

विद्या परं दैवतम्

IIM
भारतीय प्रबंध संस्थान विशाखपट्टणम Indian Institute of Management Visakhapatnam

## Post Graduate Program in Digital Governance \& Management (PGPDGM) SAMPLE QUESTIONS

The Admission Test shall consist of questions that evaluate a candidate's Logical reasoning ability, Quantitative aptitude and knowledge of English language. A set of sample questions that illustrate the nature of the test is provided.

## Section A <br> Data Interpretation and Logical Reasoning

Direction (Q. 1-2): Study the following diagram carefully and answer the question following it.

No. of total seats in each year in 1991, 1993 and 1996 was 425 and in 2002 it was 400

Seats won


Vots Polled

-BJP -BSP

1. In which of the following years both BJP and BSP witnessed gain/loss either on the basis of seats or on the basis of votes polled?
a. Can't say
b. 1993
c. 1996
d. 2002
e. none
2. What was the ratio of total votes polled by BJP in the year 1996 to the total votes polled by BSP in the year 2002?
a. $65: 48$
b. $48: 65$
c. Can't say
d. none of these

Questions 3 to 5 refer to bar graph which shows number of crimes in six major cities during 2002, 2003 and 2004.

Total number of Crimes

3. From 2003 to 2004, the percentage of increase in crime rate was minimum in
a. Delhi
b. Kolkata
c. Mumbai
d. Chennai
e. none
4. From 2002 to 2004, the total number of crimes decreased in
a. None of the cities given
b. Ahmedabad
c. Culcatta
d. Chennai
e. none
5. The average number of crimes in Mumbai during the three years is more than the average number of crimes in Ahmedabad by nearly
a. 19200
b. 20450
c. 20900
d. 21780
e. none

## Directions (Q. 6 to 8): The pie-chart given below gives the state wise distribution of 96


project outlays (percentages) for the year 1987-88. Answer questions on the basis of the information given. The total project cost is Rs. 900 crore.
6. The amount allocated to Gujarat is more than the amount allocated to Tamil Nadu by nearly Rs.
a. 281 crore
b. 243 crore
c. $\mathbf{2 7 3}$ crore
d. 212 crore
7. The amount allocated to Maharashtra is nearly $\qquad$ per cent higher to that allocated to Andhra Pradesh
a. $15 \%$
b. $25 \%$
c. $48 \%$
d. $2.5 \%$
8. The average of the amounts allocated to Maharashtra, Uttar Pradesh and Andhra Pradesh is nearly
a. 108.4 crore
b. 99.45 crore
c. 96.6 crore
d. 94.5 crore
Q.09-10. Directions: In each question below is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the followed assumptions and decide which of the assumptions is implicit in the statement. Give answer (1) if only assumption I is implicit ; give answer (2) if only assumption II is implicit ; give answer(3) if either I or II is implicit ; give answer (4) if neither I nor II is implicit and give answer (5) if both I and II are implicit. Study the following sample question.

## Statement :

Go by aeroplane to reach Aurangabad from Bombay quickly.

## Conclusions :

I. Bombay and Aurangabad are connected by aeroplane services.
II. There is no other means of going from Bombay to Aurangabad.
9. Statement:

The educational programme on the T.V. is to help the students to learn without teacher.
Assumptions :
I. Students wish to study without a teacher.
II. Teachers cannot teach a lesson.

## 10. Statement :

It is good that this year players in Olympics have motivated the youths.

## Assumptions :

I. Motivation of youths is necessary.
II. Players in Olympics can inspire.
11. If the following words are arranged as they appear in a dictionary which words would appear last?
a. Mortician
b. Morality
c. Moraine
d. Morphine
e. Mortgage
12. Ashok is standing at P. He walks 10 meters towards the South ; then the he walks 20 meters towards the West ; then he walks 10 meters towards the South ; then he walks 20 meters towards the East ; then the walks 10 meters towards the North and reaches Q . What is the straight distance between P and Q in meters ?
a. Zero
b. 5
c. 10
d. 15
e. None of these

Directions:(Qs. 13-14) : Arrange the sentences in order they should be written and choose the correct order among the alternatives :
13.
(1) Natasha goes to this school.
(2) Therefore Natasha is rude.
(3) All children in this school are rude.
a. $1,2,3$
b. 2,13 ,
c. $\quad 3,2,1$
d. $3,1,2$
e. None of these
14.
(1) It was a Sunday morning
(2) I did not bother to go out early
(3) I slept till 9 a.m
a. 1, 2, 3
b. $2,1,3$
c. $3,1,2$
d. $2,3,1$
e. None of these

Directions (Qs. 15 -16) : The Smith family is seated around a ten-place table. Each of two daughters is seated next to Mrs. Smith. Mr. Smith sits next to one of the daughters. Two sons are seated so that no child sits next to another child.
15.If one son is seated next to Mr. Smith, the number of empty seats between the two sons is:
a. only one
b. only two
c. only three
d. from one to three
16. If no one sits next to the father, then it is true that there is (are)
a. no more than one seat between a daughter and a son
b. three empty seats between sons
c. no more than two empty seats between sons
d. always two empty chairs between a daughter and a son

Section B
Verbal Ability and Reading Comprehension

## Q. 1 to 3. Read following passage carefully and answer the questions. Each question has four alternatives. Select the most appropriate alternative and darken the circle with the correct number :

The first parachute of which any cord exists planned by Leonardo da Vinci in 1514. He made drawings of a huge flat sail, and wrote careful notes on the way it was supposed to work. Nearly three hundred years later a Frenchman, Joseph Montgolfier (Inventor of balloons), made a small, circular, rigid parachute with a basket hanging beneath it. He put a sheep in the basket and dropped it from the top of a high tower. Slowly and safely the sheep descended to earth. Other Frenchmen made experiments with rigid parachutes, and in 1797 a man named Garnering dropped from a balloon in Paris. Garnering parachute was more like those used today, being made of numerous cloth panels forming a cup-shape in reverse, and depending on the wind to open it out. After that, various people improved the parachute from time to time, until in America a man named Baldwin designed a folding one made of silk. He made several successful jumps with it, for it opened out as soon as the air current caught it. The earliest evidence for the parachute dates back to the Renaissance period. The oldest parachute design appears in an anonymous manuscript from 1470s Renaissance Italy, showing a free-hanging man clutching a crossbar frame attached to a conical canopy. As a safety measure, four straps ran from the ends of the rods to a waist belt. The design is a marked improvement over another folio, which depicts a man trying to break the force of his fall by the means of two long cloth streamers fastened to two bars which he grips with his hands. Although the surface area of the parachute design appears to be too small to offer effective air resistance and the wooden base-frame is superfluous and potentially harmful, the basic concept of a working parachute is apparent.

1. Leonardo da Vinci was -
a. A sculptor
b. An author
c. A painter
d. A Scientist.
2. Who planned the first parachute?
a. Joseph Montgolfier
b. Garnerin
c. Baldwin
d. Leonardo da Vinci.
3. Baldwin could make successful jumps with the parachute because -
a. it was a folding one.
b. it was light.
c. it opened out as soon as the current of air caught it.
d. None of these.

Direction (Q.4-5) : Select the meaning of idioms or phrases written in bold from the options given below.
4. Get some rest. You look a bit off colour.
a. Colorless
b. looking sad
c. looking ill
d. confused
5. Jack got his fingers burnt playing on the stock market.
a. suffer injury
b. suffer losses
c. losing documents in fire
d. none of the above.

Direction (Q.6-11) : Select the most accurate word from the options given below which can substitute the group of words given in the question.
6. One who feeds on human flesh.
a. Cannibal
b. Omnivorous
c. Homovores
d. Carnivores
7. The Feminine of word "Drone" is -
a. Countess
b. Queen bee
c. Gander
d. Vixen
8. The Plural of Bison is -
a. Bison
b. Bisons
c. Bisoness
d. Bisen
9. The Antonyms of "Expedite" is -
a. Aid
b. hasten
c. Quicken
d. Hinder

Direction (Q.10) Find one word with wrong spelling from the options given below.
10.
a. PLAGIARISM
b. ENROLMENT
c. MAGNIFICENT
d. MACHINARY

# Section C <br> Quantitative Ability 

1. Average weight of 45 players and a coach weighing 60 kg is 50 . If 5 players of 60 kg . weight are omitted, then what is the average weight of remaining players?
a. 60
b. 45
c. 45.5
d. 48.5
2. If $x+y=5$ and $x y=6$, then the value of $1 / x^{2}+1 / y^{2}$ will be
a. $13 / 24$
b. $11 / 30$
c. $13 / 32$
d. $13 / 36$
3. In a survey, $34 \%$ of population was found to know Hindi, $46 \%$ to know English and $23 \%$ to know both languages. The percentage of those knowing neither English nor Hindi, is
a. $42 \%$
b. $43 \%$
c. $44 \%$
d. $45 \%$
4. If $7 x-1 / x^{2}-4=21-1 / x^{2}-4$, then $x$ will be
a. 3
b. 4
c. 5
d. none of these
5. Ajay lent a certain sum of money to Bhanu at $12 \%$ per annum under simple interest for 3 years. The interest received by Ajay is less than the sum by whole sum is
a. Rs. 8000
b. Rs. 10000
c. Rs. 8500
d. Rs. 9000
6. 4 years hence, a father's age will be 2 years less than three times the age of his son. Also, 6 years back his age was 2 years more than five times the age of his son. After how many years from now will their combined age be 100 years?
a. 40 year
b. 14 yr
c. 19 yr
d. 38 yr
7. 7 m long rope was cut at 34 pieces, pieces of equal length were obtained. Find the length of each piece
a. 0.20 m
b. 0.002 m
c. 0.2 m
d. 2 m
8. If the S.P of an item is RS. 18 , then the profit is $1 / 9$ th of the S.P . If the item is sold for RS.16. Find the loss/profit\%
a. $6.25 \%$ profit
b. $6.25 \%$ loss
c. $6 \%$ profit
d. No profit, no loss
9. Two pipes can fill a tank in 3 h and 4 h separately and a drain pipe can empty it in 6 h . If tank is empty and all pipes are opened simultaneously, then number of hours to fill the whole tank is
a. 2 h 12 min
b. 2 h 48 minute
c. 2 h 36 min
d. $2 \mathrm{~h} \mathbf{2 4} \mathrm{~min}$
10. If $x+2 y=8,2 x+3 z=16$ and $4 y+5 z=32$, then the value of $x, y$ and $z$ will be
a. $1,2,3$
b. $-1,2,3$
c. 2, 3, 4
d. $-2,-3,-4$
11. A medical test machine gives the correct report in 3 out of 5 times. Three patients A, B and C got their checkup done on the same machine, what is the probability that majority of them got the correct report?
a. $9 / 25$
b. $8 / 25$
c. (C) $1 / 5$
d. None of the above
12. If the weight of a 13 m long iron rod be 23.4 kg . The weight of 6 m long of such rod will be
a. $\quad 7.2 \mathrm{~kg}$
b. $\quad 12.4 \mathrm{~kg}$
c. $\quad \mathbf{1 0 . 8} \mathbf{~ k g}$
d. $\quad 18 \mathrm{~kg}$
13. $\left[\left(3^{2} \times 4^{3 \times} 7^{9}\right) \div\left(3 \times 4^{2} \times 7^{8}\right)\right]^{2}=$
a. 7156
b. 7056
c. 7153
d. 7154
14. The cost of 3 pens is Rs. $(15 x-24 y)$. Find the cost of $(15 x-24 y)$ pens.
a. Rs. $\left(75 x^{2}-240 x y+192 y^{2}\right)$
b. Rs. $\left(75 x^{2}-247 x y+192 y^{2}\right)$
c. Rs. $\left(225 x^{2}-248 x y+192 y^{2}\right)$
d. Rs. $\left(225 x^{2}-240 x y+192 y^{2}\right)$
15. The combined cost of 5 doors and 7 bells was 2350 while, the cost of 10 doors and 4 bells is 2200 . How much is the cost of 2 doors?
a. 100
b. 240
c. 80
d. 120
16. The value of $(2.48 \times 2.48-1.52 \times 1.52) / 0.96$
a. 4
b. 16
c. 0.96
d. None of these
17. The salaries of Rohan and Raj together amount to Rs.3500, if they spend $60 \%$ and $80 \%$ of their respective salary and ratio of their savings is $1: 3$, then their respective salaries should be
a. Rs.500, Rs. 3000
b. Rs. 1500 , Rs. 2000
c. Rs. 2500 , Rs .100
d. None of these
