

# F001 - UG SAMPLE PAPER

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①

Mathematics

In a game of dice, every time I roll an even number I add the number to my score and every time an odd number is rolled, I multiply my score with the number I rolled. My initial score is 1. If in two throws I roll a 3 and a 4, not necessarily in that order, what is the maximum possible score I can achieve?

- 15
- 12
- 16
- 20

The correct option is "15" Score:-1

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Mathematics

The sum of terms of the series  $1 - 2 + 3 - 4 + 5 - 6 + 7 - 8 + 9 \dots - 16 + 17 - 18 + 19$  is:-

- 11
- 12
- 10
- 13

The correct option is "10" Score:-1

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Mathematics

A group of workers engaged in the task of plastering a wall completed  $\frac{1}{2}$  of the work in 1 day and  $\frac{1}{4}$  of the remaining work the next day. If still  $50 \text{ m}^2$  of the wall remained to be plastered, what was the area of the wall?

- $120 \text{ m}^2$
- $180 \text{ m}^2$
- $240 \text{ m}^2$
- None of the above

The correct option is "None of the above" Score:- 1

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**Mathematics**

Rajesh's salary is increased by 15% and then decreased by 15%. What is the percentage change in Rajesh's salary?

- Indeterminate
- 5% increase
- 2.25% decrease
- No change

The correct option is "2.25% decrease" Score:- 1

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**Mathematics**

In a class, each student had enrolled either for French or German or both. The number of students enrolled for French was twice as many as for German. The number enrolled only for French is thrice the number enrolled only for German. What is the possible value of those enrolled for French?

- 8
- 5
- 7
- 6

The correct option is "8" Score:- 1

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**Mathematics**

Three bells toll at intervals of 3, 4 and 5 seconds. If they now toll together, they will again toll together after:-

- 1 min.
- $1 \frac{1}{2}$  mins.
- $1 \frac{3}{4}$  mins.
- 30 secs.

The correct option is "1 min." Score:- 1

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**Mathematics**

What percentage of Rs.500/- is Rs.25/-?

- 0.5%
- 15%
- 5%
- 3.75%

The correct option is "5%" Score:- 1

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**Mathematics**

A watch was sold at a loss of 15%. Had it been sold for Rs. 300/- more, the seller would have gained 15% instead. What is the no-profit, no-loss selling price of the watch?

- Rs. 750/-
- Rs. 2,000/-
- Rs. 1,000/-
- Data Insufficient

The correct option is "Rs. 1,000/-" Score:- 1

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**Mathematics**

Of a group of 11 boys who gathered to play cricket, 8 had bats and 5 had balls. It was decided that those who had both would be allowed to bat twice in a row. How many wickets will have to be taken before the others get to play?

- 4
- 8
- 6
- 2

The correct option is "4"Score:- 1

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Mathematics

4

The table below gives information on the sales performance of three companies in 2004 across various regions. (All figures in Rs. lakhs)

Region	Company A	Company B	Company C	Total
N	35	65	121	221
S	44	44	105	193
E	48	57	87	192
W	51	34	96	181
NE	36	38	58	132
NW	64	58	78	200
SE	28	89	78	195
SW	81	67	90	238
C	65	45	111	221

Sales of A and B were what percentage of the total sales of the 3 companies in the NW region?

- 44%
- 59%
- 66%
- 61%

The correct option is "61%" Score:- 1

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General Science

What is the chemical symbol for Gold?

- Go
- Gl
- Ar
- Au

The correct option is "Au" Score:- 1

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**General Science**

Which of the following is not an inert gas?

- Helium
- Neon
- Xenon
- Freon

The correct option is "Freon" Score:- 1

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**General Science**

Which of the following is not an area in which you could get a Nobel Prize?

- Economics
- Geography
- Physiology
- Physics

The correct option is " Geography" Score:- 1

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**General Science**

What does an increase in the level of carbon-dioxide in the earths atmosphere lead to?

- El Nino effect
- Greenhouse gases
- Cooling of the earths surface
- Global warming

The correct option is " Global warming" Score:- 1

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**General Science**

Weightlessness experienced while orbiting the earth in a spaceship is the result of:-

- Zero gravity
- Acceleration
- Inertia
- Centre of gravity

The correct option is "Zero gravity" Score:- 1

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**General Science**

The Bernoulli's theorem is based on conservation of:-

- Energy
- Mass
- Angular momentum
- Momentam

The correct option is "Energy" Score:- 1

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**General Science**

What is Sodium bicarbonate commonly known as?

- Salt
- Lime soda
- Sugar
- Baking soda

The correct option is " Baking soda" Score:- 1

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**General Science**

Light of all colours (white light) comes to Earth from the sun. Why do we see a cloudless sky as blue and not white?

- The cells in the retina of our eyes are most sensitive to blue light
- Illusion
- Air molecules scatter the blue light more than yellow or red
- The Earth's magnetic field bends blue light more than yellow or red

The correct option is " Air molecules scatter the blue light more than yellow or red" Score:- 1

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**General Science**

Why are fluorescent tubes fitted with a choke?

- The choke coil reduces current in the circuit
- The choke coil steps up the line voltage
- The choke coil chokes low frequently currents
- The choke coil steps down the line voltage

The correct option is " The choke coil reduces current in the circuit" Score:- 1

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**General Science**

Which organelle in the cell, other than nucleus, contains DNA?

- Golgi apparatus
- Lysosome
- Centriole
- Mitochondrion

The correct option is "Mitochondrion" Score:- 1

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**English**

Choose the best word/phrase to replace the underlined part in accordance with grammatical usage, wherever necessary.

I failed the test where my friend passed.

- Where
- Whence
- As
- Whereas

The correct option is "Whereas" Score:- 1

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**English**

In each of the following sentences, some part of the sentence is underlined. Beneath each sentence you will find four ways of phrasing the underlined part. Select the best answer keeping in mind correctness, effectiveness of expression, grammar, choice of words and sentence construction.

Some students work hard; others take life easily.

- Life easy
- Life easiest
- Life coolly
- Life easily

The correct option is "Life easy" Score:- 1

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**English**

Frank says, "Winning is not everything. It is the only thing". What does Frank mean?

- There are many things that are important and winning is the last one of them.
- Winning is the single-most important objective.
- Winning is one among the various things that one must try and achieve.
- Winning is not important.

The correct option is "Winning is the single-most important objective." Score:- 1



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English

Given below is a set of questions. Examine the statements and state the conclusion.

Welcome to the world of services. From being the last reluctant link in the sales chain, after sales services(s) is fast moving up in the food chain, value chain or whatever you choose to call it. In short, servicing customers is moving centre stage as more companies begin to treat it as an independent and valuable business activity. So what's new? The difference lies in the treatment. From being a cost center, service has become a cutting edge, garnering both more resources and top management attention. Says Ryan Albuquerque, strategic planner at Global Telesystems, 'With increasing similarity in product offerings, customer care has become a key differentiator with regards to competition.'

Q. After sales service is now the most important function of sales occupying management's attention.

- Data Inadequate
- Definitely True
- Definitely False
- Probably True or Probably False

The correct option is "Data Inadequate" Score:- 1

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English

Arrange the sentences A, B, C and D to form a logical sequence.

- A. The objects remain unaffected.
  - B. Everyday objects are visible because light beams bounce off them into the observers eye.
  - C. Nuclear particles, however are so small that a ray of light is enough to knock them off course or out of position.
  - D. This means that though a scientist can 'see' where the particle was at the moment the ray hit it, he has no way of knowing where it is afterwards, or how it is moving.
- BACD
  - BCAD
  - CABD
  - CDBA

The correct option is "BACD" Score:- 1

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English

Arrange sentences A, B, C, D and E to form a logical sequence and answer the questions that follow.

The second sentence of the passage is:-

- A. Some wanting to be the king
- B. One of the funnier sides
- C. Others the king-makers
- D. The array of characters strutting and fretting on the stage
- E. To the tragicomedy is

- C
- B
- A
- E

The correct option is "E" Score:- 1

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English

The following sentence has part(s) left blank. Following the sentence are 4 different ways of completing the sentence. Choose the best alternative from among the 4.

Kalidas is \_\_\_\_\_ Shakespeare of India.

- One of the
- An
- The
- A

The correct option is "The" Score:- 1

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(11)

English

The following sentence has part(s) left blank. Following the sentence are 4 different ways of completing the sentence. Choose the best alternative from among the 4.

The returns have to be sent to the Chief on \_\_\_\_ Saturdays.

- Alternative
- Every
- Alternate
- Each

The correct option is "Alternate" Score:- 1

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English

In the following sentences, some part of the sentence is underlined. Beneath the sentence you will find four ways of phrasing the underlined part. Select the best answer keeping in mind correctness, effectiveness of expression, grammar, choice of words and sentence construction.

The poet and scholar are dead, we must express our sorrow.

- Poet and an scholar
- Poet and the scholar
- Poet and a scholar
- Poet and scholar

The correct option is "Poet and the scholar" Score:- 1

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**English**

In the following sentences, some part of the sentence is underlined. Beneath the sentence you will find four ways of phrasing the underlined part. Select the best answer keeping in mind correctness, effectiveness of expression, grammar, choice of words and sentence construction.

There is no dearth of opportunity in India.

- Opportunity
- In opportunity
- Of opportunity
- Of opportunities

The correct option is "Of opportunities" Score:- 1

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**General Awareness**

In which one of these places is India's Rocket engine testing facility located?

- Satish Dhawan Space Center, Sriharikota
- Mahendragiri, Tamilnadu
- Vikram Sarabhai Space Center, Thiruvananthapuram
- ISRO, Bangalore

The correct option is "Mahendragiri, Tamilnadu" Score:- 1

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**General Awareness**

The Escorts group is headed by which one of the following families?

- Nandas
- Firodias
- Singhania
- Mittals

The correct option is "Nandas" Score:- 1

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**General Awareness**

What are the grasslands of Australia known as?

- Steppes
- Downs
- Pampas
- Prairies

The correct option is "Downs" Score:- 1

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**General Awareness**

An increase in the level of carbon-dioxide in the earth's atmosphere is said to lead to:-

- Global Warming
- Greenhouse Gases
- El Nino Effect
- Cooling of the earth's surface

The correct option is "Global Warming" Score:- 1

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**General Awareness**

Who won the FIFA world cup in 2006?

- Germany
- Argentina
- Italy
- Brazil

The correct option is "Italy" Score:- 1

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**General Awareness**

Washington, D.C. is the Head Quarters for World Bank and I.M.F.

- True
- True, but not for IMF
- True, not for World Bank
- False, neither for IMF nor for World Bank

The correct option is "True" Score:- 1

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**General Awareness**

What is Euromoney?

- The term is used to describe secret deposits with Swiss banks
- A financial magazine
- A unit of currency
- None of the above

The correct option is "A financial magazine" Score:- 1

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**General Awareness**

Which Indian city has become the first to implement the Conditional Access System (CAS)?

- Kolkata
- Chennai
- New Delhi
- Mumbai

The correct option is "Chennai" Score:- 1

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**General Awareness**

Who is the telecom minister of India?

- Montek Singh Aluwhalia
- Mulayam Singh Yadav
- Arjun Singh
- Dayanidhi Maran

The correct option is "Dayanidhi Maran" Score:- 1

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**General Awareness**

What is the life expectancy in India as per Census 2001?

- 59.6 years
- 62.3 years
- 68.4 years
- 65.9 years

The correct option is "62.3 years" Score:- 1