1. What is a 'black hole' in astronomy?

   (A) A black object in our solar system

   (B) A cosmic body of extremely intense gravity from which nothing, not even light, can escape

   (C) A cosmic body with no gravitational pull

   (D) A black planet

2. The earth rotates around its axis from

   (A) East to West

   (B) West to East

   (C) Northeast to Southwest

   (D) Southeast to Northwest

3. The Angami tribe is domicile of which Indian State?

   (A) Arunachal Pradesh

   (B) Tripura

   (C) Sikkim

   (D) Nagaland

4. On the bank of which river, the Greek Emperor Alexander the Great fought with King Porus?

   (A) Jhelum

   (B) Chenab

   (C) Ravi

   (D) Beas

5. Which of the following plays was not written by Kalidasa?

   (A) Abhijnanashakuntalam

   (B) Vikramorvasiyam

   (C) Svapnavasavadattam

   (D) Malavikagnimitram

6. During whose rule was the Grand Trunk Road built?

   (A) Sher Shah Suri

   (B) Iltutmish

   (C) Alauddin Khalji

   (D) Muhammad bin-Tughluq

7. Where was the head office of Indian National Army or Azad Hind Fauz located?

   (A) Tokyo

   (B) Berlin

   (C) Rangoon

   (D) Kuala Lumpur

8. What was the original name of Swami Vivekananda?

   (A) Bankim Chandra Chattapadhyay

   (B) Narendranath Datta

   (C) Chittaranjan Das

   (D) Rash Behari Bose

9. Dandi March was led by

   (A) Mahatma Gandhi

   (B) Pandit Jawaharlal Nehru

   (C) Madan Mohan Malaviya

   (D) Bal Gangadhar Tilak

10. Which of the following is the classical dance of Andhra Pradesh?

    (A) Kathakali

    (B) Bharatanatyam

    (C) Mohiniyattam

    (D) Kuchipudi

11. Who among the following is known as the Father of the Indian Constitution?

(A) B. N. Rao

(B) Alladi Krishnaswami Ayyar

(C) Dr. B. R. Ambedkar

(D) Maulana Abul Kalam Azad

12. The Chief Justice of a High Court is appointed by

(A) the President of India

(B) the Chief Justice of the Supreme Court of India

(C) the Prime Minister's Office

(D) the Governor of the concerned State

13. Which of the following is an indigenously built light combat aircraft of India?

(A) Akash

(B) Gnat

(C) Mirage

(D) Tejas

14. What is the full form of DRDO?

(A) Defence Research and Delivery Organization

(B) Development Research and Defence Organization

(C) Defence Research and Development Organization

(D) Defence Research and Delivery Observatory

15. Which was the first artificial satellite to be sent to the space by any country?

(A) Pioneer

(B) Luna I

(C) Apollo I

(D) Sputnik I

16. Who was the first Indian woman to scale Mount Everest?

(A) Premlata Agarwal

(B) Arunima Sinha

(C) Bachendri Pal

(D) Shivangi Pathak

17. When is the 'World AIDS Day' observed?

(A) 2nd November

(B) 1st December

(C) 16th September

(D) 11th December

18. The French Open is the tournament played for which of the following sports?

(A) Volleyball

(B) Hockey

(C) Lawn tennis

(D) Badminton

19. What is the capital of Pakistan?

(A) Rawalpindi

(B) Islamabad

(C) Lahore

(D) Karachi

20. What is the official currency of Japan?

(A) Won

(B) Yen

(C) Yuan

(D) Dollar

21.

22.

23

21. The process of conversion of sugar to alcohol by the microorganism yeast is called

   (A) biodegradation

   (B) decomposition

   (C) fermentation

   (D) phosphorylation

22. What does our body produce to fight the invader when a disease-causing microbe enters our body?

   (A) Antigen

   (B) Antibody

   (C) Albumin

   (D) Antibiotic

23. Microbial diseases that can spread from an infected person to a healthy person through air, water, food or physical contact are called

   (A) communicable diseases

   (B) non-communicable diseases

   (C) autoimmune diseases

   (D) None of the above

24. Which of the following materials is non-biodegradable?

   (A) Paper

   (B) Cloth

   (C) Wood

   (D) Plastic bags

25. The property of metals by which they can be beaten into thin sheets is called

   (A) malleability

   (B) ductility

   (C) conductivity

   (D) elasticity

26. The green coloured plastids present in leaves of plants is called

   (A) golgi body

   (B) chloroplast

   (C) chlorophyll

   (D) lysosome

27. Fallopian tubes are the parts of which of the following?

   (A) Flowers

   (B) Kidneys

   (C) Female reproductive system

   (D) Male reproductive system

28. When two or more reactants react with each other to form a single product, it is called

   (A) oxidation reaction

   (B) reduction reaction

   (C) decomposition reaction

   (D) combination reaction

29. Carbon compounds having double or triple bonds between the carbon atoms are known as

   (A) saturated carbon compounds

   (B) unsaturated carbon compounds

   (C) halothanes

   (D) alkanes

30. Waste products produced by our body during metabolism and carried by blood are excreted through

   (A) the kidneys

   (B) the spleen

   (C) the gonads

   (D) the stomach

31. What is the past tense of 'speak'?

(A) Spoken

(B) Spoke

(C) Spoked

(D) Spook

32. Fill in the blank with correct pronoun :
"The presents are for you and _____."

(A) me

(B) I

(C) she

(D) they

33. Fill in the blank with correct preposition :
"She sat _____ the fire and told me a tale."

(A) in

(B) after

(C) into

(D) by

34. A person who eats human flesh is called

(A) parasite

(B) cannibal

(C) iconoclast

(D) drover

35. Complete the proverb with the correct word given below :
"Better late than _____."

(A) ever

(B) never

(C) always

(D) forever

36. Which of the following is correct?

(A) A hedge of flowers

(B) A shoal of flowers

(C) A bouquet of flowers

(D) A pride of flowers

37. What is the synonym of 'fraternity'?

(A) Brotherhood

(B) Neighbourhood

(C) Friendship

(D) Consulate

38. What is the opposite gender of 'widow'?

(A) Bachelor

(B) Spinster

(C) Maiden

(D) Widower

39. What is the superlative of 'modern'?

(A) Modernist

(B) Most modern

(C) Moderate

(D) None of the above

40. What is the antonym of 'best'?

(A) Worse

(B) Bad

(C) Worst

(D) Poor

[Contd.

41. Simplify :

$$\frac{-3}{4} \times \left\{ \frac{2}{3} + \left(\frac{-5}{6} \right) \right\}$$

(A) $\frac{1}{6}$

(B) $\frac{1}{8}$

(C) $\frac{-1}{4}$

(D) $\frac{-1}{6}$

42. If $21y5$ is a multiple of 9, where y is a digit, what is the value of y?

(A) 1

(B) 2

(C) 3

(D) 4

43. Find the values of the letters in the following :

```
    3  A
 +  2  5
 --------
    B  2
```

(A) $A = 6$, $B = 7$

(B) $A = 5$, $B = 6$

(C) $A = 7$, $B = 5$

(D) $A = 7$, $B = 6$

44. Divide $z(5z^2 - 80)$ by $5z(z + 4)$ and find the answer from the options given below :

(A) $4 - z$

(B) $z - 14$

(C) $z - 4$

(D) $z + 4$

45. If the weight of 12 sheets of thick paper is 40 grams, how many sheets of the same paper would weigh 2½ kilograms?

(A) 700

(B) 750

(C) 800

(D) 850

46. What are the roots of the equation $2x^2 - 5x + 3 = 0$?

(A) 1 and $\frac{3}{2}$

(B) -1 and $\frac{3}{2}$

(C) 1 and $\frac{3}{4}$

(D) 1 and $-\frac{3}{4}$

47. The 10th term of the arithmetic progression 2, 7, 12, ... is

(A) 27

(B) 37

(C) 47

(D) 57

48. A girl of height 90 cm is walking away from the base of a lamppost at a speed of 1·2 m/s. If the lamp is 3·6 m above the ground, what will be the length of her shadow after 4 seconds?

(A) 1 m

(B) 1·2 m

(C) 1·4 m

(D) 1·6 m

49. Find the value of $\frac{1}{3^{-2}}$.

(A) 3

(B) 9

(C) 18

(D) 27

50. Find the height of a cuboid whose volume is $275\,cm^3$ and base area is $25\,cm^2$.

(A) 25 cm

(B) 22 cm

(C) 11 cm

(D) 27 cm

[P.T.O.