’16

前期日程

受験番号

見本

医学部医学科小論文問題

注　意　事　項

1. 試験開始の合図があるまで，問題冊子を開いてはいけません。

2. この問題冊子のページ数は 8 ページです。問題冊子，解答用紙 3 枚及び下書用紙 2 枚に落丁，乱丁，印刷不鮮明などがある場合には申し出てください。

3. 解答は指定の解答用紙に記入してください。

(1) 文字はわかりやすく，横書きで，はっきり記入してください。

(2) 解答の字数に制限がある場合には，それを守ってください。

(3) 訂正，挿入の語句は余白に記入してください。

(4) ローマ字，数字を使用するときは，ます目にとらわれなくてもかまいません。

4. 試験時間は 90 分です。

5. 解答用紙は持ち帰ってはいけません。

6. 問題冊子と下書用紙は持ち帰ってください。

次の文章を読んで問1～11に答えなさい。なお文末の訳注一覧に，*のついた単語の訳注があります。

The April 25 earthquake in Nepal has caused mass devastation*, killing and injuring thousands of people, and highlighting (A) the country's vulnerability* to disaster. Dinesh C Sharma reports.

Kathmandu, Nepal's picturesque* capital located in the foothills* of the Himalayas, is usually teeming* with tourists and locals going about their daily lives. But, on April 25, it looked more like a war-ravaged* city after a 7.8 magnitude earthquake struck causing widespread devastation.

The impact of the quake, which had its epicenter* 77 km northwest of Kathmandu in the district of Lamjung, was felt across western and central Nepal and parts of north India. The disaster, which also triggered an avalanche* on Mount Everest, burying parts of the base camp, has left more than 7,400 people dead and more than 14,000 injured, with most of the casualties* reported from Kathmandu region, according to data released by Nepal's National Emergency Operations Center on May 4. The casualty figure is expected to rise as rescue teams clear debris* in outlying areas, which can only be reached by foot because road and communication infrastructure is [(B)] damaged. In the north Indian states of Uttar Pradesh and Bihar, about 80 people were killed.

The UN Resident Coordinator in Kathmandu estimates that 8 million people in 39 districts have been affected, 2 million of whom are in 11 severely affected districts. About 1.4 million people in these districts need immediate food assistance. The quake-hit regions include mountain and hilly areas, disperse rural populations, densely populated towns*, and the country's two largest cities — Kathmandu and Pokhara. People living in poor quality and [(C)] homes with

outer walls, roofs, and foundations made of mud and stone bore the brunt of* the disaster. Essential services such as water and electricity supplies remained disrupted in the capital for almost a week after the quake.

(D) Relief efforts mounted by national and international agencies have focused on providing food, water, shelter, and medical help to survivors. The rescue and relief operations were hampered* due to rains and the inability of Kathmandu airport to handle additional traffic up to 3 days after the quake. India responded by airlifting* military and civilian rescue teams, including personnel of the National Disaster Relief Force, field hospitals, and water purification equipment. Relief material was also rushed through by road from India to Nepal. Military field hospitals were set up in Lagankhel and Sinamangal by Indian armed forces, in addition to deploying* smaller medical teams in rural areas. "Even after 4 days, rescue teams could not reach areas close to the national capital, like Sindhupalchowk, Banepa, Sankhu, and Rasuwa where casualty figures could run into thousands", said Jagannath Lamichhane, coordinator of Kathmandu-based Movement for Global Mental Health. "In most of the affected villages, over 90% of homes have collapsed. They don't have young people who can volunteer as most of them have migrated to other countries for work."

Response coordination

As rescue teams, relief material, and medical help pours in from different parts of the world, (E) WHO is working with the Ministry of Health and Population to ensure that medical resources are distributed based on specific requirements of different regions. Ian Norton, a WHO official overseeing* the effort, requested that all teams wanting to provide relief to register their intent so that they could be properly deployed. Medical teams that are [(F)] are ideal for the situation. Norton cautioned that teams working outside the coordinated relief effort could become a burden on local authorities* and diminish the effectiveness of health

service delivery. "There are small teams that have been launched after watching the news and that are trying to respond with the best of intentions, but unfortunately they (G) do not have the sustainability* to be able to deploy into remote areas where we need them the most", he said.

WHO has established a field office in the Gorkha district to coordinate national and international humanitarian aid. By May 2, more than 80 foreign medical teams had reached Nepal; 68 have been deployed to deliver health care in affected districts.

"All major tertiary* care hospitals in Kathmandu are functional but they are overwhelmed (H)", remarked Amit Gupta, a trauma* care expert from the All India Institute of Medical Sciences who has been deputed* by India's Ministry of Health to assess medical relief requirements. "Most medical relief is needed in far flung rural areas and districts where health facilities have been badly damaged and have become dysfunctional*. This is the challenge for health authorities as they have depleted* resources to handle the situation. Several foreign medical teams have arrived but they need to be deployed appropriately", Gupta added.

A team of doctors from Médecins Sans Frontières (MSF), which assessed the needs and capacity of four hospitals in Kathmandu, has found that health facilities are overstretched* after dealing with an influx* of wounded people, while also trying to continue to provide treatment to regular patients with chronic* conditions. "The greatest need right now is space for our outpatient* department and pharmacy, because they have been damaged and we cannot work there. The patients have to be shifted to tents where they can be safe", said Sudha Devkota, head of the Gorkha district hospital. "Health facilities are completely non-existent in rural areas post-quake. We have no other options than outsourcing* public health needs for rural areas until basic health services are restored", noted

Lamichhane.

In addition to ensuring immediate medical relief for injured and displaced people, health authorities face the challenge of [(I-2)].

Protecting health facilities

Based on the geological and seismic* history of the region, scientists have been warning of a large earthquake of the magnitude seen on April 25, for a long time. The earthquake risk for Nepal as a whole is high as it sits right on top of tectonic* activity — ongoing subduction* of the Indian plate underneath Tibet; several studies in recent years had forewarned* large-scale devastation and loss of lives in the Kathmandu valley. Indeed, Nepal raised the issue of a major earthquake at last month's World Conference on Disaster Risk Reduction in Japan where countries adopted the Sendai Framework for Disaster Risk Reduction, which outlines the priorities for reducing disaster risk over the next 15 years.

Nepal has been working on securing front-line buildings such as hospitals in the event of a natural disaster. In 2009, a health ministers' conference adopted the Kathmandu Declaration on Protecting Health Facilities from Disasters. Projects to assess risks of hospitals were initiated, but progress has been slow because of political instability* and inadequate institutional mechanisms for disaster risk reduction nationally.

"Building codes specific to hospitals and health facilities need to be developed and enforced. If medical equipment and essential supplies like water and electricity are damaged in hospitals, it can cripple* medical services even if the building structure itself is sound", pointed out Hari Kumar, regional coordinator* for south Asia, GeoHazards International, which has assessed seismic vulnerability of medical equipment and utilities at three large hospitals in Kathmandu as part of a

WHO project. The assessment raised serious issues. For instance, the electrical power system of the National Academy of Medical Sciences — a tertiary referral* and teaching hospital — was found to be ill equipped to keep life-saving and essential systems in the hospital functional after an earthquake. The April 25 disaster has put such predictions to the test.

「出典：Dinesh C Sharma. Nepal earthquake exposes gaps in disaster preparedness. Lancet 2015 9 May; 385(9980): 1819-20. (一部抜粋および改変)」

＊ 訳注一覧

devastation 破壊　vulnerability 脆弱性
picturesque 絵のように美しい　foothills 高山のふもとの低い丘
teeming あふれかえっている　war-ravaged 戦争により破壊された
epicenter 震源地　avalanche 雪崩　casualties 犠牲者
debris がらくた　densely populated towns 人口密集地域
bore the brunt of ～の攻撃にさらされる　hamper 妨げる
airlifting 空輸の　deploy 配置する　oversee 監視する
local authorities 自治体　sustainability 持続可能性　tertiary 専門
trauma 心的外傷　depute 委任する　dysfunctional 機能障害の
deplete 使い切る　overstretch 過剰に広げる　influx 到着
chronic 慢性の　outpatient 外来患者　outsourcing 外部委託
seismic 地震の　tectonic 構造上の
subduction プレートの沈み込み　forewarn 警告する
instability 不安定さ　cripple 損害を与える
coordinator 調整役　referral 紹介

問 1　Nepal における下線部(A) the country's vulnerability to disaster について，医療の観点から解答用紙 1—1 のA欄に，日本語 160 字以内(句読点を含む)で説明しなさい。

問 2　空欄(B)にふさわしいのは以下のいずれの語か。下から選んで解答用紙 1—1 のB欄に番号を書きなさい。

1) hardly　　2) slightly　　3) rarely
4) merely　　5) severely

問 3　空欄(C)にふさわしいのは以下のいずれの語か。下から選んで解答用紙 1—1 のC欄に番号を書きなさい。

1) scenic　　2) solid　　3) vulnerable
4) hard　　5) massive

問 4　下線部(D) Relief efforts の阻害要因を解答用紙 1—1 のD欄に日本語で記述しなさい。

問 5　下線部(E) WHO が医療資源を供給する医療支援チームに求めていること，およびその理由を解答用紙 1—2 の E 欄に，日本語 50 字以内(句読点を含む)で述べなさい。

問 6　空欄(F)には，理想的な医療支援チームの条件が記されている。その条件を下の 1)～5)から選び，解答用紙 1—2 の F-1 欄に番号を書きなさい。また，その条件が求められる理由を F-2 欄に日本語で記述しなさい。

1) WHO の指示に従ってすぐに必要な場所に移動できること。
2) 外傷に対する大手術を実施可能であること。
3) 医療活動と共に，がれきの中からの人命救助活動も行えること。
4) 電気・水道などのライフライン復旧も同時に行えること。
5) 他から援助を受けずに自立して医療活動を行えること。

問 7　下線部(G) they は何を指すか。下の 1)～5)から選んで解答用紙 1—2 の G 欄に番号を書きなさい。

1) local authorities　2) WHO　3) small teams
4) the news　5) intentions

問 8　下線部(H)について，その理由を解答用紙 1—2 の H 欄に日本語で記述しなさい。

問 9　下線部(I-1)の他に，空欄(I-2)には，大災害時において，行政が考慮しておかねばならない医療面での重要な問題が記されている。その問題とは何かを考えるとともに，その問題が起こりうる理由と対策を含めて，解答用紙 1—3 の I 欄に日本語で記述しなさい。

問10　下線部(J) geological な要因について，解答用紙 1—3 の J 欄に日本語 40 字以内(句読点を含む)で具体的に説明しなさい。

問11　下線部(K) Building codes はどういうものが考えられるか。解答用紙 1—3 のK欄に日本語40字以内(句読点を含む)で記述しなさい。