



G T S E

GOAL TALENT SEARCH EXAM

FIRST STEP TOWARDS COMPETITION

2026-27

CLASS : IX - SAMPLE PAPER

- This paper has 30 questions. All questions are compulsory.
- The maximum marks for each question is 4.
- 1 mark will be deducted against each negative response from the total marks.
- Use of calculator, slide rule, graph paper & trigonometric tables is NOT PERMITTED.

[Time : 40 Minutes]

[Full Marks : 120]

Name of the Candidate : _____

Class : _____

Roll No. : _____

Exam Centre : _____

CLASS IX SYLLABUS

Subject		Pre.	Mains
Physics	:	05	20
Chemistry	:	05	20
Biology	:	05	20
Maths	:	10	20
I.Q. Based	:	05	20
Total Questions	:	30	100
Total Time	:	40 Min.	2 Hrs.

Physics

Describing Motion around us, How force affect motion, Work, Energy & simple machine, Sound wave – Characteristics and application. Exploring the investigative world of science, Electricity : Magnetic & Heating effects, Exploring forces, Pressure, winds, storms and cyclones, Light : Mirror & lenses.

Chemistry

Exploring mixtures and their separation, Journey inside the atom, Atomic foundations of matters, Particulate nature of matter, Nature of matter : Element, compound & mixtures, the amazing world of solutes, solvents and solution.

Biology

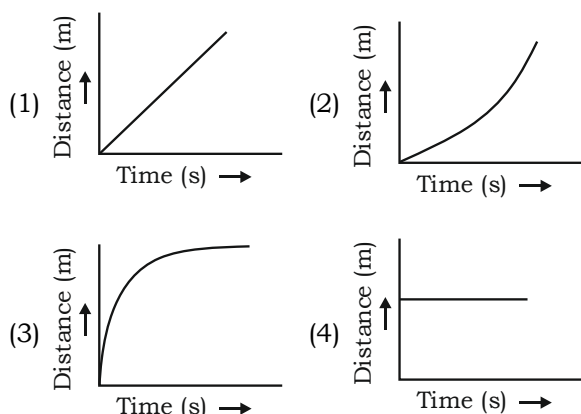
Cell the building block of life, Tissue in action, Reproduction – How life continues, Pattern in life: Diversity and classification, The invisible, living world – Beyond are naked eye, Health : The ultimate treasure.

Maths

Number System, Polynomials, Coordinate Geometry, Linear Equations in Two Variables, Line and Angles, Triangles, Quadrilaterals, Circles, Measuring space (perimeter area), Square and Squares Roots, Cubes and Cube Roots, Algebraic Expressions and Identities, Mensuration, Factorisation, Playing with Numbers, Factors and multiples, Statistics, Sequence and progression introduction to probability.

SCIENCE

01. Which of the following figures represent uniform motion of a moving object correctly ?



02. When no external force acts on an object, the physical quantity that remains conserved is :

- (1) velocity
- (2) momentum
- (3) acceleration
- (4) force

03. Acceleration due to gravity varies with :

- (1) height
- (2) depth
- (3) shape of the planet
- (4) all of these

04. A mass 'm' falls from a height 'h'. At any point on its path the total energy is :

- (1) $\frac{1}{2}mgh$
- (2) $\frac{mgh}{4}$
- (3) mgh
- (4) Depends on the height

05. A boat is rocked by waves such that a crest and a trough reach at an interval of 0.1 second with a speed of 50 m/s. The distance between two consecutive crests is :

- (1) 5 m
- (2) 10 m
- (3) 15 m
- (4) 20 m

06. Nucleus was discovered by

- (1) J.J. thomson
- (2) Rutherford
- (3) Chadwick
- (4) Dalton

07. Formula unit mass of sodium chloride (NaCl) is

- (1) 58.5 u
- (2) 35.5 u
- (3) 23 u
- (4) 12.5 u

08. What is formula unit mass of CH_4 ?

(Atomic mass of C = 12 u

Atomic mass of H = 1 u)

- (1) 13 u
- (2) 15 u
- (3) 18 u
- (4) 16 u

09. The properties, 'hard, lustrous, malleable, ductile, sonorous, and good conductor of heat and electricity' belongs to

- (1) Metal
- (2) Non-metal
- (3) Both (1) & (2)
- (4) Can't say

10. Proton and neutrons reside with

- (1) Orbits of atoms
- (2) Extra nuclear part of atom
- (3) Nucleus
- (4) Outside the atom

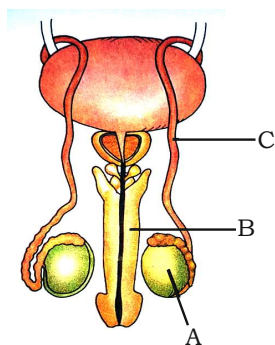
11. What is the nature of plasma membrane ?

- (1) Freely permeable
- (2) Selectively permeable
- (3) Impermeable
- (4) None of these are correct

12. Which type of permanent tissue is depicted in the given figure ?



- (1) Parenchyma (2) Collenchyma
(3) Sclerenchyma (4) Xylem
13. Which of the following crops are not rabi crops ?
(1) Wheat (2) Gram
(3) Mustard (4) Cotton
14. In the given figure which of the following labelled parts produce the male gametes?



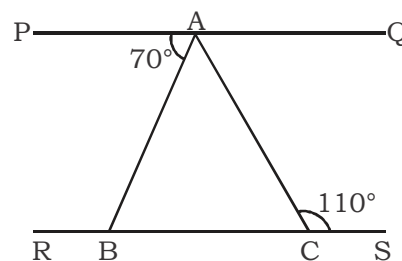
- (1) A (2) C
(3) B (4) None of these
15. Which of the following parts of the eukaryotic shows the presence of DNA ?
(1) Nucleus (2) Mitochondria
(3) Chloroplast (4) All of these

MATHS

16. If the mean of the following data is 20, find the value of P.

x_i	20	15	P	28	22	16
f_i	7	12	5	2	3	1

- (1) 3.60 (2) 45.8
(3) 28.4 (4) None of these
17. The mean of n observation is $\bar{x}$. If each observation is multiplied by K, the mean of new observation is :
(1) $K\bar{x}$ (2) $\frac{\bar{x}}{K}$ (3) $\bar{x} + K$ (4) $\bar{x} - K$
18. In the given figure $PQ \parallel RS$, $\angle PAB = 70^\circ$, $\angle ACS = 110^\circ$. Then $\angle BAC$ is



- (1) 40° (2) 70° (3) 110° (4) 30°
19. Simplified value of $(16)^{\frac{1}{4}} \times \sqrt[4]{16}$ is
(1) 16 (2) 4 (3) 1 (4) 0
20. Zeros of the polynomial $p(x) = (x - 2)^2 - (x + 2)^2$ are
(1) 2, -2 (2) 2x (3) 0, -2 (4) 0
21. If $x = 3 + 2\sqrt{2}$, then find the value of $\left(\sqrt{x} - \frac{1}{\sqrt{x}}\right)$
(1) 2 (2) 6 (3) 5 (4) 3

22. The radius of a cylinder is doubled but its lateral surface area is unchanged. Then its height must be

- (1) doubled (2) halved
(3) trebled (4) constant

23. If a, b, c are positive real numbers then,

$$\sqrt{a^{-1}b} \sqrt{b^{-1}c} \sqrt{c^{-1}a} \text{ is equal to :}$$

- (1) 1 (2) 3
(3) -6 (4) None of these

24. In a cylinder, if radius is doubled and height is halved, curved surface area will be :

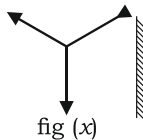
- (1) halved (2) doubled
(3) same (4) four times

25. If both $x - 2$ and $x - \frac{1}{2}$ are factors of $Px^2 + 5x + r$ then,

- (1) $P = r$ (2) $P + r = 0$
(3) $2P + r = 0$ (4) None of these

I.Q BASED

26. Choose the correct mirror image of the figure (x).



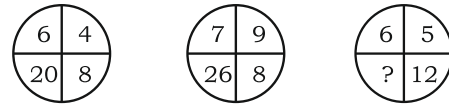
- (1) (2)
(3) (4)

27. Arrange the given words as they occur in an english dictionary and select the correct option.

- (i) Fight (ii) Freak (iii) Faint (iv) Fault
(v) Flick

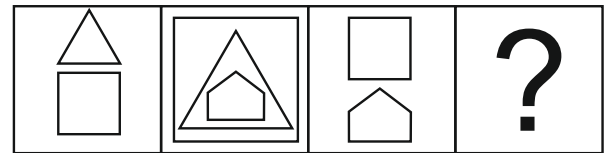
- (1) iv, iii, i, v, ii (2) iv, iii, ii, v, i
(3) iii, iv, i, v, ii (4) iii, iv, v, i, ii

28. Which number will be replace in the question mark in pattern below ?



- (1) 21 (2) 23 (3) 25 (4) 27

29. There is a certain relationship between figures (i) and (ii). Establish a similar relationship between figures (iii) and (iv) by selecting from the given options that would replace the (?) in figure (iv).



- (i) (ii) (iii) (iv)

- (1) (2)
(3) (4)

30. Pointing to a photograph, Kabeer said, "He is the son of the only daughter of the father of my brother". How is Kabeer related to the man in the photograph ?

- (1) Nephew (2) Brother
(3) Father (4) Maternal Uncle

Feel the best quality education uniformly across all The corporate branches of **GOAL**.



PATNA
BUDHA COLONY
Goal Building, B/58,
Budha Colony, Patna - 1
Help Line : 0612-3508700
Classroom & Test Centre



PATNA
WEST BORING CANAL ROAD
Pushpanjali Mall, 3rd Floor
Near Raja Pul.
Help Line : 0612-3508700
Classroom & Test Centre



PATNA
KANKARBAGH
Tilak Nagar Road, Opp. Rajendra Nagar Terminal,
Near Sahaj Nursing Home, Munna Chowk
Help Line : 9608360780
Classroom & Test Centre



PATNA
ACHIEVERS CAMPUS
Vivek Vihar Colony, Gola Road
Classroom & Test Centre



PATNA
GOLA ROAD
Near Gyanodaya Gurukul School
Gola Road, Danapur
Nizamat, Patna – 801503
Help Line: 7564902125, 0612-4490519
Classroom & Test Centre



PATNA
GOAL EDUCATION VILLAGE
Painal, Patna
Classroom & Test Centre
with residential facility.



RANCHI
LALPUR
504, 5th Floor, R.S. Tower,
Lalpur, Circular Road, Ranchi
Help Line : 7564900041/ 42/ 43
Classroom & Test Centre

RANCHI
HINOO
302, 303, 3rd Floor, Indira Palace,
Main Road, Hinoo, Ranchi
Help Line : 7564900041/ 42/ 43
Classroom & Test Centre



ODISHA
Aditya Plaza, Plot No. 10, Unit-IV,
Bhouma Nagar, Bhubaneswar
Help Line : 7854934290, 0612-3508700
Classroom & Test Centre



DHANBAD CLASSROOM
Medical Section
GOAL Empire, Memko More
Opp. Prabhatam Grand Mall, Dhैया
Help Line : 9334098595, 9308057050



DHANBAD OFFICE
Engineering Section
GOAL Empire 2.0, Memko More
Dhैया
Help Line : 7488112429, 9234300143



JAMSHEDPUR
S/9, 3rd Floor Shatabdi Tower
1 SNP Area, Sakchi,
Jamshedpur
Help Line : 7564900041/ 42/ 43



BHILAI
■ Shop No. 166, New Civic Centre
Help Line : 07884013502
09826943595, 9926454100



RAIPUR
Beside Vidya Hospital,
Shankar Nagar
Help Line
07714060711, 07415884100



DELHI
1525, 15th Floor Astralis Supernova
Sector - 94,
Noida, UP - 201313
Help Line: 7564900045



PATNA (Corporate Office)

B-58, GOAL Building, Budha Colony, Patna - 800001
Helpline : 0612-3508700

RANCHI (Classroom & Head Office)

504, 5th Floor, R.S. Tower, Lalpur, Circular Road, Ranchi
Helpline : 7564900041 / 7564900042 / 7564900043

DHANBAD : 9334098595, 9308057050 | **BHILAI** : 07884013502, 09826943595 | **RAIPUR** : 07714060711, 07415884100 | **DELHI** : 7564900045

• FACILITIES •



LIBRARY



HOSTEL



TRANSPORT



SEPARATE BATCH
FOR BOYS & GIRLS

© www.goalinstitute.org | Follow us on [f](#) [i](#) [y](#) [x](#) [in](#)