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**T.B.C. : P-DTQ-M-QB**

**TEST BOOKLET SERIES**

**Serial**

126609

**TEST BOOKLET**

**PAPER - II**



**Time Allowed : Two Hours**

**Maximum Marks : 200**

**INSTRUCTIONS**

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. ENCODE CLEARLY THE TEST BOOKLET SERIES A, B, C OR D AS THE CASE MAY BE IN THE APPROPRIATE PLACE IN THE ANSWER SHEET.
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. **DO NOT** write *anything else* on the Test Booklet.
4. This Test Booklet contains 80 items (questions). Each item is printed both in Hindi and English, except for Questions relating to English Language Comprehension which are in English only. Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case, you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your responses **ONLY** on the separate Answer Sheet provided. See directions in the Answer Sheet.
6. All items carry equal marks.
7. Before you proceed to mark in the Answer Sheet the response to various items in the Test Booklet, you have to fill in some particulars in the Answer Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Answer Sheet and the examination has concluded, you should hand over to the Invigilator **only the Answer Sheet**. You are permitted to take away with you the Test Booklet.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. **Penalty for wrong answers :**  
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE EXCEPT FOR QUESTIONS FROM 74 TO 80, WHICH DO NOT CARRY ANY PENALTY FOR WRONG ANSWER.
  - (i) There are four alternatives for the answer to every question. For each question which has a penalty for which a wrong answer has been given by the candidate, **one-third** of the marks assigned to that question will be deducted as penalty.
  - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above to that question, if it has a penalty.
  - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

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**ध्यान दें : अनुदेशों का हिन्दी रूपान्तर इस पुस्तिका के पिछले पृष्ठ पर उपा है ।**

**Directions for the following 15 (fifteen) items :**

*Read the following three passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.*

**Passage - 1**

Education, without a doubt, has an important functional, instrumental and utilitarian dimension. This is revealed when one asks questions such as 'what is the purpose of education?'. The answers, too often, are 'to acquire qualifications for employment/upward mobility', 'wider/higher (in terms of income) opportunities', and 'to meet the needs for trained human power in diverse fields for national development'. But in its deepest sense education is not instrumentalist. That is to say, it is not to be justified outside of itself because it leads to the acquisition of formal skills or of certain desired psychological - social attributes. It must be respected in itself. Education is thus not a commodity to be acquired or possessed and then used, but a process of inestimable importance to individuals and society, although it can and does have enormous use value. Education then, is a process of expansion and conversion, not in the sense of converting or turning students into doctors or engineers, but the widening and turning out of the mind — the creation, sustenance and development of self-critical awareness and independence of thought. It is an inner process of moral - intellectual development.

1. What do you understand by the 'instrumentalist' view of education?  
 (a) Education is functional and utilitarian in its purposes.  
(b) Education is meant to fulfil human needs.  
 (c) The purpose of education is to train the human intellect.  
(d) Education is meant to achieve moral development.
2. According to the passage, education must be respected in itself because  
(a) it helps to acquire qualifications for employment.  
(b) it helps in upward mobility and acquiring social status.  
 (c) it is an inner process of moral and intellectual development.  
(d) All the (a), (b) and (c) given above are correct in this context.
3. Education is a process in which  
(a) students are converted into trained professionals.  
(b) opportunities for higher income are generated.  
 (c) individuals develop self-critical awareness and independence of thought.  
(d) qualifications for upward mobility are acquired.



## Passage - 2

Chemical pesticides lose their role in sustainable agriculture if the pests evolve resistance. The evolution of pesticide resistance is simply natural selection in action. It is almost certain to occur when vast numbers of a genetically variable population are killed. One or a few individuals may be unusually resistant (perhaps because they possess an enzyme that can detoxify the pesticide). If the pesticide is applied repeatedly, each successive generation of the pest will contain a larger proportion of resistant individuals. Pests typically have a high intrinsic rate of reproduction, and so a few individuals in one generation may give rise to hundreds or thousands in the next, and resistance spreads very rapidly in a population.

This problem was often ignored in the past, even though the first case of DDT (dichlorodiphenyltrichloroethane)

resistance was reported as early as 1946. There is exponential increase in the numbers of invertebrates that have evolved resistance and in the number of pesticides against which resistance has evolved. Resistance has been recorded in every family of arthropod pests (including dipterans such as mosquitoes and house flies, as well as beetles, moths, wasps, fleas, lice and mites) as well as in weeds and plant pathogens. Take the Alabama leafworm, a moth pest of cotton, as an example. It has developed resistance in one or more regions of the world to aldrin, DDT, dieldrin, endrin, lindane and toxaphene.

If chemical pesticides brought nothing but problems, — if their use was intrinsically and acutely unsustainable — then they would already have fallen out of widespread use. This has not happened. Instead, their rate of

production has increased rapidly. The ratio of cost to benefit for the individual agricultural producer has remained in favour of pesticide use. In the USA, insecticides have been estimated to benefit the agricultural products to the tune of around \$5 for every \$1 spent.

Moreover, in many poorer countries, the prospect of imminent mass starvation, or of an epidemic disease, are so frightening that the social and health costs of using pesticides have to be ignored. In general the use of pesticides is justified by objective measures such as 'lives saved', 'economic efficiency of food production' and 'total food produced'. In these very fundamental senses, their use may be described as sustainable. In practice, sustainability depends on continually developing new pesticides that keep at least one step ahead of the pests — pesticides that are less persistent, biodegradable and more accurately targeted at the pests.

4. "The evolution of pesticide resistance is natural selection in action." What does it actually imply ?

(a) It is very natural for many organisms to have pesticide resistance.

(b) Pesticide resistance among organisms is a universal phenomenon.

✓ (c) Some individuals in any given population show resistance after the application of pesticides.

(d) None of the statements (a), (b) and (c) given above is correct.

5. With reference to the passage, consider the following statements :

1. Use of chemical pesticides has become imperative in all the poor countries of the world.
2. Chemical pesticides should not have any role in sustainable agriculture.
3. One pest can develop resistance to many pesticides.

Which of the statements given above is/are correct ?

- (a) 1 and 2 only
- (b) 3 only
- ✓ (c) 1 and 3 only
- (d) 1, 2 and 3

6. Though the problems associated with the use of chemical pesticides is known for a long time, their widespread use has not waned. Why ?

- (a) Alternatives to chemical pesticides do not exist at all.
- (b) New pesticides are not invented at all.
- ✓ (c) Pesticides are biodegradable.
- ✓ (d) None of the statements (a), (b) and (c) given above is correct.

7. How do pesticides act as agents for the selection of resistant individuals in any pest population ?

1. It is possible that in a pest population the individuals will behave differently due to their genetic makeup.
2. Pests do possess the ability to detoxify the pesticides.
3. Evolution of pesticide resistance is equally distributed in pest population.

Which of the statements given above is/are correct ?

- (a) 1 only
- ✓ (b) 1 and 2 only
- (c) 3 only
- (d) 1, 2 and 3

8. Why is the use of chemical pesticides generally justified by giving the examples of poor and developing countries ?

1. Developed countries can afford to do away with use of pesticides by adapting to organic farming, but it is imperative for poor and developing countries to use chemical pesticides.
2. In poor and developing countries, the pesticide addresses the problem of epidemic diseases of crops and eases the food problem.
3. The social and health costs of pesticide use are generally ignored in poor and developing countries.

Which of the statements given above is/are correct ?

- (a) 1 only
- (b) 1 and 2 only
- ✓ (c) 2 only
- (d) 1, 2 and 3

9. What does the passage imply ?

- (a) Alternative options to chemical pesticides should be promoted.
- ✓ (b) Too much use of chemicals is not good for the ecosystem.
- (c) There is no scope for the improvement of pesticides and making their use sustainable.
- (d) Both the statements (a) and (b) above are correct.



### Passage - 3

Today's developing economies use much less energy per capita than developed countries such as the United States did at similar incomes, showing the potential for lower-carbon growth. Adaptation and mitigation need to be integrated into a climate-smart development strategy that increases resilience, reduces the threat of further global warming, and improves development outcomes. Adaptation and mitigation measures can advance development, and prosperity can raise incomes and foster better institutions. A healthier population living in better-built houses and with access to bank loans and social security is better equipped to deal with a changing climate and its consequences. Advancing robust, resilient development policies that promote adaptation is needed today because changes in the climate, already begun, will increase even in the short term.

The spread of economic prosperity has always been intertwined with adaptation to changing ecological conditions. But as growth has altered the environment and as environmental change has accelerated, sustaining growth and adaptability demands greater capacity to understand our environment, generate new adaptive technologies and practices, and diffuse them widely. As economic historians have explained, much of humankind's creative potential has been directed at adapting to the changing world. But adaptation cannot cope with all the impacts related to climate change, especially as larger changes unfold in the long term.

Countries cannot grow out of harm's way fast enough to match the changing climate. And some growth strategies, whether driven by the government or the market, can also add to vulnerability — particularly if they overexploit natural resources. Under the Soviet development plan, irrigated cotton cultivation expanded in water-stressed Central Asia and led to the near disappearance of the Aral Sea, threatening the livelihoods of fishermen, herders and farmers. And clearing mangroves — the natural coastal buffers against storm surges — to make way for intensive farming or housing development, increases the physical vulnerability of coastal settlements, whether in Guinea or in Louisiana.

10. Which of the following conditions of growth can add to vulnerability ?

1. When the growth occurs due to excessive exploitation of mineral resources and forests.
2. When the growth brings about a change in humankind's creative potential.
3. When the growth is envisaged only for providing houses and social security to the people.
4. When the growth occurs due to emphasis on farming only.

Select the correct answer using the codes given below :

- ✓ (a) 1 only  
(b) 2, 3 and 4 only  
(c) 1 and 4 only  
(d) 1, 2, 3 and 4

11. What does low-carbon growth imply in the present context ?

1. More emphasis on the use of renewable sources of energy.
2. Less emphasis on manufacturing sector and more emphasis on agriculture sector.
3. Switching over from monoculture practices to mixed farming.
4. Less demand for goods and services.

Select the correct answer using the codes given below :

- (a) 1 only
- (b) 2, 3 and 4 only
- (c) 1 and 4 only
- (d) None of the above implies low-carbon growth

12. Which of the following conditions is/are necessary for sustainable economic growth ?

1. Spreading of economic prosperity more.
2. Popularising/spreading of adaptive technologies widely.
3. Investing on research in adaptation and mitigation technologies.

Select the correct answer using the codes given below :

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

13. Which of the following inferences can be made from the passage ?

1. Rainfed crops should not be cultivated in irrigated areas.
2. Farming under water-deficient areas should not be a part of development strategy.

Select the correct answer using the codes given below :

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

14. Consider the following assumptions :

1. Sustainable economic growth demands the use of creative potential of man.
2. Intensive agriculture can lead to ecological backlash.
3. Spread of economic prosperity can adversely affect the ecology and environment.

With reference to the passage, which of the above assumptions is/are valid ?

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

15. Which one of the following statements constitutes the central theme of this passage ?

- (a) Countries with greater economic prosperity are better equipped to deal with the consequences of climate change.
- (b) Adaptation and mitigation should be integrated with development strategies.
- (c) Rapid economic growth should not be pursued by both developed and developing economies.
- (d) Some countries resort to overexploitation of natural resources for the sake of rapid development.



16. Consider the following statements
1. All artists are whimsical.
  2. Some artists are drug addicts.
  3. Frustrated people are prone to become drug addicts.

From the above three statements it may be concluded that

- (a) Artists are frustrated.
- (b) Some drug addicts are whimsical.
- (c) All frustrated people are drug addicts.
- (d) Whimsical people are generally frustrated.

17. Examine the following statements :

1. Either A and B are of the same age or A is older than B.
2. Either C and D are of the same age or D is older than C.
3. B is older than C.

Which one of the following conclusions can be drawn from the above statements ?

- (a) A is older than B
- (b) B and D are of the same age
- (c) D is older than C
- (d) A is older than C

18. Examine the following statements :

1. Only those who have a pair of binoculars can become the members of the birdwatcher's club.
2. Some members of the birdwatcher's club have cameras.
3. Those members who have cameras can take part in photo-contests.

Which of the following conclusions can be drawn from the above statements ?

- (a) All those who have a pair of binoculars are members of the birdwatcher's club.
- (b) All members of the birdwatcher's club have a pair of binoculars.
- (c) All those who take part in photo-contests are members of the birdwatcher's club.
- (d) No conclusion can be drawn.

19. During the last summer vacation, Ankit went to a summer camp where he took part in hiking, swimming and boating. This summer, he is looking forward to a music camp where he hopes to sing, dance and learn to play the guitar.

Based on the above information, four conclusions, as given below, have been made. Which one of these logically follows from the information given above ?

- (a) Ankit's parents want him to play the guitar.
- (b) Ankit prefers music to outdoor activities.
- (c) Ankit goes to some type of camp every summer.
- (d) Ankit likes to sing and dance.

20. Three persons A, B and C wore shirts of black, blue and orange colours (not necessarily in that order) and pants of green, yellow and orange colours (not necessarily in that order). No person wore shirt and pants of the same colour. Further, it is given that

1. A did not wear shirt of black colour.
2. B did not wear shirt of blue colour.
3. C did not wear shirt of orange colour.
4. A did not wear pants of green colour.
5. B wore pants of orange colour.

What were the colours of the pants and shirt worn by C, respectively ?

- (a) Orange and black
- (b) Green and blue
- (c) Yellow and blue
- (d) Yellow and black

21. Ten new TV shows started in January — 5 sitcoms, 3 drama and 2 news magazines. By April, only seven of the new shows were still on, five of them being sitcoms.

Based on the above information, four conclusions, as given below, have been made. Which one of these logically follows from the information given above ?

- (a) Only one news magazine show is still on.
- (b) Only one of the drama shows is still on.
- ✓ (c) At least one discontinued show was a drama.
- (d) Viewers prefer sitcoms over drama.

22. Read the passage given below and the two statements that follow (given on the basis of the passage) :

Four men are waiting at Delhi airport for a Mumbai flight. Two are doctors and the other two are businessmen. Two speak Gujarati and two speak Tamil. No two of the same profession speak the same language. Two are Muslims and two are Christians. No two of the same religion are of the same profession, nor do they speak the same language. The Tamil-speaking doctor is a Christian.

- 1. The Christian-businessman speaks Gujarati.
- 2. The Gujarati-speaking doctor is a Muslim.

Which of the above statements is/are correct conclusion/conclusions ?

- (a) 1 only
- ✓ (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

23. Consider the following statement :

"Though quite expensive, television is not a luxury item, as one can learn many things through television."

Which one of the following is a valid inference from the above statement ?

- ✓ (a) All expensive things are regarded as luxury.
- (b) All essential things for learning are not luxury.
- (c) Television is essential for learning.
- (d) Television is not a luxury item.

24. Mr. Kumar drives to work at an average speed of 48 km per hour. The time taken to cover the first 60% of the distance is 10 minutes more than the time taken to cover the remaining distance. How far is his office ?

- ✓ (a) 30 km
- (b) 40 km
- (c) 45 km
- (d) 48 km

25. Gita is prettier than Sita but not as pretty as Rita. Then,

- ✓ (a) Sita is not as pretty as Gita.
- (b) Sita is prettier than Rita.
- (c) Rita is not as pretty as Gita.
- (d) Gita is prettier than Rita.

26. Given that,

- 1. A is the brother of B.
- 2. C is the father of A.
- 3. D is the brother of E.
- 4. E is the daughter of B.

Then, the uncle of D is

- ✓ (a) A
- (b) B
- ✓ (c) C
- (d) E

27. Examine the following statements :

- 1. Rama scored more than Rani.
- 2. Rani scored less than Ratna.
- 3. Ratna scored more than Rama.
- 4. Padma scored more than Rama but less than Ratna.

Who scored the highest ?

- (a) Rama
- ✓ (b) Padma
- (c) Rani
- ✓ (d) Ratna