PREVIOUS YEAR PAPER

DSSSB PGT Engineering Drawing (Male) 2021 — 30 July 2021, Shift 2

DSSSB PGT · 30 July 2021 · Shift 2

270 of the paper's 300 questions · +1 for a correct answer, −0.25 for a wrong one · 180 minutes

Left out of the original paper: 30 (any question that needs a figure, a symbol or formatting we cannot show, or whose text did not read back cleanly from the booklet).

Questions from the Delhi Subordinate Services Selection Board's paper of 30 July 2021, Shift 2. Each question is followed by its answer, and the answer key is repeated on the last page.

Take it as a timed practice test: exambharo.com/dsssb-pgt/previous-year-papers/dsssb-pgt-2021-engineering-drawing-male-30-jul-shift-2/

Mental Ability

1. Find the missing term in the following series.
D4W, F16U, H64S, ____

(a) J128P
(b) K512P
(c) J64O
(d) J256Q

Answer: (d)

2. Find the missing term in the following letter series
EVG, HSJ, KPM, ____

(a) MNP
(b) NMP
(c) MOP
(d) MNO

Answer: (b)

3. Out of the given options, three are similar in a certain manner. However, one option is NOT like the other three. Select the option which is different from the rest.

(a) Father
(b) Brother
(c) Grandfather
(d) Sister

Answer: (d)

4. Out of the given options, three are similar in a certain manner. However, one option is NOT like the other three. Select the option which is different from the rest.

(a) IJKL: JLNP

(b) UVWX : VXZB

(c) EFGH : FHJL

(d) QRST : SUWY

Answer: (d)

5. Select the option that is related to the third term on the same basis as the second term is related to the first term.
Decent : Crude :: Durable : ?

(a) Stable

(b) Sturdy

(c) Transitory

(d) Resistant

Answer: (c)

6. Select the pair that is related on the same basis to the pair given in the question.
Biased : Prejudiced :: ?

(a) Brief : Short

(b) Aware : Ignorant

(c) Smile : Frown

(d) Tragic : Comic

Answer: (a)

7. In a certain code language, 'mat tat pat lat . 'the queue is long' 'fat zat hat cat' means 'it will take time' 'tat bat fat' means 'time is precious' What is the code for 'precious'?

(a) fat

(b) tat

(c) bat

(d) hat

Answer: (c)

8. In a certain code language if AVENGERS is coded as HIVTMVEZ, then what will SPIDERMAN be coded as?

(a) MZNIWVRKH

(b) MZNIVWRKH

(c) MNZVIWRKH

(d) HKRWVINZM

Answer: (b)

9. Akash is standing in a queue in front of KFC to place his order .He realises that his place is 15th from the starting and 16th from the end of the queue.How many people were actually standing in the queue?

(a) 32

(b) 31

(c) 30

(d) 29

Answer: (c)

10. A delivery boy has to deliver six parcels each to a different house namely S, T, U, V, W and X. He has decided to visit the houses based on the following condition,
1. He must visit S before T and W.
2. He must visit T before V.
3. The third parcel should be delivered to house U.
Which of the houses cannot definitely be the fourth one to receive the parcel?

(a) T

(b) V

(c) W

(d) S

Answer: (d)

11. In this question, a statement has been given, followed by two arguments numbered I and II.
You have to decide which of the arguments is a 'strong' argument and which is a 'weak' argument.
Statement: Should government officials accepting bribes be prisoned?
Arguments:
1. No. There may be circumstances which force them to take a bribe.
2. Yes. They should do their duty honestly.

(a) Only I is strong

(b) Only II is strong

(c) Both I and II are strong.

(d) Neither I nor II is strong.

Answer: (b)

12. In the question, a group of statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.
Statement: All corrupt businessmen were arrested. Zeeshan and Mohan were among those arrested.
Conclusions:
1. All businessmen are corrupt.
2. Mohan and Zeeshan are corrupt.

(a) Only I follows

(b) Only II follows

(c) Both I and II follows

(d) Neither I nor II follows

Answer: (b)

13. Select the option that is related to the third number on the same basis as the second number is related to the first number.
17 : 27 :: 258 : ?

(a) 509
(b) 442
(c) 449
(d) 385

Answer: (a)

14. Find the wrong term in the following number series.
5, 25, 155, 1050, 8400

(a) 25
(b) 5
(c) 155
(d) 8400

Answer: (c)

General Awareness

21. Which among the following is also known as the 'royal dance of Ladakh'?

(a) Rauf
(b) Kathi
(c) Shondol
(d) Huttari

Answer: (c)

22. Which among the following festival-state pair is incorrect?

(a) Onam-Kerala
(b) Bihula-Bihar
(c) Wangala-Kerala
(d) Hornbill-Nagaland

Answer: (c)

23. Who among the following is the Chief Executive Officer (CEO) of the NITI Aayog as of 20th May 2020?

(a) Narendra Modi
(b) G.R. Chintala
(c) Amitabh Kant
(d) Ajay Tyagi

Answer: (c)

24. As announced in the Budget 2021, _____ crores has been allocated to MSME sector.
    (a) Rs 14,800
    (b) Rs 15,700
    (c) Rs 16,100
    (d) Rs 15,200
    Answer: (b)

25. Which among the following is the largest national park in India?
    (a) Kaziranga National Park
    (b) Papikonda National Park
    (c) Hemis National Park
    (d) Keibul Lamjao National Park
    Answer: (c)

26. _____ law states that black body radiation has different peaks of temperature at wavelengths that are inversely proportional to temperatures.
    (a) Wien's
    (b) Fourier's
    (c) Ampere's
    (d) Coulomb's
    Answer: (a)

27. Phawngpui is the highest mountain peak of which the following states?
    (a) Mizoram
    (b) Sikkim
    (c) Meghalaya
    (d) Nagaland
    Answer: (a)

28. Which among the following is the longest canal of India?
    (a) Ganges canal
    (b) Narmada Canal
    (c) Indira Gandhi canal
    (d) Anupgarh canal
    Answer: (c)

29. Which of the following pairs is correct?
    (a) Treaty of Madras - 1769
    (b) Treaty of Amritsar - 1860
    (c) Treaty of Salbai - 1785
    (d) Treaty of Alinagar - 1751
    Answer: (a)

30. _____ was the Governor General when the Dandi March incident took place.

(a) Lord Canning
(b) Lord Hastings
(c) Lord Irwin
(d) Lord Curzon

Answer: (c)

31. The first session of Indian National Congress after Independence was held in _____ in 1948.

(a) Meerut
(b) Jaipur
(c) Lahore
(d) Kanpur

Answer: (b)

32. _____ was the first woman to hold the post of External Affairs Minister in India.

(a) Shashikala Kakodkar
(b) Sucheta Kripalani
(c) Sushma Swaraj
(d) Indira Gandhi

Answer: (d)

33. Match the following authors with their books - 1. Origin of Species A. Jawaharlal Nehru 2. Alice in Wonderland B. George Bernard Shaw 3. Man and Superman C. Charles Darwin 4. Discovery of India D. Lewis Carroll

(a) 1-C, 2-D, 3-B, 4-A
(b) 1-C, 2-D, 3-A, 4-B
(c) 1-B, 2-C, 3-D, 4-A
(d) 1-B, 2-D, 3-A, 4-C

Answer: (a)

34. Aahaar is a free meal distribution initiative introduced in _____ in May 2021 with the motto of fighting hunger- feeding future.

(a) Rajasthan
(b) Uttar Pradesh
(c) Gujarat
(d) Assam

Answer: (d)

35. Water Sports and Adventure Institute (WSAI) has been established by the Indo-Tibetan Border Police (ITBP) in _____.

(a) Uttarakhand
(b) Arunachal Pradesh
(c) Sikkim
(d) Himachal Pradesh

Answer: (a)

36. The theme of _____ Arctic Science Ministerial, held on 8th May 2021, was 'Knowledge for Sustainable Arctic'.

(a) 2nd
(b) 3rd
(c) 4th
(d) 5th

Answer: (b)

37. Part _____ of the Indian Constitution deals with Finance, Property, Contracts and Suits.

(a) X
(b) XII
(c) XIII
(d) XIV

Answer: (b)

38. Which among the following options is incorrect with respect to the feature of the Indian Constitution and the country from which it is borrowed?

(a) Republic & ideals of liberty, equality & fraternity in the Preamble - France
(b) Joint Sitting of two houses of Parliament - Australia
(c) Prerogative Writs - United States of America
(d) Directive Principles of State Policy - Ireland

Answer: (c)

39. The first Men's Hockey World Cup 1971 was hel _____.

(a) Russia
(b) France
(c) Spain
(d) India

Answer: (c)

40. Who among the following won back-to-back men's high jump titles in the Big 12 Outdoor Track and Field Championships 2021 in Manhattan, United States of America?

(a) Sydney Conley
(b) Austin Hoag
(c) Anastasiya Muchkayev
(d) Tejaswini Shankar

Answer: (d)

Arithmetic Ability

41. Ashish, Narendra, and Ved are running on a circular track having a circumference of 40 km, and the starting point is same for all of them. Their speeds are 4 km/hr, 8 km/hr, and 6 km/hr respectively. Find after how much time (in hours) they will meet each other.

(a) 18 hours

(b) 20 hours

(c) 25 hours

(d) 12 hours

Answer: (b)

42. There are four hobby clubs in a college viz., painting, photography, chess and dancing. The painting group meets every fifth day, the photography group meets every sixth day, the chess group meets every twelfth day and the dancing group meets every fifteenth day. How many times do all the four groups meet on the same day with in 240 days?

(a) 120

(b) 12

(c) 5

(d) 4

Answer: (d)

43. A boy buys a diamond ring for his wife. If a diamond ring is marked at Rs. 3,20,000 at three successive discounts of 25%, 20% and x% respectively and paid after getting three successive discounts at Rs. 1,92,000. Find the value of x.

(a) 1.50 percent

(b) 2 percent

(c) 3 percent

(d) 0 percent

Answer: (d)

44. Anshuman's income increases by 20% in the first year and decreases by 10% in the second year and also increases by 25% in the third year and decreases by 12.5% in the fourth year, if Anshuman's income after four years is Rs. 37,800, then find the actual income of Anshuman.

(a) Rs. 20,000

(b) Rs. 25,000

(c) Rs. 24,000

(d) Rs. 32,000

Answer: (d)

45. Alisha went to the market to buy groceries. She has some money with her, 20 Percent of which she used to buy rice. 25 Percent of the remaining money is spent on cooking oils. If she is left with Rs. 600, then find out total amount of money that Alisha had.

(a) 800

(b) 1200

(c) 900

(d) 1000

Answer: (d)

46. Hari sold his goods for Rs. 1035 at 28.57 Percent profit. Find the price at which he must sell his goods so that he earns 15 Percent profit.

(a) Rs. 900.25

(b) Rs. 850.25

(c) Rs. 925.75

(d) Rs. 875.75

Answer: (c)

47. X and Y started a business by investing in the ratio of 3 : 5. After 4 months from the start of the business, Z joins with an amount equal to (1/4)th of X and Y. Find the total profit at the end of the year, if Y got Rs. 22,500 as his share.

(a) Rs. 40,000

(b) Rs. 42,000

(c) Rs. 32000

(d) Rs. 48000

Answer: (b)

48. A family consists of a father, a mother, a son, and a daughter. The ratio of their ages is 7 : 6 : 2 : 3 and the present age of the father is 49 years.
What will be the average age of family after 3 years?

(a) 35 year

(b) 36 year

(c) 34.5 year

(d) 35.5 year

Answer: (c)

49. Arjun and Prateek have toffees with them in the ratio 7 : 9. If Arjun is given 32 more toffees, the ratio of the number of toffees with them gets reversed. How many toffees would have been given to Arjun to make the ratio 10 : 7?

(a) 41

(b) 43

(c) 46

(d) 47

Answer: (a)

50. At a certain sum of money with the interest rate of 7 Percent for 3 years the simple interest is Rs. 7455. Find the compound interest of 2 years at the same sum when the rate of interest is 4 Percent.

(a) Rs. 2869.9

(b) Rs. 2896.8

(c) Rs. 3896.8

(d) Rs. 4869.8

Answer: (b)

51. Himanshu borrowed a sum of Rs. 40,000 at 15 Percent per annum compounded annually and he returned Rs. 60,835 to the bank. Find the time period for which he borrowed the sum.

(a) 3 years

(b) 5 years

(c) 2 years

(d) 1 year

Answer: (a)

52. A can beat B by 20 m in a 200 m race. B can beat C by 2 seconds for the same distance. If C takes 26(4/9) seconds to complete the race, what is the time taken by A to complete the race? (in seconds)

(a) 21

(b) 24

(c) 23

(d) 22

Answer: (d)

53. The ratio of the speeds of the boat in still water to the speed of the stream is 9 : 1 and the boat can travel 20 km downstream in 24 minutes. Then, how much time will the boat take to cover 50 km upstream?

(a) 72 min

(b) 75 min

(c) 45 min

(d) 30 min

Answer: (b)

54. A tap, that can fill a tank in 50 minutes, is opened. After the tank is half full, it is closed and another tap that drains the half-filled tank in 37.5 minutes is opened. If starting from a half-full tank, both taps were opened, how many minutes would it take to fill the tank?

(a) 60 min

(b) 65 min

(c) 75 min

(d) 80 min

Answer: (c)

55. The ratio of time taken in completing a work by a girl and boy is 4 : 3. The boy and the girl can complete the work together in 60 days. In how many days can the girl complete one-fifth piece of the work alone?

(a) 28 days

(b) 14 days

(c) 35 days

(d) 30 days

Answer: (a)

56. The volume of two spheres A and B are in the ratio 1331:343. If the sum of radius A and B is 36cm, then find the surface area of B.

(a) 2500 sq. cm

(b) 2546 sq. cm

(c) 2646 sq. cm

(d) 2464 sq. cm

Answer: (d)

57. A cone having radius 20 cm and slant height 29 cm is converted into a cylinder having equal volume as the cone, find out the height of the cylinder if the radius of the cylinder is 50% smaller than the radius of the cone.

(a) 23 cm

(b) 28 cm

(c) 33 cm

(d) 36 cm

Answer: (b)

General English

61. The sentence below has been divided into three parts. Select the part of the sentence that has an error. If the sentence has no error, select the option 'No Error'.
While the Everest has increased in popularity over/ the st 60 years, Nepalis have continued to/ bear much of the risk involved in summiting.

(a) While the Everest has increased in popularity er

(b) the last 60 years, Nepalis have continued to

(c) bear much of the risk involved in sum

(d) No error

Answer: (a)

62. The sentence below has been divided into three parts. Select the part of the sentence that has an error. If the sentence has no error, select the option 'No Error'.
As of today, the nature/ and environmental movements/ have been able to prevent this.

(a) As of today, the nature

(b) and environmental movements

(c) have been able to prevent this.

(d) No error

Answer: (a)

63. Select the word segment that substitutes (replaces) the bracketed word segment correctly and completes the sentence meaningfully. Select the option 'no correction required' if the sentence is correct as given.
English in Nepal is unique in that it was (introduced neither by colonization or by the missionaries).

(a) introduced either by colonization or by the missionaries

(b) introduced either by colonization nor by the missionaries

(c) introduced neither by colonization nor by the missionaries

(d) No correction required

Answer: (c)

64. Select the word segment that substitutes (replaces) the bracketed word segment correctly and completes the sentence meaningfully. Select the option 'no correction required' if the sentence is correct as given.
(But then, many a man didn't) want children until he had them.

(a) But then, many a men don't

(b) But then, many a men doesn't

(c) But then, many men doesn't

(d) No correction required

Answer: (d)

65. Fill in the blank with the most appropriate choice
The Buddha, on the other hand, obtained _____ in his 35th year, under the Bo tree, after he had abandoned penance.

(a) nirvana

(b) karma

(c) arcana

(d) sienna

Answer: (a)

66. Fill in the blank with the most appropriate choice
It was tempting to _____ him in front of everyone, but that would be childish.

(a) acquittance

(b) denounce

(c) transience

(d) ascendance

Answer: (b)

67. The question below consist of a set of labelled sentences. Out of four options given, select the most logical order of the sentences which form a paragraph.
In the ten years since its publication in 1988, Stephen Hawking's classic work has become a landmark volume in scientific writing, with more than nine million copies in forty languages sold worldwide.
P. These observations have confirmed many of Professor Hawking's theoretical predictions in the first edition of his book, including the recent discoveries of the Cosmic Background Explorer satellite (COBE), which probed back in time to within 300,000 years of the universe's beginning and revealed wrinkles in the fabric of space-time that he had projected.
Q. But the intervening years have seen extraordinary advances in the technology of observing both the micro- and the macrocosmic worlds.
R. That edition was on the cutting edge of what was then known about the origins and nature of the universe.
S. Eager to bring to his original text the new knowledge revealed by these observations, as well as his own recent research.
Professor Hawking has prepared a new introduction to the book, written an entirely new chapter on wormholes and time travel, and updated the chapters throughout.

(a) SRQP
(b) PQRS
(c) RQPS
(d) SPQR

Answer: (c)

68. Select the word that is opposite in meaning (ANT[illegible]YM) to the word given below Jeopardize

(a) Conjure
(b) Compromise
(c) Imperil
(d) Protect

Answer: (d)

69. Select the word that is opposite in meaning (ANTONYM) to the word given below Hamper

(a) Hinder
(b) Shackle
(c) Bridle
(d) Assist

Answer: (d)

70. Four words are given, out of which only one word is spelt correctly. Choose the correctly spelt word.

(a) Cavilier
(b) Caviliar
(c) Caviler
(d) Cavalier

Answer: (d)

71. Four words are given, out of which only one word is spelt correctly. Choose the correctly spelt word.

(a) Insouciant
(b) Insoiciant
(c) Insociant
(d) Insocant

Answer: (a)

72. Select the most appropriate meaning of the given idiom Off The Hook

(a) No longer have to deal with a tough situation
(b) Something said in confidence that the one speaking doesn't want attributed to him/her.
(c) Getting a bad start on a relationship or task.
(d) When multiple people all agree on the same thing.

Answer: (a)

73. Select the most appropriate meaning of the given idiom Smell Something Fishy

(a) To detect someone in the group is betraying the others.
(b) The exact likeness or kind.
(c) Someone who is left-handed
(d) Detecting that something isn't right and there might be a reason for it.

Answer: (d)

74. Select the most appropriate 'one word ' for the e[illegible]essions given below Groups of separate companies that agree to increase profits by fixing p[illegible]es and not competing with each other

(a) Convoy
(b) Cartel
(c) Caravan
(d) Confederation

Answer: (b)

75. Select the most appropriate 'one word ' for the expressions given below Involving a chance that something bad or unpleasant could happen

(a) Bastion
(b) Brickbats
(c) Dicey
(d) Blitzkrieg

Answer: (c)

76. How does Booby describe her relationship with Valerie?

(a) Friend
(b) Sister
(c) Best friend
(d) Cousin

Answer: (c)

77. What conclusion does Bobby reach at the end?

(a) Bobby decides to meet Valerie next month after the State Fair.

(b) Bobby disagrees to go to the State Fair with Valerie.

(c) They agree to go somewhere else because Bobby isn't comfortable.

(d) Bobby agrees to go to the State Fair.

Answer: (d)

78. How does Bobby describe the crowds of the state fair?

(a) Creative and chattering

(b) Noisy, energetic and cheerful

(c) Unruly, uncomfortable and long

(d) Disarrayed and uncontrollable

Answer: (b)

80. What does the line "The fried food at the State Fair is a gastronomical nightmare on its own." mean?

(a) The rides at the State Fair are a nightmare.

(b) The food at the State Fair is delicious.

(c) The Food at the State Fair was harmful for the stomach.

(d) The State Fair is a nightmare.

Answer: (c)

Discipline1

101. When combustion of 1 kg of carbon ta[illegible]n sufficient quantity of oxygen what will be the amount of oxygen required to produce 11/3 kg [illegible]bon dioxide?

(a) 3/8kg

(b) 8kg

(c) 3kg

(d) 8/3kg

Answer: (d)

102. If 'm' is an odd positive integer, then am + bm is divisible by_____.

(a) $a^2 + b^2$

(b) a + b

(c) a – b

(d) Both $a^2 + b^2$ and a + b

Answer: (b)

103. If B, C and D are any three sets, then B × (C ∪ D) is equal to?

(a) (B × C) ∩ (B × D)

(b) (B ∪ C) × (B ∪ D)

(c) (B × C) ∪ (B × D)

(d) (B ∩ C) × (B ∩ D)

Answer: (c)

104. At 4 Degree C the specific gravity of water is _____.

(a) 1000

(b) 1

(c) 0.1

(d) 100

Answer: (b)

105. Most cast irons have a chemical composition of _____ carbon, 1–3% silicon, and the remainder is iron.

(a) 0–0.5%

(b) 5–10%

(c) 2.5–4.0%

(d) 0.5–1%

Answer: (c)

106. Speed of a boat can be measured by using _____.

(a) Venturimeter

(b) Pitot Tube

(c) Manometer

(d) Orifice Meter

Answer: (b)

107. The deformation in length of a body of length l, [illegible] A when tensile load 'P' is acting, is given by _____.

(a) PA/El

(b) Pl/AE

(c) AE/Pl

(d) PE/Al

Answer: (b)

108. If the diameter for tolerance grades IT01 is given as 100mm then standard tolerance unit (i) in microns is _____.

(a) 0.1

(b) 1.1

(c) 0.8

(d) 0.3

Answer: (b)

109. Identify 'V' type threads from the given options.

(a) B.S.W Thread

(b) Metric Thread

(c) Knuckle Thread

(d) Both B.S.W Thread and Metric Thread

Answer: (d)

110. The interference fit required for wheel set is _____.

(a) H8/u8
(b) N8/u7
(c) H7/m7
(d) H8/m7

Answer: (a)

111. In an isometric projection, lines which are not parallel to the isometric axis are called _____.

(a) Concurrent lines
(b) Non Isometric lines
(c) Co-incident lines
(d) Isometric lines

Answer: (b)

112. When two or more entities lie on the same plane they are called _____

(a) Sub ordinate
(b) Datum
(c) Non Coplanar
(d) Coplanar

Answer: (d)

113. Latent defects are the defects which are identifi _____.

(a) during work
(b) during inspection
(c) after issuing final certificate
(d) at initial stage

Answer: (c)

114. When focus on only quality work is required, architects are only engaged in _____.

(a) Selective Service
(b) Partial Service
(c) Typical Service
(d) Comprehensive Service

Answer: (d)

115. For A Circular Rod to have Small Curvature the ratio of the depth of curvature 'h' to the radius of curvature of the rod axis 'Ro' should be comparable with _____.

(a) 0.2 to 0.5
(b) 0.5 to 1.0
(c) 1.5 to 2.5
(d) 0.2 or less

Answer: (d)

116. The Proof of Resilience of a Body is defined as the _____.

(a) Total Energy stored in a Body.

(b) Maximum energy stored in a Body.

(c) Ratio of Total and Maximum energy.

(d) When the Maximum energy is zero.

Answer: (b)

117. Two rectangular simply Supported Beams A1 and A2 have Bending Moment M and 2M, and the the Section Modulus as 4 and 2 respectively, the ratio of Flexural Stress of beam A1 to beam A2 is:

(a) 2

(b) 1÷2

(c) 4

(d) 1÷4

Answer: (d)

118. The Ratio of Efficiency of Riveted Joints in a Metal Frame to the Efficiency of Welding Joints is _____.

(a) 1÷3

(b) 2÷3

(c) 3÷4

(d) 4÷3

Answer: (c)

119. Which of the following represent weather cond ns and elements of a very large area _____.

(a) Geo-climate

(b) Ecological Climate

(c) Dynamic Climatology

(d) Physical Climatology

Answer: (a)

120. Which of the following is not a Primary pollutant _____.

(a) Carbon dioxide

(b) Carbon monoxide

(c) Nitrogen oxide

(d) Both Carbon monoxide and Nitrogen oxide

Answer: (a)

Discipline2

121. "The density of any two gases at the same temperature and pressure is directly proportional to their masses", is the statement of _____.

(a) Joule's Law
(b) Boyle's law
(c) Charles's Law
(d) Avogadro's law

Answer: (d)

122. Which of the following is not a reversible process?

(a) Throttling Process
(b) Constant volume process
(c) Constant pressure Process
(d) Isothermal process

Answer: (a)

123. The frictionless adiabatic process is also known as _____.

(a) Isothermal Process
(b) Isentropic Process
(c) Isobaric Process
(d) Isochoric Process

Answer: (b)

124. The term used for the One lumen of light falling l m^2 of surface is:

(a) Light Offset
(b) External Lighting
(c) Lux
(d) Fluorescent

Answer: (c)

125. The transfer of load carried by an existing foundation from its present bearing level to a new level at a lower depth is called _____.

(a) Pile foundation
(b) Underpinning
(c) Well foundation
(d) Shoring

Answer: (b)

126. Sheet Piling is suitable for _____.

(a) Fine Grain Soil
(b) Fine Sand
(c) Clayey Soil
(d) All of the given options

Answer: (d)

127. Pavements that contain a nominal amount of cement to bind materials in the sub base and have bituminous materials for surfacing is known as:-

(a) Flexible Pavement
(b) Rigid Pavement
(c) Earthen Pavement
(d) Stone Mastic Pavement

Answer: (a)

128. For an offshore Marine structure or tower which of the following type of pile should be used:

(a) Batter Pile
(b) Friction Pile
(c) screw piles
(d) Strip Foundation

Answer: (a)

129. One of the best-known and most widely used systems for land use classification is the:

(a) Holdridge Life Zone Model
(b) Fannel Model
(c) Dawling Mode
(d) Zoning Life Zone Model

Answer: (a)

130. Which One of the following is not a Main pillar of ...een Ecological Movement?

(a) Ecology
(b) Social Responsibility
(c) Future Focus
(d) Non violence

Answer: (c)

131. A large Land community where the plant species are uniform is called _____.

(a) Biomes
(b) Grass Land
(c) Forest
(d) Green advocacy

Answer: (a)

132. The Amount of Dissolved Oxygen (DO) required for the survival of aquatic life should be between:

(a) 7-8 ppm
(b) 0- 3 ppm
(c) 4-6 ppm
(d) 8- 9 ppm

Answer: (c)

133. The capability of some mineral to split along certain planes parallel to the crystal face is known as_____.

(a) Streak
(b) Lustre
(c) Cleavage
(d) Crystal

Answer: (c)

134. On increasing the quantity of C2S in cement Clinkers:

(a) Resistance to freezing increase but early strength decrease.
(b) Resistance to Freezing decreases but, early strength increase.
(c) Both Resistance to freezing and early strength increase.
(d) Both Resistance to freezing and early strength decrease.

Answer: (d)

135. Fungi that attack a growing tree and damage it's structure is called _____.

(a) Dry Rot
(b) Wet Rot
(c) White or Brown Rot
(d) Green Rot

Answer: (c)

136. Gothics is an architecture style developed from _____.

(a) Roman style
(b) Persian style
(c) Christian style
(d) Indian style

Answer: (a)

137. In India, the Maximum number of historic monuments can be found in which of the following cities?

(a) Jaipur
(b) Lucknow
(c) Delhi
(d) Rajasthan

Answer: (c)

138. Which of the following architect worked on modern style?

(a) Hector Guimard
(b) Antonio Gaudi
(c) Bartolomeo Restrelli
(d) Both Hector Guimard and Antonio Gaudi

Answer: (d)

139. In India the rock cut architecture abundant in symbolic geometry is influenced by _____.

(a) Persians
(b) Romans
(c) Arabs
(d) Europeans

Answer: (a)

140. If the departure and Latitude of a line are + 82.0 m and -123.2 m respectively, the length of the line is _____.

(a) 155.7 m
(b) 188.0 m
(c) 177.0 m
(d) 147.99 m

Answer: (d)

Discipline3

141. The art to determine the correct difference of levels between two points where its is not possible to set up the instrument between them is known as:

(a) Trigonometric Levelling
(b) Reciprocal Levelling
(c) Fly Levelling
(d) Differential Levelling

Answer: (d)

142. The slope correction for a Length 40 meter along a gradient of 1/20 is _____.

(a) 0.05 cm
(b) 5.00 cm
(c) 50 cm
(d) 0.50 cm

Answer: (b)

143. The intersection of Horizontal axis, vertical axis and the line of collimation, is known as _____.

(a) Instrumental Center
(b) Axis of telescope
(c) Trunion axis
(d) Axis of plate level

Answer: (a)

144. Which of the following is not a programming language?

(a) C

(b) Java

(c) Python

(d) A.I

Answer: (d)

145. Which of the following is not a part of secondary constant?

(a) Real Constant

(b) Array

(c) Pointer

(d) Structure

Answer: (a)

146. Repeating a portion of the program either specified number of time or until a condition is not satisfied is called _____.

(a) Array

(b) Function

(c) Loop

(d) Recursion

Answer: (c)

147. The collection of similar data type or elements is called _____.

(a) Case Control

(b) Pointer

(c) argument

(d) Array

Answer: (d)

148. In Rural areas in India, which type of waste water system is used?

(a) partially separate

(b) combined

(c) separate

(d) Separate but intersecting at some distance

Answer: (b)

149. When the Velocity of water flowing in a Pipe is suddenly diminished, raising the pressure, the phenomenon is called:

(a) Air Lock

(b) Water Hammer

(c) Cavitation

(d) Siphonage

Answer: (b)

150. Coarse screens in the water treatment unit are provided at a distance of _____.

(a) 50 - 75 mm
(b) 75 - 100 mm
(c) 100 - 125 mm
(d) 125 - 150 mm

Answer: (b)

151. In the given options which one is not the methods of achieving energy efficiency in buildings _____.

(a) material and construction technique
(b) building orientation
(c) renewable energy
(d) Green building

Answer: (d)

152. The Method to control the temperature in the Buildings is _____.

(a) thermal insulation
(b) Aluminium Sheets
(c) Plywood
(d) All of the given options

Answer: (a)

153. Mass, Space, Proportion and Balance in an aest ıc building are its _____.

(a) Key Elements
(b) Ideal modelling
(c) Information modelling
(d) All of the given options

Answer: (a)

154. A Built Environment is all of the following, except _____.

(a) Buildings
(b) Facilities
(c) Rivers
(d) Roads

Answer: (c)

155. In a machine shop having extremely high ceiling with enclosed space which of the following sound absorbers should be used _____.

(a) Variable absorber
(b) Suspended absorber
(c) Rotatable Panels
(d) Rotatable Cylinders

Answer: (b)

156. The Glare contribution of different sources depends up on _____.

(a) Size
(b) Luminance
(c) Both Size & Luminance
(d) Colour

Answer: (c)

157. In steels, the temperature point at which phase change start on heating is know as _____.

(a) Lower critical point
(b) Melting Point
(c) Upper Critical point
(d) Yield Point

Answer: (a)

158. Which of the following is not a case hardening process?

(a) Carburising
(b) Cyaniding
(c) Nitriding
(d) Normalising

Answer: (d)

159. A unit cell of a Face Centred Cubic space lattice has a coordination number of _____.

(a) 9
(b) 17
(c) 12
(d) 14

Answer: (c)

160. A material is to be used for making springs. Which of the following property is essential for the material?

(a) Toughness
(b) Malleability
(c) Resilience
(d) Ductility

Answer: (c)

Discipline4

161. In S.I. units the value of Universal gas constant 'R' is given by:

(a) 8.314kJ/kg-moleK

(b) 83.14kJ/kg-moleK

(c) 0.8314kJ/kg-moleK

(d) 831.4kJ/kg-moleK

Answer: (a)

162. The blade efficiency of a steam turbine is 0.50 and nozzle efficiency is 0.30, then the stage efficiency of the steam turbine is _____.

(a) 0.3

(b) 0.8

(c) 0.5

(d) 0.15

Answer: (d)

163. Which of the following is the correct sequence for decreasing order of brake thermal efficiency of the given type of I.C. engine?

(a) 4 Stroke C.I Engine, 4 stroke S.I Engine, 2 stroke S.I engine

(b) 4 stroke S.I engine, 4 stroke C.I engine, 2 stroke S.I Engine

(c) 4 stroke C.I engine, 2 stroke S.I Engine, 4 stroke S.I engine

(d) 2 stroke S.I Engine 4 stroke S.I engine, 4 stroke C.I engine

Answer: (a)

164. if 'U' is the useful heat drop and 'I' is the isentr c heat drop then the coefficient of Nozzle is defined as _____.

(a) U.I

(b) U/I

(c) U+I

(d) U-I

Answer: (b)

165. Which of the following is the correct relation for Young's modulus of elasticity, modulus of Rigidity, and Bulk Modulus?

(a) E = (9KC)/(3C+K)

(b) E = (3K+C)/(9KC)

(c) E = (9KC)/(3K+C)

(d) E = (9K+C)/(3CK)

Answer: (c)

166. The proof resilience per unit volume of a material is known as _____.

(a) Resilience

(b) Modulus of Resilience

(c) Modulus of rigidity

(d) Strain energy

Answer: (b)

167. The power transmitted by a belt is maximum when maximum tension in belt is equal to _____.

(a) 3 times of Centrifugal Tension
(b) 2 times of Centrifugal Tension
(c) Centrifugal Tension
(d) 1/3 of Centrifugal Tension

Answer: (a)

168. The True length of a Line which is parallel to V.P and H.P can be seen in _____.

(a) Front view and side view
(b) Top view and side view
(c) Top view and Front view
(d) Front view

Answer: (c)

169. If the Scale of a drawing is given as 1cm=1mm then the R.F. is _____.

(a) 1000
(b) 1÷1000
(c) 1÷100
(d) 1÷10

Answer: (d)

170. When a cone is cut by a section plane making a ngle of 90 degree with the cone axis then the section obtained on the cone will be a _____.

(a) Parabola
(b) Ellipse
(c) Hyperbola
(d) Circle

Answer: (d)

171. If the First angle projection of an object is to be obtained, the object must be situated in the _____.

(a) First Quarter
(b) Second Quarter
(c) Third quarter
(d) Fourth Quarter

Answer: (a)

172. Different ways to draw an orthographical projections are _____.

(a) First and third angle projection
(b) third, fourth and second angle projection
(c) First and second angle projection
(d) Second and third angle projection

Answer: (a)

173. When all four equal faces of a polyhedron are equilateral triangle then it is known as _____.

(a) Octahedron
(b) Hexahedron
(c) Tetrahedron
(d) Dodecahedron

Answer: (c)

174. When the projectors make an angle of 90 degrees with the plane on which projection is being obtained, then the projection is called _____.

(a) Perspective projection
(b) Orthographic Projection
(c) Pictorial Projection
(d) Oblique Projection

Answer: (b)

175. The correct abbreviation for cutting a metric thread of Nominal Diameter 18mm and pitch 1 mm is _____.

(a) M18 × 1
(b) M1 × 18
(c) M1 + 18
(d) M18 × M1

Answer: (a)

176. Which of the following is used for dev[illegible]ing [illegible]m and single curved surface like cylinder?

(a) Radial Line Development
(b) Parallel line Development
(c) Inclined line development
(d) Both Radial Line Development and Parallel line Development

Answer: (b)

177. Which one of the following is correct?

(a) Atmospheric Pressure = absolute Pressure -Vaccum Pressure
(b) Absolute Pressure = Atmospheric Pressure - Vaccum pressure
(c) Absolute Pressure =Vaccum pressure - Atmospheric Pressure
(d) Vaccum Pressure - Absolute Pressure = Atmospheric Pressure

Answer: (b)

178. Which one of the following is not a reaction turbine?

(a) Francis turbine
(b) Kaplan turbine
(c) Pelton wheel turbine
(d) Propeller turbine

Answer: (c)

179. The Slip of a Reciprocating Pump is Negative when the pump is running at high speeds and _____.

(a) Suction Pipe is long and delivery pipe is short
(b) Deliver pipe is long and suction pipe is short
(c) Both suction and delivery pipes are long
(d) both suction and delivery pipes are short

Answer: (a)

180. If the Mach number is less than 1 then the flow is _____.

(a) Supersonic
(b) Subsonic
(c) Sonic
(d) Hypersonic

Answer: (b)

Discipline5

181. Orifice meter works on same principle as _____.

(a) Pitot tube
(b) Venturimeter
(c) Draft tube
(d) Manometer

Answer: (b)

182. Speed of turbine, operating under one [illegible] is _____.

(a) N/H
(b) √N/H
(c) H/√N
(d) N/√H

Answer: (d)

183. When the positive terminal of D.C welding Machine is connected to the work then the setup is said to have _____.

(a) Straight polarity
(b) Positive Polarity
(c) Negative Polarity
(d) Reverse polarity

Answer: (a)

184. A number of evenly spaced holes in a regular pattern are to be cut on a metal sheet. Which of the following operation is suitable for required results?

(a) Lancing
(b) Punching
(c) Perforating
(d) Notching

Answer: (c)

185. The property of sand which allows flue gases to pass through the mold is called _____.

(a) Plasticity
(b) Adhesiveness
(c) Porosity
(d) Cohesiveness

Answer: (c)

186. Number of pairs in a kinematic chain is 7 then it has _____.

(a) 10 links
(b) 12 links
(c) 14 links
(d) 7 links

Answer: (a)

187. The number of links in a mechanism is 5 then th umber of instantaneous centres is _____.

(a) 12
(b) 10
(c) 5
(d) 15

Answer: (b)

188. The ball and socket joint is a complete example of _____.

(a) Spherical pair
(b) Roller Pair
(c) Turning Pair
(d) Sliding Pair

Answer: (a)

189. The value of thermal conductivity 'k' for non metallic solids is _____.

(a) lower than metals
(b) more than metals
(c) equal to metals
(d) zero

Answer: (a)

190. A material which reduces heat flow with reasonable effectiveness is called _____.

(a) conductor

(b) semiconductor

(c) insulator

(d) super conductor

Answer: (c)

191. Nusselt number is given as _____.

(a) hl/k

(b) μ/k

(c) ρvl/μ

(d) lk/h

Answer: (a)

192. Gantt chart is used for _____.

(a) production schedule

(b) production control

(c) inventory control

(d) cost handling

Answer: (a)

193. Exchange value is defined as:

(a) Cost value - Esteem value

(b) Use value - Esteem value

(c) Cost value + Esteem value

(d) Use value + Esteem value

Answer: (d)

194. Which of the following chart is used when attributre data, such as a count of the number of defect is the focus?

(a) X-chart

(b) R-chart

(c) P-chart

(d) C-chart

Answer: (d)

195. Which of the following is used for medium level enterprise?

(a) Job production

(b) Batch production

(c) Continuous production

(d) Both Job production and Continuous production

Answer: (b)

196. Which of the following is not an essential property for a good refrigerent?

(a) High boiling point
(b) High critical temperature
(c) Non toxic
(d) High latent heat

Answer: (a)

197. On a psychrometric chart sensible cooling can be denoted by a straight line parallel to _____.

(a) Humidity
(b) Wet bulb temperature
(c) Dry bulb temperature
(d) Dew point temperature

Answer: (c)

198. Dew point depression is equal to the _____.

(a) Dry bulb temperature - Dew point temperature
(b) Dry bulb temperature + Dew point temperature
(c) Dew point temperature - Dry bulb temperature
(d) Dry bulb temperature - Wet bulb temperature

Answer: (a)

199. Break even point for a business is a point at whi usiness is:

(a) Not making profit
(b) not incurring loss
(c) Neither making profit nor incurring loss
(d) Making highest profit

Answer: (c)

200. A critical path consumes _____.

(a) Minimum resources
(b) Maximum resources
(c) intermediate resources
(d) some particular resources

Answer: (b)

Discipline6

201. The idea of dividing human activities into division of movement is known as:

(a) Therbligs
(b) Stray diagram
(c) Hasley plan
(d) Break even analysis

Answer: (a)

202. The shortest possible time in which an activity can be completed is known as:

(a) Most likely time
(b) Pessimistic time
(c) Optimistic time
(d) Critical time

Answer: (c)

203. For a square matrix the rank of matrix is equal to the number of:

(a) Non zero Eigen values
(b) Eigen vector
(c) Number of column
(d) Number of rows

Answer: (a)

204. In work study '→' represents:

(a) Delay
(b) Inspection
(c) Transport
(d) Shortage

Answer: (c)

205. The assessment of performance of the operator the time study man is known as:

(a) Rating factor
(b) Observed time
(c) Actual time
(d) Average time

Answer: (a)

206. in an incompressible flow region the Mach number is:

(a) M<0.3
(b) M>5
(c) M=1
(d) M>10

Answer: (a)

207. The force which initially propel the rotor at a given speed is called _____.

(a) Thrust
(b) Propulsion force
(c) Lift
(d) Both Thrust and Propulsion force

Answer: (d)

208. In a turbofan jet engine the bypass factor is given by _____.

(a) Mass of cold air/Mass of hot air

(b) Mass of cold air x Mass of hot air

(c) Mass of cold air + Mass of hot air

(d) Mass of cold air - Mass of hot air

Answer: (a)

209. A device which is used to increase the pressure and reduce the velocity of a fluid is known as:

(a) Nozzle

(b) Diffuser

(c) Orifice meter

(d) Pitot tube

Answer: (b)

210. Which of the following is an extensive property?

(a) Density

(b) Pressure

(c) Total energy

(d) Temperature

Answer: (c)

211. A spring mass system with mass 4 kg and spring constant 'k' = 1600 N/m has the initial displacement xo= 0. The maximum initial velocity that can be given to mass without amplitude of free vibration exceeds a value of 0.1m is _____.

(a) 7 m/s

(b) 2 m/s

(c) 4 m/s

(d) 3 m/s

Answer: (b)

212. When the frequency of external excitation is equal to the natural frequency of the body, the amplitude of vibration becomes large. This concept is known as _____.

(a) Damping

(b) Phase difference

(c) Resonance

(d) Critical damping

Answer: (c)

213. In a reaction turbine the expansion of steam over blades represents _____.

(a) Isothermal process

(b) Isobaric process

(c) isochoric process

(d) Isentropic process

Answer: (d)

214. In a reaction turbine a stage is represented by _____.

(a) Each row of blade

(b) Alternate row of blade

(c) No. of casing

(d) Both Each row of blade and Alternate row of blade

Answer: (a)

215. Draft tube is used to have the pressure at runner outlet _____.

(a) Above the atmospheric pressure

(b) Below the atmospheric pressure

(c) Equal to the atmospheric pressure

(d) More than the gauge pressure

Answer: (b)

216. A closed cycle gas turbine works on _____.

(a) Ericsson cycle

(b) Otto Cycle

(c) diesel cycle

(d) Brayton cycle

Answer: (d)

217. A closed cylindrical thin shell is subjected to inter pressure. The tensile stress acting in the direction of axis is called _____.

(a) Circumferential stress

(b) longitudinal stress

(c) Hoop stress

(d) Yield stress

Answer: (b)

218. When steam is carried out by pipes at high pressure then pipes are joined by means of _____.

(a) Socket

(b) Union

(c) Expansion Joint

(d) Spigot joint

Answer: (c)

219. Thickness of a thin spherical shell subjected to internal pressure is given by:

(a) pd/4σ

(b) σ/4pd

(c) p/4σt

(d) pd/σ

Answer: (a)

220. The thickness of a thin cylinder is determined on the basis of _____.

(a) Torsional stress
(b) Shear strain
(c) circumferential stress
(d) longitudinal stress

Answer: (c)

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221. Lame's equation which is used to find the thickness of the cylinder is based on _____.

(a) Maximum shear stress theory
(b) Maximum principal strain theory
(c) Maximum shear strain theory
(d) Maximum principal stress theory

Answer: (d)

222. The relation between Gain, Amplitude of response and Input is given by _____.

(a) Gain = Input/Amplitude of response
(b) Gain = Amplitude of response/Input
(c) Input = Gain /Amplitude of response
(d) Amplitude of response = Input/Gain

Answer: (b)

223. A system in which the output has an e[illegible]t or[illegible]put is called _____.

(a) Open loop system
(b) No feedback system
(c) Closed loop system
(d) Both Open loop system and No feedback system

Answer: (c)

224. A functional industrial robot typically have _____.

(a) 3 degrees of freedom
(b) 2 degrees of freedom
(c) 4 degrees of freedom
(d) 6 degrees of freedom

Answer: (d)

225. Robot designed by Cartesian coordinates has _____.

(a) Three linear movements
(b) Two linear movement
(c) Two rotational movements
(d) One linear and one rotational movement

Answer: (a)

226. An essential work done by an actuator in a machine is _____.

(a) Sending signals

(b) Moving and controlling a system

(c) Collecting feedback

(d) Supply Energy

Answer: (b)

227. A device which is used to measure the total hemispherical radiation is known as _____.

(a) Pyrheliometer

(b) Pyranometer

(c) Galvanometer

(d) Sunshine recorder

Answer: (b)

228. When the radiation is falling on a body then the sum of Absorptivity, Reflectivity and Transmitivity is given as _____.

(a) -1

(b) 0

(c) 1

(d) Infinity

Answer: (c)

229. The change in speed of the wind with its heigh known as _____.

(a) Wind shear

(b) Total change

(c) Shear change

(d) Actual change

Answer: (a)

230. Flash steam plants are the parts of _____.

(a) Geothermal Energy

(b) Wind Energy

(c) Hydro Energy

(d) Solar energy

Answer: (a)

231. Any form of precipitant with acidic components such as sulphuric acids or nitric acids which falls on the ground in wet or dry form is called _____.

(a) Precipitation rain

(b) Acid rain

(c) Basic rain

(d) Acid fall

Answer: (b)

232. Which of the following is not an air pollution control equipment?

(a) Fabric filter

(b) Spray dryers

(c) Reformer

(d) Wet scrubber

Answer: (c)

233. PM10 refers to particles:

(a) Less than or equal to 10 μm

(b) Less than or equal to 10 nm

(c) Less than or equal to 10 mm

(d) Less than or equal to 100 nm

Answer: (a)

234. Which of the following is an approach to fracture analysis?

(a) Stress intensity approach

(b) Crack extension

(c) Fracture mechanics

(d) Damage Tolerance

Answer: (a)

235. What is R ratio in fatigue cracking?

(a) Ratio of the maximum stress to the minimum

(b) Ratio of the minimum stress to the maximum

(c) Ratio of the maximum ductility to the

(d) Ratio of the minimum ductility to the maximum

Answer: (b)

236. When is a weldment said to be overmatched?

(a) Weld metal has higher elastic constant than the base metal.

(b) Weld metal has lower elastic constant than the base metal.

(c) Weld metal has higher strength than the base metal.

(d) Weld metal has lower strength than the base metal.

Answer: (c)

237. The acceleration of fatigue crack growth due to interaction with the environment is called _____.

(a) Crack fatigue

(b) Corrosion fatigue

(c) Environmental cracking rate

(d) Fatigue threshold

Answer: (b)

238. Which of the following is the essential function of control rods in a nuclear reactor?

(a) Absorb excess neutron
(b) Absorb excess proton
(c) Reflect all the neutrons
(d) Control Temperature

Answer: (a)

239. A nuclear reactor operation is said to be critical if the value multiplication factor 'k' is eqaul to_____.

(a) 0
(b) 1
(c) 10
(d) less than 1

Answer: (b)

240. Poisson's ratio is defined as:

(a) Lateral strain/Longitudinal strain
(b) Longitudinal strain/Lateral strain
(c) Shear stress/Shear strain
(d) Shear strain/shear stress

Answer: (a)

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241. The ratio of the actual length of the co[illegible]n to[illegible]e least radius of gyration is called _____.

(a) Poisson's ration
(b) Bulk modulus
(c) Slenderness ration
(d) Modulus of rigidity

Answer: (c)

242. When a beam is subjected to bending the neutral axis experiences _____.

(a) Maximum stress
(b) Bending stress
(c) Compressive stress
(d) Zero stress

Answer: (d)

243. The study of principles and methods of transforming an unintelligible message back into an intelligible message without knowledge of the key is called _____.

(a) Cryptanalysis
(b) Cyber Security
(c) Steganography
(d) Digital watermarking

Answer: (a)

244. Which of the following is not a category of security services?

(a) Authentication
(b) Confidentiality
(c) Access control
(d) Repudiation

Answer: (d)

245. Rama tried to wire tap to capture data in the network. What is this process called?

(a) Interruption
(b) Interception
(c) Modification
(d) Fabrication

Answer: (b)

246. A person from North Korea inserted spurious m sage in a network. What is this process called?

(a) Interruption
(b) Interception
(c) Modification
(d) Fabrication

Answer: (d)

247. In an 8-bit gray scale image, what is the maximum value of a pixel?

(a) 127
(b) 128
(c) 255
(d) 256

Answer: (c)

248. What is the decimal code for red colour?

(a) (255,0,0)
(b) (255,255,255)
(c) (0,255,0)
(d) (0,0,255)

Answer: (a)

249. How many masks does Prewitt operator provide?

(a) 1

(b) 2

(c) 3

(d) 4

Answer: (b)

250. Which of the following is not a property of derivative mask?

(a) A derivative mask have positive and as well as negative values

(b) The sum of all the values in a derivative mask is equal to zero

(c) The edge content is increased by a derivative mask

(d) As the size of the mask grows , more edge content is decreased

Answer: (d)

251. Which of the following is not a type of electric drives?

(a) Group drive

(b) Individual drive

(c) Single-motor drive

(d) Multi-motor drive

Answer: (c)

252. Which of the following is an advantage of group ctrical drive?

(a) In group drive we require one machine with h capacity for to control the group of machines.

(b) In group drive speed control of indi nine is difficult using stepped pulleys, belts etc..

(c) The possibility of installation of additional machines to the existing system in group drive is limited

(d) If a fault occurs in the main machine then all the operations will be effected.

Answer: (a)

253. Single-spindle drilling machine is an example of which electrical drive?

(a) Group drive

(b) Individual drive

(c) Single-motor drive

(d) Multi-motor drive

Answer: (b)

254. Which of the following is an example of single phase induction motor?

(a) Double cage

(b) Squirrel cage

(c) Repulsion motor

(d) Slip commutation motor

Answer: (c)

255. In order to compensate the low flux density, what should the primary current applied to the primary winding have?

(a) High frequency
(b) Low frequency
(c) High flux
(d) Low flux

Answer: (a)

256. Which type of charts are useful for planning and scheduling projects?

(a) Scatter Plot
(b) Gantt Charts
(c) Pie Chart
(d) Treemap

Answer: (b)

257. Which of the following is a not an advantage of effective communication?

(a) Establish long-term partnerships
(b) Creates a sense of trust
(c) It renders one unapproachable
(d) Positive energy is generated

Answer: (c)

258. In the US people usually point with the index fir . In Japan and in India, it is considered rude. What factor of nonverbal communication does it de ?

(a) Body language
(b) Facial expressions
(c) Appearance
(d) Culture

Answer: (d)

259. _____ barriers to communication may result from personality conflicts, poor management, resistance to change, or a lack of motivation.

(a) Perceptual
(b) Physiological
(c) Attitudinal
(d) Physical

Answer: (c)

260. Which of the following is not a part of hydroelectric power plant?

(a) Dam
(b) Reservoir
(c) Power plant
(d) Reactor

Answer: (d)

Discipline9

261. A _____ uses optical sensors to detect flames at the flame stage of fire.

(a) Flame detector
(b) Heat detector
(c) Photoelectric detector
(d) Smoke detector

Answer: (a)

262. Which of the following buildings fall under high fire hazard?

(a) Schools
(b) Chemical factories
(c) Residential buildings
(d) Offices

Answer: (b)

263. Which of the following is a disadvantage of solar cell and solar panel?

(a) Reduces Electricity Bills
(b) Low Maintenance Costs
(c) Uses a Lot of Space
(d) Renewable Energy Source

Answer: (c)

264. Which of the following is not an objective of Sm[illegible]e Control Systems?

(a) To keep escape roots free from smo[illegible]
(b) To reduce toxic gases and fumes
(c) To reduce thermal damage of building during fire
(d) To speed up full development of fire

Answer: (d)

265. _____ is a situation in which too many people live in too little space.

(a) Overcrowding
(b) Housing
(c) Urban Sprawl
(d) Squatter Settlements

Answer: (a)

266. Which of the following is not a solution to resolve urbanization issues?

(a) Building Sustainable and Environmentally-friendly Cities
(b) Creation of More Jobs
(c) Population Control
(d) Preclude local community in local government

Answer: (d)

267. Which of the following impacts children due to urban issues?

(a) Overcrowding
(b) Unemployment
(c) Poor public education
(d) Urban crime

Answer: (c)

268. Which of the following is not a characteristic of squatter settlements?

(a) Physical Characteristics
(b) Operational Characteristics
(c) Social Characteristics
(d) Legal Characteristics

Answer: (b)

269. Which of the following device is used for climate research?

(a) Supercomputer
(b) Mainframe computers
(c) Palmtop
(d) Personal computer

Answer: (a)

270. The _____ tag is used to provide a text to the tab so as to explain the contents of the table.

(a) Comment
(b) Caption
(c) Paragraph
(d) Body

Answer: (b)

271. What cannot be created with DHTML?

(a) Animation
(b) Pop-up menus
(c) Inclusion of Web page content from external data sources
(d) Complex coding structure

Answer: (d)

272. PARAM 10000 belongs to which generation of computers?

(a) Second
(b) Third
(c) Fourth
(d) Fifth

Answer: (d)

273. A _____ relates to specific social expectations within a culture relating to behavior; what is acceptable behavior or not.

(a) cultural value

(b) cultural norm

(c) cultural role

(d) cultural tradition

Answer: (b)

274. What is not a key factor Vitruvius noted related to architecture?

(a) Firmness

(b) Delight

(c) Commodity

(d) Luxury

Answer: (d)

275. What is not a basic human need that architectural design principles needs to consider?

(a) sustenance

(b) security

(c) repugnance

(d) self-actualization

Answer: (c)

276. _____ territory falls to the responsibility and control of nobody, thus the rules and governing principles of these areas are typically absent.

(a) Government

(b) Private

(c) Group

(d) Vacant

Answer: (d)

277. What does metaphor mean in architecture?

(a) Adapting the concept / working of the natural form in design

(b) Comparison that shows how two things that are not alike in most ways are similar in another important way

(c) Aura around an object generated by the object

(d) Capability of creating various micro climates

Answer: (a)

278. _____ relations refers to interacting with the immediate context through visual or spatial connections.

(a) Positional relations

(b) Atmospherical relations

(c) Metaphorical relations

(d) Disturbed relations

Answer: (b)

279. What is the drawback of Palm Jumeirah architecture?

(a) Advanced for the technology
(b) Improves the existing soil quality
(c) Obstructs the natural course of water
(d) Sustainability

Answer: (c)

280. What is a series of vertical members used to support wall sheathing called?

(a) plate
(b) rafter
(c) sheathing
(d) studs

Answer: (d)

Teaching Methodology

281. When a feared activity performed by the model is not punished then it is known as _____.

(a) Creativity
(b) Facilitation
(c) Disinhibition
(d) Observation

Answer: (c)

282. What is the distance between a student's abili[illegible]o perform a task under adult guidance and or with peer collaboration and the student's a[illegible]of [illegible]ving the problems independently?

(a) Substantive Transfer
(b) Zone of Proximal Development
(c) Procedural Transfer
(d) Scaffolding

Answer: (b)

283. _____ drive results due to the testosterone hormones in males and estrogen hormones in females in differing quantities of every species.

(a) Sex
(b) Hunger
(c) Thirst
(d) Aggression

Answer: (a)

284. Which type of communication has a built-in system of feedback ensuring that further information, clarification are provided whenever possible?

(a) Institutional Communication

(b) Public Communication

(c) Mass communication

(d) Two-way communication

Answer: (d)

285. Which principle of Language Learning requires an initial oral approach with emphasis on audio-lingual skills followed by reading and writing?

(a) Principle of Graded Patterns

(b) Principle of Basic Sentence

(c) Principle of Speech

(d) Principle of Shaping Responses

Answer: (c)

286. Name the method that teaches children to recognise relationships between letters and sounds.

(a) Alphabetic Method

(b) Phonic Method

(c) Word Method

(d) Sentence Method

Answer: (b)

287. _____ is also more or less similar to Sati but i a mass suicide.

(a) Jauhar

(b) Saka

(c) Devdasi

(d) Sahagaman

Answer: (a)

288. _____ is a personality test measuring two scales "instrumentality" and "expressivity", commonly taken to be masculinity and femininity, respectively.

(a) Thematic Apperception Test

(b) Rosarchach Test

(c) Bem Sex Role Inventory (BSRI)

(d) Personal Attributes Questionnaire (PAQ)

Answer: (d)

289. In which year did the Government of India pass the Dowry Prohibition Act, making dowry demands in wedding arrangements illegal?

(a) 1981

(b) 1971

(c) 1961

(d) 1991

Answer: (c)

290. Name the type of validation that is often used for measuring a psychological characteristic that is assumed to exist by empirical or theoretical deduction?

(a) Content Validity
(b) Construct Validity
(c) Concurrent Validity
(d) Criterion-Related Validity

Answer: (b)

291. The standard deviation is represented by the Greek letter _____.

(a) Sigma (σ)
(b) Alpha (α)
(c) Delta (Δ)
(d) Theta (θ)

Answer: (a)

292. What is used in knowing the highest and the lowest measures of the data?

(a) Class Interval
(b) Frequency
(c) Standard Deviation
(d) Range

Answer: (d)

293. Read the following statement and select appropriate options regarding the truthfullness.
Statement I - Dyslexia is a chronic problem with writing.
Statement II - "Dysgraphia" literally means bad reading".

(a) Only Statement I is True
(b) Both Statements are True
(c) Both Statements are False
(d) Only Statement II is True

Answer: (c)

294. Which word among the following means weakness or problems with body movement?

(a) Mania
(b) Palsy
(c) Hypomania
(d) Phobia

Answer: (b)

295. _____ are due to genetic or neurobiological factors or injury that alters brain functioning in a manner which affects one or more processes related to learning.

(a) Learning Disability
(b) Intellectual Disability
(c) Speech Impairment
(d) Hearing Disability

Answer: (a)

296. Which system in our body controls observations and perceptions?

(a) Integumentary system
(b) Immune System
(c) Endocrine system
(d) Nervous system

Answer: (d)

297. Name the gland that lays at the base of neck in front of the wind pipe.

(a) Adrenal gland
(b) Pituitary gland
(c) Thyroid glands
(d) Endocrine glands

Answer: (c)

298. Name the hormone that causes rapid heartbeat and high blood pressure when secreted in excess and under-secretion results in lethargy and weakness in body.

(a) Cortin
(b) Adrenaline
(c) Thyroxin
(d) Follicle - stimulating hormone

Answer: (b)

299. Name the drama technique that treats learning a holistic learning experience without breaking the experience into activities?

(a) Process-oriented Drama
(b) Linear Drama
(c) System based Approach
(d) Close-ended Drama

Answer: (a)

300. While working with students in drama groups we tell the student to focus their attention on the audience, look towards the audience and not on the floor. Which core technique of linear drama approach is this?

(a) Storytelling
(b) Sharing
(c) Spotlighting
(d) Side-coaching

Answer: (d)

Answer key

Answer key from the Delhi Subordinate Services Selection Board's official answer key for this sitting. "—" means the key gave none.

Mental Ability

1	**(d)**	2	**(b)**	3	**(d)**	4	**(d)**	5	**(c)**	6	**(a)**	7	**(c)**	8	**(b)**
9	**(c)**	10	**(d)**	11	**(b)**	12	**(b)**	13	**(a)**	14	**(c)**				

General Awareness

21	**(c)**	22	**(c)**	23	**(c)**	24	**(b)**	25	**(c)**	26	**(a)**	27	**(a)**	28	**(c)**
29	**(a)**	30	**(c)**	31	**(b)**	32	**(d)**	33	**(a)**	34	**(d)**	35	**(a)**	36	**(b)**
37	**(b)**	38	**(c)**	39	**(c)**	40	**(d)**								

Arithmetic Ability

41	**(b)**	42	**(d)**	43	**(d)**	44	**(d)**	45	**(d)**	46	**(c)**	47	**(b)**	48	**(c)**
49	**(a)**	50	**(b)**	51	**(a)**	52	**(d)**	53	**(b)**	54	**(c)**	55	**(a)**	56	**(d)**
57	**(b)**														

General English

61	**(a)**	62	**(a)**	63	**(c)**	64	**(d)**	65	**(a)**	66	**(b)**	67	**(c)**	68	**(d)**
69	**(d)**	70	**(d)**	71	**(a)**	72	**(a)**	73	**(d)**	74	**(b)**	75	**(c)**	76	**(c)**
77	**(d)**	78	**(b)**	80	**(c)**										

Discipline1

101	**(d)**	102	**(b)**	103	**(c)**	104	**(b)**	105	**(c)**	106	**(b)**	107	**(b)**	108	**(b)**
109	**(d)**	110	**(a)**	111	**(b)**	112	**(d)**	113	**(c)**	114	**(d)**	115	**(d)**	116	**(b)**
117	**(d)**	118	**(c)**	119	**(a)**	120	**(a)**								

Discipline2

121	**(d)**	122	**(a)**	123	**(b)**	124	**(c)**	125	**(b)**	126	**(d)**	127	**(a)**	128	**(a)**
129	**(a)**	130	**(c)**	131	**(a)**	132	**(c)**	133	**(c)**	134	**(d)**	135	**(c)**	136	**(a)**
137	**(c)**	138	**(d)**	139	**(a)**	140	**(d)**								

Discipline3

141	**(d)**	142	**(b)**	143	**(a)**	144	**(d)**	145	**(a)**	146	**(c)**	147	**(d)**	148	**(b)**
149	**(b)**	150	**(b)**	151	**(d)**	152	**(a)**	153	**(a)**	154	**(c)**	155	**(b)**	156	**(c)**
157	**(a)**	158	**(d)**	159	**(c)**	160	**(c)**								

Discipline4

161	**(a)**	162	**(d)**	163	**(a)**	164	**(b)**	165	**(c)**	166	**(b)**	167	**(a)**	168	**(c)**
169	**(d)**	170	**(d)**	171	**(a)**	172	**(a)**	173	**(c)**	174	**(b)**	175	**(a)**	176	**(b)**
177	**(b)**	178	**(c)**	179	**(a)**	180	**(b)**								

Discipline5

181	**(b)**	182	**(d)**	183	**(a)**	184	**(c)**	185	**(c)**	186	**(a)**	187	**(b)**	188	**(a)**
189	**(a)**	190	**(c)**	191	**(a)**	192	**(a)**	193	**(d)**	194	**(d)**	195	**(b)**	196	**(a)**
197	**(c)**	198	**(a)**	199	**(c)**	200	**(b)**								

Discipline6

201	**(a)**	202	**(c)**	203	**(a)**	204	**(c)**	205	**(a)**	206	**(a)**	207	**(d)**	208	**(a)**
209	**(b)**	210	**(c)**	211	**(b)**	212	**(c)**	213	**(d)**	214	**(a)**	215	**(b)**	216	**(d)**
217	**(b)**	218	**(c)**	219	**(a)**	220	**(c)**								

Discipline7

221	**(d)**	222	**(b)**	223	**(c)**	224	**(d)**	225	**(a)**	226	**(b)**	227	**(b)**	228	**(c)**
229	**(a)**	230	**(a)**	231	**(b)**	232	**(c)**	233	**(a)**	234	**(a)**	235	**(b)**	236	**(c)**
237	**(b)**	238	**(a)**	239	**(b)**	240	**(a)**								

Discipline8

241	**(c)**	242	**(d)**	243	**(a)**	244	**(d)**	245	**(b)**	246	**(d)**	247	**(c)**	248	**(a)**
249	**(b)**	250	**(d)**	251	**(c)**	252	**(a)**	253	**(b)**	254	**(c)**	255	**(a)**	256	**(b)**
257	**(c)**	258	**(d)**	259	**(c)**	260	**(d)**								

Discipline9

261	**(a)**	262	**(b)**	263	**(c)**	264	**(d)**		**(a)**	266	**(d)**	267	**(c)**	268	**(b)**
269	**(a)**	270	**(b)**	271	**(d)**	272	**(d)**	3	**(b)**	274	**(d)**	275	**(c)**	276	**(d)**
277	**(a)**	278	**(b)**	279	**(c)**	280									

Teaching Methodology

281	**(c)**	282	**(b)**	283	**(a)**	284	**(d)**	285	**(c)**	286	**(b)**	287	**(a)**	288	**(d)**
289	**(c)**	290	**(b)**	291	**(a)**	292	**(d)**	293	**(c)**	294	**(b)**	295	**(a)**	296	**(d)**
297	**(c)**	298	**(b)**	299	**(a)**	300	**(d)**								