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Score: 20/75 (26.67%)

Code: 7488

1. What is the name of the point at which all the weight of the body concentrated?

- A) Initial point **B) Centre of gravity**
C) Centroid D) Central point (Incorrect)

2. What is the centre of gravity of a rectangular body?

- A) Longer side of rectangle B) Shorter side of rectangle (Incorrect)
C) At the point of intersection of its diagonals
D) At the corners

3. What is the centre of gravity of a sphere?

- A) At the centre** B) On the circumference
C) At the diameter D) At the radius (Incorrect)

4. Which state of equilibrium's example is A cone resting on its tip?

- A) Stable B) Neutral
C) Unstable D) Horizontal (Incorrect)

5. What is the centre of gravity of a semi circle of diameter 12 cm?

- A) 2.24 cm (Incorrect) **B) 2.54 cm**
C) 3.25 cm D) 2.75 cm

6. Which is elastic material?

- A) Nylon** B) Polystyrenes
C) Celluloid D) Polycarbonates (Incorrect)

7. What is the maximum percentage of stretch of its original length is allowable for elastic materials?

- A) 100% B) 200%
C) 300% (Correct) D) 400%

8. What is the ratio between the change in dimension to its original dimension of the substance?

- A) Stress **B) Strain**
C) Poisson's ratio (Incorrect) D) Factor of safety

9. What is the unit of strain?

- A) Kg/cm² B) Newton/metre² (Incorrect)

C) Metre

D) No unit

10. What is the ratio between lateral strain and longitudinal strain?

- A) Hooks law B) Young's modulus (Incorrect)
C) Bulk modulus **D) Poisson's ratio**

11. Which symbol is used to express change in length?

- A) L **B) delta l (Correct)**
C) I D) e

12. Which one is the ratio of stress?

- A) Load and area (Correct)** B) Load and direction
C) Load and diameter D) Load and time

13. What is the formula for bulk modulus?

- A) Tensile stress/Tensile strain (Incorrect) B) Compressive stress/Compressive strain
C) Volumetric stress/Volumetric strain D) Shear stress/Shear strain

14. What is the term used for maximum stress attained by a material before rupture?

- A) Tensile stress B) Compressive stress (Incorrect)
C) Working stress **D) Ultimate stress**

15. What is the ratio between ultimate stress to working stress?

- A) Bulk modulus B) Young's modulus
C) Factor of safety (Correct) D) Modulus of rigidity

16. What is the ratio of shear stress to shear strain?

- A) Modulus of elasticity **B) Modulus of rigidity**
C) Bulk modulus (Incorrect) D) Yield point

17. What is the ratio between stress and strain?

- A) Yield point B) Factor of safety
C) Youngs Modulus (Correct) D) Poisson's ratio

18. What force will be required to punch a hole of 10 mm dia

in a 1 mm thick plate, if the allowable shear stress is 50N/mm²? (Pi = 22/7)

- A) 1757 N
B) 1575 N
C) 1571.4 N (Correct)
D) 1577 N

19. What is the tensile stress if a square rod of 10 mm side is tested for a tensile load of 1000 kg?

- A) 1 kg/mm² (Incorrect)
B) **10 kg/mm² (Correct)**
C) 100 kg/mm²
D) 1000 kg/mm²

20. What is the tensile strain if a force of 3.2 KN is applied to a bar of original length 2800 mm extends the bar by 0.5 mm?

- A) **0.0001786 (Correct)**
B) 0.0001687
C) 0.0001867
D) 0.0001968

21. How much strain is developed in an iron rod of 1 metre length gets elongated by 1 cm, if a force of 100 kg is applied at one end?

- A) 0.1 (Incorrect)
B) **0.01 (Correct)**
C) 0.001
D) 0.0001

22. What is the safe stress if the ultimate stress of a material is 35 kg/mm² and factor of safety is 5?

- A) 0.143
B) 0.7
C) 1.43 (Incorrect)
D) **7 (Correct)**

23. What is the other term used for reference table?

- A) Dictionary
B) Biography (Incorrect)
C) Bibliography
D) **Information Table (Correct)**

24. What is a hand book?

- A) Model book of various works
B) **Type of reference work or other collection of instruction (Correct)**
C) Design book of latest works
D) Dictionary of materials

25. Which standard schedule of rates to be considered for estimation?

- A) Standard schedule of rates of the last year
B) Standard schedule of rates of the average of the last 10 years
C) Standard schedule of rates of the average of last 5 years
D) **Standard schedule of rates of the current year (Correct)**

26. What is an over estimate?

- A) **When an estimate is exceeded to actual estimate (Correct)**
B) When an estimate is fell short of the actual estimate

- C) When an estimate perfectly matches the actual estimate (Incorrect)
D) No work started as per estimate

27. What is the term used for the method of calculating various quantities and expenditure on a particular job or process?

- A) **Estimation (Correct)**
B) Drawing (Incorrect)
C) Specification
D) Plan

28. What is the minimum permissible size of aluminium wire used in estimation?

- A) **1.5 sq.mm (Correct)**
B) 2.5 sq.mm
C) 5 sq.mm
D) 3.5 sq.mm

29. Which one is the most reliable estimate?

- A) Preliminary estimate (Incorrect)
B) Plinth area estimate
C) Cube rate estimate
D) **Detailed estimate (Correct)**

30. What describes the detailed specification for the item of work?

- A) **Quality, Quantity, Workmanship, Method of execution (Correct)**
B) Colour
C) Tax, Transport, Overhead expenses
D) Maintenance, Stock, Cost (Incorrect)

31. Which of the impurity in cast iron makes it hard and brittle?

- A) Silicon
B) **Sulphur (Correct)**
C) Manganese (Incorrect)
D) Phosphorus

32. What is the relative permittivity of rubber?

- A) **Between 2 and 3 (Correct)**
B) Between 5 and 6
C) Between 8 and 10
D) Between 12 and 14 (Incorrect)

33. What is the weight of a rectangular block of a cost iron of 250cm X 20cm X 8cm (density of cast iron is 7.8 gm/cm³)?

- A) **312 kg (Correct)**
B) 372 kg
C) 410 kg
D) 525 kg

34. What is the estimation of milling cost of a rectangular block size 100 X 80 X 60 mm, if cost of the milling is Rs.2/sq.cm?

- A) Rs.652/-
B) **Rs.752/- (Correct)**
C) Rs.572/- (Incorrect)
D) Rs.960/-

35. What is the total wattage in a room if 2 tube lights of 50W rating, 2 fans of 80W rating, 2 numbers of light points of

60W rating, one fan point of 60W rating and one 3 pin socket of 100W rating?

- A) 340 W
B) 440 W
C) **540 W**
D) 640 W (Incorrect)

36. What is the total labour charges for a particular wiring work completed in 2 days by one electrician and one helper.(Electrician @ ₹800/day and helper @ Rs 400/day)

- A) Rs. 2000 (Incorrect)
B) **Rs. 2400**
C) Rs. 3000
D) Rs. 1400

37. What is the total cost of painting of a class room including ceiling, if the size of length is 6m, breadth is 5m and height is 4m. (Painting + labour cost Rs.150/- per sq.m)

- A) Rs.15000/-
B) Rs.16700/- (Incorrect)
C) **Rs.17700/-**
D) Rs.18700/-

38. What is the total construction cost of a house construction area of 3000 sq.ft. (cost of construction Rs.2000/- per sq.ft including material and labour)?

- A) Rs.30,000,000 (Incorrect)
B) **Rs.60,00,000**
C) Rs.6,00,000
D) Rs.6,000,000

39. Where the centre of gravity of a circle lies?

- A) **At its centre**
B) Any where on its radius
C) Any where on its circumference
D) Any where on its diameter (Incorrect)

40. What is the centre of gravity of a solid hemisphere from its base?

- A) $4r/5$
B) **$3r/8$ (Correct)**
C) $3r/4$
D) $r/2$

41. What is the centre of gravity of a semi circle of diameter 12 cm?

- A) 2.24 cm
B) **2.54 cm (Correct)**
C) 3.25 cm
D) 2.75 cm

42. What are the various types of heat treatment processes?

- A) **Annealing, Normalising, Hardening and Tempering**
B) Normalising, Heating, Cooling and Painting (Incorrect)
C) Hardening, Soaking, Painting and Packing
D) Tempering, Cooling, Packing and Soling

43. What is the process of heat treatment?

- A) **The process of heating and cooling to change the structure and properties (Correct)**
B) The process of heating to change the dimensions

- C) The process of cooling to measure the dimensions
D) The process of heating and bending as per our requirement

44. What are the various stages of heat treatment?

- A) Heating, Cooling and Quenching
B) Quenching, Cooling and Heating
C) **Heating, Soaking and Quenching**
D) Soaking, Quenching and Cooling (Incorrect)

45. Which process produce equilibrium conditions?

- A) Annealing and Hardening (Incorrect)
B) Normalising and Tempering
C) **Annealing and Normalising**
D) Normalising and Tempering

46. What is the name of the heat treatment process, where the metal is heated and quenched in water or oil?

- A) **Hardening**
B) Normalising and Tempering (Incorrect)
C) Annealing
D) Tempering

47. Which is a kind of surface hardening process?

- A) Cementite
B) Ferrite (Incorrect)
C) **Nitriding**
D) Tempering

48. How much time is allowed normally in soaking zone for a 10mm thick metal piece while hardening?

- A) **5 minutes**
B) 10 minutes
C) 15 minutes
D) 20 minutes (Incorrect)

49. What is colour of a metal piece when heated to 250 Degree C while doing the tempering process?

- A) Blue (Incorrect)
B) **Brown**
C) Purple
D) Pale

50. What is the purpose of tempering a steel?

- A) **To reduce the brittleness**
B) To remove the ductility (Incorrect)
C) To increase the hardness
D) To increase the brittleness

51. How many types of foundation are there based on depth? | ಆಳದ ಆಧಾರದ ಮೇಲೆ ಎಷ್ಟು ರೀತಿಯ ಅಡಿಪಾಯಗಳಿವೆ?

- A) 2
B) 3
C) 5 (Incorrect)
D) **2**

52. CPRF stands for_____ | CPRF ಎಂದರೆ _____

- A) Combined Plain Round Foundation (Incorrect)
B) Connected Pile Round Foundation
C) **Combined Pile Raft Foundation.**
D) Corrosion Proof Raft Foundation

53. Which of the following is used to block the pipe at one end? | ಒಂದು ತುದಿಯಲ್ಲಿ ಪೈಪ್ ಅನ್ನು ನಿರ್ಬಂಧಿಸಲು ಕೆಳಗಿನವುಗಳಲ್ಲಿ ಯಾವುದನ್ನು ಬಳಸಲಾಗುತ್ತದೆ?

- A) Plug | ಪ್ಲಗ್
C) Reducer | ರಿಡ್ಯೂಸರ್
(Incorrect)
- B) Union | ಯೂನಿಯನ್
D) Couplings | ಕಪ್ಲಿಂಗ್ಸ್

54. Which of the following is not a main part of rivet? | ಕೆಳಗಿನವುಗಳಲ್ಲಿ ಯಾವುದು ರಿವೆಟ್‌ನ ಮುಖ್ಯ ಭಾಗವಲ್ಲ ?

- A) Head | ಹೆಡ್
C) Point | ಪಾಯಿಂಟ್
(Incorrect)
- B) Shank | ಶ್ಯಾಂಕ್
D) Tail | ಟೈಲ್

55. Riveted joints is a _____ | ರಿವೆಟೆಡ್ ಜಂಟಿಗಳು

- A) permanent joints | ಶಾಶ್ವತ ಜಂಟಿಗಳು
C) semi permanent | ಅರೆ ಶಾಶ್ವತ
(Incorrect)
- B) temporary joints | ತಾತ್ಕಾಲಿಕ ಜಂಟಿಗಳು
D) none of these | ಇದ್ದಾವುದೂ ಅಲ್ಲ

56. Pipe cutting die is generally _____ | ಪೈಪ್ ಕಟಿಂಗ್ ಡೈ ಸಾಮಾನ್ಯವಾಗಿ

- A) divided in four parts. | ನಾಲ್ಕು ಭಾಗಗಳಾಗಿ ವಿಂಗಡಿಸಲಾಗಿದೆ.
C) divided in three parts | ಮೂರು ಭಾಗಗಳಾಗಿ ವಿಂಗಡಿಸಲಾಗಿದೆ
(Incorrect)
- B) undivided | ಅವಿಭಜಿತ
D) divided in two parts | ಎರಡು ಭಾಗಗಳಾಗಿ ವಿಂಗಡಿಸಲಾಗಿದೆ

57. Which materials pipe is used for drainage pipe line? | ಡ್ರೈನೇಜ್ ಪೈಪ್ ಲೈನ್‌ಗೆ ಯಾವ ವಸ್ತುಗಳ ಪೈಪ್ ಅನ್ನು ಬಳಸಲಾಗುತ್ತದೆ?

- A) PVC pipe | PVC ಪೈಪ್
C) G.I. Pipe | ಜಿಐ ಪೈಪ್
- B) Brass Pipe | ಹಿತ್ತಾಳೆ ಪೈಪ್
(Incorrect)
- D) Steel pipe | ಉಕ್ಕಿನ ಕೊಳವೆ.

58. Which of the following is temporary fastening? | ಕೆಳಗಿನವುಗಳಲ್ಲಿ ಯಾವುದು ತಾತ್ಕಾಲಿಕ ಘಾಸ್ಟಿನಿಂಗ್ ?

- A) Welded | ವೆಲ್ಡೆಡ್
C) Rivets | ರಿವೆಟ್ಸ್
(Incorrect)
- B) Keys | ಕೀಲಿಗಳು
D) Screw | ತಿರುಪು

59. Lock nut or check-nut is chamfered on _____. | ಲಾಕ್ ನಟ್ ಅಥವಾ ಚೆಕ್-ನಟ್ ಅನ್ನು _____ ರಂದು ಚೇಂಫರ್ ಮಾಡಲಾಗಿದೆ.

- A) upper side | ಮೇಲಿನ ಭಾಗ
C) both side | ಎರಡೂ ಕಡೆ
(Correct)
- B) lower side | ಕೆಳಗಿನ ಭಾಗ
D) none sides | ಯಾವುದೇ ಬದಿಗಳಿಲ್ಲ

60. The thread angle of B.S.W screw threads are _____. | BSW ಸ್ಕ್ರೂ ಥ್ರೆಡ್‌ಗಳ ಥ್ರೆಡ್ ಕೋನವು _____.

- A) 45°
C) 55°
- B) 60°
D) 30° (Incorrect)

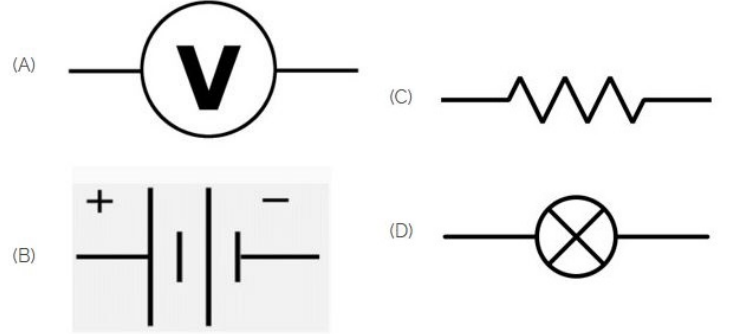
61. Which one of the following accommodates four pipes in a pipe fitting? | ಕೆಳಗಿನವುಗಳಲ್ಲಿ ಯಾವುದು ಪೈಪ್ ಫಿಟಿಂಗ್‌ನಲ್ಲಿ ನಾಲ್ಕು ಪೈಪ್‌ಗಳನ್ನು ಅಳವಡಿಸುತ್ತದೆ?

- A) Union | ಯೂನಿಯನ್
C) Elbow | ಎಲ್ಬೋ (Incorrect)
- B) Cross | ಅಡ್ಡ
D) Tee | ಟೀ

62. Nut and bolts are _____ | ನಟ್ ಮತ್ತು ಬೋಲ್ಟ್ಸ್ _____

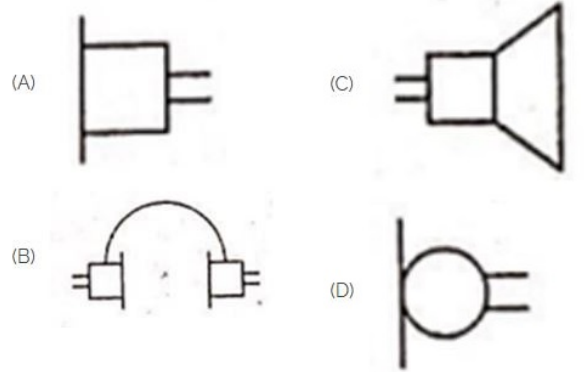
- A) permanent fastening | ಶಾಶ್ವತ ಜೋಡಣೆ
C) semi permanent | ಅರ್ಧ ಶಾಶ್ವತ
(Incorrect)
- B) temporary fastening | ತಾತ್ಕಾಲಿಕ ಜೋಡಣೆ
D) semi temporary | ಅರ್ಧ ತಾತ್ಕಾಲಿಕ

63. Identify the symbol of battery. | ಬ್ಯಾಟರಿಯ ಚಿಹ್ನೆಯನ್ನು ಗುರುತಿಸಿ.



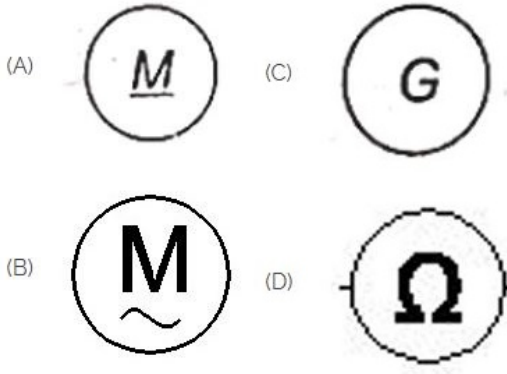
- A) A
C) C
- B) B (Correct)
D) D

64. Identify the symbol used for microphone (general) in electrical and electronic circuits. | ಎಲೆಕ್ಟ್ರಿಕಲ್ ಮತ್ತು ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಸರ್ಕ್ಯೂಟ್‌ಗಳಲ್ಲಿ ಮೈಕ್ರೋಫೋನ್ (ಸಾಮಾನ್ಯ) ಗಾಗಿ ಬಳಸುವ ಚಿಹ್ನೆಯನ್ನು ಗುರುತಿಸಿ.



- A) A
C) C
- B) B
D) D (Correct)

65. Which is a symbol of DC motor? | DC ಮೋಟರ್‌ನ ಸಂಕೇತ ಯಾವುದು?



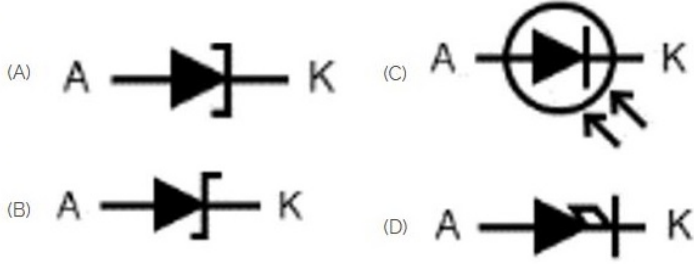
A) A (Correct)

C) C

B) B

D) D

66. Which is photo diode? | ಫೋಟೋ ಡಯೋಡ್ ಯಾವುದು?



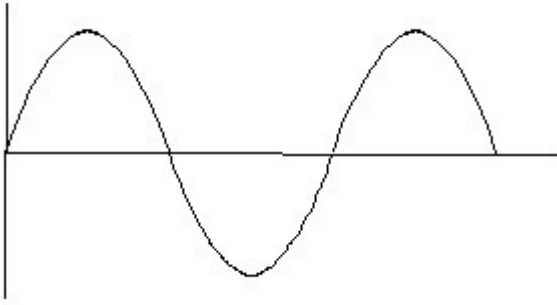
A) A

C) C

B) B

D) D (Incorrect)

67. Identify the wave form. | ವೇವ್ ಫಾರ್ಮ್ ವನ್ನು ಗುರುತಿಸಿ.



A) Square wave | ಸ್ಕ್ವೇರ್ ವೇವ್

C) Triangle wave | ತ್ರಿಕೋನ ವೇವ್ (Incorrect)

B) Sine wave | ಸೈನ್ ವೇವ್

D) Saw-tooth wave | ಸಾ-ಟೂತ್ ವೇವ್

68. What is the material of line insulator? | ಲೈನ್ ಇನ್ಸುಲೇಟರ್‌ನ ಮೇಟೀರಿಯಲ್ ಯಾವುದು?

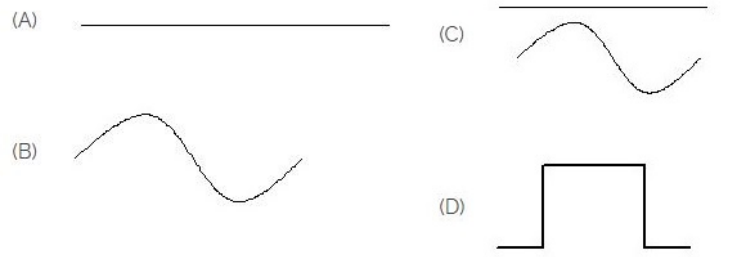
A) Copper | ತಾಮ್ರ

C) Porcelain clay | ಪಿಂಗಾಣಿ ಮಣ್ಣಿನ (Correct)

B) Aluminium | ಅಲ್ಯೂಮಿನಿಯಂ

D) Rubber | ರಬ್ಬರ್

69. Identify the symbol for direct and alternating current. | ನೇರ ಮತ್ತು ಪರ್ಯಾಯ ಪ್ರವಾಹದ ಚಿಹ್ನೆಯನ್ನು ಗುರುತಿಸಿ.



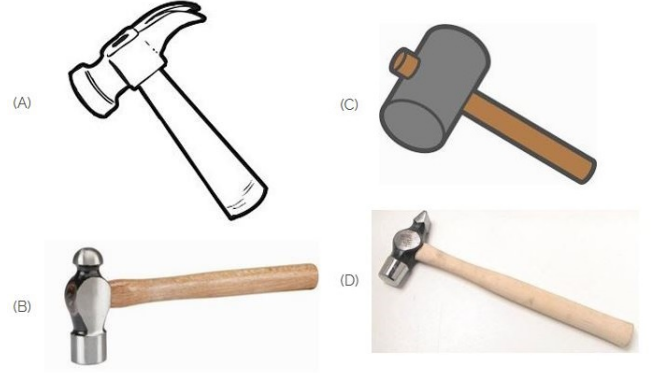
A) A (Incorrect)

C) C

B) B

D) D

70. Which is ball peen hammer? | ಬಾಲ್ ಪೀನ್ ಸುತ್ತಿಗೆ ಯಾವುದು?



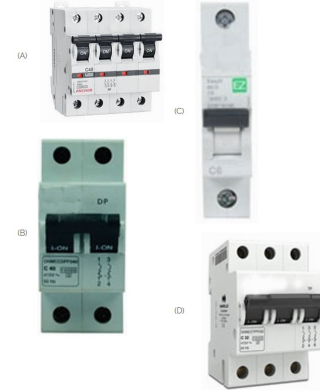
A) A

C) C

B) B (Correct)

D) D

71. Which is the single pole MCB? | ಸಿಂಗಲ್ ಪೋಲ್ MCB ಯಾವುದು?



A) A

C) C

B) B (Incorrect)

D) D

72. Which is protective device? | ರಕ್ಷಣಾತ್ಮಕ ಸಾಧನ ಯಾವುದು?

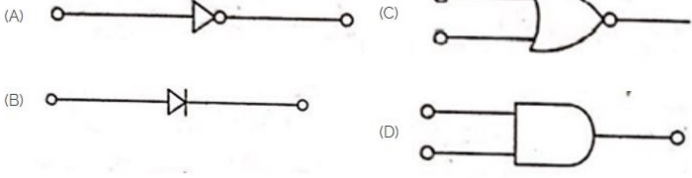
A) Fuse | ಫ್ಯೂಸ್

C) Magnet | ಮ್ಯಾಗ್ನೆಟ್ (Incorrect)

B) Resistor | ರೆಸಿಸ್ಟರ್

D) Capacitor | ಕೆಪಾಸಿಟರ್

73. Which is the NOT gate in the following picture? | ಕೆಳಗಿನ ಚಿತ್ರದಲ್ಲಿ NOT ಗೇಟ್ ಯಾವುದು?



A) A

C) C

B) B (Incorrect)

D) D

74. Which is nose pliers? | ನೋಸ್ ಪ್ಲೈಯರ್ ಯಾವುದು?



A) A (Incorrect)

C) C

B) B

D) D

75. Identify the given symbol | ನೀಡಿರುವ ಚಿಹ್ನೆಯನ್ನು ಗುರುತಿಸಿ



A) AC

C) Ohms | ಓಮ್ಸ್

B) DC (Incorrect)

D) Inductance | ಇಂಡಕ್ಟೆನ್ಸ್