



پوهنتون کاردان
KARDAN UNIVERSITY

Faculty of Engineering
Department of Bachelor in Civil Engineering

(ENTRY TEST SAMPLE QUESTION PAPER)

2023-2024

A Vibrant University Inspiring Academic and Professional Excellence.

Entry Test
Section One – Mathematics
64 Marks (Forty Minutes)

Directions: Please solve all the 32 questions in this section, every question has two mark. Transfer the correct answer to your answer sheet.

1. The simplified form of the expression $20 - 20 \div 20 + 6 = ?$
 A. -25 B. 25 C. 0 D. 26
2. If $x = 23$ and $y = 7$ then $x + y =$
 A. 16 B. -16 C. -30 D. 30
3. If $x = 10$ and $y = 50$ then $x - y =$
 A. -60 B. 60 C. -40 D. 40
4. If $x = 20$ and $y = 3$ then $x * y =$
 A. 17 B. -60 C. 60 D. 23
5. If $x = 200$ and $y = 20$ then $x \div y =$
 A. 400 B. 10 C. -20 D. 20
6. What is the average of the numbers 70, 72, 74, 76?
 A. 75 B. 76 C. 73 D. 82
7. The Set $\{0, \pm 1, \pm 2, \pm 3, \dots\}$ is called the set of
 A. Irrational numbers B. Integers C. None of them D. Complex Numbers
8. The solution of the system of equation $x + y = 1$ and $x - y = 1$
 A. $x = 1$ and $y = 1$ B. $x = -1$ and $y = 1$ C. $x = -1$ and $y = -1$ D. $x = 1$ and $y = 0$
9. The solution of inequality $-x + 12 \geq 12$ is
 A. $x \leq 4$ B. $x \geq -4$ C. None of them D. $x \leq 0$
10. Which of the following is equal to $m^{-30} \cdot m^{35}$?
 A. m^5 B. m^{-65} C. m^{65} D. m^{-5}
11. Which of the following is equal to $(a^{10}b^3)^3$
 A. $a^{30}b^{27}$ B. $a^{30}b^9$ C. $a^{30}b^6$ D. $a^{30}b^{27}$
12. The factorization of the expression $x^2 + 9x + 18$ is equal to?
 A. $(x+6)(x-3)$ B. $(x+6)(x+3)$ C. $(x-6)(x+3)$ D. $(x-6)(x-3)$
13. Factorization of the expression $169 - x^2$
 A. $(13 + x)(13 + x)$ B. $(13 - x)(13 - x)$ C. $(x - 13)(13 + x)$ D. $(13 + x)(13 - x)$
14. Which one is the correct solution of the radical equation $\sqrt{x + 15} = -1$
 A. -14 B. None of them C. 14 D. 16
15. Which one is the correct solution of the radical equation $\sqrt{x + 1} = 5$
 A. 4 B. -24 C. 24 D. 6
16. Evaluate the expression: $4a^2 + 2ab + 5b$, when $a = 1$ and $b = 0$
 A. -6 B. 4 C. 11 D. None of them
17. The simplified form of the inequality is $-2x + 2 \leq 4$
 A. $x \leq -1$ B. $x \geq -2$ C. $x \geq -1$ D. $x \leq -6$
18. The simplified form of the expression $8 - 2 \div 2 + 1 = ?$
 A. 5 B. 7 C. -8 D. 8
19. Which one is the correct simplified form for the radical expression $\sqrt[3]{-8x^3}$
 A. $3x \sqrt[3]{3x^2}$ B. $2x$ C. $-2x$ D. None of them

20. Factorization of the expression $y^2 - 4$
 A. $(y - 2)(y + 2)$ B. $(2 + y)(2 + y)$ C. $(2 - y)(y - 2)$ D. $(1 + y)(y - 1)$
21. The simplified form of the expression $2\frac{1}{7}$
 A. $2/7$ B. $1/7$ C. $15/7$ D. None of them
22. The simplified form of the expression $\frac{1}{3} \div \frac{1}{3}$
 A. $1/3$ B. 9 C. 1 D. $1/9$
23. The simplified form of the expression $\frac{13}{5} \cdot \frac{13}{5}$
 A. $26/25$ B. $5/13$ C. $13/5$ D. $169/25$
24. The simplified form of the expression $\frac{1}{6} + \frac{1}{6} + \frac{1}{6}$
 A. 1 B. $1/6$ C. 3 D. $1/2$
25. The simplified form of the expression $\frac{1}{19} + \frac{3}{9} - \frac{3}{9}$
 A. $1/4$ B. $3/18$ C. $1/19$ D. $3/16$
26. The simplified form of the expression $\frac{1}{5} + \frac{1}{7}$
 A. $5/7$ B. $12/35$ C. $2/3$ D. $7/12$
27. The simplified form of $1/5000$ is
 A. 0.000005 B. 0.000001 C. 0.0002 D. None of them
28. . The scientific notation form of 0.000234 is
 A. 2.3×10^{-4} B. 2.34×10^{-4} C. 234×10^4 D. 23.4×10^4
29. The scientific notation form of 60000 is
 A. None of them B. 6×10^{-4} C. 60×10^4 D. 6×10^4
30. The solution of the equation $\frac{x}{10} = \frac{1}{10}$ is
 A. 110 B. 100 C. 10 D. 1
31. The decimal form of 23% is
 A. 2.3 B. 0.23 C. 0.023 D. 23
32. . The decimal form of 190% is
 A. 190 B. 0.19 C. 1.9 D. 0.019

Entry Test
Section Two – Logic
64 Marks (forty Minutes)

Directions: Please solve all the 32 questions in this section, every question has two mark. Transfer the correct answer to your answer sheet.

33. Jane's mother has four children. Their names are Spring, Summer, and Autumn. What is the fourth child's name?
a) Winter b) January c) Jane d) all
34. Look at this series: 12, 11, 13, 12, 14, 13, ... What number should come next?
a. 13 b) 15 c) 10 d) 16
35. Which word does not belong with the others?
a) glossary b) chapter c) index d) book
36. If it takes eight men ten hours to build a wall, how long would it take four men?
a) No-time b) 1 day c) 1 week d) 3 hours
37. Fill in the blanks with correct combination of letters ABC, BCD, _____, DEF, EFG.
a) CDF b) BCE c) DCE d) CDE
38. Complete the given sequence with appropriate letter X, W, V, _____, T, S
a) Z b) U c) M d) Q
39. Complete the given sequence with appropriate number 1, 4, 9, 16, 25, _____
a) 36 b) 30 c) 40 d) 49
40. What number comes next in the given series 11, 13, 17, 19, 23, _____
a) 27 b) 29 c) 31 d) 33
41. If X is less than Y and Y is less than Z then
a) X is greater than Z b) X is equal to Z c) Z is greater than X d) None of these
42. How many triangles are there in the following shape?



- a) 8 b) 7 c) 6 d) 9
43. What letter comes next in the following sequence L, N, P, R, T, V, _____
a) W b) X c) Y d) Z
44. Wajid is the brother of Mahmood, Mahmood is the father of Samim and Freshta is the sister of Samim. What relation Freshta has with Wajid?
a) Daughter b) Sister c) Mother d) Niece

45. Window is to pane as book is to
 a) Novel b) Page c) Cover d) Glass
46. Pen is to poet as needle is to
 a) Button b) Thread c) Tailor d) Sewing
47. Secretly is to openly as silently is to
 a) Scarcely b) Impolitely c) Noisily d) Quietly
48. Exercise is to gym as eating is to
 a) Food b) Dieting c) Fitness d) Restaurant
49. Ahmad and Shagofta is married couple. They have only one son by the name Waheed who also married and have two sons and three daughters. They all are going for a trip. How many total family members they are?
 a) 8 b) 9 c) 10 d) 11
50. Which word does NOT belong with the others?
 a) Tyre b) Wheel c) Engine d) Car
51. Complete the following series with correct number 32, 34, 36, _____, 40
 a) 37 b) 38 c) 39 d) 41
52. If you have a bowl with six apples and you take away four, how many do you have?
 a) 2 b) 4 c) 6 d) 3
53. What breaks and never falls, and what falls and never breaks?
 a) Paper b) Wall c) Cement d) Day breaks and night falls
54. What goes up and down, but always remains in the same place?
 a) Time b) Day c) Stairs d) None
55. What is it that goes up, but never comes down?
 a) Age b) Stairs c) Number d) All
56. Where is an ocean with no water?
 a) America b) Africa c) Asia d) On a map
57. A police department purchases badges at 16-Afs each for all the graduates of the police training academy. The last training class graduated 10 new officers. What is the total amount of money the department will spend for badges for these new officers?
 a) 70-Afs b) 116-Afs c) 160-Afs d) 180-Afs
58. What is found necessarily in desert?
 a) Sand b) Watermelon c) Camel d) Wind
59. A river always has
 a) Fished b) Boat c) Banks d) Bridges
60. My Ten years old nephew is taller than my Twelve years old son
 a) Always b) Never c) Often d) Sometimes

61. What provides the strength and power to walk through walls?
a) Door b) Boots c) Stairs d) None
62. What do you always see at the beginning of a paper?
a) Lines b) Numbers c) P d) Dots
63. How can a woman go eight days without sleep?
a) Sleeps before b) Sleeps at night c) Sleeps after d) None
64. What type of hair does an ocean have?
a) Curly b) Brown c) Wavy d) All

Entry Test
Section Three – General Knowledge
64 Marks (Thirty Minutes)

Directions: Please solve all the 32 questions in this section, every question has two mark. Transfer the correct answer to your answer sheet.

65. World War One started in the year:
a. 1913 b. 1914 c. 1915 d. 1916
66. World War one ended in:
a. 1918 b. 1920 c. 1919 d. 1925
67. Who won men’s ODI cricket world cup of 2020?
a. South Africa b. Afghanistan c. West indies d. England
68. United Nations Organization was established in:
a. 1945 b. 1955 c. 1965 d. 1975
69. How many countries have political boundaries with Afghanistan?
a. 6 Countries b. 5 Countries c. 4 Countries d. 3 Countries
70. Ahmad Shah Abdali’s famous expedition was:
a. Somanat b. Panipat c. Rajputana d. Gandahara
71. USA attacked Afghanistan on:
a. December 2001 b. September 2001 c. July 2001 d. October 2001
72. The last US soldier withdrew from Afghanistan on:
a. 31st August 2021 b. 15th August 202 c. 20th August 2021 d. 10th August 2021
73. USSR withdrew from Afghanistan through:
a. Geneva accord b. Bonn agreement c. Peshawar accord d. Doha Agreement
74. Bonn agreement was signed in:
a. October 2001 b. July 2002 c. December 2001 d. June 2002
75. Iranian Islamic Revolution succeeded in:
a. 1980 b. 1979 c. 1978 d. 1988
76. Which country has the biggest population in the world?
a. India b. United States c. China d. Brazil
77. Tehran is the capital city of:
a. Turkmenistan b. India c. Pakistan d. Iran
78. How many countries are currently involved in Mars exploration?
a. Russia b. China c. USA d. All of them.
79. Which of the following planets is the smallest one in the solar system?
a. Earth b. Mercury c. Venus d. Jupiter.
80. Which of the following countries recognizes Northern Cyprus?
a. Bangladesh b. Pakistan c. Turkey d. European Union.

81. Which of the following years did the Third Battle of Panipat took place?
 a. 1526 b. 1556 c. 1761 d. 1789
82. In which of the following years did Genghis Khan invaded the region (in Afghanistan)?
 a. 1119 b. 1219 c. 1819 d. 2001.
83. In which of the following years was the citadel of Herat built?
 a. 330 BC b. 500 BC c. 1870 d. 1919.
84. Which of the following provinces is considered the birthplace of Maulana Rumi?
 a. Badakhshan b. Balkh c. Kandahar d. Kabul.
85. In which of the following years the United states recognized Afghanistan?
 a. 1926 b. 1933 c. 1934 d. 1935.
86. How many consulates did India have during the previous government?
 a. Two b. Three c. Four d. Five.
87. How many consulates did Afghanistan previously have in the United States?
 a. One b. Two c. Three d. Four.
88. Which of the following teams did Afghan cricket star Rashid Khan attached with before the controversial decisions imposed by Cricket Australia?
 a. Renegades b. Adelaide Strikers c. Sydney Sixers d. Sydney Thunders.
89. Which of the following names is given to Afghanistan's recent supercar?
 a. Bugatti b. Mazda c. Mada 9 d. Corolla.
90. Which of the following years did Afghanistan have her first constitution?
 a. 1921 b. 1964 c. 2004 d. None of the above.
91. Which of the following is the current minister of interior affairs in Afghanistan?
 a. Sirajuddin Haqqani b. Bismillah Mohammadi c. Hayatullah Hayat d. None.
92. Which of the following is the current president of Uzbekistan?
 a. Recep Tayyip Erdoğan b. Shavkat Mirziyoyev c. Emomali Rahmon
 d. Gurbanguly Berdimuhamedov.
93. Which of the following countries had recognized the Islamic Emirate Government in 1992?
 a. Pakistan, Saudi Arabia, and UAE b. Pakistan, Saudi Arabia, and Turkmenistan
 c. Pakistan, Saudi Arabia and USA d. Pakistan, Saudi Arabia and Qatar.
94. Which of the following countries are currently having embassies in Kabul?
 a. India, Iran, Indonesia b. Kazakhstan, Kyrgyzstan, Pakistan
 c. Qatar, Russia, Saudi Arabia d. All of them.
95. In which of the following countries one may find the Kurdish ethnic group?
 a. Turkey b. Iraq, Iran c. Syria d. All of them.
96. In which year the first Anglo-Afghan war was fought?
 a. 1878-1880 b. 1839-1842 c. 1914-1918 d. 1919.

Entry Test
Section Four – English Language
64 Marks (forty Minutes)

Directions: Please solve all the 32 questions in this section, every question has two mark. Transfer the correct answer to your answer sheet.

97. She didn't _____ me use her car.
A: let B: left C: lit D: lets
98. The dress that I bought the other day doesn't _____.
A: fits B: fitted C: fit D: fitting
99. I have a shirt; I want _____ one.
A: another B: others C: some other D: the others
100. He's in the room _____ a book.
A: read B: to read C: reading D: is reading
101. I think Jimmy is very _____. He never stops moving his lips.
A: confident B: serious C: talkative D: pleasant
102. I heard _____ the applicant.
A: talking with Ali B: Ali C: Ali talking with D: with Ali talking
103. Fill _____ quickly please.
A: on them B: in them C: them on D: them in
104. I thought Nadia was very _____. she never smiled.
A: confident B: serious C: talkative D: pleasant
105. The Logans found a house _____ a big shopping center.
A: to next B: right next to C: next to right D: right next
106. Nilab _____ meet new friends at school.
A: will be able B: will be able to C: will be D: will able be
107. Don't throw away the paper. your dad hasn't read it _____.
A: already B: yet C: still D: anymore.
108. Sheila _____ for a job for two months.
A: has been looking B: has being looked C: have been looking D: has been looking
109. Can you come to the Thursday movie class? _____.
A: I hope so B: I don't hope C: I think yes D: I don't guess
110. Sámi will be able to take a _____.
A: three weeks' vacation B: vacation three weeks C: vacation three-week.
D: three-week vacation
111. We're open Saturday _____ Thursday.
A: from B: on C: through D: too

112. Sony is _____ TV in the store.
 A: popular B: the more popular C: the most popular D: a popular
113. The moon isn't small. _____?
 A: is it B: isn't it C: does it D: doesn't it
114. Swimming in the pools _____ really enjoyable.
 A: is B: are C: be D: will
115. I ate a big plate _____ rice.
 A: of B: at C: in D: with
116. Can I _____ some books?
 A: borrow B: run C: spend D: cost
117. Ahmad _____ home until school closes.
 A: came B: is more C: comes D: won't come
118. Paris is _____ city in the world.
 A: the prettiest B: prettier C: prettiest D: the prettiest
119. My father _____ buy me a new bicycle.
 A: May to B: have to C: may D: doesn't have
120. My aunt and uncle made their living room furniture _____.
 A: ourselves B: themselves C: their selves D: himself
121. That car has _____ steering.
 A: worst B: the bad C: the worst D: the worse
122. Will Hussein go shopping on Saturday? He isn't sure, but he _____ go.
 A: have to B: won't C: will D: might
123. Bilal put his pen _____ his pocket.
 A: above B: in front of C: into D: to
124. Nomy is at the museum _____ at the painting.
 A: look B: looked C: looking D: is looking
125. The new appliances are _____.
 A: easy to fix B: easy fix C: easy for fix D: easy for fixing
126. Would you mind _____ a long with us?
 A: to come B: come C: coming. D. will come
127. Alia had better _____ hard.
 A: to study. B: study. C: studying. D. will study
128. The car was _____ by Ali.
 A: washed B: washing. C: being washing. D. had washed

Entry Test
Section Five – Sciences
60 Marks (Thirty Minutes)

Directions: Please solve all the 30 questions in this section, every question has two mark. Transfer the correct answer to your answer sheet.

129. Combustion analysis is performed to determine
A. Empirical formula B. Molecular mass C. Molecular formula D. Formula mass
130. The partial pressure exerted by the water vapours is called
A. Surface tension B. Aqueous tension C. Vapour pressure D. Hydraulic pressure
131. The spreading of fragrance or scent in the air is due to
A. Effusion B. Attraction with air C. Diffusion D. Low density
132. The density of water may be
A. Equal to that of ice B. Less than that of ice C. Greater than that of ice D. All are possible
133. The conversion of vapours back into their liquid state is called
A. Crystallization B. Vaporization C. Vaporization D. Condensation
134. Homogeneous mixture of two or more than two compounds is called
A. Solution B. Compound C. Radical D. Ion
135. Number of moles in 1 kg of solvent is called
A. Normality B. Molarity C. Molality D. Mole fraction
136. Water molecules surround more around
A. +ve ion B. Complexion C. -ve ion D. Neutral atom
137. Water of crystallization can be removed by
A. Drying B. Heating C. Evaporation D. All of the above
138. Coal is produced after a long-time decay of
A. Animals B. Fossils C. Wood D. All of the above
139. In which of the following layer of atmosphere there is more thickness of the ozone layer?
A. Troposphere B. Stratosphere C. Mesosphere D. Photosphere
140. Which of the following is not an example of projectile motion.
A. A gas-filled balloon B. Bullet fired from the gun C. A football kicked D. A baseball shot
141. Distance covered by a freely falling body in 2 seconds while $g=9.8\text{m/sec}^2$ will be
A. 4.9 m B. 19.6 m C. 39.2 m D. 44.1 m
142. The direction of a vector in space is specified by
A. One angle B. Two angles C. Three angle D. No angle
143. Maximum number of components of a vector may be
A. 1 B. 2 C. 3 D. Infinite
144. The dot product of force and velocity is
A. Power B. Work C. Impulse D. Torque

145. Which of the following substances possess the highest elasticity?
 A. Rubber B. Steel C. Glass D. Copper
146. Bernoulli's equation is obtained by applying the law of conservation of _
 A. Mass B. Energy C. Momentum D. Fluid
147. The Fahrenheit and centigrade scales agree to
 A. 40 B. 15.5 C. 542 D. 273
148. We can produce heat by
 A. Frictional process B. Chemical processes C. Electrical processes D. All of the above
149. In scientific notation, numbers are expressed in
 A. Power of ten B. Powers of two C. Reciprocal D. Decimal
150. Three coplanar forces acting on a body keep it in equilibrium. They should therefore be
 A. Concurrent B. Non-concurrent C. Parallel D. Non-parallel
151. The presence of what distinguishes a plant cell from an animal cell?
 A. Nucleus B. Cell wall, Chloroplasts, Vacuoles C. Cell membrane D. None of these
152. Carrot is orange in color because
 A. It grows in the soil B. It contains carotene
 C. It is not exposed to sunlight D. The entire plant is orange in color
153. During photosynthesis green plants absorb
 A. Oxygen B. Nitrogen C. Carbon monoxide D. Carbon dioxide
154. Select the components of an ecosystem from the following?
 A. Trees and weeds B. Plants and animals C. Man and plants D. Biotic and abiotic
155. Chief function of phloem is conduction of _____.
 A. Food B. Minerals C. Water D. Air
156. Which of the following tissue is present in leaves of Pinus conducts food and water laterally?
 A. Transfusion tissue B. Phloem C. Xylem D. Medullary rays
157. The site for light reaction of photosynthesis is....
 A. Grana B. Stoma C. ER D. Cytoplasm
158. Arrangement of leaves on a stem branch is _____?
 A. Vernation B. Venation C. Ptyxis D. Phyllotaxy
159. The scientific study of the physiology, structure, genetics, ecology, distribution, classification, and economic importance of plants.
 A. Zoology B. Botany C. Ecology D. Anatomy
160. The process by which green plants and some other organisms use sunlight to synthesize nutrients from carbon dioxide and water.
 A. Transfusion B. Photosynthesis C. hibernation D. all correct.

Good Luck!