General Instructions:
1) Read carefully and attempt all questions.
2) Encircle the correct option of each MCQ as shown in the example below.
Example: Which of the following gases causes greenhouse effect?
(a) oxygen (b) nitrogen (c) hydrogen (d) methane
3) Use black/blue ink for writing. Use of lead pencil is not allowed.
4) If more than one option is encircled in a question, no mark will be given.

Instructions:
- Thirty two (32) Multiple Choice Questions (MCQs) are given in this part. Each question carries 1.5 marks.
Q. No.1. Which of the following is NOT a part of the forebrain?
(a) Cerebrum (b) Cerebellum (c) Thalamus (d) Hypothalamus

Q. No.2. A tube which arises from kidney and enters the urinary bladder is called:
(a) urethra (b) cortex (c) ureter (d) medulla
Q. No.3. Cleaning of blood by artificial method is called:
(a) dialysis (b) transplant (c) lithotripsy (d) cloning

Q. No.4. Which of the following cells are produced by meiosis?
(a) Skin cells (b) Gametes (c) Cone cells (d) Heart cells

Q. No.5. Thread like structures present in the nucleus of a cell are called:
(a) DNA (b) RNA (c) Genes (d) Chromosomes

Q. No.6. Which of the following steps does NOT happen during DNA replication?
(a) Unwinding of double helix structure (b) Production of carbohydrates (c) Separation of both the strands (d) Production of new strands in front of the old ones

Q. No.7. Which of the following organisms is used as a transgenic organism in production of insulin?
(a) Bacteria (b) Virus (c) Mushroom (d) Algae

Q. No.8. Dengue fever is spread by which of the following mosquitoes?
(a) Male aedes (b) Female aedes (c) Male culex (d) Female culex

Q. No.9. Which of the following gases causes air pollution?
(a) N₂ (b) H₂ (c) O₂ (d) NO₂

Q. No.10. Which of the following gases cause greenhouse effect?
(a) Cl₂ and H₂ (b) O₂ and N₂ (c) H₂O and CH₄ (d) He and O₃

Q. No.11. Which of the following is the cause of skin cancer?
(a) Global warming (b) Ozone depletion (c) Acid rain (d) Greenhouse effect

Q. No.12. Which one of the following is an example of chemical reaction?
(a) Breakage of glass (b) Burning of wood (c) Cutting of wood (d) Melting of ice

Q. No.13. \[ x\text{N}_2 + 3\text{H}_2 \rightarrow 2\text{NH}_3 \]
The above equation is balanced when:
(a) \( x = 1 \) (b) \( x = 2 \) (c) \( x = 3 \) (d) \( x = 6 \)
Q. No.14. The example of decomposition reaction is:

(a) CaCO₃ → CaO + CO₂  
(b) Mg + 2HCl → MgCl₂ + H₂  
(c) HCl + NaOH → NaCl + H₂O  
(d) 2Na + Cl₂ → 2NaCl

Q. No.15. Which one of the following gases is produced by the reaction of sulphuric acid and iron?

سلفسیرک ایسید اور لوہے کے تعامل سے مندرجہ ذیل میں سے کون سا گیس بنتی ہے؟

(a) Oxygen  
(b) Flourine  
(c) Hydrogen  
(d) Chlorine

Q. No.16. The solution which turns litmus from blue to red is:

جو شنسلو نیلے لٹمس کو سرخ کر دتا ہے، وہ ہے

(a) Ca(OH)₂  
(b) NaOH  
(c) Na₂CO₃  
(d) HCl

Q. No.17. Weight of a table is 500N. The area occupied by it on the ground is 1m². The pressure exerted by it on the ground is:

پر کتنے پیشر کا حقہ ہے؟

(a) 50 Pa  
(b) 100 Pa  
(c) 500 Pa  
(d) 1000 Pa

Q. No.18. All of the following statements are true for liquid pressure EXCEPT:

ئے سواہیں درست ہے تبیانا دنیا مائع کے پریشر کے بارے میں

(a) It increases with depth  
(b) It decreases with depth  
(c) It acts perpendicular to the surface  
(d) It acts equally in all directions

Q. No.19. In which one of the following things is gas pressure used in its working?

گیس پریشر کا استعمال ہوتا ہے کس سے میں یہل کے

(a) Jack  
(b) Hydraulic lifter  
(c) Hydraulic press  
(d) Pneumatic hammer

Q. No.20. The unit of mass is:

ماس کا یونٹ ہے:

(a) kg  
(b) m  
(c) m²  
(d) dm³

Q. No.21. Which of the following instruments is used for measuring length?

لہریزمشن میں استعمال ہونے والے آلہ کا لگبر جھایا ہے?

(a) measuring cylinder  
(b) flask  
(c) beaker  
(d) metre rule

Q. No.22. The greatest source of energy for our earth is:

ہماری زمین کے لیے انرژی کا سب سے بڑا ذریعہ ہے:

(a) coal  
(b) sun  
(c) food  
(d) diesel

Q. No.23. Railway tracks are laid with gaps between them for thermal

ریل ویڈز کے درمیان خالی جگہیں ہیں خالی جگہیں ہیں۔

(a) expansion  
(b) conductivity  
(c) contraction  
(d) transformation

Q. No.24. The liquid used in thermometer is:

لا تھرمومیٹر میں استعمال ہونے والے مائع ہے:

(a) acetone  
(b) water  
(c) benzene  
(d) mercury
Q. No.25. Identify the lens given below.

(a) double convex  (b) double concave  (c) concavo-convex  (d) convexo-concave

Q. No.26. In the given figure image is formed beyond the retina. This defect is known as:

(a) short-sightedness  (b) long-sightedness  (c) cataract  (d) glaucoma

Q. No.27. The lens used in magnifying glass is:

(a) double concave  (b) double convex  (c) concavo-convex  (d) convexo-concave

Q. No.28. Which one of the following types of energy production is NOT environment friendly?

(a) Nuclear energy  (b) Hydral energy  (c) Wind energy  (d) Solar energy

Q. No.29. The basic component of an electronic system is:

(a) amplifier  (b) processor  (c) telescope  (d) transistor

Q. No.30. The device which converts A.C to D.C is a/an:

(a) amplifier  (b) telescope  (c) diode  (d) processor

Q. No.31. Continuous reporting of the position of a satellite is called:

(a) monitoring  (b) reporting  (c) watching  (d) tracking

Q. No.32. Accurate weather report is possible with the help of:

(a) satellites  (b) microscopes  (c) telescopes  (d) spectroscopes