iii) Mixed land use
 - (iv) NMT network
 - (v) Traffic calming
- (A) (i), (ii), (iii) and (iv)
(B) (ii), (iii) and (iv)
(C) (i), (ii), (iii), (iv) and (v)
(D) (iii), (iv) and (v)
(E) Answer not known
90. Which of following is true?
- (1) The investment in housing results in over all increase in productivity of economy
 - (2) It decrease the mobility of manpower
 - (3) It promote social development
- (A) (1) is correct
(B) (2) is correct
(C) (1) and (2) are correct
(D) (1) and (3) are correct
(E) Answer not known

91. _____ represents spatial information as a grid of pixels
- (A) Satellite data
 - (B) Vector data
 - (C) Raster data
 - (D) GPS data
 - (E) Answer not known
92. Which of the following statement is correct?
- (1) Plancks law – The spectral existence of a black body
 - (2) Stephen Boltzmann law – The dominant wave length is related to its temperature
 - (3) Wein's Displacement law – All matter at a temperature above absolute emit EMR continuously
- (A) (1) is correct
 - (B) (1) and (2) is correct
 - (C) (2) and (3) is correct
 - (D) (1) and (3) is correct
 - (E) Answer not known

93. Identify the Indian satellites from the following
- (1) LAND SAT1, LAND SAT 2, LAND SAT 3
 - (2) SPOT 2, SPOT 3, SPOT 4
 - (3) OCEAN SAT 1, RESOURCE SAT 1, CARTO SAT 1
 - (4) ERTS, I KONOS, QUICK BIRD
- (A) (2)
(B) (3)
(C) (1)
(D) (4)
(E) Answer not known
94. Identify the three basic geometries of vector data model from the following
- (i) Points
 - (ii) Polylines
 - (iii) Polygons
 - (iv) Polyhedron
- (A) (i), (ii) and (iii)
(B) (ii), (iii) and (iv)
(C) (i), (iii) and (iv)
(D) (i), (ii) and (iv)
(E) Answer not known

95. Assertion [A] : Constraint maps are useful to identify and eliminate the unsuitable areas in a study/analysis
- Reason [R] : Constraint maps are assigned with the value 'i' for suitable area and 'o' for unsuitable.
- (A) [A] is true and [R] is false
- (B) Both [A] and [R] is true and [R] is explanation of [A]
- (C) [A] is false and [R] is true
- (D) Both [A] and [R] is false
- (E) Answer not known
96. Identify the false statement with respect to regional planning
- (A) Include the proposal for the distribution of population and industry
- (B) Helps in controlling and reshaping the growth of towns in the region
- (C) A town or city can be isolated from its surrounding region
- (D) Ensures most profitable utilization of resources at minimum expenses
- (E) Answer not known
97. The planning of Chandigarh is the great contribution of
- (A) Patrick Geddes
- (B) Ebenezer Howard
- (C) Doriadis
- (D) Le Corbusier
- (E) Answer not known

98. Which of the following data are wrong to be collect for master plan?
- (1) Details of industrial
 - (2) Caste details
 - (3) Facilities of transport
 - (4) Unemployment detail
 - (A) (1) and (2) are correct
 - (B) (2) and (4) are correct
 - (C) (3) and (4) are correct
 - (D) (1) and (3) are correct
 - (E) Answer not known
99. Arrange the various stages of preparation of a development plan in an order
- (1) Consideration of views received from experts and the public
 - (2) Collection of data and relevant information
 - (3) Preparation of the revised development plan
 - (4) Preparation of a tentative draft of the development plan
 - (A) (4), (2), (3), (1)
 - (B) (1), (2), (3), (4)
 - (C) (2), (4), (1), (3)
 - (D) (3), (2), (1), (4)
 - (E) Answer not known

100. Which of the following are object of beauty in town planning scheme?
- (1) Natural greenery
 - (2) Industrial waste
 - (3) Cinema houses
 - (4) Ancient architectural buildings
- (A) (1) only
(B) (1) and (2) only
(C) (1) and (3) only
(D) (1) and (4) only
(E) Answer not known
101. The primary objective of working capital management is to
- (A) Minimize taxation
 - (B) Invest in long term assets
 - (C) Maximum sales revenue
 - (D) Ensure smooth production and sales operation
 - (E) Answer not known
102. Which of the following components is NOT a part of the operating scale?
- (A) Fixed assets depreciation period
 - (B) Raw material conversion period
 - (C) Work in progress period
 - (D) Debtor (receivable) conversion period
 - (E) Answer not known

103. State which of the following will affect the flow of fund?
- (A) A transaction affecting current and non-current accounts
 - (B) A transaction affecting both non-current accounts
 - (C) A transaction affecting both current account
 - (D) Both (B) and (C)
 - (E) Answer not known
104. Cash from operators is equal to
- (A) Net profit after tax
 - (B) Net profit plus increase in current assets
 - (C) Net profit plus decrease in current liabilities
 - (D) Net profit plus non-cash expenses plus decrease in current assets
 - (E) Answer not known
105. What is the main difference between Cash flow and Fund flow?
- (A) Cash flow shows the company's operating performance, Fund flow indicates overall financial position
 - (B) Cash flow includes only operating activities, Fund flow includes investing and financing activities
 - (C) Cash flow is calculated based on accrual accounting, Fund flow is based on cash basis
 - (D) There is no difference
 - (E) Answer not known

106. What does the times interest earned ratio measure?
- (A) The ability of a project to generate profits
 - (B) The project's capacity to meet interest payments with earnings
 - (C) The liquidity of a project's assets
 - (D) The leverage of a project
 - (E) Answer not known
107. The net working capital of a project is calculated by
- (A) Subtracting current liabilities from current assets
 - (B) Adding current assets to current liabilities
 - (C) Subtracting fixed assets from liabilities
 - (D) Adding fixed assets to liabilities
 - (E) Answer not known
108. Which of the following measures the efficiency with which a project uses its assets to generate revenue?
- (A) Return On Investments (ROI)
 - (B) Return On Assets (ROA)
 - (C) Quick Ratio
 - (D) Net Profit Margin
 - (E) Answer not known

109. Which of the following methods focuses on comparing costs and benefits to determine whether a project is financially viable?
- (A) Discounted Cash Flow (DCF)
 - (B) Cost-Benefit Analysis
 - (C) Monte Carlo Simulation
 - (D) Sensitivity Analysis
 - (E) Answer not known
110. Which financial metric evaluates a project's ability to generate profits relative to its capital invested?
- (A) Net Present Value (NPV)
 - (B) Internal Rate of Return (IRR)
 - (C) Return on Investment (ROI)
 - (D) Payback Period
 - (E) Answer not known
111. When calculating the Net Present Value (NPV), which rate is typically used to discount nominal cash flows?
- (A) Real interest rate
 - (B) Expected inflation rate
 - (C) Nominal interest rate
 - (D) Risk-free rate
 - (E) Answer not known
112. Which risk management process involves determining the likelihood and impact of risks?
- (A) Risk assessment
 - (B) Risk identification
 - (C) Risk mitigation
 - (D) Risk monitoring
 - (E) Answer not known

113. Which of the following is not a type of project risk?
- (A) Technical risk
 - (B) Market risk
 - (C) Personal risk
 - (D) Practical risk
 - (E) Answer not known
114. What does 'leverage' refer to in capital management?
- (A) Use of cash reserves
 - (B) Use of borrowed funds to increase potential return
 - (C) Reducing operational costs
 - (D) Increasing equity investment
 - (E) Answer not known
115. Which of the following is a method for evaluating Capital Projects?
- (A) Internal Rate of Return (IRR)
 - (B) Employee Satisfaction Index
 - (C) Market Share Analysis
 - (D) SWOT Analysis
 - (E) Answer not known
116. PV ratio can be improved by
- (A) Increasing sale price
 - (B) Increasing variable cost
 - (C) Lowering fixed cost
 - (D) Lowering variable cost
 - (E) Answer not known

117. Which of the following represents an example of an activity based cost in a manufacturing company?

- (A) Machine set up costs
- (B) Rent for the office building
- (C) General administrative costs
- (D) Salaries of factory workers
- (E) Answer not known

118. In absorption costing, which of the following costs included in the cost of goods sold?

- (A) Variable selling costs
- (B) Direct labor costs
- (C) Fixed manufacturing overhead
- (D) Direct material costs
- (E) Answer not known

119. Match the following with their correct categories :

Column A		Column B	
(a) Production costs		1. Direct labor	
(b) Non-production cost		2. Rent on office space	
(c) Prime costs		3. Direct materials + Direct labour	
(d) Conversion costs		4. Direct labour + Manufacturing overhead	

- | | (a) | (b) | (c) | (d) |
|-----|------------------|-----|-----|-----|
| (A) | 4 | 2 | 3 | 1 |
| (B) | 1 | 2 | 3 | 4 |
| (C) | 2 | 1 | 3 | 4 |
| (D) | 1 | 3 | 2 | 4 |
| (E) | Answer not known | | | |

120. Balance Sheet of a company is required to be prepared as per the format given in
- (A) Schedule III Part II
 - (B) Schedule III Part I
 - (C) Schedule III Part III
 - (D) Schedule II Part I
 - (E) Answer not known
121. Which type of information system is specifically designed for decision support?
- (A) Transaction Processing System (TPS)
 - (B) Executive Information System (EIS)
 - (C) Office Automation System (OAS)
 - (D) Management Information System (MIS)
 - (E) Answer not known
122. What type of system provides managers with reports that summarize operational performance?
- (A) Executive Support System (ESS)
 - (B) Decision Support System (DSS)
 - (C) Management Information System (MIS)
 - (D) Transaction Processing System (TPS)
 - (E) Answer not known

123. Which of the following is a challenge often faced during ERP implementation?
- (A) Enhanced user satisfaction
 - (B) Resistance to change from employees
 - (C) Immediate return on investment
 - (D) Streamlined business processes
 - (E) Answer not known
124. Which of the following components is critical for a successful e-tendering process?
- (A) Limited access to the internet
 - (B) Clear tender specifications and requirements
 - (C) Inconsistent evaluation criteria
 - (D) Lack of communication with suppliers
 - (E) Answer not known
125. What is the primary objective of the Tamil Nadu Transparency in Tender Rules Act 1998?
- (A) To increase the number of tenders
 - (B) To ensure transparency and fairness in the tendering process
 - (C) To limit competition among bidders
 - (D) To increase government revenue
 - (E) Answer not known

126. Which of the following is not a component of the tendering process under the Act?

- (A) Pre-qualification of bidders
- (B) Submission of bids
- (C) Private negotiation with suppliers
- (D) Opening of bids
- (E) Answer not known

127. What type of bids does the Act encourage?

- (A) Sealed bids
- (B) Open bids
- (C) Email submissions
- (D) Verbal agreements
- (E) Answer not known

128. Match the following data privacy law to their countries or regions :

Column A (Law)	Column B (Region/Country)
(a) GDPR	1. United States
(b) CCPA	2. European Union
(c) PIPEDA	3. Canada
(d) HIPAA	4. California, USA

- | | | | | |
|-----|------------------|-----|-----|-----|
| | (a) | (b) | (c) | (d) |
| (A) | 2 | 4 | 3 | 1 |
| (B) | 1 | 2 | 3 | 4 |
| (C) | 3 | 4 | 2 | 1 |
| (D) | 2 | 3 | 1 | 4 |
| (E) | Answer not known | | | |

129. _____ is malicious software that alters the regular functionality of an OS, takes full control on the targeted system and act as the system administrator on the victims system.
- (A) Virus (B) Spyware
(C) Trojan horse (D) Root kit
(E) Answer not known
130. Information privacy, individual privacy and communication privacy is the three main pillars of
- (A) Digital Integrity (B) Digital Protection
(C) Digital Secrecy (D) Digital Privacy
(E) Answer not known
131. The value of reflection factor of the walls and ceiling with white and very light colours is
- (A) 0.6 (B) 0.7
(C) 0.8 (D) 0.9
(E) Answer not known
132. Which is the main concern for international B2C businesses?
- (A) Market saturation
(B) Consumer protection laws
(C) High transaction costs
(D) Currency exchange and logistics
(E) Answer not known

133. E-commerce and large retailers in India bet big on mega consumption events on which of the following days?

- (a) Republic Day
- (b) Independence Day
- (c) Black Friday
- (d) Cyber Monday
- (e) Akshaya Tritiya

Choose the most appropriate answer from the options given below :

- (A) (a) and (b) only
- (B) (c) and (d) only
- (C) (a), (b) and (c) only
- (D) (a), (b), (c), (d) and (e)
- (E) Answer not known

134. What is the significance of training in e-auditing?

- (A) It complicates the process
- (B) It ensures auditors are equipped with necessary skills
- (C) It is unnecessary for success
- (D) It reduce the need for audit
- (E) Answer not known

135. Which of the following is an advantage of automated e-auditing?

- (A) Faster data processing and analysis
- (B) Increased labour costs
- (C) Higher error rates
- (D) Limited accessibility
- (E) Answer not known

136. Which of the following is an example of a risk in e-auditing?
- (A) Increased Efficiency
 - (B) Data integrity issues
 - (C) Improved compliance
 - (D) Enhanced visibility
 - (E) Answer not known
137. What does the term “audit trail” refer to in e-auditing?
- (A) A method of manual record
 - (B) A process of data deletion
 - (C) A log of all transactions and charges
 - (D) The physical path of audit documents
 - (E) Answer not known
138. What is the primary advantage of using patents in project information system?
- (A) They ensure the quality of project deliverable
 - (B) They prevent unauthorized use to intellectual property
 - (C) They speed up project completion
 - (D) They help in project cost reduction
 - (E) Answer not known
139. Which of the following is a strategy for managing patents within a project information system?
- (A) Sharing patents publicity without protection
 - (B) Delaying patent applications
 - (C) Conducting regular patent searches
 - (D) Ignoring patent filings
 - (E) Answer not known

140. Which of the following best describes a “Patent troll”?
- (A) A Government agencies that review's patents
 - (B) A type of infringement on patents
 - (C) A company that innovates and patents new technology
 - (D) An individual or company that acquires patents to enforce against others
 - (E) Answer not known
141. The capacity of doing work by an skilled labor in the form of quantity of work/day is known as
- (A) Capacity
 - (B) Product of quality of work
 - (C) Out-Turn work
 - (D) Production
 - (E) Answer not known
142. What is maximum time limit given for tender notice if the work costing more than 10 lakhs?
- (A) 3 weeks
 - (B) 4 weeks
 - (C) one month
 - (D) 6 weeks
 - (E) Answer not known
143. Centage charges are generally varies between
- (A) 5% to 10% of Estimated cost
 - (B) 10% to 15% of Estimated cost
 - (C) 15% to 25% of Estimated cost
 - (D) 25% to 35% of Estimated cost
 - (E) Answer not known

144. Rent is fixed on the basis of what percentage of valuation.
- (A) 2% to 4%
 - (B) 10% to 20%
 - (C) 6% to 10%
 - (D) 5% to 15%
 - (E) Answer not known
145. In Estimation, in absence of detailed design the percentage for steel concrete may be taken approximately for beams
- (A) 2.0% to 3.0%
 - (B) 1.0% to 2.0%
 - (C) 0.5% to 1.0%
 - (D) 0.1% to 1.0%
 - (E) Answer not known
146. Web crippling in steel beams occurs due to
- (A) Excessive deflection
 - (B) Excessive bending moment
 - (C) Failure of the web under concentrated load
 - (D) Excessive section modulus
 - (E) Answer not known
147. Which of the following is not a mode of failure in a tension member?
- (A) Yielding of gross section
 - (B) Rupture at critical section (or) net section
 - (C) Local buckling
 - (D) Block shear failure
 - (E) Answer not known

148. According to IS:800, the maximum permissible shear stress, is given by $\tau_{vm} = \text{_____} f_y$.
- (A) 0.45 (B) 0.66
(C) 0.60 (D) 0.40
(E) Answer not known
149. Assertion [A] : When the load over the column is too large, a gusset base is provided?
- Reason [R] : Gusset material used in the column base increase the bearing area, consequently reducing the thickness of the base plate as compared to the slab base.
- (A) [A] is true but [R] is false
(B) Both [A] and [R] are true; and [R] is the correct explanation of [A]
(C) [A] is false, [R] is true
(D) Both [A] and [R] are true; but [R] is not the correct explanation of [A]
(E) Answer not known
150. Which is the basic tool that defines the scope of entire project?
- (A) Task duration
(B) Event and activities
(C) Work breakdown structure
(D) Milestone
(E) Answer not known

151. PolyCarboxylated Ethers (PCE) Super Plasticizers, Viscosity Modifying Agents (VMA), Air entraining Agents (AEA) used in which of the following concrete?

- (A) Aerated concrete
- (B) No-fines concrete
- (C) Light-weight concrete
- (D) Self - compacting concrete
- (E) Answer not known

152. In concrete mix design, the mean strength expressed as

- (A) $f_m = f_{\min} + KS^2$
- (B) $f_m = f_{\min} - KS$
- (C) $f_m = f_{\min} - KS^2$
- (D) $f_m = f_{\min} + KS$
- (E) Answer not known

153. Bending equation expressed as,

where

M = Moment of resistance

I = Moment of inertia

E = Young's modulus

R = Radius of curvature

σ = Bending stress

- (A) $\frac{M}{E} = \frac{\sigma}{Y} = \frac{I}{R}$
- (B) $\frac{M}{I} = \frac{\sigma}{Y} = \frac{E}{R}$
- (C) $\frac{M}{E} = \frac{Y}{\sigma} = \frac{I}{R}$
- (D) $\frac{M}{I} = \frac{Y}{\sigma} = \frac{R}{EI}$
- (E) Answer not known

154. Section modulus for rectangular section is

- (A) $\frac{bd^2}{12}$ (B) $\frac{bd^2}{24}$
(C) $\frac{bd^2}{6}$ (D) $\frac{bd^2}{8}$
(E) Answer not known

155. The point of contraflexure is also called

- (A) The point of inflexion
(B) A virtual hinge
(C) Either of the above
(D) Uniformly varying section with maximum moment
(E) Answer not known

156. The failure of concrete in compression normally occurs across the shear planes at ————— to the applied load?

- (A) 60° (B) 30°
(C) 25° (D) 45°
(E) Answer not known

157. If $P = 100 \text{ KN}$ and area of cross section is, $A = 10 \text{ m}^2$, then find out the stress developed in the section is?

- (A) 10^3 N/m^2 (B) 10^4 N/m^2
(C) 10^5 N/m^2 (D) 10^2 N/m^2
(E) Answer not known

158. The deformation of the shape of bricks caused by the rain water falling on hot bricks is known as?
- (A) Chuffs (B) Bloating
(C) Spots (D) Black core
(E) Answer not known
159. A freshly cut stone carries some natural moisture known as?
- (A) Quarry sap
(B) Blasting
(C) Structure – Moisture
(D) Quarry Appearance
(E) Answer not known
160. Lime is obtained by burning limestone at a temperature is about _____ °C?
- (A) 800°C (B) 200°C
(C) 600°C (D) 100°C
(E) Answer not known
161. In which summit, agreement on reduction in carbon emission was signed?
- (A) Toronto Summit, 1988
(B) First Earth Summit, 1992
(C) Second Earth Summit, 1997
(D) Paris Agreement , 2015
(E) Answer not known

162. Which of the following statement (s) is /are correct approach of reducing the global warming?
- (i) Increased energy efficiency is the most promising option for reducing the risk of global warming.
 - (ii) Conservation of natural resources along with contraction of consumption is one of the solution of global warming
 - (iii) Use of fossil fuels be stopped fully to minimize the global warming.
- (A) (i) only
(B) (i) and (ii) only
(C) (ii) only
(D) (ii) and (iii) only
(E) Answer not known
163. Which one of the following is included as a mitigation technique for GHGs?
- (A) Construction of new nuclear power station
 - (B) Construction of new thermal power station
 - (C) Development of new oil fields
 - (D) Development of new coal fields
 - (E) Answer not known

164. Match the following :

- | | |
|---|---------|
| (a) The first world, climate summit, Geneva | 1. 1987 |
| (b) Montreal protocol | 2. 1998 |
| (c) Formation of IPCC | 3. 1979 |
| (d) Kyoto Protocol | 4. 1988 |

- | | (a) | (b) | (c) | (d) |
|-----|------------------|-----|-----|-----|
| (A) | 2 | 3 | 1 | 4 |
| (B) | 3 | 1 | 4 | 2 |
| (C) | 1 | 2 | 4 | 3 |
| (D) | 4 | 3 | 2 | 1 |
| (E) | Answer not known | | | |

165. Who developed the concept of urbanism as a way of life?

- | | |
|----------------------|-------------|
| (A) Louis Wirth | (B) Fisher |
| (C) Louis Coser | (D) De Bell |
| (E) Answer not known | |

166. Which Article of the Indian constitution allows citizens to migrate freely within India?

- | | |
|----------------------|----------------|
| (A) Article 14 | (B) Article 15 |
| (C) Article 21 | (D) Article 19 |
| (E) Answer not known | |

167. PURA of former President Dr. Abdul Kalam refers to
- (A) A model for growth of metro cities
 - (B) Providing urban rural alignment
 - (C) Providing urban amenities in rural areas
 - (D) A plan for urban and rural areas
 - (E) Answer not known
168. What are the components of sustainable urban development?
- (A) Economic growth and environmental degradation
 - (B) Social equity and economic inequality
 - (C) Environment protection, social inclusion and economic prosperity
 - (D) Population growth and resource depletion
 - (E) Answer not known
169. Environmental audits in industries help
- (A) To track employee attendance
 - (B) To improve branding only
 - (C) To schedule product delivery
 - (D) To evaluate compliance with environmental laws
 - (E) Answer not known
170. In the implementation of emission reduction, the term 'CER' refers to
- (A) Carbon Emission Reduction
 - (B) Carbon Emission Rate
 - (C) Certified Emissions Reduction
 - (D) Certified Emissions Rate
 - (E) Answer not known

171. Which of the following is NOT a part of the carbon cycle?
- (i) Fossil fuels
 - (ii) Dead animals and plants
 - (iii) Industrial activity
 - (iv) Living organic matter
- (A) (iv) only
(B) (iii) only
(C) (ii) only
(D) (i) only
(E) Answer not known
172. An environmental impact assessment is intended to identify the environmental, social and economic impacts of a proposed development
- (A) Prior to the decision to sanction a project is taken
 - (B) During the execution of a project
 - (C) After the execution of a project to assess its beneficiaries
 - (D) None of the above
 - (E) Answer not known

173. Match correctly the protection act with their corresponding year :

- | | |
|---|---------|
| (a) The Air (Prevention and control of Pollution) Act | 1. 1993 |
| (b) The water (prevention and control of pollution) Act | 2. 1981 |
| (c) Noise and stationary Act | 3. 1986 |
| (d) Environmental protection Act | 4. 1974 |

- | | (a) | (b) | (c) | (d) |
|-----|------------------|-----|-----|-----|
| (A) | 2 | 4 | 1 | 3 |
| (B) | 1 | 3 | 4 | 2 |
| (C) | 4 | 3 | 2 | 1 |
| (D) | 3 | 4 | 1 | 2 |
| (E) | Answer not known | | | |

174. In atmospheric particulates, Cunningham group and stokes group are classifications for particles in gas with diameters in reference to 'l'. Here 'l' is the

- (A) Terminal setting velocity (cm/s)
- (B) Mean free path of air (cm)
- (C) Gravitational acceleration constant (cm/s²)
- (D) Viscosity of the gas (g/cm s)
- (E) Answer not known

175. How can e-waste be treated in an environmentally sound way?

- (i) Decontamination , dismantling and segregation
- (ii) Shredding
- (iii) Recovery of metals from e-waste
- (A) (i) and (ii) only
- (B) (i) and (iii) only
- (C) (ii) and (iii) only
- (D) (i), (ii) and (iii) only
- (E) Answer not known

176. Reason and Assertion type:

Assertion [A] : The pH of acid rain lies between 9 and 12

Reason [R] : Acid rain occurs due to heavy air pollution.

- (A) [A] is true but [R] is false
- (B) Both [A] and [R] are true and [R] is the correct explanation of [A]
- (C) [A] is false, [R] is true
- (D) Both [A] and [R] are true , but [R] is not the correct explanation of [A]
- (E) Answer not known

177. The key components of GDP are consumption, investment, government spending and net exports. It does not include

- (A) Consumer spending on goods and services
- (B) Govt spending on public services
- (C) Income earned by citizens from abroad
- (D) Business investments in machinery
- (E) Answer not known

178. The global indicator framework for SDG was developed by inter agency and expert group on SDG indicators during UN statical commission held in
- (A) March 2017 (B) June 2017
(C) March 2018 (D) June 2018
(E) Answer not known
179. International cooperation and sustainable development division is the nodal point in _____ , GOI.
- (A) Ministry of environment and forest
(B) Ministry of external affairs
(C) Ministry of internal affairs
(D) Ministry of finance and Agriculture
(E) Answer not known
180. Assertion [A] : CTL (Coal to liquid) Technology is clean conversion of solid fuel into liquid fuel without harm to the environment
- Reason [R] : Coal is broken down into smaller molecules using inorganic solvents. These solvents rejects mineral matter and sulfur content of the coal.
- (A) [A] is true; [R] is false
(B) Both [A] and [R] are true and [R] is the correct answer for [A]
(C) [A] is false but [R] is true
(D) Both [A] and [R] are true but [R] is not the correct explanation of [A]
(E) Answer not known

181. What is the primary objective of risk management in project management?
- (A) To eliminate all risks
 - (B) To ensure the projects is completed on time
 - (C) To identify, assess and manage risk that may affect the project success
 - (D) To delegate risk to stakeholders
 - (E) Answer not known
182. What does risk mitigation involve in project management?
- (A) Ignoring the risk
 - (B) Transferring the risk
 - (C) Reducing the likelihood or impact of a risk
 - (D) Increasing the probability of the risk occurring
 - (E) Answer not known
183. What is the result of ineffective expediting in project management?
- (A) A better understanding of project scope
 - (B) Reduced project cost
 - (C) Further delays and potential project failure
 - (D) Increased stakeholders satisfaction
 - (E) Answer not known

184. What role does a project manager play in the project evaluation process?
- (A) Ensuring that evaluations are conducted only at the end of the project
 - (B) Facilitating and gathering data for evaluation and adjusting the project as needed
 - (C) Ignoring the evaluation process and focussing solely execution
 - (D) Restricting feedback to internal team members only
 - (E) Answer not known
185. What should included in the risk report?
- (A) A list of completed tasks
 - (B) A review of the project's financials
 - (C) An analysis of potential risks, their impact and mitigation strategies
 - (D) A summary of team meetings
 - (E) Answer not known
186. Which type of PPP model involves the private sector designing, building and operating a project?
- (A) Design-build
 - (B) Build-Operate-Transfer (BOT)
 - (C) Build-Own-Operate (BOO)
 - (D) Service Contract
 - (E) Answer not known

187. Which type of contract is most suitable when the perfect scope is well-defined and the risks are minimal?
- (A) Cost-Reimbursable contract
 - (B) Time and materials contract
 - (C) Fixed-price contract
 - (D) Unit price contract
 - (E) Answer not known
188. In a Cost Plus-Incentive-Fee (CPIF) contract the contractor is reimbursed for
- (A) All Allowable costs plus a percentage of the cost savings
 - (B) All Allowable costs plus a fixed fee
 - (C) All Allowable costs plus a fixed fee and a percentage of the cost savings
 - (D) A fixed amount regardless of costs incurred
 - (E) Answer not known
189. The core principle of lean project management is to
- (A) Increase project complexity
 - (B) Strict control costs
 - (C) Eliminate waste and improve efficiency
 - (D) Decrease stakeholder involvement
 - (E) Answer not known
190. Which technique is commonly used for risk assessment in projects?
- (A) Monte Carlo simulation
 - (B) SWOT analysis
 - (C) PERT analysis
 - (D) Fish bone diagram
 - (E) Answer not known

191. Which of the following project scheduling techniques is particularly useful for managing projects with a high level of uncertainty?
- (A) Gantt chart
 - (B) Monte Carlo simulation
 - (C) PERT analysis
 - (D) Work Breakdown Structure (WBS)
 - (E) Answer not known
192. Which of the following is a primary characteristic of PERT?
- (A) It is used for projects with well-defined activities and deterministic time estimates
 - (B) It uses a probabilistic model for project completion
 - (C) It is based on the assumption of fixed activity durations
 - (D) It is primarily used for construction projects with fixed timelines
 - (E) Answer not known
193. In ————— path, an activity may be preponed or postponed
- (A) Normal
 - (B) Non-critical
 - (C) Critical
 - (D) Parallel
 - (E) Answer not known
194. In ————— an attempt will be made to reduce the project completion time earlier than the normal project completion time
- (A) CPM
 - (B) PERT
 - (C) Network crashing
 - (D) Resource Allocation
 - (E) Answer not known

195. Assertion [A] : Quality control in project management is essential for delivering the final product with the required specifications and standards.

Reason [R] : Quality control ensures that every process is consistently monitored and adjusted to meet the required quality standards

- (A) Both [A] and [R] are true, and the [R] is the correct explanation of the [A]
- (B) Both [A] and [R] are true, but the [R] is not the correct explanation of the [A]
- (C) [A] is true, but [R] is false
- (D) [A] is false, but [R] is true
- (E) Answer not known

196. Which of the following is NOT typically part of a design review?

- (A) Feasibility analysis
- (B) Scope validation
- (C) Stakeholder analysis
- (D) Work breakdown structure
- (E) Answer not known

197. The projects goals and objectives in the proposal are after framed using

- (A) SWOT analysis
- (B) SMART criteria
- (C) PESTEL analysis
- (D) Gantt chart
- (E) Answer not known

198. Assertion [A] : A project can be feasible even if it faces significant environmental risk.
- Reason [R] : Environmental feasibility assesses the projects environmental impact, ensuring sustainability and minimal harm.
- (A) Both [A] and [R] are correct and [R] is the correct explanation for [A]
 - (B) Both [A] and [R] are correct but [R] is not the correct explanation for [A]
 - (C) [A] is correct, but [R] is incorrect
 - (D) [A] is incorrect, but [R] is correct
 - (E) Answer not known
199. In project planning, which of the following describes the sequence of tasks and their interdependencies?
- (A) Gantt chart
 - (B) Work breakdown structure
 - (C) Network diagram
 - (D) Risk Register
 - (E) Answer not known
200. Which of the following is a key characteristics of a “Hybrid” project life cycle?
- (A) A combination of predictive and agile approaches
 - (B) The project follows a strictly linear approach from initiation to closure
 - (C) Only agile techniques are used throughout the project
 - (D) The project focuses on a single deliverable with little to no changes
 - (E) Answer not known