

SAMPLE PAPER

Subject Specialist

PHYSICS

(Academics/QAI)

ENGLISH

Choose the best option, from the given choices below each sentence.

1. She said that her friends _____ her.

- A) betrays
- B) betraying
- C) have betrayed
- D) had betrayed

Identify the part of the speech of the underlined word of the given sentence.

2. The zookeeper quietly set free all the wild animals.

- A) noun
- B) preposition
- C) adjective
- D) verb

Each of the following questions consists of a sentence with all or part of the sentence underlined. Following the requirements of standard written English, select (A) if the original is best; otherwise choose the best phrase from the options.

3. What are needed are not large houses but small cottages.

- A) are
- B) were
- C) was
- D) is
- E) had

Choose the best opposite of the following words.

4. DETERIORATE:

- A) deaden
- B) trust
- C) rectify
- D) drain

Choose the best same meaning of the following words.

5. DESTINY:

- A) real
- B) plan
- C) fate
- D) wish

Read the following passage to answer the given question (4)

As I walk, alone and lonely, on the streets around my small apartment, I feel a bond with virtually everyone I see: the elderly man struggling to walk up the stoop (a man who finds even the most basic tasks challenging), the child playing with a soccer ball (a blithe boy, experiencing easy joy), and even the wrinkled woman stationed behind the cash register of the convenience store, where she seems to be eight days a week (a hard worker facing a daily struggle to make a living). My own identity feels lost, wrapped up in the lives of others. And yet I realize that as I struggle to identify myself, I feel closer to the world around me and less alone.

6. The author mentions that the woman in the convenience store seems to be there "eight days a week" in order to:

- A) suggest that she makes her home at the store
- B) indicate that she is merely part of the author's imagination
- C) provide an anecdote about the challenges of accomplishing basic tasks
- D) argue that convenience store workers have easy lives
- E) highlight how hard she must work to earn a living

General Ability

7. Which country is currently is the largest source of foreign direct investment (FDI) in Pakistan?
- A) United States
 - B) China
 - C) United Arab Emirates
 - D) Saudi Arabia
8. Nobel Prize is awarded for:
- A) Physiology or Medicine
 - B) Physics and Chemistry
 - C) Literature, Peace and Economics
 - D) all of the above
9. Person below 18 years who is unable to sue or be sued without representation is called a:
- A) Juvenile
 - B) Minor
 - C) Immature
 - D) Child
10. All of the following countries possess veto-power EXCEPT:
- A) China
 - B) France
 - C) United States
 - D) Russia
 - E) Canada
11. The concept of the "Global South" in international relations primarily refers to:
- A) All countries located geographically south of the equator.
 - B) A coalition of states formerly part of the Non-Aligned Movement.
 - C) A term for countries characterized by developing economies, lower per capita income, and a history of colonization or peripheral status.
 - D) An official political and economic bloc with a permanent secretariat, similar to the United Nations
12. Which of the following is referred by per capita?
- A) By head
 - B) By law
 - C) By the way
 - D) By legal means
13. In Pakistan summer season rain fall is caused by:
- A) Due to heat
 - B) Due to cold wind
 - C) Due to storm
 - D) Due to monsoon
14. Which of the following province is the smallest according to population?
- A) Punjab
 - B) Sindh
 - C) Baluchistan
 - D) KPK

QUANTITATIVE

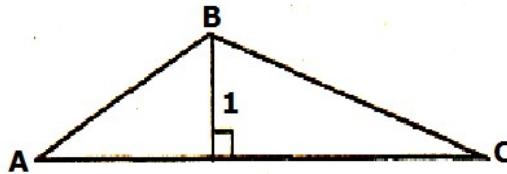
15. If the average (arithmetic means) of a and -5 is 10 , then $a =$

- A) 25
- B) 15
- C) 5
- D) -5

16. The ratio between the ages of Ahmad and Ali at present is $2 : 3$. After three years, the ratio of their ages will be $3 : 4$. Find the present age of Ahmad in years.

- A) 3
- B) 6
- C) 9
- D) 15

17. If $AC = 4$, what is the area of $\triangle ABC$ below?



- A) $\frac{1}{2}$
- B) 2
- C) 4
- D) 8

18. Of the twenty people who won the prize, 8 have come forward to claim the prize. What percent of the people have not yet appeared?

- A) 20%
- B) 30%
- C) 40%
- D) 60%

19. There are enough candies in a bag to give 12 candies to each of 20 children, with no candies left over. If 5 children do not want any candies, how many candies can be given to each of others?

- A) 12
- B) 14
- C) 16
- D) 18
- E) 20

20. A boy saves 18 Rupees in 8 weeks. He continues to save at the same rate. How many weeks will it take him to save 81 rupees?

- A) 13
- B) 36
- C) 40
- D) 71

COMPUTERS

21. Copy command in a spreadsheet:

- A) Never copies formulae**
- B) Copies formulae treating them like labels**
- C) Copies only those formula with addresses of one type**
- D) Copies formula giving a special treatment in order to handle different types of addresses**

22. You are sending a project proposal to a senior manager, Mr. X, whom you have not met before. Which of the following is the most appropriate subject line for your email?

- A) Proposal**
- B) Project Name: Proposal for Marketing Initiative**
- C) Hey Mr. X– Please check this out when you get a sec**
- D) Important! Read Immediately!**

23. The arrangement of keys on a modern keyboard is called:

- A) Phonetic arrangement**
- B) Qwerty arrangement**
- C) Dvorak arrangement**
- D) Olympia arrangement**

24. In MS Word Ctrl + G is used for:

- A) Print**
- B) Undo**
- C) Go To**
- D) Find and Replace**

25. Values, entered in a cell, are always:

- A) Left aligned**
- B) Right aligned**
- C) Centered**
- D) Not aligned at all**

26. The short-cut key for print dialogue box is:

- A) Ctrl + N**
- B) Alt + I**
- C) Ctrl + X**
- D) Ctrl + H**
- E) Ctrl + P**

Punjab Education Foundation Rules & Regulations & Estacode

27. What is the primary legislative document that governs the Punjab Education Foundation (PEF)?

- A) The Punjab Education Foundation Act 2004
- B) PEF Policy 2010
- C) PEF Charter of Operations
- D) Punjab Education Sector Reform Program

28. The PEF's financial operations, including budgeting, accounting, and auditing, are primarily guided by:

- A) Federal Board of Revenue Rules
- B) PEF's own Financial Rules & Regulations
- C) World Bank Guidelines
- D) Punjab Private Schools Regulatory Authority Rules

29. A school partnered with PEF can have its agreement terminated for:

- A) Consistently maintaining high academic results.
- B) Submitting accurate and timely reports.
- C) Participating in PEF's teacher training programs.
- D) Charging unauthorized fees from PEF-sponsored students.

30. According to the Act, a "civil servant" does NOT include:

- A) A person employed on a work-charged basis
- B) A person on deputation from the Federation
- C) A member of a civil service of the province
- D) A person holding a civil post in connection with the affairs of the Province

31. A civil servant shall retire from service on the completion of:

- A) The fifty-fifth year of his age
- B) The fifty-eighth year of his age
- C) The sixtieth year of his age
- D) The sixty-second year of his age

32. What percentage of posts is reserved for women in recruitment?

- A) 2%
- B) 5%
- C) 15%
- D) 20%

33. The financial support provided by PEF to its partner schools under programs like FAS is primarily intended to cover:

- A) School expansion and construction of new buildings.
- B) The students' tuition fees and related educational costs.
- C) Political campaigns.
- D) Teachers' personal travel expenses.

34. The Public Procurement Regulatory Authority (PPRA) Rules, 2014, apply to:

- A) All private companies in Pakistan.**
- B) All public sector organizations and entities defined as "Procuring Agencies."**
- C) Only federal government ministries**
- D) Only projects funded by international lenders.**

35. A 'Technical Proposal' is primarily used in which method of procurement?

- A) Open Competitive Bidding**
- B) Direct Contracting**
- C) Two-Stage Bidding**
- D) Request for Quotations (RFQ)**

Professional/Post/ Qualification Related Questions

36. The "Parho Punjab, Barho Punjab" (Read Punjab, Grow Punjab) initiative primarily focuses on:
- A) Building new school buildings
 - B) Increasing teacher salaries
 - C) Improving student learning outcomes in literacy and numeracy
 - D) Providing free tablets to all students
37. The "KhidmatCentres" in schools provide:
- A) Career counseling and educational services to students
 - B) Banking services
 - C) Medical facilities for teachers
 - D) Religious education
38. The SNC places special emphasis on the teachings and philosophy of:
- A) Western philosophers
 - B) Allama Muhammad Iqbal and Quaid-e-Azam Muhammad Ali Jinnah
 - C) International leaders
 - D) Modern scientists only
39. The SNC aims to reduce the divide between different education systems by:
- A) Closing private schools
 - B) Eliminating madrasa education
 - C) Teaching only in English
 - D) Having common curriculum standards and competencies
40. What is the primary goal of PEF's Foundation Assisted Schools (FAS) program?
- A) To provide higher education scholarships.
 - B) To establish new government schools in rural areas.
 - C) To support low-cost private schools for imparting quality education to the poorest students.
 - D) To offer technical and vocational training to adults.
41. Early Childhood Education (ECE) in Pakistan is formally intended for which age group?
- A) 3 to 5 years
 - B) 4 to 6 years
 - C) 5 to 7 years
 - D) 6 to 8 years
42. What is the main objective of PEF's "Continuous Professional Development (CPD)" program?
- A) To construct new school buildings.
 - B) To provide monthly stipends to students.
 - C) To enhance the teaching skills and pedagogical knowledge of teachers in partner schools.
 - D) To develop a new national curriculum.

43. Which of the following is the highest level of cognition in Bloom's taxonomy?

- A) analysis**
- B) synthesis**
- C) comprehension**
- D) evaluation**

44. The best instructional method for the teaching of science to early graders is:

- A) Traditional method**
- B) Demonstration method**
- C) Group discussion method**
- D) Activity method**

45. Two groups G and G' are isomorphic if they have:

- A) Different number of elements & different multiplication table**
- B) Same number of elements & different multiplication table**
- C) Different number of elements & same multiplication table**
- D) Same number of elements & same multiplication table**

46. The term solar energy is most closely described by which of the following statements?

- A) The conversion of the sun's energy into useful electrical or thermal energy on earth**
- B) The way the sun generates its own power**
- C) The conversion of heat into light**
- D) The conversion of electricity into solar power**
- E) The high wavelength rays emitted by the sun**

47. A capacitor is charged with a battery and then it is disconnected. A slab of dielectric is now inserted between the plates, then:

- A) The charge in the plates reduces and potential difference increase**
- B) Potential difference between the plates increase, stored energy decreases and charge remains the same**
- C) Potential difference between the plates decreases, stored energy decreases and charge remains unchanged**
- D) None of the above**

48. Light of variable frequency ν shines on the metal surface of a photoelectric tube. Einstein's theory of the photoelectric effect predicts that the:

- A) work function of the metal is proportional to the frequency**
- B) work function of the metal is proportional to the wavelength**
- C) current in the tube is a linear function of the wavelength**
- D) potential difference necessary to stop the emitted electrons is a linear function of the frequency above the threshold frequency**

49. Which of the following devices is used for generating an alternating current of a desired frequency?

- A) An amplifier
- B) A rectifier
- C) An oscillator
- D) A volt meter

50. In a transistor, what is its operational state called when both the emitter-base junction and the collector-base junction have a reverse bias applied?

- A) active region
- B) cut off region
- C) saturation region
- D) None of the above

ESSAY

Organize, develop and express your ideas on the following topic by deploying elements of standard written English. (15 Marks)

"The Role of Public-Private Partnerships in Achieving Universal Quality Education in Punjab"

ANSWER KEYS

Q #.	Right Choice	Q #.	Right Choice
1	D	29	D
2	C	30	A
3	D	31	C
4	C	32	C
5	C	33	B
6	E	34	B
7	B	35	C
8	D	36	C
9	B	37	A
10	E	38	B
11	C	39	D
12	A	40	C
13	D	41	A
14	C	42	C
15	A	43	D
16	B	44	B
17	B	45	D
18	D	46	A
19	C	47	C
20	B	48	D
21	D	49	C
22	B	50	B
23	B		
24	C		
25	B		
26	E		
27	A		
28	B		