



**FEDERAL PUBLIC SERVICE COMMISSION  
COMPETITIVE EXAMINATION-2017  
FOR RECRUITMENT TO POSTS IN BS-17  
UNDER THE FEDERAL GOVERNMENT**

**Roll Number**

**ENVIRONMENTAL SCIENCES**

<b>TIME ALLOWED: THREE HOURS</b>	<b>PART-I (MCQS)</b>	<b>MAXIMUM MARKS = 20</b>
<b>PART-I(MCQS): MAXIMUM 30 MINUTES</b>	<b>PART-II</b>	<b>MAXIMUM MARKS = 80</b>
<b>NOTE: (i) Part-II is to be attempted on the separate Answer Book.</b>		
<b>(ii) Attempt ONLY FOUR questions from PART-II. ALL questions carry EQUAL marks.</b>		
<b>(iii) All the parts (if any) of each Question must be attempted at one place instead of at different places.</b>		
<b>(iv) Candidate must write Q. No. in the Answer Book in accordance with Q. No. in the Q.Paper.</b>		
<b>(v) No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.</b>		
<b>(vi) Extra attempt of any question or any part of the attempted question will not be considered.</b>		

**PART-II**

- Q. No. 2.** (A) How the hazardous material is defined, identified and differentiated from the toxic material? Explain the environmental problems and health risks linked with the hazardous waste. (10) **(20)**
- (B) What stands for CERCLA and why it is related with hazardous waste? (10)
- Q. No. 3.** Which of the GHGs are the most significant contributors to the global warming? How do they work? And what mitigation steps could be taken to stabilize the GHG content of the atmosphere? **(20)**
- Q. No. 4.** (A) Discuss the global efforts that are currently in place to protect our ozone shield. What evidence is there that such efforts have been effective? (12) **(20)**
- (B) Discuss and comment on the social and economic dimensions of Agenda 21. (8)
- Q. No. 5.** Trace the political history of UNFCCC and the Kyoto Protocol. Do you think that the UNFCCC (2015) conference in Paris was the next step in reaching an agreement on climate change? **(20)**
- Q. No. 6.** (A) What do you understand by climate and microclimate? (4) **(20)**
- (B) How do forest burning and land clearing affect the global climate? (8)
- (C) What impact would changing climate have on the 'ecosystem in general' and 'coastal environment in particular'? (8)
- Q. No. 7.** (A) What is genetic engineering or biotechnology and how it may affect the agriculture and the environment? (12) **(20)**
- (B) What is the relation between poverty and food security? (8)
- Q. No. 8.** Write short notes on any FOUR of the following: **(5 each) (20)**
- (a) E-waste (b) Superfund
- (c) Eutrophication (d) Carbon foot print
- (e) Smog (f) Energy from biomass

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